



The Proliferation of Digital Credit Deployments

Digital credit—offering quick small loans remotely over digital channels—is a rising trend in low-income countries, especially in sub-Saharan Africa. The most visible example is the rapid success of the small value credit and savings service M-Shwari in Kenya launched in late 2012 (Cook and McKay 2015), but an increasing number of new deployments is going to market each year.

This Brief provides an introduction to the fast-evolving landscape of digital credit and illustrates common features of this new digital finance offering. The focus is on digital credit services that leverage customers' existing access to a mobile phone, though there are also digital credit models building on a person's connection to the internet. This Brief uses 10 case examples to describe the digital credit trend, recognizing that there are many more pilots and products under design than are covered. Many of the case examples are new and have not reached scale yet, while a few already have portfolios reaching 800,000 to 1.8 million active borrowers.

CGAP has sought to differentiate digital credit from conventional loans by noting that digital credit is instant, automated, and remote (Chen and Mazer 2016). Accordingly, most of the deployments featured in this Brief are tailored to meet short-term liquidity needs of individual borrowers and can be accessed very quickly: Upon application, a credit decision may be made within seconds or at most within 24 hours. The lending decision-making process is mostly automated, running through a series of computerized decision trees and algorithms. Credit decisions for each loan rely less on human judgment and manual processes than on the availability of key digital data, such as mobile phone records. In addition, in-person interactions are limited, as transactions such as loan applications, disbursements, and repayments are carried out remotely, mostly via the mobile channel. This can have significant financial inclusion implications as many digital credit models do not require customers to have prior financial account ownership or a credit history.

Five out of 10 deployments featured in this Brief are in Kenya; nine are in sub-Saharan Africa. Though digital credit is offered in many markets, the use in this region is particularly abundant. One reason is the region's high mobile money penetration, which presents a critical enabler for large-scale digital credit delivery. As seen with other products, such as mobile microinsurance (Tellez and Zetterli 2014), new product offerings

leverage existing digital infrastructure to gain or retain market share. In fact, in many countries, digital credit is offered alongside a fast-growing and robust digital payments industry.

Most of the early digital credit offerings this Brief evaluates involve partnerships between mobile network operators (MNOs) and banks or other financial institutions, but partnership models involving third-party FinTech companies are also arising. Leveraging each partner's unique positioning, providers see digital credit as an opportunity to create new revenue streams and increase customer retention rates by building on a fast-growing digital finance ecosystem and offering a new product category to customers.

What Are Common Features of Digital Credit?

The 10 case examples noted in Table 1 share four distinct features that exhibit how digital credit offerings function.¹

1. Loan eligibility is enabled by existing digital access. The digital credit products analyzed in this Brief target existing customers of MNOs. As such, borrower eligibility is tied to the preceding subscription to and use of voice and SMS services, digital payments, and—if applicable—bank history. Digital credit providers target these market segments to leverage their digital data records to evaluate a potential borrower's initial loan eligibility. For example, M-Shwari and KCB M-Pesa—offered by Safaricom in partnership with Commercial Bank of Africa (CBA) and Kenya Commercial Bank (KCB), respectively—are two distinct banking products offering digital loans. A prerequisite for applying for either loan product is that borrowers are registered Safaricom M-Pesa customers and have used M-Pesa for at least six months. Similarly, Timiza, a digital credit product offered by Airtel and Jumo in Tanzania, is available only to existing Airtel customers who hold an active Airtel Money account.

¹ The deployments analyzed in this Brief are mostly linked to customers' existing mobile phone and mobile money subscription, though other digital credit deployments build on a person's connection to the internet.

Table 1. Sample of Digital Credit Deployments^a

			Partner Providers					
Year of Launch	Deployment Name ^b	Country	MNO	Bank	Nonbank financial institution	3rd Party FinTech	Typical Loan Term	Typical Loan Size (US\$) ^c
2012	M-Shwari	Kenya	Safaricom	Commercial Bank of Africa (CBA)			4 weeks	30
	EcoCashLoan	Zimbabwe	Econet	Steward Bank			4 weeks	125
2014	Mkopo Rahisi	Kenya			InVenture		3 weeks	20
	M-Pawa	Tanzania	Vodacom	Commercial Bank of Africa (CBA)			4 weeks	7
	Timiza	Tanzania	Airtel		Jumo		1, 2, 3, or 4 weeks	10
	Mjara	Ghana	MTN		Adehyeman Savings and Loans	Mobile Financial Services (MFS) Africa	2 or 4 weeks	26
2015	Eazzy Loan	Kenya	Airtel	Equity Bank			4 weeks	50
	KCB M-Pesa	Kenya	Safaricom	Kenya Commercial Bank (KCB)			4, 12, or 24 weeks	30
	Branch	Kenya			Branch		3 weeks	10
2016	Instaloan	Philippines	Globe		Fuse	Lenddo Dataspark	16 weeks	50

a. The list is not exhaustive in capturing all existing digital credit deployments. For the purpose of this Brief, we deliberately focus on deployments that strictly meet our definition of digital credit, and that have emerged in low-income and lower-middle-income economies. In addition, the focus is on individual loans, and does not include merchant cash advances, MSME and e-commerce loans, or person-to-person lending platforms.

EcoCashLoan is a short-term microloan offered by Econet and Steward Bank in Zimbabwe and is likewise targeting existing customers of the MNO.² In addition to requiring prior use of Econet's airtime and mobile money service, EcoCash, loan applicants must sign up for an EcoCashSave savings account offered by Steward Bank and maintain a minimum savings balance of US\$5 over a period of at least three months.

