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Lidya: Bringing Nigerian FinTech Innovation to Global Small and Medium Enterprises

"It's not a natural path to go from Lagos to Warsaw," remarked Tunde Kehinde, Co-Founder and Co-CEO of the Nigeria-based FinTech platform Lidya. While the observation was made to entertain his guests during a video conference from the company's headquarters in early 2020—the space between the two parties spanning over 5,000 miles—Kehinde's easy smile held the assuredness of an executive who believed in making his next move. Indeed, it was his belief in an entirely new approach to the process of lending and credit provisioning that had brought his young company success so far, and it was that belief which sought to expand the enterprise to a new continent altogether.

Following Lidya's launch in 2016, Kehinde rolled out a system of SME lending never before seen in the region. His process revolved around shrinking the credit cycle through data collection and agile decisions about who was worthy of his firm's loans, and who should be advised to look elsewhere. Over the ensuing years, Lidya's operations unfolded from Lagos out into the rest of the country. From the beginning, Kehinde had chosen to target small- and medium-sized enterprises in an effort to broaden their own business capabilities. He had identified needs for inventory payments and other types of short-term capital from many SMEs during his time co-founding two companies prior to Lidya. His expertise in understanding these needs in Nigeria led him to bridge the gap with Lidya's 100-variable algorithm, which was customized to the unique and often limited data available on the companies. The approach cut the loan approval process down to under 48 hours, and allowed him to meet capital requests on the date of approval.

It was after these initial years of success that Kehinde had seen the potential to apply Lidya's methodology to other countries and the new markets therein. Ever the data-driven strategist, Kehinde had dispatched a 7-point framework to analyze a basket of variables that could help him decide where Lidya's next expansion would take place. Just as the strength of Lidya's algorithms for SME-lending boasted a 95% repeat business rate and a mere 0.5% NPL (90-plus day delinquency), Kehinde put faith in his new framework to show him the way in a similarly potent fashion. When the results came in, Kehinde trusted them, yet nevertheless acknowledged that the challenges in taking Lidya's next steps would not be few.

Kehinde's framework pointed to Poland and the Czech Republic as the most viable opportunities for the company's international expansion. Both countries ranked highly in Kehinde's desired criteria, while crucially sharing the time zone of Lidya's headquarters. Given that the countries each had

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demands for loans and credit that Lidya could fill, and especially that management could respond in real time as any potential issues arose, Kehinde announced his expansion goals. Nonetheless, questions abounded. Were his previous successes, rooted in understanding his native Nigeria's nuanced capital demands, too location-specific, or were they sufficiently generalizable to port success to Eastern Europe? Even if Lidya's algorithms could lead to repeat success in the new continent, could Lidya engage in the "soft-skill" aspect of SME lending – including servicing and collection – being a continent away? Kehinde needed answers, as he staked Lidya's future on its ability to adapt; or else face losses on a scale just as grand as his ambitions.

Background

Kehinde's Ventures

Kehinde was no stranger to an international way of life. Raised in Nigeria, Kehinde graduated with honors from Howard University in Washington, D.C. before earning his MBA from Harvard Business School. Just one year out from graduate school, Kehinde became the Co-Founder and Managing Director of Nigerian online retailer Kasuwa in 2012. Mere days into its life as a company, Kasuwa received funding from German online startup incubator Rocket Internet and changed its name to Jumia Nigeria. The company went on to receive hundreds of millions more in VC funding, and soon became Africa's first unicorn with a public listing on the NYSE. The company scaled to cover several countries across the continent, and reached a market cap of $660 million USD. As a founder of one of the largest tech startups Africa had ever seen, Kehinde would receive the nickname "the Jeff Bezos of Africa.[1]"

In 2013, Kehinde went on to co-found Africa Courier Express, a logistics company focused on global solutions for consumers and SMEs. As with Jumia, Kehinde centered his company's core operations and competency on the integration of technology to the customer landscape he knew well. His approach was able to guarantee next-day package delivery within Lagos and under three-day delivery throughout Nigeria. The operations of the two companies overlapped in e-commerce, and explored innovations that had been brought to other markets in the U.S. and Europe many years earlier. Kehinde described his process rather simply, saying, "I launched, I got to scale, I got return on investment.[2]" What stood out to Kehinde from these experiences were the unique problems facing SMEs in Nigeria (see **Exhibit 1** for details). He viewed these issues as the main factors preventing Nigerian SMEs from scaling. Additionally, while there were commonalities across potential customers (see **Exhibit 2** for details), he viewed these problems as stemming from two distinct types, each with certain thematic characteristics and needs.

