

Insights from analysis of digital credit in Kenya

September 2019







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Seven years since the launch of the first digital credit offering, the following key changes were observed:

- Kenya has seen remarkable progress on financial inclusion in the past decade. This has largely been fueled by the mobile money revolution that has expanded the access to and use of financial services beyond payments. Digital credit products, such as M-Shwari and KCB-M-Pesa from MNO-facilitated banks are already popular in the market.
- In the past two years, the number of digital loans issued has approximately doubled¹. Between 2016 and 2018, 86% of the loans taken by Kenyans were digital in nature. This trend continues with traditional players, such as banks. Now, approximately half of the loans issued are digital.
- Compared to 2016, digital loans issued have increased by 1.9 times in 2018. Yet despite the entry of almost 50 fintechs in the past four years, bank and MNO-facilitated products still dominate the market, amounting to 97% of supply.

- Among borrowers in Kenya, 2.2 million individuals have non-performing loans¹ for digital loans taken between 2016 and 2018. About half (49%) of the digital credit borrowers with non-performing loans have outstanding balances of less than USD 10.
- The percentage of non-performing loans² is approximately three times higher for digital loans (16%) compared to traditional products (5%). An analysis of non-performing loans in the same period, however, suggests an encouraging trend with a 15% decrease in the past two years.

Notes:

- 1. The supply-side data reflects data shared by 14 digital credit providers, including three fintechs that are not mandated but choose to share data. However, these 14 players contribute to the vast majority of the digital credit supply.
- 2. Non-performing loans are those loans for which the outstanding balances have not been paid for more than 90 days.

There are eight key demand-side insights:

- For most borrowers, digital credit is an important additional tool to manage business and consumption expenses. Customers appreciate the convenience and immediacy of the product. This also explains why despite the fairly high interest rates associated with digital credit, the product still sees an increasing demand.
- The gender gap among borrowers is at 26%. The majority of users are young males aged under 35 years. Most women who borrow do so for household and business needs and on average take smaller loans than men.
- Customers have a low understanding of the information shared by providers in terms of (1) pricing, (2) terms and conditions, and (3) how their personal data is shared. Customers reported rarely paying attention to terms and conditions. Balancing the quantity of information is key, as customer loyalty appears to lie with products with clear information in simple language.
- Providers seek to drive product knowledge through regular marketing and communications. However, low-income and women customers in particular rely heavily on peer networks for information and use them to guide their decisions.

- Multiple borrowing is common, with 62% of borrowers having more than one digital loan. This could reflect the low loan limits that fail to fulfill needs and the short tenures that increase pressure on repayment and require a new loan to repay the previous one.
- Due to the nature of the product, however, most defaults are still on very small loan amounts of less than USD 10. Moreover, the hassles of negative listing that include inperson requests at the CRB and a considerable fee of USD 22¹ have been turning away some potentially reliable customers.
- Customers understand what drives loan limit increases on subsequent loans and apply several approaches. These include regular savings, frequent borrowing, and early repayment to boost their credit scores and loan limits—with business owners seeing the greatest success.
- The prevalence of sports betting is a worrying trend and is partly fueled by easy access to digital credit. The digital borrower segment that is male, young, and low- and moderate-income is at the greatest risk.

1. This amount is equivalent to approximately a fifth of the average Kenyan household income for a month.



There are six key supply-side insights:

- Increasing incidences of identity fraud is a key issue for suppliers. Rapid loan approvals and the ease of acquiring personal data in Kenya are the key drivers to this. Our analysis of supply-side data shows that 26.4% of borrowers have taken "two consecutive loans within 30 days" between 2016-18. Such behavior is commonly referred to as "loan-stacking"—a definite indicator of identity fraud.
- Regular borrowers seamlessly shift between lenders, and loyalty to a single provider appears to be limited. This aligns with the finding on multiple borrowing. With increased comfort with the product, borrowers show greater confidence in experimenting with a newer and broader set of providers.
- The supply-side comprises a variety of players who are not equally regulated.
 While fintechs currently contribute to a small percentage of digital credit supply, this is expected to increase continually. However, they are not regulated and are not mandated to report to the credit bureau. A small group of fintechs has established the Digital Lenders Association, whose members abide by responsible lending guidelines.

Clear guidelines for privacy protection and sharing client data are still lacking. An expected legislation on data-sharing currently being debated in Kenya could change this.

- The digital divide is a relevant concern and digital credit still serves a specific and to a large extent already empowered customer segment. Factors, such as the quality of smartphones, data coverage, high mobile data price sensitivity among low-income users, and to some extent lower digital literacy for women and rural customers further risks excluding these customers who are already underserved.
- The lower costs of delivering digital credit at scale have not trickled down to customers. The interest rates offered by the variety of digital lenders vary considerably. However, these are generally not lower than the interest rates offered by traditional FSPs, whose pricing has been moderated by the interest rate effected in 2016.





This section highlights key recommendations made to global providers and regulators based on the lessons from Kenya. In sections 3,4, and 5 of this report, we provide detailed analysis, insights, and implications for digital credit in Kenya. These also form the basis for each of the recommendations that we have highlighted in this section.







Regulators

| Issues | Recommendations |
|-------------------------------------|--|
| Identity fraud | • A national identity system can help. For example, in April 2019, a nationwide registration exercise for the <u>National Integrated Identity</u> <u>Management System (NIIMS)</u> , or 'Huduma Namba' has been launched. In theory, this unique identifier could help to address identity fraud but essentially even with a common digital ID system, regulations should stipulate that photo verification is part of the KYC process. |
| Lack of level playing field | Bring all providers of digital credit under the regulatory framework. Ensure fair competition in the sector. |
| Data privacy and protection | • Enact data protection into law. This will clarify the rules and standards to be met by all parties that hold, access and use customer data, including digital credit lenders. |
| Transparency | Promote a more transparent and comparable publication of interest rates and fees. |
| Defaults of very low-value loans | Avoid negative listing for very small loans. Smart Campaign recommends to negatively report only those loans that have an outstanding balance higher than the equivalent of 5% of the per month value of gross national income per capita. Set-up a dashboard to monitor provider-wise digital credit performance based on CRB data and impose penalties on those who fail to meet the set performance standards. Enforce guidelines for providers to inform customers at least 30 days before the status update of negative listing. Require providers to establish measures that prevent customer over-indebtedness, for instance through more flexible repayment terms or more extensive verification and credit checks. Run national information campaigns on the consequences of negative listing and the available precautions and measures. |
| Curbing high defaults | • Consider developing a threshold value for NPLs as a percentage of the total portfolio. Providers that consistently exceed this threshold may be punished by a fine or may eventually lose their license. |
| Data reporting | Specify internal checks and balances by suppliers to cross-verify loan information, such as listing status, outstanding amounts, and days past due before submission to CRBs, and impose penalties otherwise. Upgrade the system of reporting towards real-time for data to better reflect the short-term nature of digital credit and associated risks. For example, introduce a common API (not specific to each bureau) that will automatically retrieve data on borrowers from the provider's server on a more real-time basis. This will reduce the errors that result from manual compiling or entry of data by the providers. |



Digital credit suppliers and market facilitators

| Issues | Recommendations |
|----------------------|--|
| Identity fraud | Combine traditional identity verification methods (including CRB checks) with advanced risk analytics to make real-time security decisions—this technique utilizes a variety of checks, including real-time account checking, ID document capture, and biometric verification. Use machine learning algorithms to identify potential cases of fraud among the applications they receive Consider using a photo of the ID as part of the verification process |
| | Accessibility of loans Optimize apps for low-cost phones with limited processing power. We expect that while smartphones will be the norm in the next five years, most phones in use will likely to be the cheaper, basic models. Remove the requirements to sign in with Facebook and M-PESA account |
| Digital exclusion | Gaps in user experience Make interfaces visually appealing by using colors and icons to communicate meaning and by removing heavy text. Given that 21% of the population is illiterate, consider user interfaces that accommodate <u>oral habits and practices</u>. Streamline and simplify the registration process while complying with KYC requirements |
| | Appropriate product design Adopt a more mass-market approach to product development with products that serve the majority segments of the population to avoid further exclusion, for example, farmers and women. Suppliers who are already operating at scale should endeavor towards greater customer segmentation and develop appropriate products and services. Niche players who are committed to this goal deserve more support. |
| Pricing | Move towards risk-based pricing policy—the lower-touch model of digital credit should translate to lower prices for customers, reflecting the digital lending algorithm's capacity to learn. A risk-based pricing policy can be effected by designing products with an interest rate range, where the actual interest rates applied are based on customer risk profile and repayment behavior. |



Digital credit suppliers and market facilitators

| Issues | Recommendations |
|---------------------|--|
| Customer protection | Data privacy and protection Access to contacts and other personal data that does not affect the lending decision but used to blackmail or threaten customers should be barred |
| | Transparency Simplify and communicate T&Cs better. For example, use summary displays before customers accept the loan and after the loan, making the disbursement accessible within the app, rather than by following a link away from the session As part of ethical standards for the industry, providers should strive for more transparent and comparable publication of interest rates and fees |
| | Mechanisms to resolve complaints Increase (i) awareness about how to use and (ii) comfort with using these mechanisms by making this function easily identifiable and easy to use When it comes to customer engagement, specific segments, such as rural people do not find social media channels to be intuitive, as they still prefer human interaction. Providers can consider running campaigns to increase the inclusivity of products Include at least one channel that features relatively higher-touch, for instance, a customer care number that has a human element |
| | Fair and respectful treatment Constant hassling or intimidation of customers in debt collection is futile. If third-party debt collectors are used, suppliers should have more control and monitor their practices regularly. |



Digital credit suppliers

| Issues | Recommendations |
|---|---|
| Over- indebtedness and delinquency prevention | All providers should use CRB data as part of the loan decision process. Track the uptake of multiple loans from multiple carriers and introduce additional steps to increase friction before approval of the Nth loan (as defined by the regulator and industry). For example, answering additional questions before approval of the Nth loan. Consider adding friction to the process of loan approval and distribution for loans that are associated with a higher risk of default; for example, analyze factors, such as frequent requests late at night and type of account for loan disbursal Offer customers the option of self-exclusion functions¹, for example, a PIN shared with another individual, such as the spouse for loan application Inform defaulters of risk of negative listing at least a month before it is effected On defaults of very low-value loans Providers could consider incorporating a tool or tutorial product testing that is intuitive and user-friendly for first-time users. |
| Data reporting and quality | All providers, regardless of whether they are regulated, should report to the credit bureaus. This is particularly relevant given the growing reach of non-traditional lenders, such as fintechs. This also helps to build a credit file for unbanked customers. The existing credit reporting templates need to be updated such that they are consistent with digital credit product features, such as loan duration. In view of the above, we suggest the following: Move the reporting system towards real-time for data to better reflect the short-term nature of digital credit and associated risks Implement a common API that is not specific to a bureau that will automatically retrieve borrower's data from providers server on a more real-time basis. This will reduce the errors that occur due to manual compiling or entry of data by the providers. Progress gradually towards API-based reporting to CRB, which would be real-time. This also requires suppliers to invest in more sophisticated back-end technology as products and processes become increasingly digital. |

^{1.} Self-exclusion refers to an established approach to combat gambling and other addictions, where an individual can choose to exclude him/herself from online betting services for example. This could also be applied to digital credit for customers by adding friction to the process, particularly where customers acknowledge a pattern of impulse-triggered borrowing and resulting stress due to over-indebtedness.





This section discusses the current context of financial inclusion in Kenya and gaps therein, the key drivers for digital credit uptake, and the policy and regulatory environment in the country.

It is built on the foundation of insights from a larger body of secondary research and is supplemented with supply-side insights and analytics of usage data from 2016 to 2018.







The digital credit revolution is spurred by specific supply-side trends

We discuss six key digital credit trends in Kenya

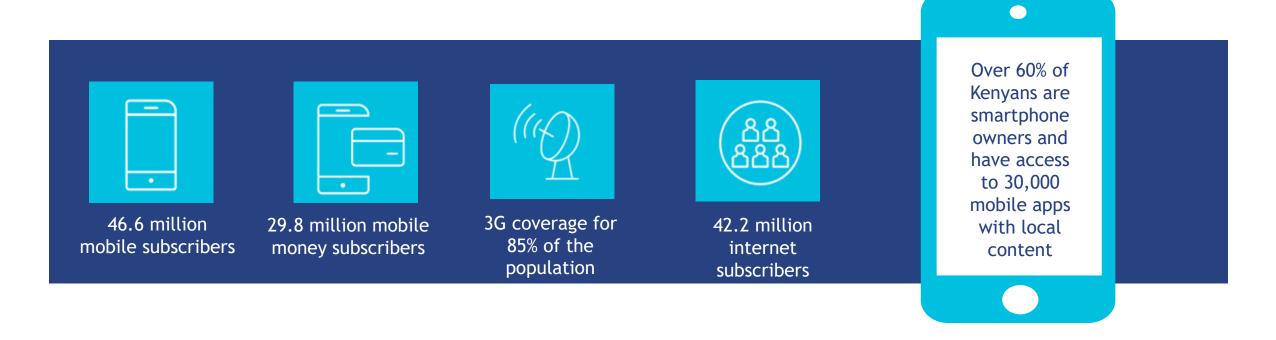
| Trend | One-size-fits-all product design | 2 Partnerships | Credit scoring | 4 (a) Alternative data types | 5 Technology and product bundling | Data privacy and transparency |
|-------------|---|---|--|--|--|--|
| Description | Lenders continue to offer one-size-fits-all products rather than a large variety of credit products designed to meet the varying needs of clients. For instance, the Kenyan market lacks a product that specifically targets farmers or rural borrowers. Lenders are shifting to targeted lending differentiated by segment. | Lenders have partnered with banks, non-banks, mobile network operators (MNOs), retailers and investment firms. Digital credit serves over 35% of the number of adults who own a mobile phone (FSDK, 2018). | The majority of lenders use their own customized scoring algorithms. Others use third-party off-the-shelf solutions. Many fintechs in the market claim to not use CRB data in making their credit assessments. The credit scoring models currently in use are unproven and are still being refined. | The majority of lenders model their credit scoring using some or all of six types of data, namely: • Mobile money data • Data scraped from the mobile phone • Online activity and social media • Credit history with the lender • Traditional financial history; and • Other personal information. | Lenders generally offer products through a single tech platform. A few offer products via two platforms. For example, M-Shwari is offered through both SIM toolkit and an android-based app. Most providers offer single unbundled products. However, instances of lenders offering more than one product, and sometimes bundling products are emerging in the market. | Lenders have been obtaining customer's information in a non-transparent manner with little disclosure if any on use, storage, and sharing. Some lenders acquire data from the client's phones without their informed consent. Others, such as M-PESA have commoditized the clients' transaction or lending history. Okash, Tala, and Fuliza hide important contract information in long and complex T&Cs. |
| Examples | Musoni, a digital MFI is testing its digital agricultural financing product through USSD and app channels. | KCB's partnership with Safaricom has resulted in 90% of its loan volumes disbursed through the KCB M-PESA digital platform. | Two smartphone app lenders, Tala and Branch use their own customized credit scoring. | 'Afrikaloan' a new lending platform additionally relies on a live phone interview with the customer before lending. | Stawi loan, a new product endorsed by CBK, is priced at a 9% interest rate plus extra hidden charges. Fuliza is bundled to the M-PESA payments platform. | Kopa Leo shames defaulters on the defaulter's social media wall. Okash calls people from the defaulters' contact list to ask them to push the defaulter to pay. |

Source: MSC analysis



Developments in digital infrastructure have enabled the rapid uptake of digital services

These include increased mobile and internet subscriptions, improved GSM network coverage, increased access to electricity, and increased smartphone penetration and mobile app content.



Digital credit has evolved with the digital disruption. It has led to the emergence of the digital lending era, which non-traditional players, such as MNOs and fintechs, have largely capitalized. Traditional financial service providers have also been transforming their models to remain relevant. In Kenya, lending by traditional providers is now predominantly through their digital channels.



Incumbent lenders dominate the market compared to app-based fintech lenders

Leading app-based lenders (such as Tala and Branch) still account for less than 10% of the market

| Players | M-Shwari | KCB M-PESA | MCo-op Cash | Eazzy Loan | Tala | Branch |
|--|------------------------|------------|---|----------------------------------|----------|-----------|
| Summary of model | Telco-facilitated bank | | Bank + Mobile virtual network operator (MVNO) | Fintech (Android app focused) | | |
| Total subscribers (million) | 20.10 | 9.80 | 3.30 | 1.60 | 0.77 | 0.75 |
| No. of loans disbursed (million) | 83.30 | 15.40 | 2.80 | 4.20 | 1.80 | 1.50 |
| Value of loans disbursed (million USD) | 2080 | 482 | 87 | 570 | 35 | 20 |
| Approximate daily loans | 70,000 | 21,000 | 1,000 | 8,500 | 310 | 190 |
| Loan portfolio (million USD) | 80.0 | 24.0 | 8.6 | 38.0 | 7.8 | 4.0 |
| Loan interest rate (monthly) | 7.5% | 3.66% | 3.66% | 3.66% | 15% | 1-14%1 |
| Loan size range (USD) | 1 - ! | 500 | 10 - 1 | 1,000 | 20 - 500 | 2.5 - 500 |

Source: Orange Digital Ventures Africa at https://bit.ly/2Tvl4y5. These figures are reported by the supply-side actors reflected here. Figures as on October 2018

1. Branch offers varying interest rates based on a number of factors, including repayment history with Branch, and the cost of lending for Branch



Regulation lags behind innovation in Kenya but the country has been moving toward principle-based¹ regulation

While initially uncoordinated, planned reforms and interventions enable the move towards a more centralized and regulated sector. Though piecemeal, regulation has begun to take shape with the emergence of clear guidelines

- 1 Emergence of mobile money
- Test-and-learn approaches started being used. CBK issued M-PESA with a no-objection letter but did not provide a license to operate.
- A comprehensive approach to digital finance or credit regulation is missing.

 Responses from CBK and CAK in the form of circulars, public notices and guidelines addressed different aspects related to mobile money and digital financial services.
- Regulators react to the more pressing issues as the need arises through circulars, public notices, and guidelines. In 2009, CBK released a <u>statement</u> to mitigate negative publicity about digital payments.

- 2 Evolution of mobile finance
- The foundational digital rails for digital payments and credit have been laid. For example, the establishment of the national payments systems regulation in 2014
- Regulators continue to reactively address pressing issues. In 2014, Safaricom was mandated to open its network to licensed players in the banking and communication ecosystem; in 2015, CBK offered clarifications on Bitcoin and a public notice on the use of digital currencies.
- Collaboration with private sector and development partners has increased.

