

# Loan Origination in the Cloud

End-to-End Digitization and Automation

## Market Overview

The global unbanked and underbanked market continues to grow exponentially each year, and will reach an estimated 3 billion individuals and over 250 micro, small and medium-sized enterprises (MSMEs) in the next several years. This segment of the banking industry has the potential to reach over \$150bn of new revenue and steal up to 10% of existing banking profits. Both new and traditional banking entities continue to seek opportunities to provide competitive solutions to this underserved corner of the market.

While separated by disparate business models and geographies, many of these institutions share common issues and objectives in their approach to serving the underbanked. For new market entrants in developed markets emerging as digital disruptors, the challenge lies in creating new and innovative products and services to entice both underserved individuals and MSMEs to do business with them versus traditional banks and incumbent players. In the case of the new, non-traditional entrants into emerging markets, the ability to create a flexible, scalable and efficient infrastructure is crucial to survival. In both cases, it is essential for lending organizations to create a balance between data capture and the customer experience, while keeping in mind the challenges inherent in embracing a multichannel engagement strategy.

In the sections that follow, we'll look at how Mambu's software as-a-service (SaaS) cloud architecture has been implemented by lenders from around the globe to offer a simplified user-friendly, loan origination process for individuals and small businesses, that balances data capture requirements and technology workflows with a customer experience across channels that factors in the human element to stay competitive.

## The Loan Origination Challenge

Loan origination is the first and arguably the most important process to determining the credit worthiness of a potential loan applicant. It is also the point where a lending organization makes its first impression on a prospective borrower. As such, it can be difficult for lenders to balance data capture in markets where access to established credit histories and

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### 1) Lenddo Case Study

**ABOUT:** Lenddo is an online lending community that utilizes social media profiles to build credit ratings that enable the emerging middle classes to access loans and other financial services.

**GOALS:** To focus their internal engineering and development resources towards improving their innovative credit scoring algorithm rather than on their core banking system.

**APPROACH:** Utilized the Mambu cloud banking platform and API portal to automate and manage the loan transaction workflow, pushing and pulling data from the cloud platform to expedite the origination and decisioning process.

**RESULTS:** Mambu's open platform allows Lenddo to aggregate over 12,000 data points from social media including Facebook, Google +, LinkedIn, Twitter and Yahoo. Lenddo then uses these social data points to create character virtues such as "honesty" and "consistency" and the community to vouch for character and trustworthiness. This has allowed them to identify and approach new borrowers that have been overlooked by larger competitors.

Lenddo was able to power a proprietary credit rating methodology looking at past history, and future liability using publicly available data sources.

By automating and streamlining their data management workflow, Kueski was able to focus on improving their proprietary credit risk modeling capabilities.

existing infrastructure is minimal while maintaining a favorable customer experience.

Lenders in both emerging and established markets need to simplify data capture in loan origination, streamline credit assessments and create a more open flexible platform that easily pushes and pulls data. This needs to be across multiple channels (mobile, the internet and social media) and platforms (e-signing vendors, back office accounting systems, etc.), and integrate the technology workflow while human interaction and experience.

### **Balancing Data Capture with Customer Experience**

The advent of cloud computing gives lenders the opportunity to streamline data capture and optimize the customer experience through technology. Mambu's flexible, agile cloud-based platform enables these organizations to rapidly address new market opportunities and reduce the excessive costs previously associated with software licenses, maintenance and in-house infrastructure and to simplify the loan origination process.

### **Simplifying Data Capture**

One of the most challenging aspects of loan origination in emerging markets is acquiring the necessary information to build credit risk profiles for individuals and businesses alike. Without access to reliable quality data from traditional sources of credit information (such formal credit bureaus), lenders have turned to non-traditional sources of information to begin the evaluation process.

Online lending community Lenddo (*see sidebar 1*), for example, used Mambu's open architecture to capture social data to create a credit score based on sentiment and character virtues, including honesty and consistency. Using publicly available data sources like Facebook, Twitter and LinkedIn, Lenddo minimized data entry for the customer and was able to power a proprietary credit rating methodology looking at past history, and future liability using this unique data source.