Two Types of Underserved SMEs in Nigeria

As he recalled, the first type of SME would say, "The amounts I want are too small for banks to care about." This type of SME had an average loan demand of around $250–$2000, with an average revenue around $30,000 a month. They were generally high-frequency, high-volume companies such as restaurants, coffee shops, gyms, beauty salons, hotels, and travel agencies. These companies needed loans to finance their working capital—typically for inventories—and the demand for such loans came

1 "Meet the 'Jeff Bezos of Africa'" *BBC Newsday*, June 14, 2019 https://www.bbc.co.uk/programmes/w172wpk7yl02b45; "Meet Tunde Kehinde, the Jeff Bezos of Africa," *C2*, https://www.c2montreal.com/post/meet-tunde-kehinde-lidya/#/, accessed February 2021.

2 "A conversation with Tunde Kehinde of Lidya on finance and the digital divide," Ingrid Lunden, *TechCrunch*, September 17, 2020, https://techcrunch.com/2020/09/17/finance-and-the-digital-divide-a-conversation-with-tunde-kehinde-of-lidya/, accessed February 2021.

on a monthly basis. If they were able to secure a loan for these purposes, the companies generally were able to realize a return in revenue that was triple the amount of the loan.

The second type of SME would say, "I already have bank financing, but I want to complement it." They could use existing bank financing to build physical store locations, but needed fast additional financing to stock the shelves. Banks were often far too slow for this purpose; as with the former group, inventory for this type of SME had fast-paced demands, yet banks took 6–8 weeks or more to approve such loans. Further adding to the burden of the existing process was that banks often asked for collateral on such loans. SMEs in this category thus felt abandoned by the system in place, as they could not meet these requirements for the tight time windows they were after.

While Kehinde saw these two types of underserved SMEs, he acknowledged shortfalls in terms of data availability that prevented the creation of reliable credit models. Lacking reliable credit models in turn prevented the creation of players who could facilitate the necessary lending that would allow both types of SMEs to scale. The market and overall economy in Nigeria was developing faster than previous examples of countries he had studied that had adapted background information into credit rating systems. In Nigeria, there was no TransUnion or Experian for SMEs. While some data did exist, acquiring it quickly, securely, and in a structured and useable manner was difficult, costly, and time-consuming.

Lidya: Operations, Novel Credit System, and Model

Data and Partnerships

In an effort to close the gaps he saw around him in the Nigerian financing ecosystem, Kehinde launched tech startup Lidya in 2016 with the goal of addressing each of these problems. Lidya began by offering invoice financing against receivables. This step was the most basic form because it only required the proper invoice documentation, allowing quick turnaround for the customer and stronger surety of repayment for Lidya. From there, the company moved on to financing against Point-of-Sale (PoS) terminals. Throughout their operations, they covered about 80,000 of such PoS machines, and this step was crucial for their initial expansion efforts. From this step, they could make the jump to financing against customer bank accounts. This step saw the most promise, as there were 45 million bank accounts in total at the time.

While these methods allowed for initial types of financing that would meet the needs of the SMEs in question and cover areas the banks could not, Lidya also strove to gain the data necessary to generate reliable credit models. To do so, Kehinde turned to partnerships with a variety of organizations, such as embassies, chambers of commerce, payment gateways, and suppliers. Suppliers in particular had an incentive to partner up, since each constraint on an SME was effectively a constraint on them, too. The consequence of the inability of SMEs to scale was that slowdown in purchasing led to less product being turned over. The consequence of lack of credit access was that SMEs without it represented riskier partners with a higher chance of default.

To further appeal to these partners, Lydia could offer more in return as the result of a larger customer base with enhanced stability. Supply-chain partners gained over the long term by witnessing an increase in the sales of the borrowers in their value chains who utilized Lidya funds to purchase goods. In addition, Lidya could also provide commissions to certain partners for introductions to their value chains. Commissions ranged from 5–10% of Lidya's revenues (from interest and fees) per successful loan repaid. Such commissions were added on top of any fees due to Lidya from the borrower and were not deducted from the fees already owed. Through these incentives, Lidya's number of partnerships grew, and were augment and grow their data sources. They were also able to secure partnerships with big players like Coke and Procter & Gamble.