 For example, guideline number

 CBK/PG/15 came into place and allowed agency banking to be developed collaboratively with the private sector in 2010.

3 Growth of digital credit

- No fintech regulations are in place yet but CMA launched a sandbox for fintechs. While digital lenders are currently not included, it reflects the need for robust testing that can inform the subsequent realities of fintech operations.
- Regulatory appetite for establishing mobile money interoperability has grown. CAK and CBK have worked together since 2017 to develop cross-network transfer systems.
- A clear move towards principle-based regulation is noted. The banking charter of 2019 has guidelines on disclosure and consent for digital products.
- Coordinated efforts are in place to reform the regulatory architecture governing digital finance and credit. These include the introduction of data-protection draft bills for legislation in July, 2018 and the reform of credit data reporting templates.

2007 - 2012 2011- 2015 2016-2019

Source: MSC analysis



^{1.} Principle-based regulation refers to the use of a broad set of guidelines of conduct which are left to regulated parties to decide how to most appropriately implement them, as opposed to a rule book of dos and don'ts.

Forward-looking regulatory interventions have started to emerge

No regulations exist yet on lending limits and operational standards. Regulators are, however, implementing forward-looking policy guidelines such as sandboxes by CMA

| Regulatory issues | Description |
|---------------------------------|---|
| Governance requirements | DFS lenders are encouraged through non-binding guidelines to introduce systems that enhance reporting with regard to transparency and compliance with regulatory guidelines. |
| Product disclosure | Section 31A of Kenya's Banking Amendment Act of 2015 requires banks and other financial institutions to disclose all loans, fees, and charges to a borrower before granting a loan. The Banking Charter of 2019 specifically requires disclosure to be done via USSD channels, among others. |
| Lending prohibitions | No regulatory guidelines exist to cap either the maximum or minimum loan amounts. However, since May, 2019, lenders are bound by the Kenya Banking Charter 2019 to disclose T&C. |
| Privacy and confidentiality | Disclosure of confidential customer information is prohibited, except when requested by law. However, third-party arrangements raise questions on breach of privacy All bank providers must report both positive and negative credit information to the countries' CRBs. (CRB Regulations, 2013, sect. 18). Third parties are permitted but not required to submit information. |
| Operational requirements | None noted |
| Regulatory sandboxes | • CMA sandbox established a sandbox regime and launched it on 26 th March. 2019. The sandbox is currently accepting applications. |
| Rates and pricing | Section 33B of Kenya's Banking Amendment Act (2015) establishes an interest rate ceiling and floor, but not all lenders adhering to the maximum interest rate capped at 4% above the CBK's benchmark rate. |
| Consumer over-indebtedness | Consumer protection guidelines by CBK exist, however, consumer indebtedness is not covered. |
| Complaints resolution mechanism | Lenders are obligated to have a working complaints-handling and customer grievance mechanism within six months of commencing operations. |
| AML/CFT regulatory framework | The Crime and Anti-Money Laundering Regulations (2013) obligate lenders to verify customer identity, maintain customer records, and report suspicious transactions. |

Source: Blechman, 2016; Central Bank of Kenya, 2012; Central Bank of Kenya, 2013; Central Bank of Kenya, 2016; Odero, 2016; The Economist, 2016; The Republic of Kenya, 1998; The Republic of Kenya, 2010; The Republic of Kenya, 2012; MSC analysis



The lack of a comprehensive regulatory framework has led to risky market practices

The effect of the uncoordinated regulatory environment in the Kenyan market reflects in the four main areas below:

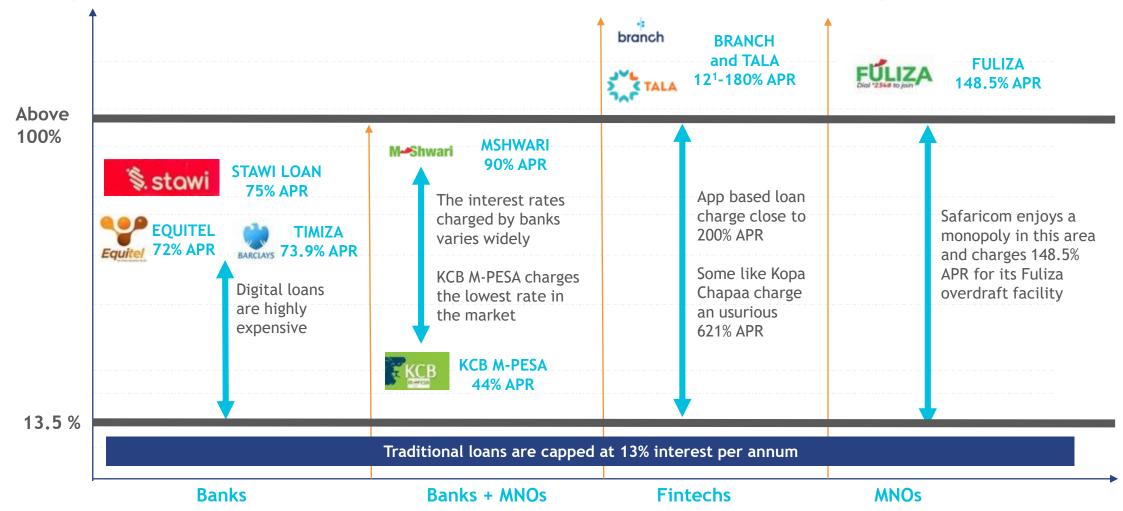
| 1. Data management and privacy | 2. Product disclosure | 3. Consumer over-indebtedness | 4. Cost of credit |
|--|--|---|--|
| Concerns around access to, use, storage, and sharing of alternative data obtained from consumers are on the rise. For instance, consumer data has been reportedly surrendered to third parties without their consent. Providers use algorithms to exclude certain groups of consumers, which raises concerns around equity. | Digital credit regulations require providers to disclose the costs of conducting transactions to consumers. Limited disclosure of costs and increasing rates of default are some of the most pressing market conduct issues in the market currently. Predatory practices and aggressive marketing force consumers into debt traps. | The proliferation of digital credit providers offers customers a wide variety of easy-to-access loans. This has made consumers more vulnerable to over-borrowing due to the lack of restriction on borrowing across multiple platforms. This is coupled with incomplete information on the extent of borrowing as most of the new fintechs lenders do not report to the CRB. Considerable supply-side concerns persist on identity fraud, which contributes to the perception of over-indebtedness due to negative listing of customers whose stolen identities have been used for digital borrowing. | The interest cap guidelines do not affect nonbank DFS providers, which can and still do charge high-rates. M-Shwari charges a fee of 7.5% of the loan value for a 30-day loan. However, this rate doubles if the loan is not paid in one month and effectively translates to an APR of 90%. Equity Bank's cost to customers is 10% per month—despite the interest rate cap at 13% per annum. Most of Equity Bank's digital lending is through its MVNO channel. KCB's M-PESA offers a 6% rate on a 30-day term but deducts the cost of borrowing upfront. |





The greater efficiencies of the "digital" delivery of credit have not translated into lower interest rates for clients

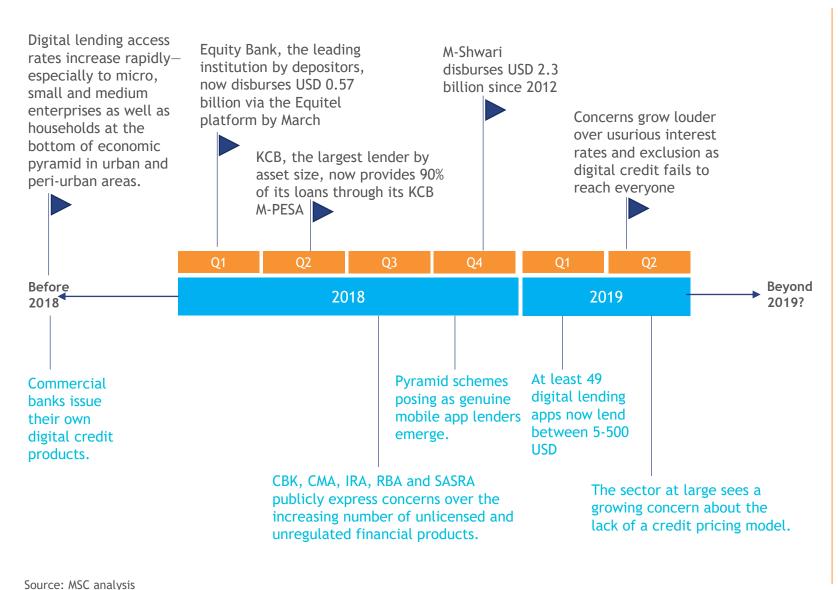
Usurious pricing models are still observed. The MNO-facilitated model currently offers the cheapest digital loans.



^{1.} Branch has a varying APR due to a range of interest rates offered along with the loan cycles. Tala's APR is 180% Source: MSC analysis



A highlight of key events in the past 18 months in digital credit and regulatory reactions



July, 2018: The draft of the Data Protection and Privacy Bill is introduced in the national parliament.

August, 2018: CBK cautions that while Kenya boasts of advancements in developing financial technology solutions, a lack of adequate guidelines has opened the room for rogue players.

March, 2019: (1) The formation of Digital Lenders' Association of Kenya (DLAK) is initiated with a code of conduct. The DLAK will help members and fintechs, in particular, to be better positioned in engaging the CBK as a collective body; (2) The Data Protection and Privacy Bill is due for discussion at the Senate for its third reading.

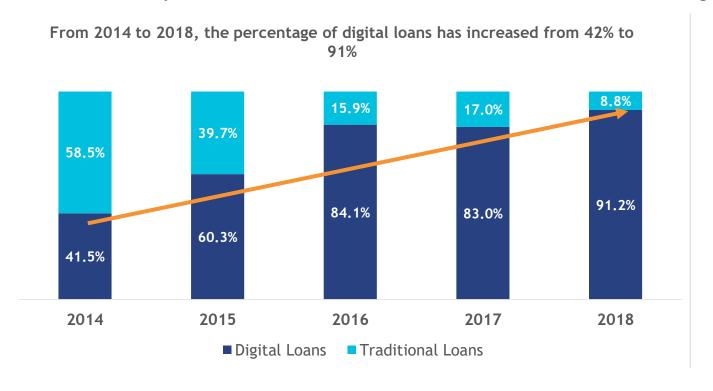
May, 2019: (1) CBK released the Kenya Banking Sector Charter 2019 which for the first time makes it mandatory for digital products users to be informed about T&C via USSD platform; (2) CBK receives a parliamentary resolution requesting the regulator to develop regulatory guidelines for digital lenders.



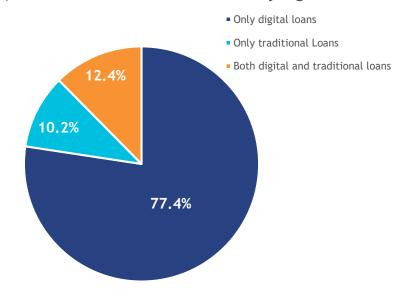
The number of digital loans has not only increased, but it has far surpassed that of traditional loans

While the total value of traditional credit is still higher than digital credit, the number of digital loans has increased substantially across all provider categories.

The majority of loans and formal borrowers in Kenya are digital, which reflects the wider accessibility and reach¹ of digital credit for borrowers in Kenya. Around 75% of formal borrowers have taken a mobile banking loan or digital lending app loan².







2014 and 2015 figures are from TransUnion data

- 1. Our demand-side research does suggest a preference for digital loans, although many borrowers would like more human touch.
- 2. Source: FinAccess Household Survey report 2019.
- 3. Borrowers here refer to customers who have borrowed from regulated FSPs and the three currently unregulated fintechs that report to the CRB and as captured in the dataset for FY 2016-18. It does not reflect any informal loans taken.











Since the launch of the first product in 2012, the digital credit provider landscape has expanded significantly

Innovation from a variety of lenders, among other factors, has helped enable this quick market scale-up

The incumbents (supplying over 97%) of digital loans)

Two types of incumbents:

MNO-facilitated

Partnerships between MNOs and banks e.g. Safaricom with CBA and KCB have shown the biggest potential for rapid scale



KCB

Bank-driven products, such as mKey from Equity Bank's fintech arm, Finserve, has been launched to drive volumes



The not-so-new kids on the **block** (49 players and growing)

The challengers

Fintechs

Tala and Branch are international fintechs that have made good inroads







Newer fintechs are focused on niche or underserved segments



Small women traders





Smallholders



The emergence of digital lenders' association

In 2019, 12 fintechs established DLAK to promote industry best practices including ethical and professional standards and to drive a coordinated approach in addressing the pressing issues of the emerging industry.

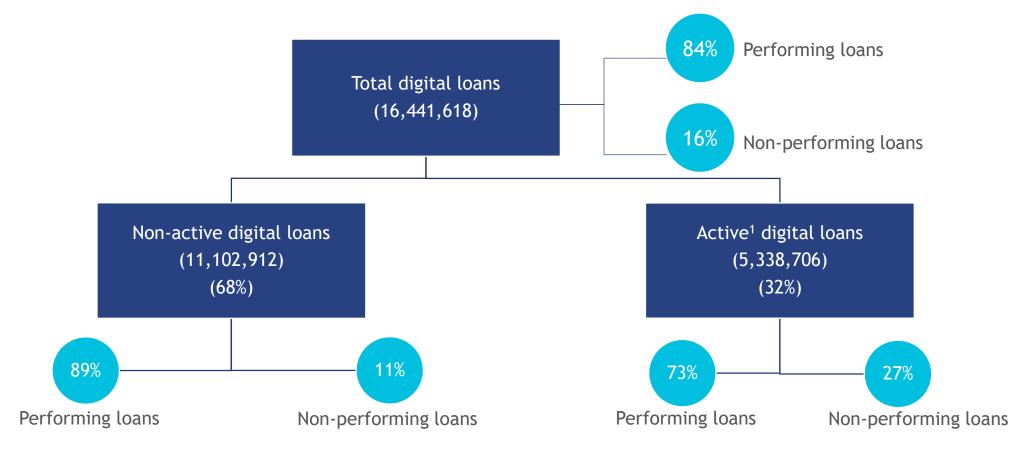




Banks

Understanding the supply-side data set: 2016 to 2018

Of the total digital loans, 16% are non-performing, while 27% of the active digital loans are non-performing.



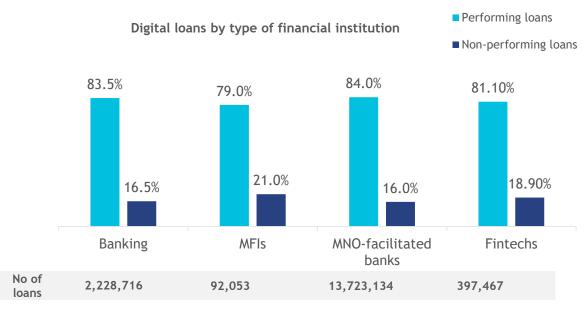
Non-performing loans (NPLs) are loans with outstanding balances that are not paid for more than 90 days. For digital loans that are typically due in 21-30 days, these are fairly overdue loans and are likely indicative of stress. Borrowers who have at least one NPL are negatively listed.

^{1.} The status of "Active" and "Non-active" is indicated by providers when they report to the credit bureau; hence the percentages indicated here reflect the proportion of total loans that correspond to the two classifications. We must also note that providers do not follow any standard criteria to define a loan as "active", meaning that providers may not have common practices for loan write-offs. This could also imply that institutions that have the capacity to write off losses based on their sheer size and growth of their loan portfolio could be doing so quicker than others.

High non-performance rates still observed in digital loans but show a decreasing trend

The supply side data reveals that 2.2 million¹ individual digital credit borrowers in Kenya have non-performing loans and have been negatively listed in this 3 year period.

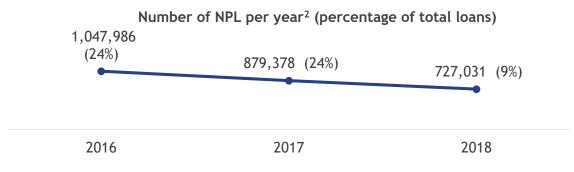
Approximately 16% of the total digital loans borrowed between 2016 and 2018 are non-performing. 1 in 6 digital loans are non-performing versus 1 in 20 traditional loans.



In terms of digital loan portfolio, MFIs and Fintechs have a higher percentage³ of NPLs. However these are two smallest contributors to total digital loans at 0.6% and 2.4% respectively.

Even though the overall non-performing rate is 16%, it is encouraging to note the decreasing trend for NPLs, year on year from 2016 to 2018. There has been a considerable 15% drop largely due to significant portfolio performance improvements at MNO-facilitated banks.

This could be due to validation of the theory that over time digital loan performance will improve as customers 'test and learn' and over time digital loans are also increasingly valued, which in turn motivates good repayment behavior.



Correspondingly, a number of the suppliers interviewed were less concerned about default inherent risk, which was not viewed to be more significant than their traditional loan books.



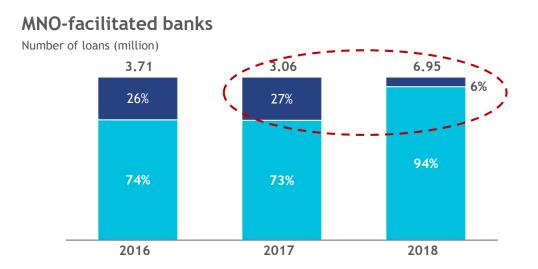
^{1.} The overall number of borrowers in Kenya with non-performing loans is likely to be more than 2.2 million. As the current supply set used for review did not contain any digital loan data prior to 2016.

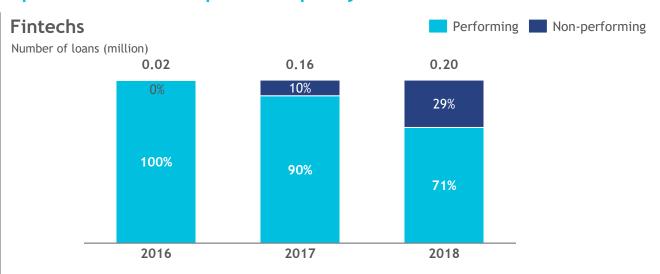
^{2.} Numbers reflected here are NPLs in the total loans that were applied in the respective years.

^{3.} As the data-set comprises millions of data points, even single percentage points are statistically significant.