## 2) My Community Bank Case Study

**ABOUT:** My Community Bank is the first online-only Credit Union in the UK offering loans and term deposit products to underserved markets.

**GOALS:** To rapidly launch an agile, cost-effective 'bank in a box' that would allow rapid time to market, minimal IT costs and overhead and give the business flexibility in growth in the products and channels it would offer in the future.

**APPROACH:** Implement the Mambu cloud banking platform to manage loan and deposit products, customer relationships, workflows and reporting and accounting. Integrate into the website as well as services like CallCredit, EchoSign, FD Online and Rapidata in the UK.

**RESULTS:** The successful implementation of Mambu with the desired products and workflows including 6 third party services integrated in 3-5 man days each, 20 second automated loan decision, 100% digital paperwork and the launch of the credit union with zero internal IT staff and full agility to modify and launch new products as they grew.

Data capture leads to the next step in loan origination, which is the credit risk assessment and valuation. At this phase, the lender determines the types of loan products/services for which a potential customer is suitable and customizes those products and pricing offered based on their situation and level of risk.

Kueski (see sidebar 2) utilized Mambu's Application Program Interface (API) platform as a gateway to manage their loan processing applications across their entire system, from basic transaction processing (including micropayments, and lending) to customer account creation updating and reporting. By automating and streamlining their data management workflow, Kueski was able to focus on improving their proprietary credit risk modeling capabilities, augmenting them with artificial intelligence and machine learning. These predictive capabilities

gave them greater agility in their credit assessment process, allowing them to automate approvals and provide a faster decision to viable customers.

This type of automation and control allows lenders like Kueski to focus on value-added services and capabilities to improve their internal processes and create greater value for customers.

## Preserving the Customer Experience

In order to build the most robust credit profiles possible, potential borrowers need to feel at ease submitting their information for verification. While most traditional lenders have embraced online forms for acquiring customer data, many still require physical documentation, creating additional complexity for the customer and the back office. A cloud-based, digital first approach can dramatically improve the customer experience and reduce transaction costs for all parties.

Online credit union My Community Bank (see sidebar 3) saw an opportunity to leverage Mambu's platform to make their entire loan origination workflow paperless, utilizing APIs to develop bespoke workflows around how they capture data and design their loan origination process. This also allowed them to simplify the application process by allowing for the use of digital signatures for information verification, as well as 'do your own assessment' tools that create more flexibility in the origination process.

Additionally, Savvy Loans.com entered the U.K. consumer credit market with a fully digital model to provide affordable and responsible loans tailored to its customers' individual circumstances. By choosing Mambu, Savvy Loans quickly launched a fully customizable online offering with low upfront capital expenditure and accelerated time-to-market from months to weeks. Mambu's agile cloud platform provides a fast and flexible way for Savvy Loans to originate loans from its website to its core platform and capture data all in one spot. Mambu's open API platform allows Savvy Loans to conduct credit assessments on payments and collections through integrations with Call Credit and Lend Protect systems. This allows the company to streamline data management and make a credit decision within 24 hours.