To gather the rest of the data Lidya needed, Kehinde also used bank account data and a host of data points from the sparse existing credit bureaus. He anticipated that the best way to secure partnerships and data would entail a strong ground game. As such, he deployed teams on a city-by-city basis to start with, and placed emphasis on striking deals through this on-site method. Once partnerships were formed and the data could flow in, Kehinde minimized costs while expanding his tech capabilities by having the data processing and analysis carried out by a 10-person team located in Portugal. This strategy offered some advantages, with Portugal sharing the same time zone as much of West Africa, over other locations such as the US or Asia. The in-house team could authenticate bank statements, fetch data, track fraud, and complete other processes that did not require customers to go outside of their typical daily activities (see **Exhibit 3** for details on the overall data acquisition process).

Advent of the 30-Day Credit Cycle

The convenience of Kehinde's integrated approach caught on. Soon enough, he was able to deploy the data and client bank account information for the creation of a proprietary Lidya credit score. This allowed for Lidya's most important innovation for existing and potential customers: the 30-day credit cycle. An initial loan would be made to first-time customers as a demo of sorts. The customer's performance in paying back the loan, combined with their other information, could give them their baseline Lidya credit score. At the end of the first loan cycle, re-underwriting could occur, and this process allowed Lidya to react at the micro level to customer needs over time (see **Exhibit 4** for details). The repetition of the short cycle also bolstered Lidya's data collection capabilities, which further sharpened their models. Micro adjustments could be further coupled with macro adjustments, as Lidya could adapt to changes in policy on the fly.

The shrinking of the credit cycle allowed Lidya to identify losses early, and cut them out as need be. Should a customer prove unreliable in paying back a loan in full or on time, Lidya could adapt accordingly. On the other end of the spectrum, Lidya could more actively pursue product options with highly reliable customers, and take advantage of gains that might have otherwise gone unrealized with a longer cycle. Such customers likewise benefitted from a credit cycle that matched their monthly inventory scheduling. Calculations for expansion or contraction of capital needs could be met with the appropriate funds in a way that would decrease operational costs while increasing inventory turnover. Another boon to customers came in that Lidya's analytics and automatized collection process precluded the need for collateral on loans, which freed up SME operations. The process, however, was not one-size-fits-all. While Lidya could focus its model on capital and inventory financing, it accepted that the process would not cover asset financing or other financing types of that nature. Kehinde believed that Lidya's success would come at serving his core base rather than expanding into every type of financing need.

The Framework

From Africa to Europe

In just four years, Lidya expanded its operations throughout the country (see **Exhibit 5** for details). Yet Kehinde, his career built on looking for opportunities rather than on resting with successes, felt Lidya could do more. He felt that his home country now looked more like a proving ground for Lidya than its entire market goal. He sought ways to bring its novel approaches to SME credit-enablement into other countries. At the helm of a data-driven company, Kehinde looked to modeling to choose the location of his next efforts. He decided he probably needed to start in a country with similar characteristics to Nigeria in terms of: SME financing gaps, GDP growth rate, trade balance, currency valuation, and a list of other comparable macroeconomic indicators. Such a country would also see its viability for Lidya live or die on its ratio of banks per 100,000 people. The number of brick-and-mortar branches, in his experience, heavily affected the opportunity for alternative finance. If it were low, there would likely be a strong opportunity to meet potential customers. If it were high, competition might be more fierce and the overall market opportunity likely less attractive. While an oversized bureaucracy that stagnated innovation could conceivably lead to gaps in SME financing in much the same way that a lack of banks could – spelling opportunity for Lidya – Kehinde was keenly aware that this was not the training-ground on which Lydia's model had been optimized. Given these considerations, Kehinde developed a 7-point framework to help him decide (see **Exhibit 6** for details).