Evolution of non-performing digital loans over time (2016-2018)

MNO-facilitated banks appear to have made a significant improvement in their portfolio quality







Possible reasons for the trends observed

- 1. In 2017, banks actually reduced volumes of digital loans in an effort to manage NPLs and tripled volumes from 2017 to 2018. The associated increase in 2018 NPLs is not surprising and can be explained by the usual drop in quality associated with the expansion of loan volumes.
- 2. The marked improvement in performance at MNO-facilitated banks, however, is quite surprising, especially when observed alongside the more than doubling of loan volume from 2017 to 2018. We should note that MNO-facilitated banks however, do benefit from experience being the oldest players in this space and mobile money payments data and this remarkable drop could partially be explained by significant improvements in the credit assessment algorithms.
- 3. In relative terms, fintechs have marginally increased their loan volumes in 2018 and experienced almost 30% NPLs—most fintechs reported not to using CRB information as part of their credit assessment. This could be a reason for their poor performance.

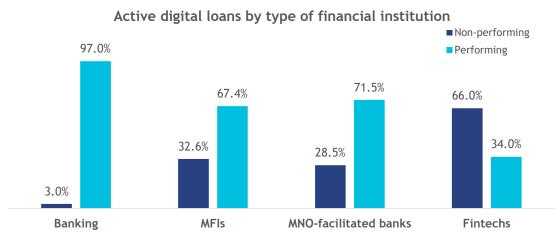


^{1.} While only a few fintechs are captured in this data-set, they are market-leading players in this category. The data from 2016 does not fully reflect performance, as most fintechs were only starting their operations.

More than a quarter of active digital loans are non-performing

Non-performing loans are highest for amounts between USD 2 and 10 at 30.3% of active digital loans

Looking at the "active" digital loans, overall nonperformance is considerably higher at 27%. This can be attributed to two common demand-side practices—"loan-stacking" and debt cycling. The latter is when subsequent loans often go towards repaying existing debt.

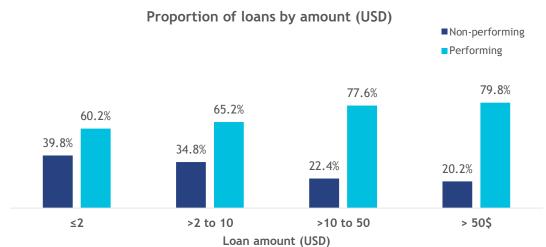


It reflects the variance in the treatment of loans by the different providers as "active" status is provider-defined.

Banks have significantly lower NPLs for active loans compared to the other players at 3%. This could be due to quicker write-offs by banks.

Separately, the significantly higher NPLs at fintechs are of concern. This could be due to more pervasive customer behavior on account of the higher rates of loans and easier approvals associated particularly with small-value loans. This also explains why the fintechs on average have the highest APRs as they seek to minimize their risk by pricing in defaults.

These active NPLs account for only 19% of the loan value, which is consistent with the understanding that most defaults in digital credit are concentrated among smaller value loans. More than 18% of active digital NPLs are less than 2 USD.



From our demand-side research, the reasons for higher non-performance among smaller loans are:

- The nature of digital credit;
- First-time loans approved are very small;
- First-time customer or those trying new providers testing with small amounts;
- Multiple borrowing from different providers given the insufficiency of amounts to meet needs and subsequent inability to repay.



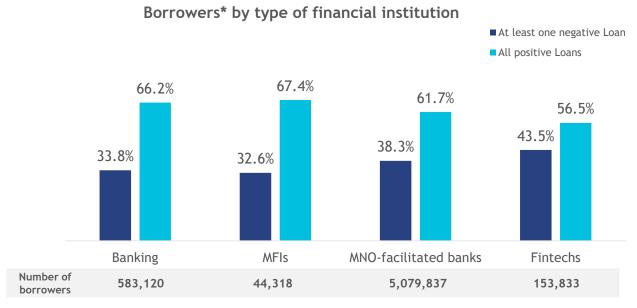
^{1.} We observed that providers do not follow any standard criteria to define a loan as "active" and it is at the discretion of providers to report loans as active or non-active.

^{2.} Loan stacking refers to when a borrower has multiple loans outstanding at the same time, thereby affecting their ability to afford timely repayment.

Lower "touch" in digital lending practices could be linked to higher defaults

MNO-facilitated banks and fintechs have a higher percentage of borrowers with non-performing loans

An analysis at the borrower level reveals that 38% of digital borrowers have at least one non-performing loan.



The MNO-facilitated banks and fintechs record a higher number of borrowers who default on their digital loans compared to the other two provider categories. This could be due to:

- The prevalent practice of debt cycling and loan stacking by their borrowers due to relative ease and speed of loan approvals
- The lower "touch" customer engagement that is more typical for these two institutions, where transactions are entirely mobile-enabled.

This finding of lower touch leading to higher defaults is consistent with <u>FSDK analysis in 2017</u>¹ which concluded that M-Shwari borrowers are about 30% more likely to pay late or default than borrowers of digital loans from other providers.

The more diligent repayment observed by MFI digital borrowers is that MFI products are not really "equally digital". They employ digital channels for disbursement, collection, credit-scoring, and other processes but still retain higher levels of human touch.

From the data, the average size of an MFI digital loan is also higher at USD 42. Separately, banks require digital borrowers to be existing customers and this presents higher barriers to entry, which could actually result in greater prudence.

From a nationally representative demand-side survey conducted in 2016, the top four reasons for late repayment or defaults are:

- 1. Poor business performance;
- 2. Losing a job or source of income;
- 3. Not planning well enough; and
- 4. Saying that funds were tied up with more important expenditures.

(FSDK FinAccess. 2016)

Borrowers may appear in more than one category as they had borrowed from more than one type of financial institutions

^{1.} FSDK. Digital borrower repayment segments, by digital loan provider. 2017. Among digital borrowers whose last loan was M-Shwari, close to 14% reporting having defaulted on a digital loan compared to 8% of digital borrowers whose last loan was from another provider

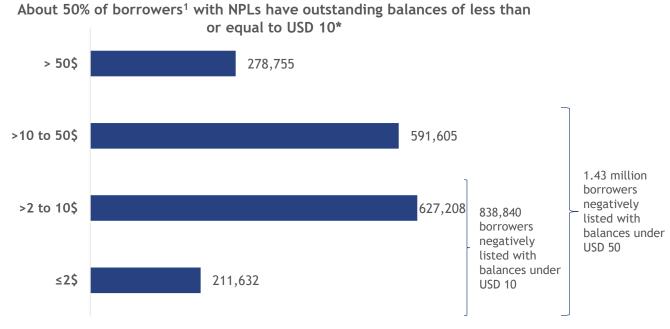


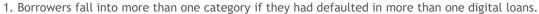
Digital NPLs are more significant for outstanding balances of less than USD 10

Defaults beyond 90 days and outstanding balance higher than USD 0 results in negative listing, which poses a high cost for borrowers. This status persists for five years.

Currently, negative listing technically does not disqualify customers from borrowing digitally. From supply-side data, 17% of borrowers have more than one negatively listed loan. There could be three possible reasons for this:

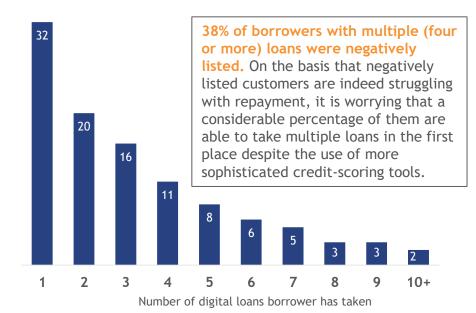
- Borrowers take loans from multiple providers in the same credit reporting cycle, that is, within a 30-day period, and default on more than one loan.
- Borrowers have previously defaulted and as a result are negatively listed but have since cleared their outstanding balance. This status remains, however, for five years. As a result, customers still face difficulties with loan approvals in some cases. Additionally, they also have to go through the hassle of getting de-listed at a cost, since a proof of clean record is often required to apply for jobs and to secure larger loans, such as mortgages.
- A number of digital lenders do not use CRB data in their loan decisions.





2. If a borrower has at least one NPL then they are negatively listed

Proportion (percentage) of digital borrowers negatively listed² and the number of loans taken





Identity fraud is a significant concern

All suppliers were unanimous on the relevance of this threat; solutions are emerging gradually across the ecosystem

There are two key drivers for identity fraud in the case of digital credit in Kenya

Firstly, the rapid approval process presents a prime opportunity to apply for multiple loans in a very short timeframe. Fraudsters may use stolen data to borrow from several providers with no intention of repayment. The time-frame between approval and delivery of funds is shorter than that required for the KYC data and CRB checks. Hence, the speed at which multiple loans are taken, also known as "stacking", may signal a fraud.

The second driver is the ease of access to personal data in many public places in Kenya. For example, every office building requires filling in a register or leaving the ID at the reception. This is similarly the case at any mobile money agent in the country. Such KYC information can be easily be assessed by fraudsters, who then create good profiles to get higher loan limits. The victims are last to find out and often at the point of getting negatively listed in the CRB, without having any prior knowledge that their identity has been used. They are then faced with the reality of getting delisted in order not to impact their real need for borrowing.

A <u>recent study</u> by Patrick Traynor, that covered 33 digital lenders globally, some of which operate in Kenya, also reveals that only a minority of service agreements addressed fraud against the user and all excluded liability of the providers. In a reality where users have effectively no choice but to accept the terms to get a loan, users are compelled to bear the consequences.

Providers have started taking measures to combat identity fraud



Tala relies largely on its data and the development of machine learning frameworks that constantly monitor for anomalies. These additionally help with credit-worthiness assessment and identity verification.



OKash has noted that fraudsters were taking advantage of soft automated inquiry on the apps and the use of an algorithm to underwrite the borrower to try to access funds. OKash upgraded its loan application process, requiring borrowers, to take a picture of their face and national ID.



Branch has invested in a highly trained loan review staff to assess and analyze suspicious borrowers. It has also employed sophisticated machine learning models to target and block fraudulent applications. Branch still manages the sign-up process with just four questions.



Patascore offers both B2B and B2C solutions. It acts as a neutral entity that converges all KYC data for robust credit scoring purposes. Its individual customers have a data wallet that builds and stores their digital profile and own it. It comes with an added feature of financial education.

Traynor, P. "Digital Finance and Data Security: How Private and Secure Is Data Used in Digital Finance?" Center for Financial Inclusion, 2018.



Digital lenders continue to use aggressive marketing practices

Strong-arm tactics, aggressive sales, pushy messaging, and deceptive marketing are some of the approaches that digital lenders use to on-board customers, push repeat borrowing, or motivate repayment



Breach of privacy: Okash is known to randomly call numbers on a client's contact list if they default on their loan. The app obtains permission from the customer during the installation of the app. The permission clause is hidden in a long and wordy T&C that many users do not read. Many customers are surprised when, upon default or delay in payment, Okash calls or texts their "most frequently used numbers" requesting them to put pressure on the defaulting client to pay.



Identity fraud: Some loan apps use the name of popular politicians and social media celebrities to lure potential customers into downloading their app. Jaguar loan uses the name of a young member of parliament and celebrity musician called Jaguar as its app name. Users have pointed that they wrongly assumed the app was owned by the politician. He has since denied any involvement with the app owners.



Push messaging: Every time an M-PESA user attempts to send or pay money that is above their available balance in their e-wallet, a message from Fuliza pops up to prompt the user to overdraw using the facility. Unsolicited marketing messages are usually sent to the potential borrower with heavy above-the-line advertising during prime time on TV, on outdoor ad-sites, among other channels.



Intrusive calls: When a borrower defaults, the Afrika Loan call center makes multiple calls using different people who urge the client to repay. In a day, the calls can be as many as 3-5. The calls are usually made during the day but can also be made at odd hours with the possibility of inconveniencing the user.

Source: MSC analysis



Reforms suggested for data quality and reporting template of the credit bureau

For digital loans, credit bureau data is outdated and this is largely due to the current use of legacy reporting templates

There are several issues that plague the credit bureaus in Kenya

- 1 Unequal reporting: Only regulated financial institutions, such as banks and MFIs are required to report to the three credit bureaus in the country. However, some fintechs, such as Tala and Branch share data in support of their mission to create financial histories for their customers.
- Poor data quality and lack of reporting uniformity: From the supply-side data, we observed missing or inaccurate data fields¹. Some loan data could be missing, as some providers stop reporting part of their loans that were closed during the course of the year. Additionally, the lack of uniformity of information shared by providers and the different scoring mechanisms can also result in the same customer receiving different scores from each bureau.
- Misuse or underuse of CRB data: Many providers simply perform basic yes/no checks on the listing status of a potential borrower. Positively listed customers have reported loan denial, which reflects incorrect use of the CRB data. While fintechs are not mandated to report, CRB data is available for their use in credit scoring, given that it captures lending data on the same set of customers who borrow from a broader set of providers. However, this does not appear to be a common practice.
- 4 Lack of adherence to guidelines: CRB regulations issued in 2013 had already stated that providers should notify customers one month before NPL status and update of CRB. However, this is largely not done.
- Mismatch of reporting frequency and product features: With the increasingly digital nature of credit, characterized by its instant approvals and shorter tenures, the existing monthly reporting cycles do not allow for up-to-date information.

Reporting reforms are gradually underway

- Reforms are being led supported by the World Bank Group in the following ways:
- **Revising the reporting template**, such that it is aligned better with the digital credit product. This would mean that digital lenders are required to report on a daily basis compared to every 30 days. This streamlining of the template should also ensure that more robust data is collected. The new template is being piloted with a small group of banks and will be expanded to a larger group in the next phase.
- **3 Harmonizing the validation rules** to address data quality issues and to ensure data consistency at all three CRBs.
- 4 Motivating the Central Bank to issue one central API: Currently, each CRB has its own API.

 Supporting a policy framework that includes all players: The current clause, which excludes third parties such as digital lenders from reporting, requires review.

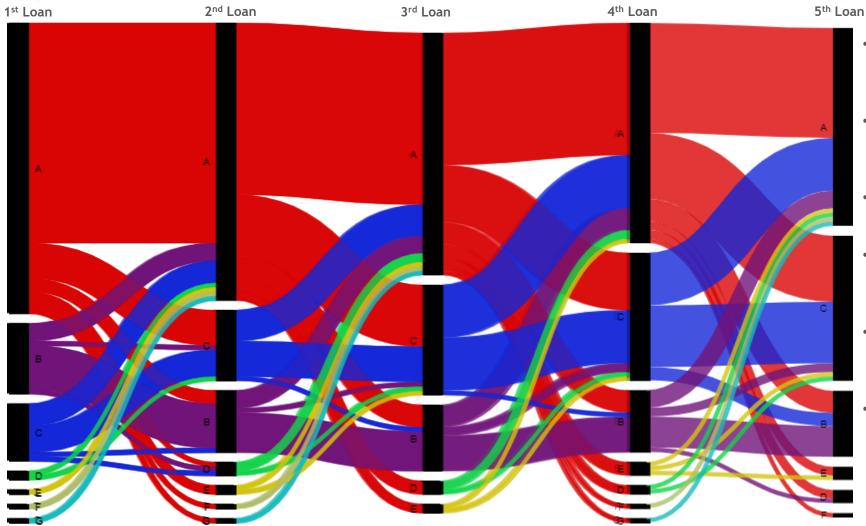
Data inconsistencies as noted in supply-side datasets

- 191,765 (1.2%) digital loans were listed as non-performing even though the outstanding amount was zero.
- 213,642 (1.3%) digital loans that were listed negatively even though they do no qualify as non-performing and 308 (0.002%) loans that were listed positively even though they should be categorized as non-performing.
- Random values for certain variables, such as, "date of birth", In other cases information, for example, "education of the borrower" is completely missing.



Loyalty to a single provider is limited but appears to improve in successive loan cycles for some providers¹

Despite some loyalty to the initial provider, regular² borrowers shift seamlessly between providers



- This visualization shows how borrowers who started with provider A move to other providers in second and subsequent loans.
- The height of the black bars represents the number of loans taken from every single provider, as a subset of total loans.
- A significant amount of entry and exit can be seen for Provider A over the loan cycle.
- The number of repeat borrowers for Provider C increased over the number of loans.
- As borrowers get comfortable with digital loans, they start to apply for loans from Providers D, E, F, and G.
- While multiple loans could be a good sign that borrowers are getting better in accessing the various options to meet needs, it is unclear from this analysis if any risk of over-indebtedness exists.

- 1. The graph is provided for the to seven digital credit providers; this infographic does not capture the timelines between the different loans.
- 2. This graph is not representative of the market share as it reflects only regular' borrowers who have taken five digital loans.



Competition or lack thereof?

The market is fragmented with unequal regulatory supervision

Lack of a level playing field

A competitive ecosystem is important to ensure the continued development of innovative products, and high-quality, value-for-money services and by extension the advancement of financial inclusion. Generally, a scenario where market power in one market can be utilized in other markets results in an uneven playing field.

In Kenya, Safaricom is the most dominant MNO with a market share of 63.3% as of the time of reporting. It makes use of customer information from its telecommunications business to market and offer digital credit products, such as M-Shwari and KCB M-PESA in partnership with banks.

Safaricom has since developed a scorecard on its customers, based on the type and usage of its products, frequency, and repayments of M-PESA-linked credit. The impact is extremely exciting with partner fintechs reporting increasing lending limits up to 250% after using this data versus their traditional data-scraping models. However, the decision on which lenders can benefit from the data lies with Safaricom. Hence, customers lack the option to share what is effectively their personal information beyond this sphere.

A strong case exists for clear rules that ensure that consumers are adequately protected and offered maximum choice. A draft data privacy bill has been announced and is hopefully the first step in the development of a comprehensive data sharing policy in Kenya. This should be anchored in a larger regulatory framework that also addresses the issue of currently unregulated providers that are not mandated to share information or abide by customer privacy rules.

Emerging global examples for data-sharing models

A number of global examples of new data-sharing models have emerged that could have a significant impact on financial innovation, particularly in markets, such as Kenya that have a significant number of customers who lack access to their own financial information.



FU

The PSD2 framework gives fintechs or third parties the legal and technical tools to build their applications and services on top of the data and services of banks. For example, a start-up from Italy can get access to the financial data in France as quickly as it would in Italy. This increases competition and offers customers more choice and more information.



India

As part of the government's "Digital India" drive, the DigiLocker application offers customers the option of storing all their official documents. It is linked to both the *Aadhaar* (national identity) card and mobile number and eliminates the use of physical documents, since all data is stored in the cloud. Customers have to consent to share data. Centralization of data theoretically reduces the burden of preparing and submitting KYC information for every new application and can now be retrieved automatically.



"Open banking" came into force on 13th January, 2018 and is enforced by the Competition and Markets Authority of the UK. It effectively forces the largest banks to release their data in a secure, standardized form, so that it can be shared more easily between authorized organizations online. The customer has control and must give their explicit approval to any exchange.