## Embracing Multi-Channel Engagement

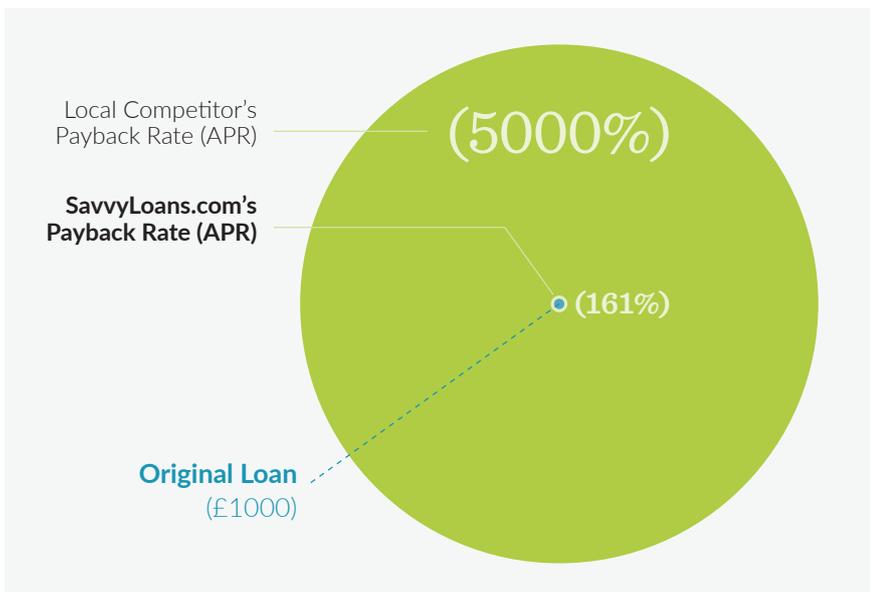
Another key to preserving a great customer experience is offering multiple points of entry for customer engagement. Whether for outgoing or inbound communications, giving customers the option for a fully-digital or multi-channel loan origination experience ensures flexibility to local market conditions and streamlines the speed of communications. E-mail, phone and direct mail have traditionally served as the main channels of communications for lending organizations. However, the rise of cloud technology, proliferation of mobile devices and ubiquitous nature of social media have empowered organizations to consider how to bring in new data points, engage customers across new channels and create digital first strategies. Mobile devices have become particularly popular in emerging markets, where there is not a traditional banking infrastructure. The exponential growth of mobile devices in recent years has provided an opportunity to quickly integrate multiple touch points (e-mail, web and social media) into a singular platform to reach the prospective borrower.

Nigerian microlender One Credit (see sidebar 4) sought to automate its loan origination and management process,

and in doing so wanted to find a way to establish multiple points of contact for customer engagement, including the rapid development of a native Android app to deploy on smartphones and tablets. Using Mambu’s platform, One Credit was able to create templates to send messages, SMSs and emails to clients to help speed loan origination and ongoing servicing for a consistent experience from start to repayment. This, combined with Mambu’s customizable reporting capabilities made Mambu a powerful alternative to desktop or in-house solutions.

## Supplementing the Human Element

Automation and digitization can substantially simplify and streamline loan origination, but ultimately, the loan approval is contingent on the credit supervisor who either automates or supports the credit officers in their decisioning processes. Therefore, all lending organizations need to understand where human decision-making can impact data understanding, credit scoring and enhance the customer experience and supplement the automated processes to reduce credit risk.



SavvyLoans.com has been able to offer a £1000 loan for 12 months at an APR of 161% versus more than 5000% from local competitors.

### 3) Kueski Case Study

**ABOUT:** Kueski needed a highly-customizable, scalable and flexible loan management platform that could integrate with its proprietary risk management system.

**GOALS:** To complement Kueski's loan management system with software that could integrate with the company's proprietary predictive engine, interact 100% through APIs and scale to process millions of clients and loans.

**APPROACH:** Integrate the Mambu cloud banking platform and API Portal (used to automate all loan processes and manage all applications) with proprietary risk profiling technology to provide a scalable and flexible model to accommodate quick growth and new market opportunities.

**RESULTS:** A scalable platform that has enabled Kueski to disburse more than 9,000 loans in Mexico since its launch and whose high-level of automation has achieved a default rate of less than 15%. The achievement of an average 20% month-to-month growth rate and ten-fold increase in loans disbursed since launch.

Mambu gives lenders a client-centric view of their workflow, allowing them to prioritize which information is most critical to define borrower risk. Before using Mambu's platform, loan operators at Kueski needed to manually create, input and approve a loan before it was considered dispersed. Now, loans are automatically categorized as either 'auto-approved' or 'auto-rejected' based on prioritized and predefined criteria. This gives lenders the opportunity to re-evaluate a rejected prospect, make final adjustments, and then follow up with customers directly across their preferred channel (e-mail, voice, or text).