Kehinde's framework identified Eastern Europe as ripe for expansion. Through discussions with management and the board of directors, Poland and the Czech Republic stood out as the top contenders. While many conditions were similar, the key differences lay in marginal customer acquisition costs and loan sizes. Each additional customer gained in Nigeria accompanied with it relatively low acquisition costs. The models were accurate as ever, the city-by-city and other ground game efforts could be launched directly from the headquarters, and knowledge of the country had been built up for Kehinde over his career thus far. An Eastern Europe launch meant taking a leap of faith, in many respects, as these edges in terms of customer acquisition would have to be re-wrought. With regard to loan sizes, it seemed the loans in those locations would average approximately 6 times those in Nigeria, but the yield was projected to remain low. Additionally, they were projected to originate from different sectors (see **Exhibit 7** for details).

Questions and Complications

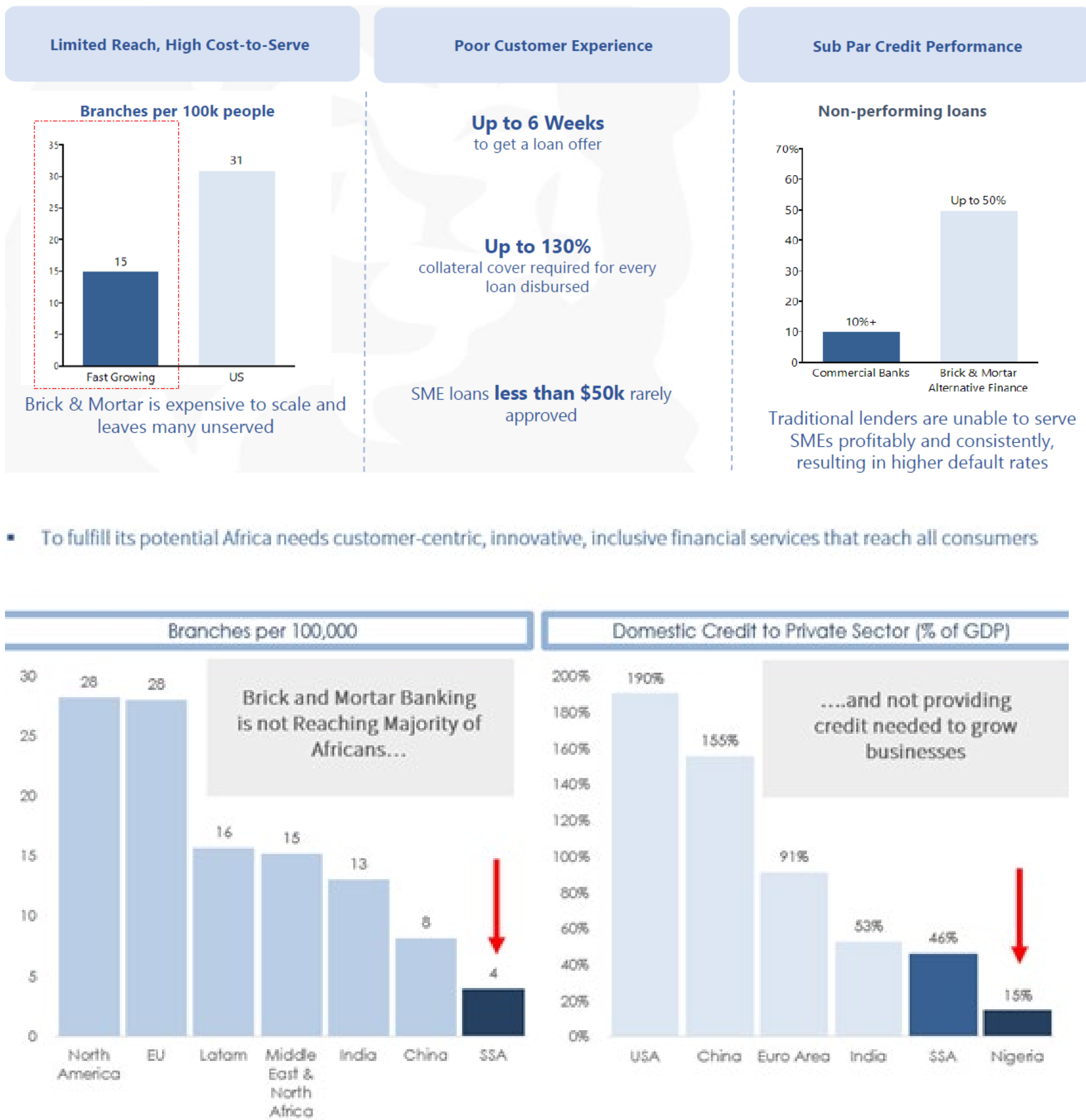
Kehinde knew that, just as his business model with Lidya was integrated with his understanding of the behaviors and needs of its people, an Eastern European expansion would likewise require tweaks and reworking to match the needs of the new customers. Due to the projected costs of the expansion and the structures of the new loans, he reflected on ways Lidya could remain stable during the process. How cautious should he be, particularly in expansion speed, services, and scale? How could he mitigate the difficulties facing Lidya's ground game there? In terms of modeling, what new data ought he to seek out? What variables might have lurked as givens behind his previous methodology for which he had not properly accounted?