The Philippines

The country passed the Data Privacy Act in 2012 as a comprehensive and strict privacy legislation "to protect the fundamental human right of privacy, of communication while ensuring a free flow of information to promote innovation and growth and is enforced by the Privacy Commission". In 2016, the final implementing rules and regulations came into force.

Source: Interview with Ariadne Plaitakis, Senior Associate and Competition Law Expert at Bankable Frontiers Associates, 5th April 2019

Mazer, R. (2018). Emerging Data Sharing Models to Promote Financial Service Innovation: Global trends and their implications for emerging markets. FSD Kenya



Data protection in Kenya

The 2018 Data Protection and Privacy Bill will fundamentally change data localization, data security aspects, and the lawful basis for data processing and data sharing in Kenya



No legislation yet but Kenya's parliament is at the final stages of passing a regulating legislation: The upper house—the Senate—received final submissions from the Minister in charge of ICT on 18th March, 2019. The bill, currently awaiting a third and final reading and commitment to the committee of the whole house will then be referred back to the National Assembly for a final debate before assent. It has a high likelihood of becoming a law before the end of 2019.

Market practice: The terms and conditions of lenders have clauses that obligate consumers to surrender data to third parties and do not seek consent on how this data is processed or shared.

Acts and guidelines that currently guide the sector include:

Kenya Information and Communications Act (2010): Section 31 of this act restricts telecommunications service providers from intercepting or disclosing private data sent through their networks or digital platforms to any other person.

Kenya Information and Communications (Consumer Protection) Regulations (2010): Section 15(1) of this act restricts providers from tapping, intercepting or listening to communications by private users of telecommunication devices like phones.

Kenya Information and Communications (Registration of Subscribers of Telecommunication Services) Regulations (2014): Section 13 of this act permits CAK to access private information on request.

Computer Misuse and Cybercrimes Act (2018): This act prohibits the sharing of false, misleading, or fictitious data.

Key features of the Data Protection and Privacy Bill, 2018

Establishment of a data protection authority

The independent authority will oversee data protection under the bill

The authority will have institutional and financial independence

Register of all persons or institutions processing data to be established

Overall, **oversight shifted** from the Communications Authority of Kenya (CAK) to the new authority

Periodic risk assessments of private digital data handlers to identify new risks with regard to big data processing

Bill bars the transfer of personal data outside Kenya The requirement will affect digital lenders, many of whom use cloud data repositories with servers hosted outside Kenya

Consent of users required before retrieval, transfer or sharing of private data



Relative exclusivity of digital credit products

The digital divide is a relevant concern and risks further excluding underserved customers in Kenya

A number of factors exclude new and currently underserved customers from digital credit in Kenya

- 1 While smartphone uptake may be increasing, the majority of these phones are low-end and have limited RAM, which <u>prohibits running many fintech apps</u>. Furthermore, the cost of data makes many users highly price-sensitive, as evident from the preference for USSD-based or SIM toolkit-based products.
- While many demand-side respondents had received basic schooling, many struggled to understand T&Cs and navigate the app-based user interfaces in particular. This translates to relatively low digital literacy and confidence, particularly for segments, such as women and rural users who will naturally prefer to the use SIM toolkit or USSD-based products.
- Rural areas are home to 83% of Kenyans. While 77% of the total population are mobile internet users, we know that <u>connectively is less reliable</u> in rural areas. Through mock-application reviews with digital credit users, we noted high data price sensitivity. Low-income users, in particular, are not always able to access data.

| Attributes | STK | USSD | | App-based | |
|------------------|----------------------------------|--|----------------------------------|---|---------------|
| Provider | KCB M-PESA | Fuliza | HF | Tala | OPesa |
| Number of steps | 8 | 3 | 6 | 27 | 6 |
| T&C | Linked to the website for T&C | Linked to the website for T&C | Linked to the website for T&C | Fee details displayed and a link to the agreement | Available |
| Max loan amount | USD 10,000 | USD 700 | USD 500 | USD 300 | USD 100 |
| Cost to customer | 4.08% interest | 1% access and fee ranging 0-70,000 KES on loan balance | 7.725% interest | 11-15% interest | 16% interest |
| Repayment period | 1, 3 and 6 months | 30 day maximum | 1 month | 21 and 30 days | 14 days |
| Reminders | SMS | SMS | SMS and calls | SMS and calls | SMS and calls |

"3G is only available in major towns where providers are able to make more profit.
[So,] rural markets will take years before experiencing 3G or 4G technology" - A Kenyan telecom expert

Source: de Reynal. L and Richter. B (2016). "Stepping Into Digital Life: DSO Research Report Kenya". Mozilla







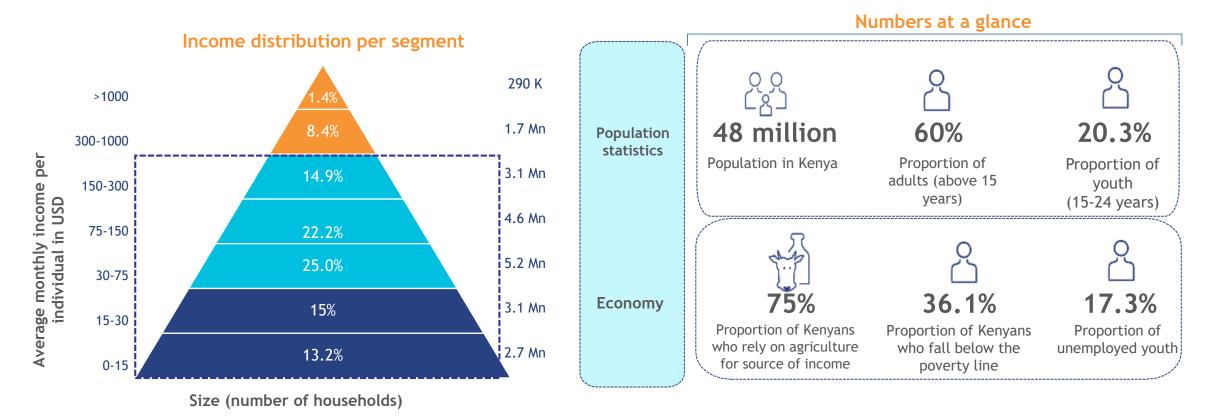




In Kenya, relatively low household incomes sustain the demand for credit while youth demographics drive the adoption of digital channels

The young population of the country and the prevalence of irregular cash flows at the household level are the key reasons for the uptake of digital credit

The gap between the rich and poor in Kenya is still high. The middle-income class is on the rise. However, an intermediate segment of "cuspers" exist who risk sliding easily back to poverty in case of disruption or loss of income. A majority of the population relies on informal employment and has an irregular income.

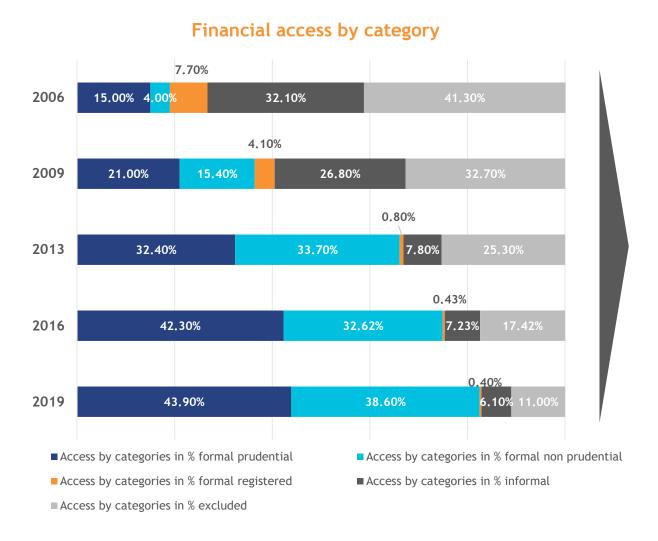


Source: FinAccess; CIA 2017



89% have access to financial services in Kenya

Nine out of 10 Kenyans are able to access some form of financial services due to the ubiquity of mobile financial services



Kenya has increased financial access from 26.7% in 2006 to 89% in 2019—a progress of 62%



Informal groups are a key source of financing in Kenya. These channels are, however becoming more formalized. In the last three years (2016-2019), the usage of informal channels has declined by 11.3%.

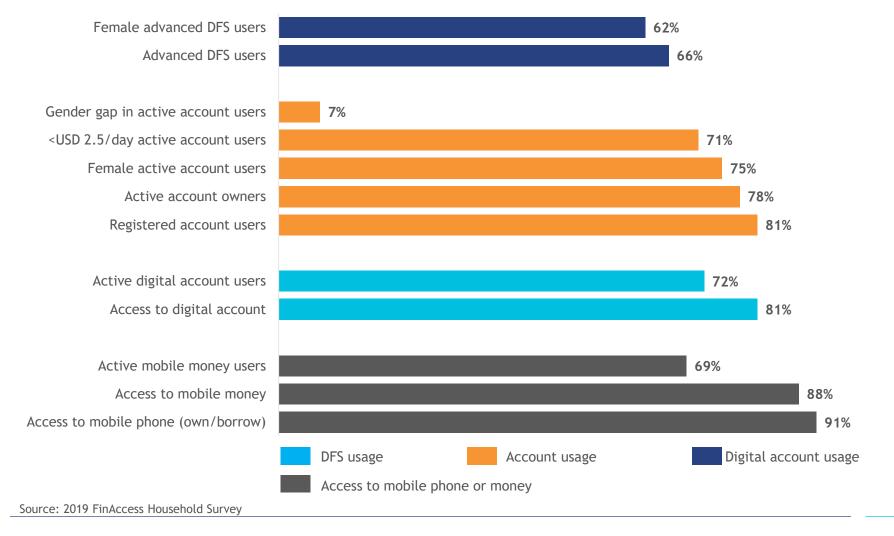
Source: 2019 FinAccess Household Survey



In general, significant digital account usage is seen for financial services

Mobile money usage, digital account usage, and digital activity by the low-income segment exhibits high activity

Digital activity and usage

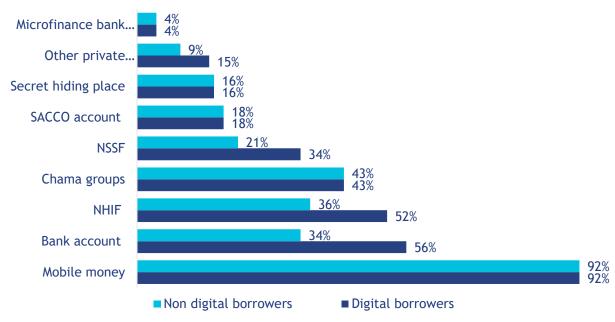


- Gender gaps in active account usage are under 10%
- A majority of lowincome earners are active account users
- Only 19% of adults lack access to a digital account
- 75% of women with access to a formal account are active users



Kenyan digital credit users have a more diversified financial portfolio than non-users

Digital credit users show a more robust use of various financial channels than traditional consumers



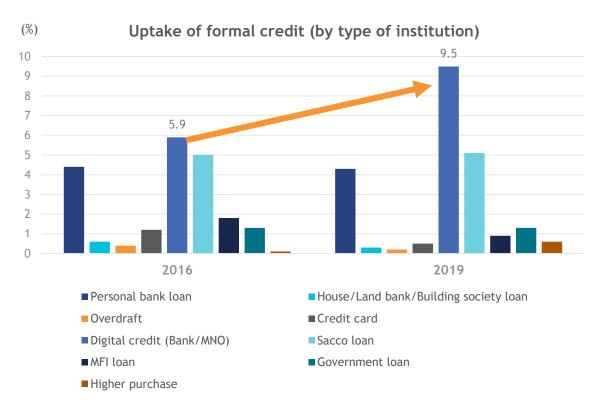
- The uptake of bank accounts, medical insurance, and pension savings by digital borrowers and their use of private financial mechanisms is greater than that of traditional borrowers.
- The financial portfolios of digital borrowers have a richer footprint of data compared to traditional bank users and offer an advantage when seeking to secure access to credit
- Informal savings groups (chama) are equally important for digital borrowers and non-digital borrowers.

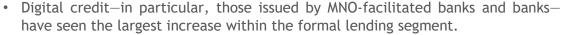
62% of the digital borrowers had 60% of the digital borrowers have more than one digital loan. Digital borrowed solely from one provider borrowers have an average of three loans each. Borrowers Single with more provider than one digital loan Multiple Borrowers provider with single digital loan 12% of the digital borrowers also had a traditional loan Digital and traditional loan 12% Only digital loan >1 52% Only traditional loan >1 37% MSC analysis of supply-side data 2016-18

Source: 2019 FinAccess Household Survey

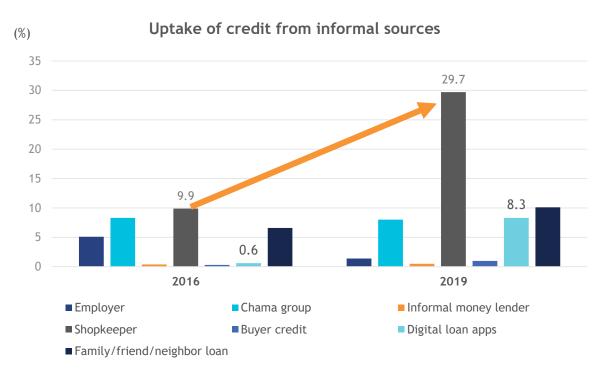
Digital credit has registered the highest growth since 2016 in the formal lending segment

Informal lending sources experienced greater volatility due to the uptake of digital credit and a decline in MFI lending





• In the same period, MFI loan uptake showed a significant decline, reaching levels equivalent to the uptake in 2006 of 1.7% of all consumer loan sources. This reflects a trend where digital credit has been displacing MFI loans.



- The uptake of credit among shopkeepers has recorded the greatest growth in the formal lending segment. This is followed by an increase in digital credit uptake from fintechs, which remain unregulated.
- Informal credit uptake suffered greater volatility compared to formal sources but still accounts for 30.1% of all borrowers.

Source: 2019 FinAccess Household Survey



Borrowers are predominantly male and under 35

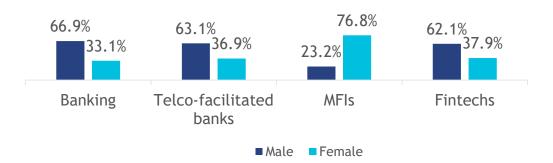
The relative risk aversion of women borrowers is evidenced by their lower uptake of digital credit across providers

From our analysis of supply-side data, 63% of digital borrowers are male.



The proportion of women borrowers is low across provider categories. It is understandably higher among MFIs as MFI customers are predominantly women. MFIs represent only 0.6% of digital loans.

Proportion of clients across providers



^{*} The average number of digital loans per borrower is 2.8 between 2016 to 2018

69.5% of digital loans were issued to people in the 25-34 or 35 - 44 age groups.



The proportion of each of the categories (number of people from the category over all the digital borrowers) is indicated above in the histogram.

^{+ &}lt;u>Digital Credit in Kenya - FSD-K</u>









Demographics

We focused on four¹ demographic segments—youth, smallholder farmers, casual laborers, and micro and small enterprises (MSEs)



The decision of low-income earners to borrow digitally is due to their limited income flow and is mostly influenced by their peers.



Users have better access to information, which influences their choices and decisions. Users in urban areas tend to have access to more information compared to the rural areas.



For both men and women, literacy levels play a huge role in the selection of digital credit products. App-based products are typically associated with <u>lengthy</u> <u>registration and in some cases privacy-invasive processes</u>. This was generally perceived to be more complex than STK- and USSD-based digital credit products.



The customer journey is the path the customer takes as they move from a point of lack of awareness to regular use and later to advocacy of the digital credit product.

DEMOGRAPHICS

What are the socioeconomic characteristics of users?

Age, gender, education, livelihood, source and amount of income, and asset ownership

The selection of focus segments is guided by the finding that digital credit is disproportionately accessed by clients that are urban, young (≤35) and male.



Behavior

Regular users of digital credit are segmented into three previously identified 1 behavioral segments. Their different behaviors have implications on their risk profile for indebtedness, product design, and marketing strategies to broaden access to other users in these segments.

While they are all regular users who rely on digital credit for consumption needs, they display different attitudes towards the product and behaviors.



- Repays digital loans diligently
- Has understood rewards in terms of increasing loan limits
- Uses digital credit primarily for business needs, for instance, to replenish stocks



- Prefers and almost exclusively relies on digital credit
- Tends to ignore repayment reminders
- A savvy borrower who uses multiple providers
- Unaware of T&C or does not understand it or does not prioritize its understanding
- Does not understand the repercussions of negative listing on CRB



- Services more than one loan; combining both traditional and digital
- Prioritizes repaying traditional loans
- Manages to repay digital loans to avoid default

BEHAVIOR

How do users act?

How are individuals influenced in their decision-making in terms of product and loan? How do they plan and prioritize their finances?

¹The three segments, namely, "Repayer, Defaulter, and Juggler" have been updated in their classification with added nuance on behavioral traits. MSC first discussed these <u>segments</u> in 2017.



Key behavioral research highlights on digital credit users in Kenya

Four key parameters affect the uptake and usage of digital credit—repayment behavior, selection criteria for providers, usage triggers, and access to information and technology

1. Repayment behavior 3. Usage triggers 4. Information and technology access 2. Selection criteria for providers Distrust of credit providers Push messages from Feature phone and data Services multiple loans (traditional and low pricing transparency, providers that lead to price sensitivity limits Phone Salience Juggler Trust besides product features are borrowing even when access and choice in and digital). type Prioritizes repaying the main barriers to adopting individuals lack a terms of app-based traditional loans specific need to borrow other options providers Repays loans on Users compare terms of Decision to try digital Positive experiences time as digital digital products easily if they from friends and family credit was influenced Repayer loans are used to Simplicity are simple and harmonized, Truth Choice encourage others to by peers and word of although the timing of replenish business borrow as well mouth disclosure is the key driver stocks Making the cost of borrowing Ease of access to digital Ignores repayment Use of internet and reminders and does more salient (separating credit products tempts exposure to social Rewards **Defaulter** not understand the principle repayment from of Hustle those who have had **Access** media influence the consequences of credit) makes users more limited access to credit choice of digital credit listing on CRB sensitive to pricing provider previously MSC, 2017 CAK, 2017 MSC. 2018 MSC. 2019

If providers explicitly offer customers the choice to view T&C during the customer journey before they proceed to borrow increases the likelihood that the customer will read the T&C. Evidence from behavioral research shows this leads to lower default rates.

Source: Where credit is due, MSC.