2. Loan decisions are automated and leverage nontraditional digital data. The digital credit application process happens over a mobile device and with limited in-person interactions. This is especially true in Africa, where mobile phones are the main links to digital communications (whereas, in other markets, online banking over a personal computer may be more widespread). Existing digital data are leveraged to gain predictive insights into a potential borrower's

likelihood of default, how to manage their customer journey, and how to follow up for loan collections. To apply for an EcoCashLoan, for instance, an eligible borrower requests a loan by entering a USSD code on his or her mobile phone. The request then triggers a set of automated decision trees that estimate the applicant's credit risk. Variables taken into account may include use of mobile airtime, data top-ups, mobile money transactions, mobile wallet balance, age of the applicant, and previous loan status. The use of alternative digital data is particularly important in evaluating first-time borrowers, while repayment-based credit history becomes more important for subsequent loan applications.

Some credit scoring models may also include social media and utility payment histories, among other data, to inform credit decisions. First Access and Lenddo are two of the various emerging third-party

b. Some deployments—i.e., M-Shwari, EcoCash, M-Pawa, and KCB M-Pesa—offer both credit and savings products. The table only depicts the specifics of the credit component of the account.

c. Numbers are based on foreign exchange rates to U.S. dollar as of December 2015.

companies providing customer credit scoring services by using such nonconventional data points. Branch is an example of a nonbank financial institution that uses data stored on the applicant's smartphone, including SMS, call logs, and contact lists to assess a borrower's credit risk.

- 3. Loans are smaller, shorter-term, and often costlier than traditional consumer loan products. Though products are still new and will evolve over time, the initial loan size is typically small, and loan terms are generally short. The typical loan size of a Branch loan is US\$10, US\$30 with M-Shwari and KCB M-Pesa, and US\$50 with Instaloan and Eazzy Loan. Eazzy Loan, EcoCashLoan, M-Pawa, and M-Shwari each have a loan term of four weeks. Annualized interest rates are very high compared to interest rates charged on most conventional consumer or microfinance credit products in these markets, with most deployments featured charging monthly interest rates between 2 percent and 10 percent. There are several factors contributing to higher interest rates, but a big driver is that the ratio of costs to each loan may be higher for smaller loan sizes. As such, the financial dynamics of digital credit driven by short terms and small loan sizes are very different than those in conventional consumer and most microfinance credits
- 4. Customer relations, repayments, and collections are managed remotely. Loans are repaid via digital payment channels either in installments or at the end of the loan term. SMS and phone call reminders prompt borrowers to repay their loan, while call center staff engage in scripted interactions with delinquent borrowers. Most providers impose a penalty fee in case of delinquency.

Some countries in our analysis negatively report delinquent borrowers to credit bureaus.³ Reporting conditions, i.e., number of delinquent days triggering negative reporting and time remaining on credit bureau files, vary. As with traditional loan products, customers' repayment behavior informs the eligibility for subsequent loans and their terms. In the case of M-Shwari, for example, overdue loans are automatically extended for another 30-day cycle under the same terms, and borrowers are alerted with text messages and calls from a customer center. Borrowers are also notified about the possibility of being negatively reported to a credit bureau in case of further delinquency. At the 120-day overdue mark, the individual is negatively reported to the credit

bureau, and the negative information remains on record for five years. To qualify for subsequent credit through Instaloan, a customer must close out his or her first loan and not exceed a certain number of late payments. Timiza rewards "good" borrowers by extending subsequent loan terms and offering higher loan amounts.

The remote nature of credit management greatly reduces the need for in-person interactions and physical visits of borrowers to brick-and-mortar bank branches to pay back their obligations. Digital credit hence closes geographical distances that formerly acted as a barrier to providing credit. However, the effectiveness of remote credit management to encourage timely loan repayment varies across deployments. Some have suffered from high default rates that forced providers to adjust their credit management process, while others have maintained nonperforming loan ratios at around 2 percent even as they reached scale.

Conclusion

The proliferation of digital credit marks an important development in financial inclusion, building on and extending financial services beyond digital payments, and promising to reach the poor at large scale. Yet digital credit is a new and emerging product, and many questions remain to be addressed over time, including the following:

- What are preconditions for digital credit delivery?
 What are core elements of an enabling digital credit infrastructure?
- What are different partnership and service design models, and what is their potential to reach unserved and underserved customers?
- What are the risks of this new digital finance offering, and what are the emerging consumer protection implications?

Several early deployments have gone to market and struggled to take off, while others have scaled quickly. New sets of deployments are already waiting in the pipelines, each one experimenting with new features to drive uptake and use. Some may succeed; others may fail. In this fast-evolving environment, a better understanding of digital credit and how individual customers and eventually micro and small businesses interact with this product will be critical. With many questions and few answers, we still have a lot to learn.



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References

Chen, Greg, and Rafe Mazer. 2016. "Instant, Automated, Remote: The Key Attributes of Digital Credit." CGAP Blog. Washington, D.C.: CGAP, 8 February. http://www.cgap.org/blog/instant-automated-remote-key-attributes-digital-credit

Cook, Tamara, and Claudia McKay. 2015. "How M-Shwari Works: The Story So Far." Forum 10. Washington, D.C.: CGAP and FSD Kenya, April. http://www.cgap.org/sites/default/files/Forum-How-M-Shwari-Works-Apr-2015.pdf

Tellez, Camilo, and Peter Zetterli. 2014. "The Emerging Global Landscape of Mobile Microinsurance." Brief. Washington, D.C.: CGAP, January. http://www.cgap.org/sites/default/files/Brief-The-Emerging-Global-Landscape-of-Mobile-Microinsurance-Jan-2014.pdf

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