While Kehinde attempted to square up the differences in the two markets, he knew that failing to anticipate even minute changes in the starting conditions could prove disastrous for his young company. Such failure could sink not just the endeavor abroad, but spell losses at home. The repercussions would not just affect his company's bottom line, but prospects for all those involved in the SME ecosystem. Should he offer new products or services in the new location? Would Lidya's long-term structure have to change? A West African headquarters, a Western European tech team, financing from the US, and an Eastern European expansion: was he spreading Lidya too thin, or was decentralization the key to success in international FinTech?

Decisions for Kehinde

As Kehinde went over the details for the new expansion, he reflected on what made Lidya stand tall in the first place. It had sprung from his acute awareness of the struggles facing a particular type of customer in a particular region with a particular history, of which he was a small but meaningful part. He believed that Lidya had the potential to transform into an international enabler of SME development. But he also knew that no African FinTech company had yet expanded internationally on such a scale. Could Lidya be the proof of concept to unlock this expansion-wave? Historically speaking, that the tides of innovation could flow from Lagos to Europe was unprecedented. But Kehinde was certain that the insights he gained regarding SMEs were "borderless" and could spur worldwide value creation – was this the right time and right strategic play to go all-in on that certainty?

Exhibit 1 Lidya's Description of Obstacles Facing Nigerian SMEs



Source: Company documents.

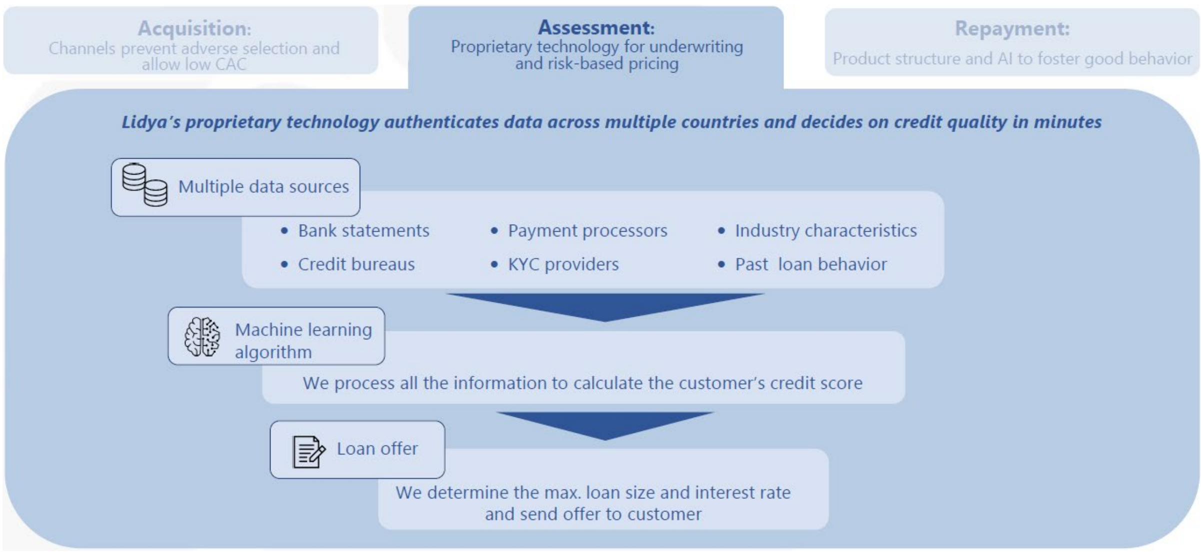
Exhibit 2 Lidya's Average Customer Profile

Customer Profile	
Target customer	We are **industry agnostic**, but our product typically fits the needs of industries with **high inventory turnover**. Examples of industries we typically serve: • Retail • Healthcare • Grocery • Telco • Wholesale • Logistics
Use of funds	Our average loan size in Nigeria is ~ **USD $2,500** Our customers use our loans to **finance their working capital needs**, allowing them to grow their business.