Gender-lens analysis

Women digital borrowers tend to be more risk-averse compared to their male counterparts.

Purpose and loan amounts

Most women tend to borrow to cater to their household and business needs. They tend to borrow smaller loan amounts than men.

Loyalty

Men are more experimental and tend to use a number of digital credit providers while women stick to preferred providers.

Loan repayment

Women appear to be keener on repaying their loans on time as compared to men. Women also expressed greater anxiety about defaults, particularly about its consequences.

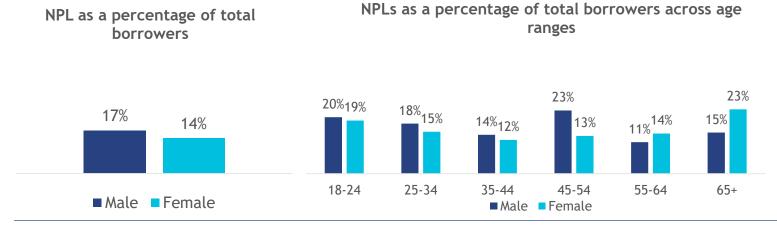
Technology and literacy

Women expressed more caution in adopting technology. Semi-literate men still tend to explore digital credit options with different providers, unlike the semi-literate women, who are a bit reluctant to trying out providers. Social proof is a key determinant for how low-income women adapt to digital credit and use it.

Disclosure

Women are more private with their digital loans and did not disclose their digital loans or outstanding balances even to their partners. Conversely, men did not have similar reservations.

The category of digital borrowers shows a 26% gender gap. However, when we compare NPLs, the repayment behavior of male and female borrowers appears similar.



For borrowers above 55 years, the default rate is higher among women compared to men. Some possible reasons for this could be:

- Older women may struggle more with digital literacy and with using the product;
- Family members may use their IDs for digital loans with no intention to repay them.



Evaluating the usability of selected digital credit products in Kenya

The mock-application review exercise investigated customer experience from the perspective of information, transparency, data privacy and protection, fair and respectful treatment, and UX design. The attributes tested are consistent with client protection principles as championed by the Smart Campaign. However, for purposes of this exercise, the attributes were limited to those that could benefit from demand-side views.

The table below includes the sampling criteria to select the mock review participants:

| Characteristics | Criteria | | |
|--|--|---|--|
| Cital acteristics | Urban | Rural | |
| Usage | An already existing registered user, except for Fuliza and O-Kash where new users were allowed | | |
| Type of phone | UWns a smartnnone | Owns either a smartphone, a feature phone, or a basic phone | |
| Gender | At least 40% of women per mock review site | At least 60% of women per mock review site | |
| Age | At least 50% of under 35 | At least 50% over 35 | |
| Business ownership | At least 40% of MSME business owners | At least 60% of MSME business owners | |
| Use of complaints resolution mechanism | At least one channel used | None required | |
| Digital credit products assessed | Branch, Tala, M-Shwari, KCB M-PESA | | |



Users were able to navigate digital credit interfaces with some challenges

The section below summarizes high-level insights from the three key steps of registration or sign-up, loan application, and loan repayment.



Registration or sign-up

Phone type, size of screen and memory affect customer engagement: Users with low-end smartphones, which have smaller screens and low specifications, struggled with specific apps that displayed a lot of information on the screen and affected how the users engaged with the content.

Unstable network connectivity and high price sensitivity to data: Lower-income users, in particular, did not have enough data bundles to download and register and this at times disrupted the process

Lengthy processes turn customers away: Users lost patience with T&Cs and accepted them without reading. Detailed KYC requests prompted respondents to switch to other products when the application for loan failed.



Loan application

Loan limits: First-time applicants were faced with low limits of between USD 2-5, which discouraged them.

Some semi-literate users struggled with the process: Key issues that such users faced were downloading the app, navigating the app menu, language, and content of information.

Marketing: Some apps featured direct marketing in the app and others, such as Tala have categorized users into loan groups depending on the amount borrowed, such as bronze, silver, and gold as a way to motivate repayment.

Information was easily available: Such information included interest rate, repayment due date, and extra charges—often written as service or facilitation fee.



Loan repayment

Channels: All providers offered the M-PESA Pay bill option. In some cases, users had to refer to the SMS texts sent by providers to recall the paybill number to make a repayment. For banklinked providers, such as M-Shwari, KCB M-PESA and HF Whizz, users could pay directly from their digital savings accounts.

Patterns: Some providers offered the option of weekly installments. Lower-income users preferred to repay their loans in small installments to complete before the due date.

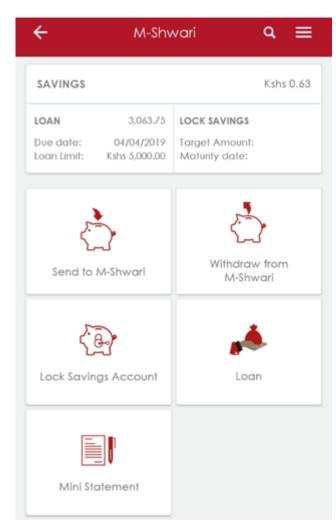
Prevention of over-indebtedness: Defaulters could not borrow other loans from the same provider; Fuliza borrowers had to repay those loans through M-PESA first.



Balancing the quantity of information is important in the design of digital credit products

These attributes have a direct impact on product uptake, continued use and the degree to which product terms are understood

- Most digital credit apps commonly provide a lot of information to customers at the registration stage.
 Hence, digital credit app users are perceived to be better protected with a provision of adequate
 information about the services they subscribe to than SMS or USSD-based digital credit users. However,
 this does not automatically result in better control for users. On the contrary, we observed that the
 majority of digital credit users do not read nor pay attention to the terms and conditions to fast-track
 the process.
- The simplicity of the user interface is a key driver to encourage digital-credit users to stick through the course of registration and encourage regular usage of digital loans. Simplicity provides users with a level of control wherein they are able to understand the process quickly and easily.
- We also observed that low-income users, particularly semi-literate users, prefer the use of SIM toolkit and USSD menus compared to apps because they are more familiar and easier to process in terms of language and interface.
- Some providers, however, have incorporated simple designs with familiar menu terms and icons. A case in point is how Safaricom uses the concept of simplicity in the design of their app as illustrated in the accompanying figure.





The use of simple language and content in digital credit enhances transparency

Digital credit users tend to stick with digital loan products that they identify with and that provide easy-to-comprehend, clear information.

Here are two good ways of communicating important information in a transparent manner

Some providers, such as Branch simplify the pricing of the loan in absolute amounts, which is easier for some customer segments to understand instead of using percentages.

Your Requested Loan





Afri Kash provides a good example of how information on terms and conditions can be broken down into simple and clear language as illustrated in the figure below:

| Loan amount | This is the amount you have requested | What happens if I am late to pay? | Your credit scoring with Afri Kash will be downgraded. We will contact you to make sure that you pay the loan as soon as possible. |
|--|--|--|---|
| Total amount due (principal + interest) | That is the loan amount plus the interest that we charge | What happens if I am more than 30 days late? | After we have notified you and contacted you, and you are still late, we will notify a collections agency to recover the total amount due plus collections fees of 14%. |
| Effective Interest Rate (EIR) | This is could be either 5% - 7% - 10% | What happens if I don't' pay after 60 days? | We will notify the Credit Reference Bureau (CRB) to place your file in a black list. You will be unable to obtain any credit from Afri Kash or any other financial institution until you have repaid your defaulted loan. |
| Disbursement date | Is the date that the loan was sent to you via M-PESA | What are the penalties if I get reported to the CRB? | In addition to paying Afri Kash the defaulted amount you will also owe the CRB fees between 3,000 Ksh to 3,500 Ksh for processing, payable only in-person at their Nairobi offices. |
| Due Date | Is the date when you have to repay back the loan plus interest | Where can I get assistance? | You can contact Afri Kash either via email at support@afrikash.net |

Source: Afrikash



Providers nudge users into giving consent as part of the application process

- Data privacy concerns abound in digital credit since digital credit providers collect digital
 trails from their customers for lending purposes. In some cases, some of the providers—
 particularly fintechs—collect and transfer data to third parties in other countries, which is
 of key concern since the fintechs are not regulated.
- To counter these concerns, most providers ask customers for consent during registration.
 At this point, many customers express concerns about getting credit rather than data
 privacy. Even the handful of customers who read and understand the requests for
 permissions do not understand the implications of the data collected.
- We also observed that some providers use aggressive language in their data privacy policy statements instead of enabling users to understand the need to collect personal data, as illustrated in the sample message below:

Sample message from OPesa on their privacy policy

You must accept our privacy policy. To provide you with the Service, you must authorize the provision of certain personal information to us as described in our privacy policy. Our privacy policy governing the Service is attached to and incorporated into these Terms ("Privacy Policy"). By accepting these Terms and using the Service, you consent to and authorize the collection and use of personal information in accordance with the Privacy Policy.

Example of Tala's request to collect personal data

We need the following permissions to start your loan application

This information helps us get to know you better and determine if we can offer you a loan.

Manage calls

Used to securely link your account to your device. We will never send or receive calls from your device



SMS

Used to understand your



financial history

By tapping "Continue" I accept and agree to the <u>Privacy</u>.

Policy.

Source: CGAP: 'Time to take privacy concerns seriously'



Clear design, simple processes, and transaction speed are some of the valued attributes of the digital nature of the product

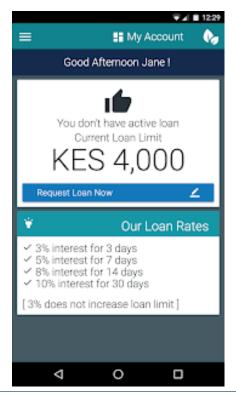
- In many instances, the most pressing need for a digital credit loan often overrides all other issues for most users. However, as per Maslow's theory, once users satisfy a certain set of needs, they move on to tackle more sophisticated issues. We observed during our mock research that digital credit users, particularly jugglers, compare digital loan providers based on their experience.
- We assessed the most popular products in the market and observed the following likes and dislikes for product attributes as displayed in the table.

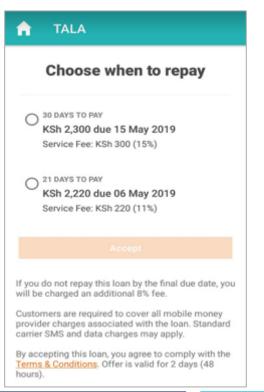
| Attribute | Likes | Dislikes |
|---------------------|--|---|
| Aesthetics | Clear and uncluttered screen design suited to diverse screen sizes and phone types Graphic design and layout have a consistent look and feel | Information is presented on screen using small font sizes and in technical language Hidden menus on app products that some users find difficult to identify Unnecessary questions during registration or loan application |
| Functionality | Minimum number of steps to conduct a task such as registration, application, and repayment Additional value-added services or features, such as savings | Network disruptions that affect the speed and performance of the service Inability to navigate to other screens or tasks while conducting a transaction |
| Customer engagement | Interactive features, such as in-app messaging Some customers value SMS alerts. These alerts provide information and remind users of payment dates | Delay in customer feedback, particularly concerning loan applications and repayments |



Digital borrowers greatly appreciate the loan application and repayment processes

- Access to flexible credit products enables digital credit users to select contracts and terms that are best suited to their needs. In digital credit, one size does not fit all as different segments of digital borrowers have varied use-cases.
- Some digital credit providers offer borrowers flexible products in form of loan tenures, interest rates, and loan repayment installments. Many providers allow customers to make repayments in small amounts before the loan term expires.
- KCB M-PESA has an interesting feature that allows users to borrow top-up loans several times, as long as customers are within their limit. Customers are also allowed to repay their loans on the same date they borrow and roll over their loans to the next month, depending on need.

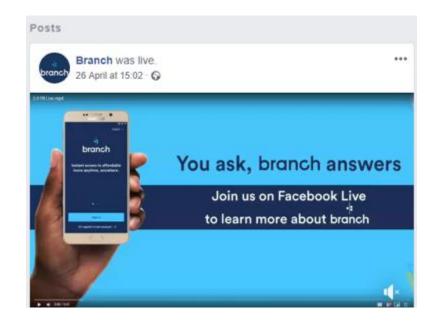






Clear communication channels and instant resolution of complaints give digital borrowers a voice

- Due to the nature of digital credit, providers use a variety of "low-touch" communication tools to reach out to their customers and build relationships with them. The most common channel for communication is through SMS texts, which is primarily used for marketing services, dissemination of product information, and reminders on loan repayments. Most app-based lenders incorporate online and social media channels since their core target market comprises clients who are young, urban, and middle-income earners. Person-to-person interactions are minimal and mostly come as telephone calls, which are used to communicate to customers who have missed payments or have defaulted on their loans.
- From our research, incorporating methods that enable customers to receive feedback when they have concerns or issues gives them a voice. For example, Branch and Tala have provided an in-app messaging tool that enables customers to ask questions and receive instant feedback. Branch also has an interesting feature where they run live sessions on Facebook dubbed "You ask, Branch answers". This enables customers to ask questions and raise concerns about their loans and they get instant feedback.





Source: Branch facebook page



Users of digital credit expect fair treatment and handling from digital credit providers

- In traditional financial services, clients can easily assess treatment and handling by financial service providers since it involves physical interactions. However, in digital financial services, respect is not often considered—particularly if the transactions are purely digital in nature, such as borrowing.
- Our analysis of customer behavior revealed that digital credit users expect to be treated with dignity and they assess this through the digital interactions they have with providers. Text messages and calls were primarily the means through which digital credit users engaged with providers and these determined the level of respect they were accorded.

Client observations on the treatment

- We noted in the research that where customers had interacted with providers through phone calls or physical visits, they based their satisfaction on the way they were handled and treated.
- Customers also assessed respect based on the speed with which providers acknowledged and handled customers' complaints and issues either digitally or through face-to-face interactions.
- We also observed that where customers defaulted on their loans, they were more prone to react negatively if they received threatening messages or calls from digital credit providers

"I like M-Shwari, since they send messages to appreciate your effort when you repay their loan. If you make a higher payment than your outstanding loan balance, they forward the balance to your M-Shwari savings account. They know how to deal with customers and maintain the relationship."













Appropriate product design and delivery

Regular marketing and communication largely drive product knowledge and awareness. Low-income and women customers, in particular, rely heavily on peer networks and their product uptake is driven by social proof*.

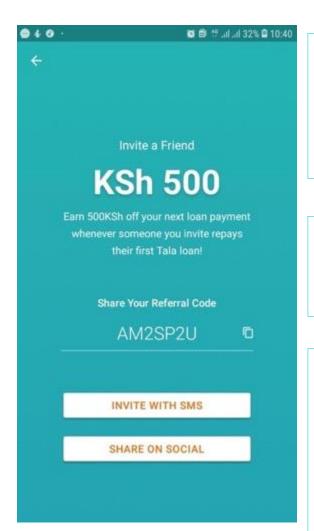
Heavy marketing works but key segments still value social proof

Digital credit products are heavily marketed and advertised through various media incorporating above-the-line (ATL) and below-the-line (BTL) methods. The majority of the respondents heard about digital credit for the first time through marketing messages from various providers. However, above-the-line (ATL) and below-the-line (BTL) marketing methods are not sufficient for some segments who move up the customer journey primarily through word-of-mouth and referrals by peers. The need to understand the experience of trusted sources was key in the trial and uptake of the product. For semi-literate respondents, referrals and word-of-mouth offered personal assistance on the procedures of the service which increased confidence.

Terms and conditions get a cursory glance at best

Most digital lenders satisfy their responsibility for transparency through "Terms and conditions" that provide detailed information either on the app or as a link to the website. Most respondents reported paying little attention and even if they read the terms, few claimed to understand them. The key issues are:

- Tunneling behavior—some digital credit users are overtly focused on the need or urgency for credit.
- In some cases, T&C are accessed via a link to separate page or app, which is a hassle.
- Some users find the language used in the terms and conditions to be too lengthy and difficult to understand.



Users speak

"KCB M-PESA often runs promotions where they encourage customers to repay within the same day and get zero-interest benefits. This encourages me to borrow more and repay early."

"I heard about digital credit for the first time through a friend who taught me how to register and borrow a loan."

"I heard about digital credit when I saw some posters advertising a particular product. I was interested, however, I did not borrow until I received some promotional messages that provided more information about the product."

*Social proof is an informational social influence. It describes a phenomenon wherein people copy the actions of others in an attempt to undertake behavior in a given situation.



Prevention of over-indebtedness: Delinquency trends

Digital exclusion is a reality for a quarter of digital borrowers who are negatively listed.

Defaults are high, and the impact of negative listing for small-loan defaults turns some potentially reliable customers away

Secondary research shows evidence that demonstrates how digital credit has improved access to finance for previously excluded low-income segments. However, concerns exist around the notion that the increasing rates of default rates particularly for those with low income have been diluting these gains from digital credit. These concerns appear to be valid.

Negative listing causes emotional stress and requires both hassle and expense to rectify; these are burdensome, particularly for defaults on very small loans

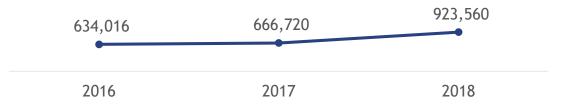
Most respondents in this research were aware of the consequences of negative listing. However, a tendency to mentally "postpone" the pressure of repayment was observed due to:

- Economic vulnerability or inability to pay the loans due to lack of income;
- Remote interaction and relationship between lender and users, which tends to reduce the obligation and pressure to repay the debt.

Negatively listed respondents reported feeling like they have been effectively locked out not only from the formal financial system but also other opportunities, such as jobs, which require a clean record. The despair is compounded especially when this reality is caused by default on very low-value amounts, such as loans of USD 2. Those negatively listed have to pay USD 22 to get de-listed. Some respondents expressed that this turned them away from the product even if they manage to settle outstanding digital loans.

In 2018, approximately 19% of the 923,560 borrowers already had one or more NPLs in the two preceding years; hence, past delinquency does not disqualify someone from getting loans in some cases

Number of borrowers with NPLs



Digital loan collection practices are mostly remote and feature minimal human touch

The collection of delinquent digital loans differs greatly from traditional loans. The latter relies on regular interactions with customers that often turn to physical interactions. Digital credit recovery, however, is often done via messages and telephone calls.

Respondents reported that digital credit providers send text messages almost daily. The downside of such intensity of reminders is that some users become immune to them and in some cases even delete messages upon receipt. Conversely, they do not trigger repayment as intended. The escalation process in the recovery of delinquent digital loans is mostly to external debt collection firms and CRB negative listing. The low levels of human touch and client relationship management do not help to address delinquency rates in digital credit.