### The Results: Competitive Advantage

In each of these cases, Mambu worked with clients that had different business models, products and processes

across geographies to meet their unique loan origination requirements. Mambu's cloud-based platform helped them to achieve a fast time-to-market, front-to-back technical integration and the flexibility and scalability it provides to support business growth and risk reduction.

For Kueski, Mambu delivered a scalable platform that has increased their loan disbursement tenfold in Mexico since January 2013, with a high-level of automation that has allowed them to achieve much lower default rates than the national average for payday lenders in the region (20-40%) and an average month-to-month growth rate of 20%. Using the Mambu platform, SavvyLoans.com has been able to offer a £1000 loan for 12 months at an APR of 161% versus more than 5000% from local competitors, an aggressive and competitive interest rate. One Credit now serves over 13,000 customers and has delivered several million dollars in loans across the region through 40 agents who use Mambu on tablets, smartphones and desktops. My Community Bank was able to launch the UK's first fully online credit union within a matter of months, offering a simple and paperless lending experience for both the internal staff and customers alike.

In each case, a digital, cloud-based loan origination process has empowered a unique competitive advantage.

### Conclusion: A Balanced Approach to Loan Origination

The loan origination process for individuals and SMEs is continually evolving, and as we've seen, requires a great deal of data aggregation and capture in order to verify and validate the viability of potential customers. However, in developing and implementing these systems, lenders need to be cognizant of the human element of the loan origination process, and how daunting it can be for new applicants (especially when they have had no prior experience doing so).

Many of the larger lending institutions continue to sacrifice customer experience in favor of greater data capture to minimize their potential risk exposure. This imbalance between control and flexibility is one of the many reasons why they continue to struggle to properly serve the 'missing middle' segment of the market.

Individuals looking for credit are often at the mercy of extortionary payday loan rates and small businesses must struggle through the complicated, expensive and inflexible processes and products of large banks. Both new market entrances as well as existing providers have the opportunity to rethink the services to these markets, and drive a digital-first lending strategy to expand outreach while lowering operating costs.

By leveraging Mambu's cloud-based technology, upstart lenders and digital disruptors have the opportunity to maintain and enhance their competitive edge by striking the needed balance between control and flexibility in loan origination.

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#### 4) One Credit Case Study

**ABOUT:** After work with two other service providers, One Credit concluded it needed a highly flexible and automated system that would give it scalability and control over reporting functions.

**GOALS:** To find a solution that could integrate with local platforms and providers in order to accommodate varying financial infrastructures across markets and allow for seamless integration across the network and third-party providers.

**APPROACH:** Implement the Mambu cloud banking platform to create an open system that would be able to quickly and seamlessly integrate throughout the One Credit network, enable smart loan decisioning and allow the company to plan and grow out its functionalities to meet market demand over time.

**RESULTS:** A more advanced and autonomous platform that has scaled to roughly 6,000 customers since launch, is highly automated and whose functions can now be utilized across desktops, tablets and smartphones by One Credit to deliver advanced services to its various market segments.

## About Mambu

Mambu enables financial institutions of any size to rapidly create, launch and service loan and deposit products through its agile, flexible and affordable cloud banking platform. An alternative to legacy in-house systems and cumbersome core banking systems, Mambu accelerates time to market for new consumer and SME banking products.

Mambu helps new institutions and business units to bring new products to new markets via new channels quickly and affordably. We also help transform smaller financial institutions from legacy in-house systems to give them the ability to digitize their business and better service their customers at the fraction of the cost, time and risk of traditional core banking system implementations.

Mambu is delivered in a SaaS model and can be deployed in any cloud environment. Our agile development process bring accelerated feature development to our customers, our technology infrastructure provides world-class security and scalability and our open integration protocol enables swift and simple integrations, extensions and automations.

Our vision is to enable institutions around the world to provide essential loan and deposit services to underserved individuals and emerging enterprises empowering them to pursue their own economic opportunities. We strive to be the trusted technology partner of our customers, allowing them to focus on rapid product, channel and business model innovation while we provide their core platform enabling them to manage and grow their business securely and cost-effectively.

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