Source: Company documents.

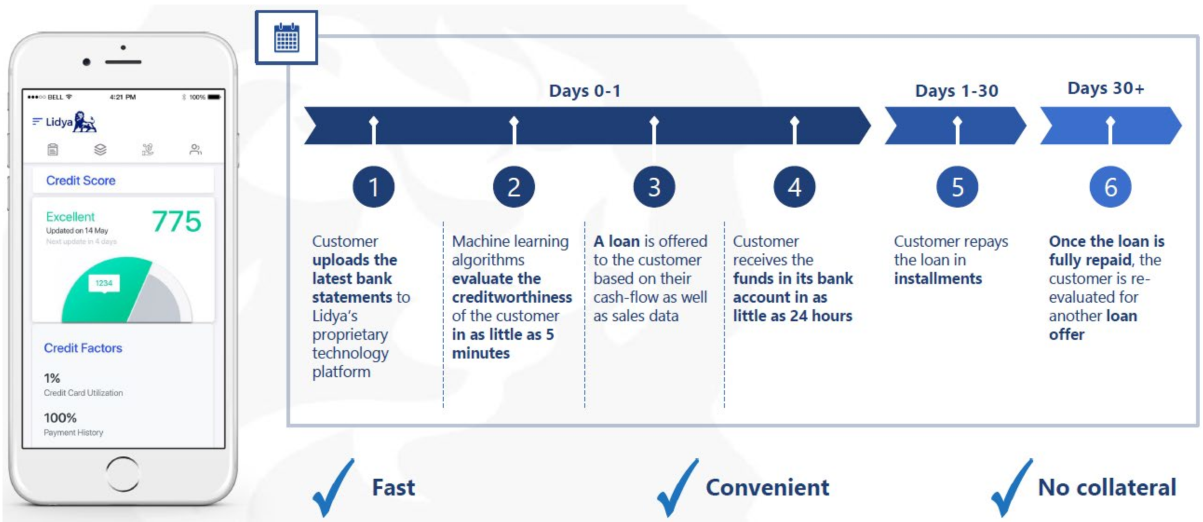
Exhibit 3 Lidya's Data Acquisition and Usage Process

Exhibit 3 (continued)



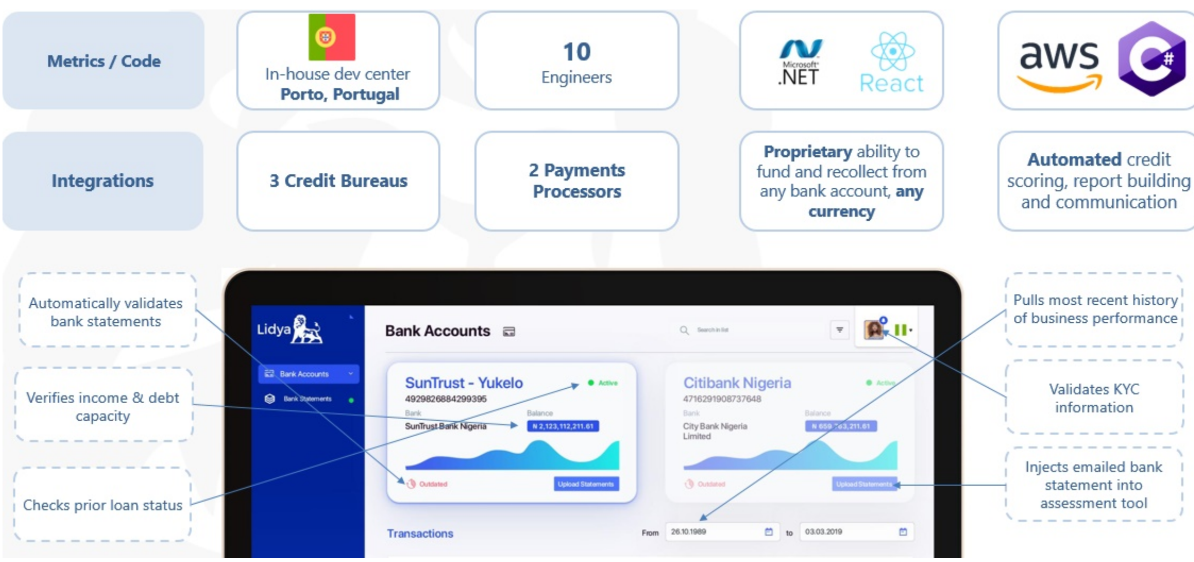
Source: Company documents.