Multiple borrowing and over-indebtedness

Loan stacking is a prevalent practice among low-income digital credit users to manage income variability

The data offers evidence for multiple borrowing and respondents offer insights to why it is such a common phenomenon

According to the FSDK CGAP data, 35% of digital borrowers have borrowed from more than one digital lender and 14% of digital borrowers were currently balancing loans from more than one digital lender.

This research reveals the major reasons of multiple borrowing of digital loans as:

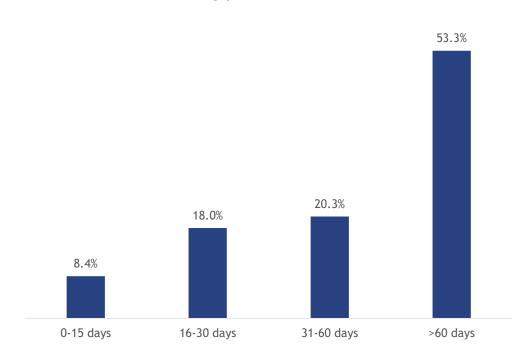
- Low loan limits that do not match the needs of the borrower; due to this
 feature of digital credit, the incidence of multiple borrowing may not
 always be indicative of over-indebtedness as multiple small loans could
 just correspond to need;
- Short loan tenures that pressurize the borrower, who resorts to coping mechanisms, such as borrowing from other lenders to repay other lenders.

Low-income people often face income scarcity due to disparate and irregular cash flows from their economic activities. They use a combination of informal and formal credit instruments to cope. Our research findings show that a majority of those who "juggle" digital loans do it to manage and meet their various needs related to their household or business, or both. Digital borrowing has become an additional tool for some households to manage consumption needs.

To manage several outstanding loans effectively, jugglers often apply mental accounting that enables them to repay multiple loans as they become due. The jugglers categorize their incomes into various groups with diverse functions, some of which include repayment of digital loans.

Among borrowers who have taken more than one digital loans, 26.4% of the borrowers took two consecutive loans within 30 days

Time gap between two loans



The average loan duration for digital credit is 30 days.



Loan decisions and customer behavior

Regular savings, frequent borrowing, and early repayment are the key determinants of customer credit score and loan limits

Customers understand what drives loan limit increases on subsequent loans

Most respondents had their first loan limits set below USD 10. Many customers considered this amount to be low, as it was insufficient to meet borrowing intent. Among the respondents, business owners were successful in increasing their limits with successive loan cycles. Other customer segments, such as youth, casual laborers, and unemployed customers experienced slower or minimal level of growth in loan limit.

Most respondents understood how to increase their loan limits as it is a key part of the constant marketing messages received. Most customers resorted to borrowing regularly and making early repayments to increase their limits. Some customers who were regular users of M-Shwari and KCB M-PESA increased their savings and M-PESA transactions to increase their loan limits.

Some users who had defaulted or been listed negatively reported reductions in loan limit and appreciated this as a consequence of non-repayment.

Gaming the system in digital borrowing evolves along with user knowledge and experience

Repeat use of the product had increased product understanding and confidence of some respondents, who revealed they frequently gamed the system to influence and increase their loan limits.

Gaming in digital credit has taken various interesting forms, as we observed in the research as follows:

- Repeat savings;
- Early or timely repayment of digital loans;
- Trading with money from diverse sources;
- Taking advantage of digital credit promotions to increase the limit. For example, some lenders announce promotions where they reward customers to provide customer referrals with offers, such as interest-free loans. We see this particular trend exhibited by the youth, who refer their friends to borrow from particular lenders so that they can borrow interest-free loans and increase the limit at the same time.



Prevalence of sports betting and link to digital credit

A segment of digital credit users regard betting as a means to achieve aspirational goals

Lower-income customers are highly prone to betting, and the ease of borrowing digitally increases the risk of this trend

A study conducted by PWC in 2017 shows Kenya as one of the largest markets for sports betting in Africa, with an estimated market size of 20 million USD. The growth of the industry has been fuelled by the influx of betting companies and the rise of the habit as a leisure activity. Geopoll 2018 data shows that the typical profile of sports betting consumers is a young male who is economically vulnerable. It is an addictive activity and betting patterns often peak over the weekends and during football seasons.

According to our analysis, low-income people are most prone to turn to betting due to economic vulnerability. Low-income people have aspirational goals. However, due to their low and irregular incomes, they rarely have money to invest beyond their basic expenses. These goals include: better education for children, save up for illness and other lifecycle events, investment in assets and financial independence. However, clients with low and irregular incomes, and particularly the youth rarely have money to invest beyond their basic expenses.

Most low-income people will often save up or borrow lump-sums to achieve their aspirational goals. However, saving up or borrowing often takes time and patience. Thus, betting has great allure for many, particularly the youth who seek to change their fortunes instantly with a lucky win.

Key drivers that fuel the betting behavior particularly among lowincome digital credit users

The following are the underlying drivers:

- Entry barriers to betting are minimal. Low-income users can bet for as low are USD 0.1;
- Sports betting is seen as a social and leisure activity, since it is coupled with activities, such as football;
- Big risks generate big wins. Some betters have hope that they will win big lump sums if they keep betting;
- Betting firms have capitalized on marketing their services with a focus on transforming lives through quick wins. The promise of quick riches resonates highly with the youth, particularly in urban settings;
- The medium of betting through mobile phones has also captured the youth who tend to own phones and spend a significant amount of time on them;
- Peer influence generates interest in betting for some users.



Awareness and use of mechanisms to resolve complaints

They are largely unused; respondents generally did not experience any issues or concerns to raise with the provider. Where used, they largely pertain to queries around loan limits, loan repayment, and CRB listing

Users speak

"I never had an issue to raise with Tala or M-Shwari but I know with Tala you can contact them on the app."

"On the last loan I took, I had an issue with the internet since I was back in the village. I wrote to Branch through the app, which they responded to and sorted out the issue by sending me the loan I had applied for."

"I once repaid a loan at the branch but they later called claiming the loan had not been paid. I shared the payment details and the provider was able to rectify on their end."

"I once reached out to M-Shwari because I had paid a loan and I forgot the full loan amount had some cents as well. M-Shwari was threatening to list me on CRB because of this balance, so I called them and they asked me to clear the amount as it still showed I had a loan."

Balancing tech and touch

The current mechanisms to resolve complaints largely rely on the use of call centers, emails, and SMS alerts that are "low touch" in nature. They are, however, still largely unused since customers are not aware enough.

Research also shows the need for varying levels of "touch". Some low-income users prefer high touch communication channels, particularly when trying out new products. However, as the products mature in the market, users get more familiar with the technology and thus require lower levels of touch.

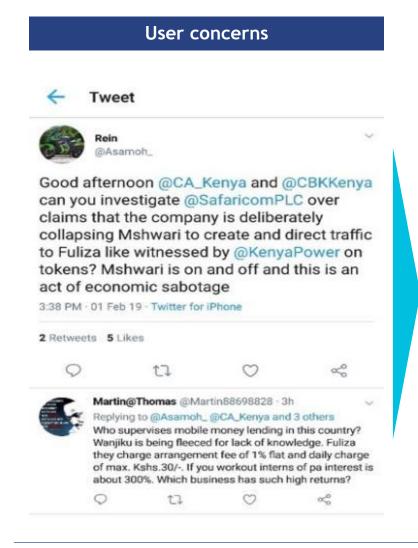
The level of automation in current complaints resolution mechanisms likely triggers the same type and gravity of response to all late repayers or defaulters, regardless of outstanding balances. The system should be more nuanced to provide appropriate communication corresponding to outstanding balances and the nature of delinquency.

*low touch refers to the reduced human engagement in the product value chain which is otherwise the norm in delivery of traditional financial products



Digital credit providers do offer multiple channels to resolve complaints

Social media channels are seen as more effective in evoking lender reactions compared to traditional channels. However, these are more accessible to younger borrowers; meanwhile, older and more rural borrowers still value some "touch".

















List of abbreviations

| AML anti money laundering API application programming interface ASCA accumulating savings and credit association CAK Communications Authority of Kenya CBR central bank rate CMA Capital Markets Authority CRB credit reference bureau CBK Central Bank of Kenya CGAP Consultative Group to Assist the Poor Chama Rotating Savings and Credit Association in Swahili DFS digital financial services HELB Higher Education Loans Board IFC International Finance Corporation KCB Kenya Commercial Bank KES Kenyan Shillings KIPPRA Kenya Institute for Public Policy Research and Analysis KYC know your customer MFI microfinance institution MNO mobile network operator MSME micro, small, and medium enterprises MVNO mobile virtual network operator NHIF National Hospital Insurance Fund NPL non-performing loan | NSSF P2P PPI SACCO SIM STK SMS SPTF T&C UX USSD USD | National Social Security Fund peer-to-peer Poverty Probability Index Savings and Credit Cooperative Organization subscriber identification module SIM tool kit short message service Social Performance Task Force terms and conditions user experience unstructured supplementary service data United States Dollar |
|--|---|--|
|--|---|--|



About the study

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About AFD



AFD funds, supports and accelerates the transitions to a fairer and more sustainable world. Focusing on climate, biodiversity, peace, education, urban development, health and governance, our teams carry out more than 4,000 projects in France's overseas departments and territories and another 115 countries. In this way, we contribute to the commitment of France and French people to support the sustainable development goals.

About SPTF



SPTF is a non-profit membership organization with more than 3,000 members from all over the world. Our members come from every stakeholder group in inclusive finance. SPTF engages with these stakeholders to develop and promote standards and good practices for responsible inclusive finance in an effort to make financial services safer and more beneficial for clients.

About The Smart Campaign



Accion is a global nonprofit committed to creating a financially inclusive world, with a pioneering legacy in microfinance and fintech impact investing. The Smart Campaign is a global effort to unite financial leaders around a common goal: to keep clients as the driving force of the industry. It is working with financial leaders from around the world to provide institutions with the tools and resources they need to deliver transparent, respectful, and prudent financial services to all clients.

About MSC



MSC (MicroSave Consulting) is a boutique consulting firm that has, for 20 years, pushed the world towards meaningful financial, social, and economic inclusion. With 11 offices around the globe and about 190 staff of different nationalities and varied expertise, we are proud to be working in over 50 developing countries. We partner with participants in financial services ecosystems to achieve sustainable performance improvements and unlock enduring value. Our clients include governments, donors, private-sector corporations, and local businesses.

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Gitau Ndung'u

Humphrey Kinuthia

Isaac Waicigo Jackson Muindi James Wainaina James Wairimu Jeldine Nkirote Jeremy Ondicho Joseph Nene Joseph Musau Josephat Onchieku Judith N. Simiyu Kelvin Mwangi Kelvin Mutisya Kevin Kamau Margaret Ngina Mary Wangari Naomi Thuo Prince Njiru Patrick Kioko Patrick Kinuka

Rose Wamboi Rosemary Achieng Sarah Mwaikali Sebastian Ngaira Scholarstica Kioko Stanley Kimanzi Sylvia Khalayi Thomas Mirithu Virginia Njoki Wandera Nyongesa Wilkins Musira Yvonne Wanjiru

Supply-side actors and market facilitators

Billy Owino, Chief Executive Officer, Transunion
Cindy Hsin-I Lin, Risk Analyst, Credit Info
Dan Karuga, General Manager, Branch
Ezana Assefa, Chief Executive Officer, Afri Kash
George Njuguna, Chief Information Officer, HF Bank
Juliet Ongwae, Chief Innovation Officer, Musoni
Karen Kantai, Head, Business Support, CBA
Leah Kiwara, Financial Sector Consultant, IFC/ World Bank Group
Michael Nyaga, General Manager - Digital Lending, Equity Bank Ltd
Nancy Kinyanjui, Head of Analytics and Value-Added Services, Credit Info
Rose Muturi, Chief Digital Officer, HF Group (former Director, Tala Kenya)

Thematic experts

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We also thank the following reviewers who have provided us with invaluable feedback and suggestions:

Amelia Greenberg, Deputy Director, SPTF Alexandra Rizzi, Senior Director, Smart Campaign Graham A.N. Wright, Managing Director, MSC

Isabelle Barres, Global Director, Smart Campaign Laura Foose, Director, SPTF



Introduction to the study

Given the rapid evolution of digital credit landscape in Kenya, it was time to evaluate the progress and challenges in the sector and to propose recommendations towards a more responsible delivery of digital credit.



What?

Develop a research report and thought-leadership focus note on understanding the changes in the digital credit ecosystem in Kenya, building on the previous analytics and behavioral research work done by MSC.

This study consolidates key findings from recent secondary research and is supplemented by customer insights including product user experience through a mock-application review exercise as well as data analytics of supply-side data.



Why?

Clients appreciate the convenience and speed of accessing digital credit; however, core issues remain and include:

- ► Insufficient oversight due to ambiguous regulation of financial institutions and lack of regulation of fintechs
- ► High rates of delinquency in digital credit and the associated negative listing of customers defaulting on low-value digital loans
- ► Interest rates are still high, despite the promise of technology to transfer value to customers
- ► Lack of channels to understand the needs of clients or create products that are adapted to them or do both, which threatens digital exclusion for specific customer segments
- ► Inadequate customer protection practices, particularly with regard to prevention of over-indebtedness, transparency, client recourse mechanisms, and privacy of client data
- ► Confusion or dissatisfaction or both in the user experience due to a "low touch" approach*



^{*}low touch refers to the reduced human engagement in the product value chain which is otherwise the norm in delivery of traditional financial products

Study approach

The focus has been on addressing three broad key questions via secondary research, stakeholder interviews, and quantitative analysis

Key questions Analysis • Current state of financial inclusion in terms of credit access and impact of digital credit • The supporting infrastructure, regulatory environment, policies and guidelines including those relating to consumer protection What is the state of digital credit in Kenya? • High-level trends comparison using anonymized supply-side data of digital credit borrowers between 2016 and 2018 • Supply-side ecosystem, players, challenges, pricing, complaint mechanisms How has the supplier landscape evolved and • Key supply-side challenges impacting customer protection what are some of the key challenges? • Data-driven insights on default trends and product lovalty · Demand-side gaps and demographic and behavioral segmentation of digital borrowers • User needs, attitudes, aspirations, perceptions, and behaviors that influence access, usage, and repayment of digital credit Who are Kenya's digital credit users and UX design suitability and experience, product (price, terms) understanding what has been their product experience? • Data-driven analysis of digital borrowing and default behavior using anonymized supply-side data Addressed largely through primary research and data Addressed largely through secondary research analytics with secondary inputs



Study methodology

To generate key insights from the digital credit ecosystem in Kenya, we used a combination of three distinct approaches:

Primary stakeholder research

The primary research covered both demandside respondents and supply-side actors and observers.

Demand side: We consulted 50 users of digital credit including women, youth, farmers and micro and small enterprises owners from both urban and rural areas. Key informant interviews generated qualitative insights.

Tools employed include:

- Persona mapping to understand what products they currently use
- Scenario mapping to understand the specific situations of customers and their consequent actions
- Behavioral mapping to understand the mental models and decision-making influencers of customer actions

Supply side: We consulted 15 supply-side actors and experts through in-person and phone interviews.

Mock-application review exercise

We worked with 21 active digital credit users to observe and evaluate the usability of selected digital credit products in the market by understanding their feedback and views. In line with the objectives of the newly launched standards for digital financial services, we assessed parameters, such as information, transparency, data privacy and protection, fair and respectful treatment, and user experience design.

We have discussed the criteria for sample selection in the annex of this report.

Additionally, we conducted a heuristic evaluation to assess the usability of each digital credit application in terms of predefined indicators. We were guided by CGAP's customer empowerment framework which encompasses four critical drivers namely choice, respect, control, and voice.

Data analytics of supply-side data

We used anonymized supply-side data sets of Kenyan borrowers for the years 2016, 2017, and 2018.

Suppliers share data once a month; a total of 14 suppliers including banks, MNO-linked banks, MFIs, and fintechs offer digital loans. The database comprised information on more than 8.1 million borrowers and 10.2 million loans. The datasets have been segregated into borrowers of digital and conventional loans.

The merged dataset captured 19,149,873 loans by 6,684,110 unique borrowers.

The annex provides more details on the dataset.



















The methodology of data analytics

We partnered with a leading Credit Rating Bureau (CRB) in Kenya to analyze borrower's data for the years of 2016, 2017 and 2018.

- Data is shared with the CRB by all the providers once in a month. The data is shared in a text file in a template provided by the Central Bank of Kenya.
- For the purpose of our analysis, we merged all data files into a single one using the unique identifier that links the datasets. A total of 19 million (19,149,873 to be precise) loan details, which pertain to 6 million (6,684,110 to be precise) unique borrowers were there in the merged dataset.

In the dataset, each row indicates a single loan (either traditional or digital) with a unique loan id. The dataset also contained unique subject id to understand which all loans were taken by the same individual.

Each loan was marked as either performing (being regularly paid off) or non-performing (repayment is due for more than 90 days) in the dataset by the provider.

Data privacy

At MSC, we have a comprehensive Code of Business Conduct (CoBC) that has a detailed policy for Ethics. The CoBC and the Ethics Policy binds all our staff and team members to preserve the confidentiality of information obtained in client service. Information of a confidential, private and sensitive nature is used responsibly, controlled and protected to prevent its prohibited, arbitrary, or careless disclosure.

Our partner CRB have their own comprehensive data protection policy which was followed during the data sharing process.

We ensured that we agreed upon the list of identifiers in the database and made sure only de-identified datasets were used.

MSC and the CRB team carried out the analysis jointly. The datasets are stored in a single laptop with access to only the two Quantitative Experts in the team. The laptop and the datasets are encrypted with the access restricted to only the two Quantitative Experts managing the data analytics.

During data analysis, we ensured that all results are generated at aggregate-level with no possibility of having any insights that can be interpreted differently.











List of providers featured in the supply-side dataset

| Banking | | | MFIs and fintechs | | Others |
|-------------------------------------|------------------------------------|--------------------------------------|--------------------------------------|---------------------------------|----------|
| African Banking Corporation Ltd. | Citibank N.A Kenya | Diamond Trust Bank Kenya Ltd. | Atlas Mara Digital | SMEP Microfinance Bank Ltd | M-Shwari |
| Bank of Africa Kenya Ltd. | Commercial Bank of Africa Ltd. | Dubai Islamic Bank | Branch | Sumac Microfinance Bank Ltd | |
| Bank of Baroda (K) Ltd. | Consolidated Bank of Kenya Ltd. | Ecobank Kenya Ltd | Caritas Microfinance Bank | Tala | |
| Bank of India | Co-operative Bank of Kenya Ltd. | Equity Bank Ltd. | Century Microfinance Bank Ltd | U&I Microfinance Bank Ltd | |
| Barclays Bank of Kenya Ltd. | Credit Bank Ltd. | Family Bank Limited | Choice Microfinance Bank Ltd | Uwezo Microfinance Bank Ltd | |
| Chase Bank (K) Ltd. | Development Bank of Kenya Ltd. | First Community Bank Limited | Daraja Microfinance Bank Ltd | Watu Credit Limited | |
| Giro Commercial Bank Ltd. | I&M Bank Ltd | Oriental Commercial Bank Ltd | Fairmile Finance Limited | Okolea International Limited | |
| Guaranty Trust Bank (Kenya) Ltd | Jamii Bora Bank Limited. | Paramount Universal Bank Ltd | Faulu Microfinance Bank Ltd | Rafiki Microfinance Bank Ltd | |
| Guardian Bank Ltd | Kenya Commercial Bank Ltd | Prime Bank Ltd | Get Bucks | Remu Microfinance Bank Ltd | |
| Gulf African Bank Limited | Mayfair Bank Ltd | Sidian Bank Ltd | Kenya Women Microfinance Bank Ltd | Maisha Microfinance Bank | |
| Habib Bank A.G Zurich | Middle East Bank (K) Ltd | Spire Bank Ltd. | | | |
| Habib Bank Ltd. | National Bank of Kenya Ltd | Stanbic Bank Ltd. | | | |
| Housing Finance Ltd | NIC Bank Ltd | Standard Chartered Bank Kenya Ltd | | | |
| Trans-National Bank Ltd | UBA Kenya Bank Limited | Victoria Commercial Bank Ltd | | | |



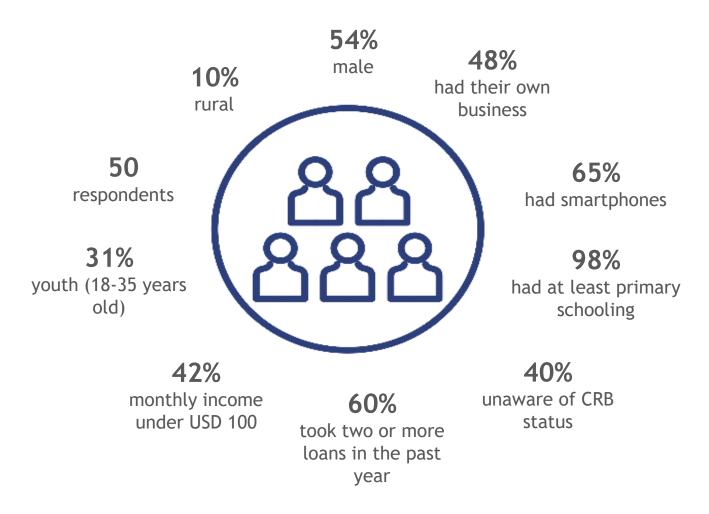








List of providers featured in the supply-side dataset



High familiarity and use of M-PESA-linked products, but >30% had tried app-based fintech products

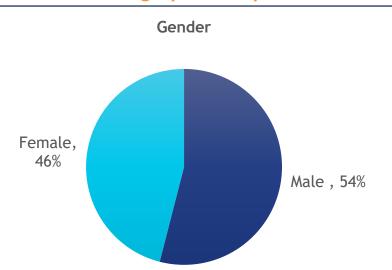


Primary demand-side consultations

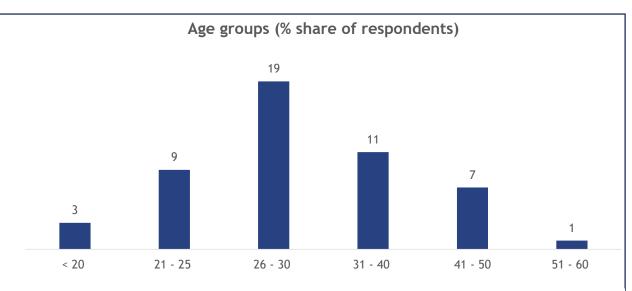
These helped to get further nuance and explore first-hand if there were differences in how everyday Kenyans used and perceived digital credit and the different products

We interviewed a sample of 50 digital borrowers to get deeper insights on use, segment-specific behavioral insights, adequacy of customer protection and empowerment and product awareness. While respondents were selected at random, it was a deliberate decision to have an equal split of men and women as far as possible. All respondents had used digital credit and approximately 60% were regular borrowers having borrowed two or more loans in the last year.

Respondent demographic snapshot



Women make up 50.3% of the Kenyan population. While their use of digital credit is catching up to that by men particularly in urban areas, perception surveys still indicate that "women are 35% more likely to be afraid of taking a digital loan compared to men". We wanted to understand why.



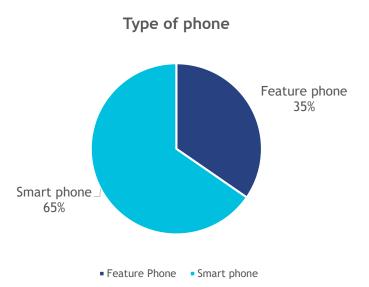
One of the drivers of digital credit in the Kenyan market is its youthful population (<25 years). While young men are generally recognized to be the most active users of digital credit, urban young women are also active users. High youth unemployment at 17.3% however, poses risks of multiple-borrowing and overindebtedness. Respondents across age groups were consulted to also try to understand products can be more user friendly for older users.

Source: 2017 FinAccess Tracker



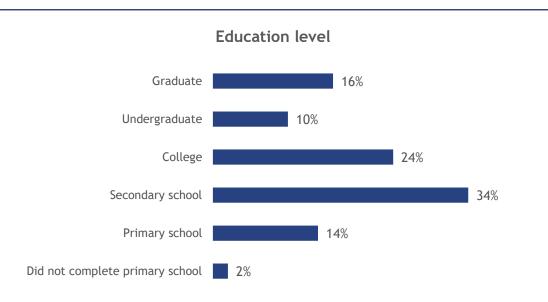
Demographic snapshot of respondents (1)

The type of phone and education levels affect the digital borrower's choice of provider, their experience with the product, and their ability to use the medium of access (phone) and to understand the product terms and their liabilities. This also has an impact on user empowerment.



Phone ownership and access in Kenya has significantly improved due to improved infrastructure, electricity access, network coverage, increased smartphone penetration. However, most users have older and outdated smartphones. Similarly, most of our respondents had smartphones with low-level features in terms of memory and battery life. This particularly impacted those who borrowed from app-based lenders.

Feature phone owners are restricted to borrowing from lenders who operate on SIM toolkit or USSD platforms. In our observations, respondents preferred SIM toolkit or USSD products over apps since these were most relatable being the first products, such as M-Shwari.

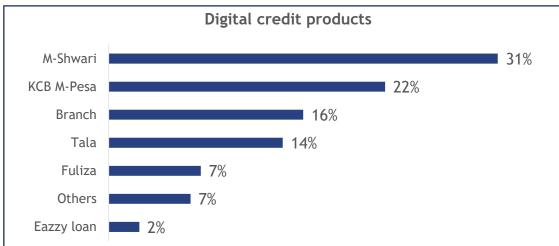


Most respondents had completed secondary school and were expected to be fairly literate and numerate. However, a few respondents were semiliterate and this affected the choice of digital product consumed. A key observation was that some semi-literate users preferred to use SIM toolkit or USSD platforms due to simplicity and clarity of information provided. Women in particular shied away from app-based lenders due to lack of understanding and awareness on how to navigate app-based products. A few women respondents struggled in understanding the language and content provided on the apps for instance at the point of registration. In contrast semi-literate men were more experiential and referred to peers to understand how to navigate the app-based products.

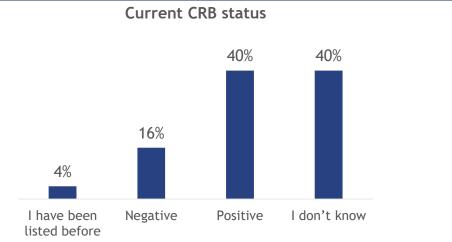


Demographic snapshot of respondents (2)

Respondents expressed an interest to understand the user-uptake of the many products offered by a variety of providers in the Kenyan market. Provider reference was found to be linked to the ubiquity of M-PESA in Kenya and the dominance of M-PESA- linked products in the market. However, app-based borrowing appears to be picking up with Branch and Tala being the most popular products. The fairly high level of negative listing along with the fact that the majority of respondents have superficial or no knowledge of their status are worrying trends.



Reflecting the market share of M-Shwari, most respondents had experience with that product as well as the other M-Pesa-linked product offered by KCB. The earlier preference for the SIM-toolkit interface also predisposes most respondents to non-app-based products. That said, more than 30% of the respondents had experience with app-based products, such as Branch and Tala. The low uptake by respondents for bank products such as Eazzy is linked to the prerequisite for respondents to be bank customers to use the channel. Respondents who were business owners reported that they increasingly use the new product "Fuliza" to manage their business expenses, such as the purchase of stock.

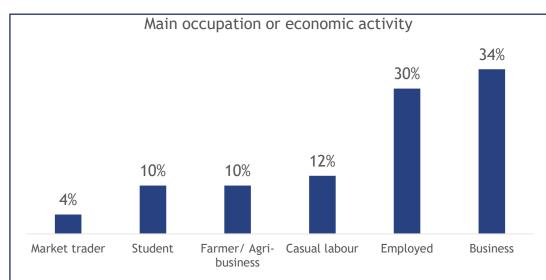


Around 20% of respondents had either been listed previously or have a current negative listing. A negative listing is a result of defaulting on a loan past the 90-day grace period. As digital loans usually have a 30-day duration, a positive listing could still mask defaults that could have taken place within the 90-day period. Respondents who were aware of status relied on hearsay from peers or SMS messages from providers and had a vague awareness of CRB purpose. Among the respondents, 40% did not know about their status and expressed curiosity about the process. Many respondents understood the impact of negative listing when they are denied a new loan. In general, information was not easily available and listed customers relied on informal sources to understand the process.



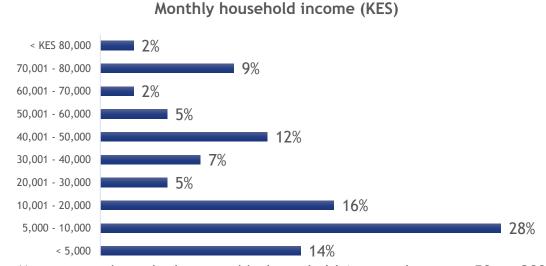
Demographic snapshot of respondents (3)

The economic activity and monthly household incomes offer insights to the respondent's cash-flows as well as the level of their need and habits around digital credit use. Understanding these attributes could also offer insights on where there could be risks around multiple borrowing and over-indebtedness.



Most respondents were employed or have a small business and it was interesting to note that respondents who have more regular incomes and hence cash flows exhibited high product uptake.

A key finding was that those respondents involved in business had a higher need for digital credit compared to other segments. These respondents would borrow regularly to replenish their working capital on a daily or weekly basis depending on the need. These respondents also reflected higher tendencies to borrow from multiple providers compared to other segments in the event the limit did not match the purpose of the loan. On the other hand, respondents from other segments borrowed mainly for consumption and emergencies.



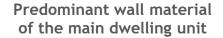
Most respondents had a monthly household income between 50 to 200 USD per month, which is consistent with national trends where half of the Kenyan households earn less than 100 USD per month.

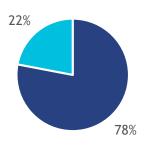
A key observation was that the low-income respondents, in particular, rely on a myriad of economic activities to ensure income inflows. They rely extensively on digital loans every month to facilitate the payment of household bills and emergencies. 11% of respondents borrowed digital loans to cater to medical bills and emergencies.



Demographic snapshot of respondents (4)

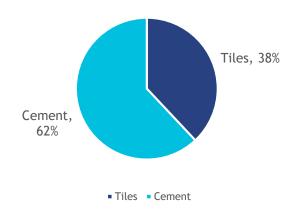
As incomes are self-reported, questions from the Kenya PPI tool were also selected to gain a dipstick understanding of poverty levels and if these were largely consistent with incomes reported.



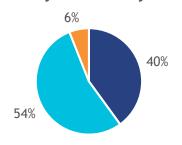


- Finished walls (cement, stone with lime/cement, bricks, cement blocks, covered adobe, or wood planks/shingles)
- Uncovered adobe, plywood, cardboard, reused wood, or corrugated iron sheets

Predominant floor material of the main dwelling unit

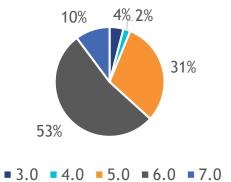


Food consumed by your family in the last year



- Enough and the kinds of nutritious food we want to eat
- Enough but not always nutrious food
- Sometimes not enough food to eat, was sometimes hungry

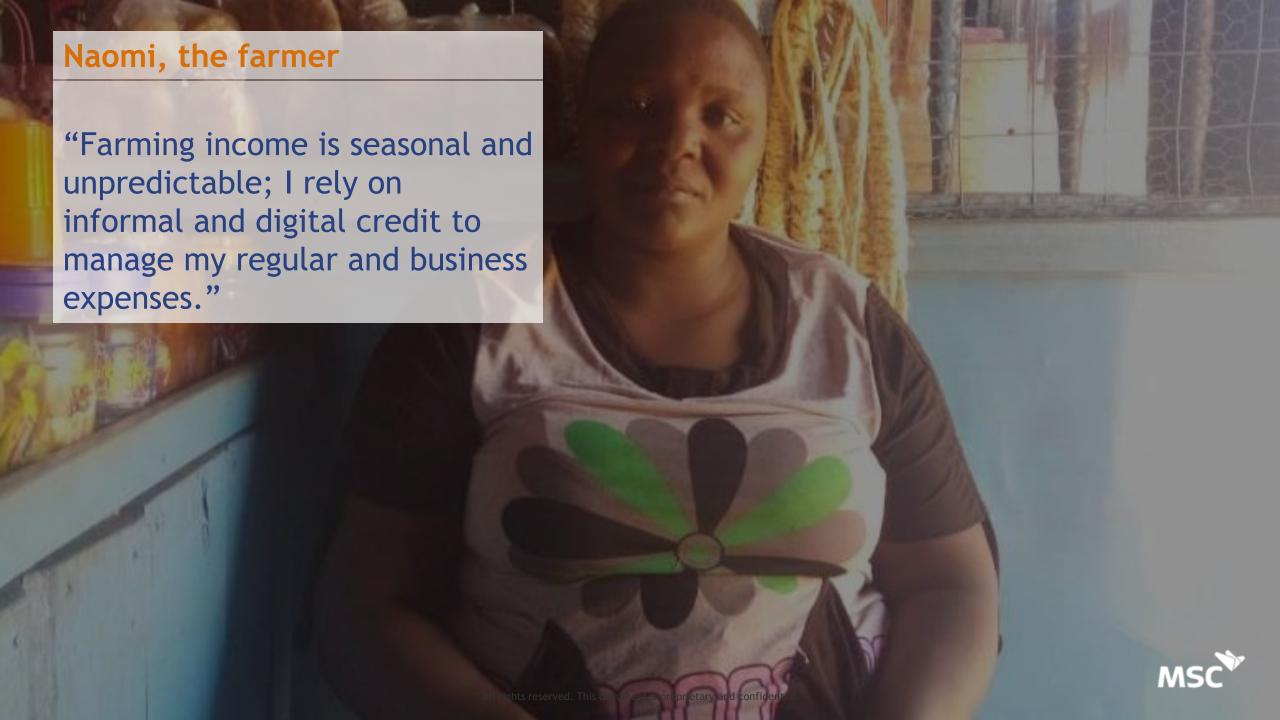
Wealth distribution based on scoring



No difference observed between the different wealth categories in terms of use of different types of products and awareness of CRB status

A wealth index was created by attributing values to each of the above responses. This largely matched the income distribution reported apart from one or two outliers. Correlation analysis to digital credit behavior based on the responses registered to "Use of digital credit products" and "CRB status" was also performed; no significant trends were observed.





DEMOGRAPHIC



Naomi is a 47-year-old woman who is married with three children. She lives in Gatundu, a peri-urban area in Kiambu county, which is an agricultural area. She lives in her own house, a semi-permanent structure made of corrugated iron sheets.

She identifies as a farmer and helps her husband on his landholding of two acres where they grow tea. She also grows local vegetables and rears small domestic animals like cows, goats and chicken for subsistence needs. As tea is a seasonal crop, she only receives two bonus payments in a year depending on her level of production. Around 25% of this payment is deducted to pay for a loan taken from the tea factory at the start of planting season for the required farming inputs. She utilizes her bonus payments to cater to main expenses, such as school fees. Hence, she needs to supplement her income with a small retail grocery shop.

The profits from this business are critical to managing all other regular household and family expenses. When this falls short, she has undertaken digital credit. She has stuck to one provider M-Shwari. Naomi also regularly saves with Equity Bank and her local chama. She considers her chama as an important part of her social life and has currently volunteered to act as the treasurer. The chama also enables her to save on a regular basis and borrow when the need arises. However, she prefers borrowing digitally since she considers it more private and hassle-free compared to chamas. As the treasurer, she is often solving cases of member disputes such as loan repayments, undisciplined members and others.

She has completed Grade 7 (primary) school and she owns a feature phone.

Demographic characteristics and patterns in digital borrowing

Income source and needs Perception and selection of Access to information and Other demographic factors financial products technology • The main source of income Peers and word of mouth Her relatively rural location Higher comfort levels and does not offer much access to reliance on informal products does not match with outflows spurred her decision to try May have a formal account and financial service points but is dependable digital credit and select the Accessibility is an important usage? provider. • Stimulates the need for a Uses digital credit to smoothen factor in trying digital credit; Feature phone and sensitivity secondary source of income she values the convenience. consumption and for business to data price limit access and that pays for regular needs. needs. choice in terms of app-based providers.



oman smallholder farmer

Juggler-Repayer

An analysis of Naomi's journey to becoming a regular digital credit user reveals certain behavioral traits that reflect (1) high reliance on her peers for information and (2) greater diligence in repayment

| | UNAWARE | AWARE | CONSIDER | TRY | > REGULAR USER |
|--------|---|---|--|---|---|
| DEVICE | Uses informal services, still unaware of digital credit | Informed by peers and friends of digital credit | Registers with one digital credit provider | Checks loan limit and borrows first loan of USD 5 which she later repaid | Borrows frequently which has led to an increase in limit to USD 20. Uses the loan to purchase stock in business |
| SOCIAL | Informed by peers and friends of digital credit | Asks questions to friends and family about their experiences | Checks out the digital credit menu and interface of with the aid of two friends with digital credit experience | | Is an active of digital credit however she fears consequence of default due to daughter's experience |

KEY TRAITS

- Juggles different financial tools—both informal and formal
- Seeks social proof relying heavily on word of mouth from peers and friends to make decisions and be familiarized with the product; at the same time values the privacy offered by the product.
- Naomi desires higher loan limits which are critical to sustaining her income, therefore avoids default. She also makes regular deposits of her chama savings into her M-PESA wallet with the motive to increase her limit.
- Risk-averse—a negative personal experience with her daughter being unable to repay a KES 10,000 loan has made her cautious







Yvonne is a 20-year-old second-year university student at Jomo Kenya University of Agriculture and Technology. She comes from a middle-income family and her upkeep is financed by her parents. She received a weekly allowance of USD 10. On an average, she spends USD 7 per week on food. She uses the rest of the money to cater for other expenses, such as hair, mobile airtime, transport, and clothes. Yvonne owns a smartphone; hence data is an important need in her daily life.