Exhibit 4A User Experience Timeline



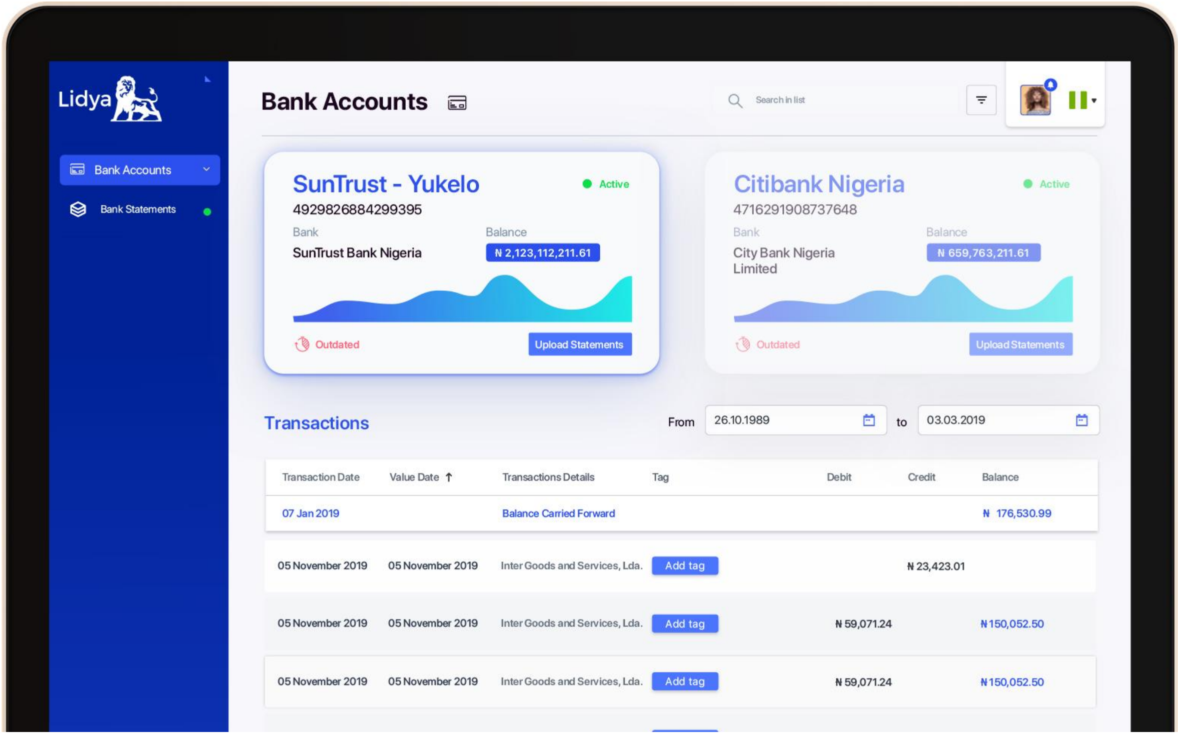
Source: Company documents.