As a university student, Yvonne has been exposed to different financial services. She uses formal financial products and operates two bank accounts. She operates a KCB account which facilitates the receipt of her government-subsidized university loan*. She also maintains an Equity Bank account which she uses as her savings account. She prefers Equity bank for its ease, speed, and simplicity. Her first encounter with digital credit was through a friend who referred her to Branch where she borrowed her first loan of USD 10 to buy her weekly shopping. She has since used a number of products like Tala, M-Shwari and Pesa Pata but prefers M-Shwari because of its low interest rates.

She borrows mostly to take care of her needs such food and clothes and at times to repay existing loans from other providers. Due to her frequent borrowing and limited income, she has defaulted on a loan for more than two months and was facing threats of being blacklisted by the provider. She resorted to seeking help from her parents who helped her repay the loan. Due to this, Yvonne stated that digital borrowing has giver her mental stress. She has since reduced her borrowing significantly.

Demographic characteristics and patterns in digital borrowing

credit products by their simplicity of

Income source and Perception and selection of needs financial products • The main source of • Simplicity, speed, and accessibility income does not match are key to her choosing formal with outflows. financial products. • Prefers digital credit products with • The main use of digital credit is for consumption low interest rates. • Driven towards app-based digital smoothing.

use.

Access to information and technology

- Experience and exposure to a wide variety of digital credit products enable her to make an informed choice.
- Use of internet and exposure to social media influence her choice in digital credit provider.

Other demographic factors

 As a university student with limited income, Yvonne faces pressure to borrow frequently to meet her personal needs.

*HELB loans Kenya (Higher Education Loans Board) is an organization that gives HELB loans, bursaries and scholarships for training at public institutes, which are recognized by the Ministry of Education of Kenya.



Defaulter

An analysis of Yvonne's journey to become a regular digital credit user reveals certain behavioral traits that reflect (1) a need for easy, accessible loans and (2) a need to manage personal needs

| | UNAWARE | AWARE | CONSIDER | TRY | > REGULAR USER |
|--------|--|---|--|-------------------------------------|--|
| DEVICE | Uses formal financial services. Still unaware of digital credit | Informed by a friend through a referral code from one of the app based digital credit providers | Registers with one digital credit provider | Borrows her first loan of USD 10 | Borrows frequently for personal use and has experience with a number of digital credit providers |
| SOCIAL | Informed of digital credit from a friend | She makes an informed choice based on the marketing messages and his peers' experiences | Access and navigates the information received on menu without any assistance | | Manages her own digital credit repayments through regular reminders from the providers |

KEY TRAITS

- Experiential and open to trying new providers; however, she prefers using M-Shwari and Branch
- · Heavily influenced by what she sees on social media
- Manages her own digital credit repayments through regular reminders from the providers
- She is struggling with loan repayments and her own expenses. This is due to her limited income





DEMOGRAPHIC



Stanley is a 35-year-old trader who operates a stall selling second-hand shoes. He is married with three children. He currently lives in Pumwani area but will soon be moving to his own home which is in the final stages of construction.

Stanley is a secondary-school graduate who survived on odd jobs until he started his business in 2004. Through discipline and hard work, his business has grown from one to two stalls with a stock turnover of USD 720 per month. Stanley is a firm believer in saving, he saves using formal and informal mechanisms. He runs two bank accounts but is more active on one because of the close proximity to his business. He has also invested in three insurance educational policies for his children and he is also a member of a local chama where he saves on a weekly basis.

Stanley owns a smartphone and is a regular digital credit user, his main purpose of borrowing is for working capital for his business. On average he borrows USD 300 per month to replenish his stock. He borrows from KCB M-PESA, M-Shwari and Equitel. However, he likes KCB M-PESA due to the limits and low interest rates. He has also tried Tala and Branch. He is motivated to borrow and repay early when there are campaigns, for example, KCB M-PESA zero-interest loans. Apart from working capital, he also borrows for personal use.

Demographic characteristics and patterns in digital borrowing

Income source and needs

- The main source of income matches his household and partly business outflows.
- The need to maintain a certain threshold in business turnover necessitates the need for credit.

Perception and selection of financial products

- Accessibility and convenience are the key attributes to his choice of formal financial provider.
- The main use of digital credit is mainly working capital.
- The key drivers to the choice of digital credit products are based on the loan limit and the interest to be paid.

Access to information and technology

- Smartphone ownership gives access to more information, for example, CRB listing and customer feedback recourse mechanisms.
- Exposure to a wide variety of digital credit products enables him to make informed choices.

Other demographic factors

- As a male small business owner, he is prone to taking high risks and trying out new things
- Being based in an urban setting, it provides him close proximity to a wide range of financial service providers.



business trader

BEHAVIOR

Juggler

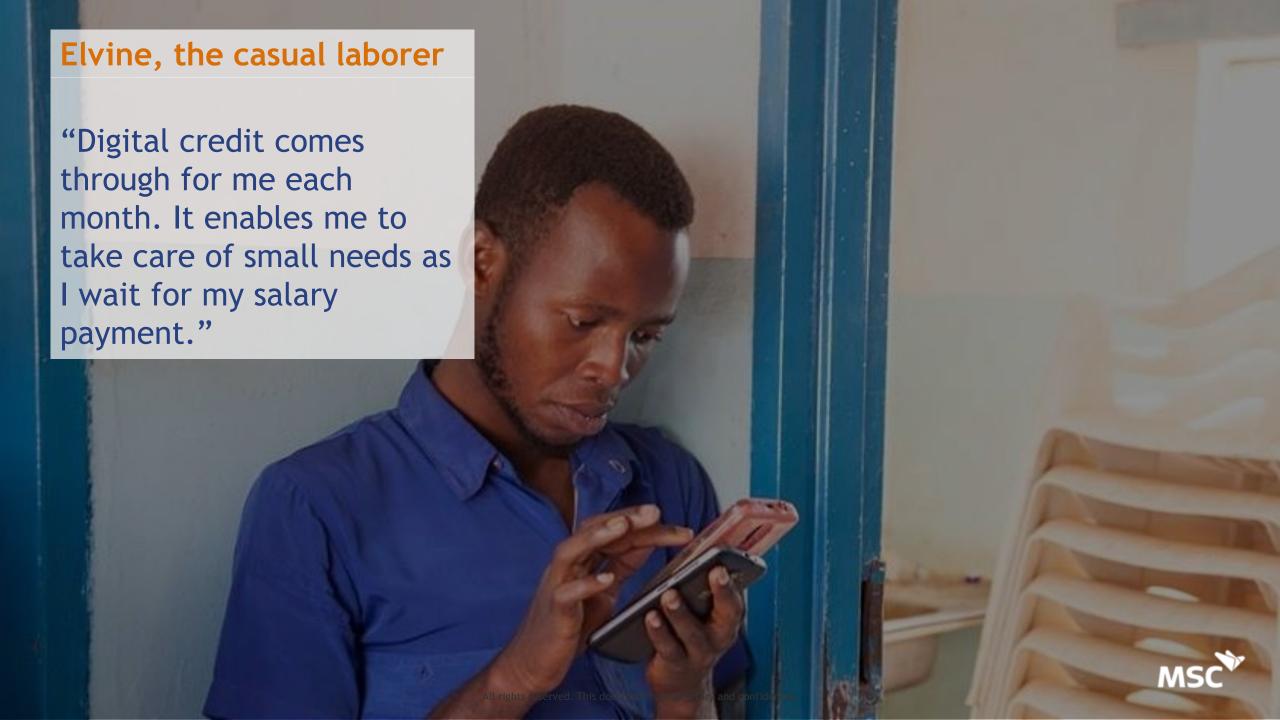
An analysis of Stanley's journey to becoming a regular digital credit user reveals certain behavioral traits that reflect (1) N=need for instant and convenient working capital with minimal hassle (collateral, lengthy process, guarantors, etc.) and (2) need to manage household and business expenses with different financial tools.

| | UNAWARE | AWARE | CONSIDER | TRY | > REGULAR USER |
|--------|---|--|--|---|--|
| DEVICE | Uses both formal and informal services. Still unaware of digital credit | Informed by promotional marketing messages which appeal to the need for credit | Registers with one digital credit provider | Checks loan limit and borrows first loan of USD 30 which he later repays | Borrows frequently for business use. As his experience evolves, he tries out different digital credit providers |
| SOCIAL | Informed of digital credit from diverse sources | He makes an informed choice based on the marketing messages and his peers' experiences | From the information received, he navigates the digital credit menu without any assistance | | Manages his own digital credit repayments through regular reminders from the providers |

KEY TRAITS

- Risk seeker—willing to experiment and juggle different digital credit providers.
- Juggles different financial tools both informal and formal to meet various needs.
- Exhibits switching behavior in choice of the digital credit provider. Loyalty is based on the digital credit provider that is meeting his current need, For example, he was an active Equitel user but he no longer borrows with them because his loan limit was reduced.
- In terms of loan repayment, he plans and ensures he repays his loans on time and in order of priority to avoid reduction of loan limit and being listed negatively







Elvine is a 26-year-old casual laborer who works as a cleaner in a local bank. He is a husband and the main provider of the home. He lives in a rented one-roomed house in Kawangware. In his free time, he operates as a personal driver and this enables him to earn an additional income of USD 50 per month

He is a primary school graduate who has worked in casual jobs for more than eight years. He uses both formal and informal financial services. He operates two bank accounts, with Jami Bora and the Cooperative Bank and is also part of a *chama*, where he saves USD 30 per month. His first encounter with digital credit was through friends and also promotional messages he received from providers. He is a frequent digital credit borrower as his income of USD 160 cannot sustain his monthly needs. He uses different financial service providers such as KCB M-PESA, OPesa, M-Shwari, and Branch. The different loans from the various providers cater to his different needs. Elvine borrows to meet his household needs such as food, school fees for his brother, and to purchase medicine. He borrows USD 45 or more each month depending on his needs.

Elvine is trying to increase his income so he participates in betting during the weekends when most soccer games are live. He spends an equivalent of USD 80 cents on every bet. His biggest win has been USD 90, which he used to buy a new mattress and a seat for his home. He is optimistic that one day he will win and he plans to use the money to sort out his financial concerns.

Demographic characteristics and patterns in digital borrowing

| Demographic characteristics and patterns in digital borrowing | | | | | | |
|---|---|--|---|--|--|--|
| Income source and needs | Perception and selection of financial products | Access to information and technology | Other demographic factors | | | |
| The main source of income does not match his outflows. Elvine needs additional income to cater to his household needs. | Low interest rates and accessibility are key attributes in choice of the digital credit provider. The main use of digital credit is personal use for his household. The key drivers for the choice of digital credit products are based on the interest to be paid. | Peers and word of mouth influenced his decision to try digital credit Smartphone ownership gives access to a wide range of digital credit products from different providers, which allows for informed decisions. | Low income influences his borrowing habit, as he needs to top up to cater to his household needs. | | | |



10000

Juggler-Repayer

An analysis of Elvine's journey to become a regular digital credit user reveals certain behavioral traits that reflect (1) need for fast and convenient funds for personal and household needs an (2) need to manage household needs with different financial tools.

| | UNAWARE | AWARE | CONSIDER | TRY | > REGULAR USER |
|--------|---|--|--|--|--|
| DEVICE | Uses both formal and informal services. Still unaware of digital credit | Informed friends and marketing messages which appeal to the need for credit | Registers with one digital credit provider | Checks loan limit and borrows first loan of USD 5 which he later repays | Borrows frequently for personal use and is now experienced with different digital credit providers |
| SOCIAL | Informed of digital credit from diverse sources | He makes an informed choice based on the marketing messages and his peers' experiences | From the information received, he navigates the digital credit menu without any assistance | | Manages his own digital credit repayments by prioritizing the loans in the order of due dates |

- KEY TRAITS
- Juggles different financial tools—both informal and formal to meet various needs.
- Loan repayment, he plans and pays for his loans in order of priority depending on the due date and once he received his salary, he clears all loan.
- Choice of digital credit provider is influenced by interest rates.
- Calculative as he only borrows the amount needed for a particular need and ensures that loans are paid on time.











Results of digital credit user mock review tests: Registration or sign-up

Observations

For some users, the registration process was affected by the phone type, size of screen, and memory. Users with 2G and 3G smartphones faced more challenges during registration. Some apps displayed a lot of information on the screen, which affected how the users with smaller phones engaged with the content

Users required stable network connectivity (2G, 3G, and 4G) and access to data or Wi-Fi to complete the registration process. In particular, low-income users lacked enough data bundles to download and register and this at times disrupted the process

All digital credit providers availed themselves of information concerning terms and conditions (including permissions for the collection of personal data) at the time of registration. However, we observed that most users did not take the time to read and understand the contents displayed, instead they accepted the terms and moved on to the next step of registration

Some customers felt that some providers had lengthy and detailed requests for KYC requirements and information during the registration process. This caused a few respondents to switch to other products especially when they failed to get access to loans after completion of registration





Results of digital credit user mock review tests: Loan application

Observations

Most users checked their loan limits prior to requesting for a loan. Some providers had set low limits for first time users, for example USD 2-5, which discouraged some borrowers

Most users considered the loan application processes to be simple and straightforward for the different products they tested. The exceptions, however, were semi-literate users who tried to use app-based products for the first time. These users faced difficulties with the following: downloading the app, navigating the app menu, language, and content

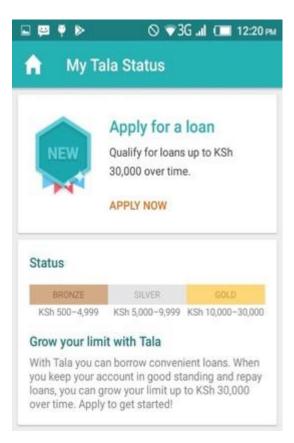
Most STK users found the process of borrowing simpler and user friendly compared to apps

Some app providers have categorized users into loan groups depending on the amount borrowed, for instance, bronze, silver, and gold

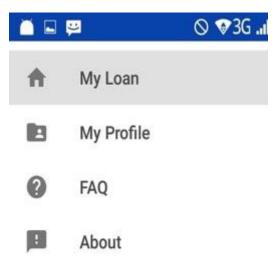
Some app providers use direct marketing in the app to encourage users to borrow and grow their limits, for example, referral promotions

All the providers displayed information about the loan terms, which include the interest rate and amount, which is often written as service or facilitation fee, and the repayment due date. Some providers offered flexible terms that enabled borrowers to choose their preferred interest rates and loan terms. In addition, some providers allowed users to repay their loans in weekly installments

Example of loan amount categorization



Example of app menus that are not always visible or easy to navigate for users





Results of digital credit user mock review tests: Loan repayment

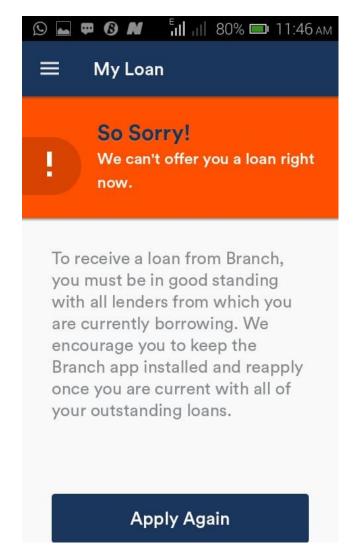
Observations

Most providers used offer the M-PESA paybill option to enable users to repay their loans. In some cases, we observed users had to refer to the SMS texts sent by providers to recall the Paybill number to make a repayment. For a few providers, users could pay directly from their digital savings accounts, for example, M-Shwari, KCB M-Pesa, and HF Whizz

For lower-income users, we observed that they preferred to repay their loans in small installments till completion before the due date

In the case of borrowers who had defaulted, they could not borrow other loans from the same provider even when they attempted to do so. In such cases, they resorted to borrowing other apps for a limited time before they were listed at CRB

We observed that users who had taken up Fuliza loans could not repay other outstanding digital loans through M-Pesa until they cleared with Fuliza















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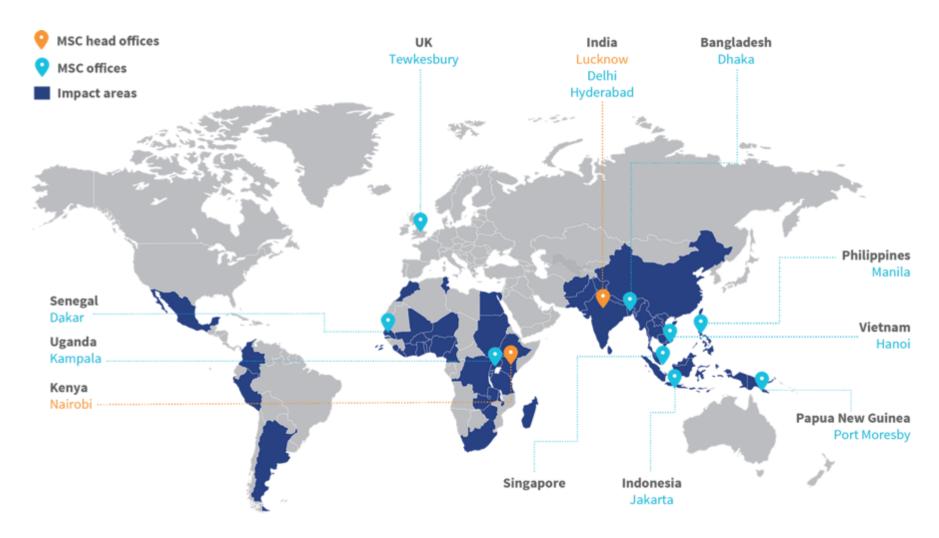
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