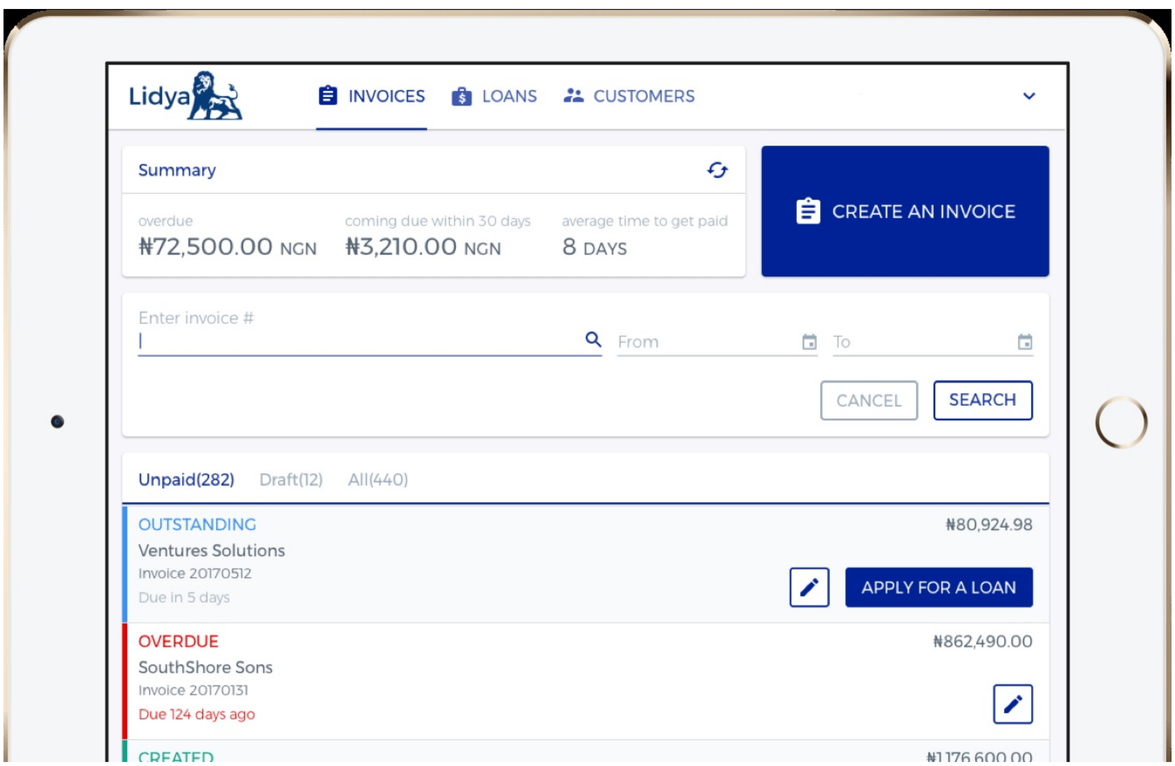
Exhibit 4B User Interface and Details



Source: Company documents.

Exhibit 4C User Interface—Detailed View





Source: Company documents.

Exhibit 5A Lidya's Income Statement, 14 Months Ending Dec. 2017

	2017
Interest and Similar Income	35,714,053
Interest and Similar Expenses	(32,225,417)
Net Interest Income	**3,488,636**
Other Income	24,421,441
Net Operating Income	27,910,077
Credit Loss Expense on Financial Assets	(5,889,212)
Net Interest Income after Credit Loss Expense	22,020,865
Operating Expenses	(43,882,246)
Personnel Expenses	(27,665,971)
Operating Loss	**(49,527,351)**
Finance Costs	-
Loss Before Income Tax Expense	**(49,527,351)**
Income Tax Expense	-
Loss After Taxation	**(49,527,351)**
Other Comprehensive Income for the Period, Net of Tax	-
Total Comprehensive Loss for the Period, Net of Tax	**(49,527,351)**
Loss per Share - Basic and Diluted (Naira)	**(4.95)**
ASSETS	
Cash and Cash Equivalents	20,624,600
Loans and Advances	1,275,113,993
Other Assets	10,637,500
Property and Equipment	700,969
TOTAL ASSETS	**159,477,062**
EQUITY AND LIABILITIES	
LIABILITIES	
Other Liabilities	17,232,264
Borrowings	181,772,149
TOTAL LIABILITIES	**199,004,413**
EQUITY	
Share Capital	10,000,000
Retained Earnings	(49,527,351)
TOTAL EQUITY	**(39,527,351)**
TOTAL EQUITY AND LIABILITIES	**159,477,062**

Source: Company documents.

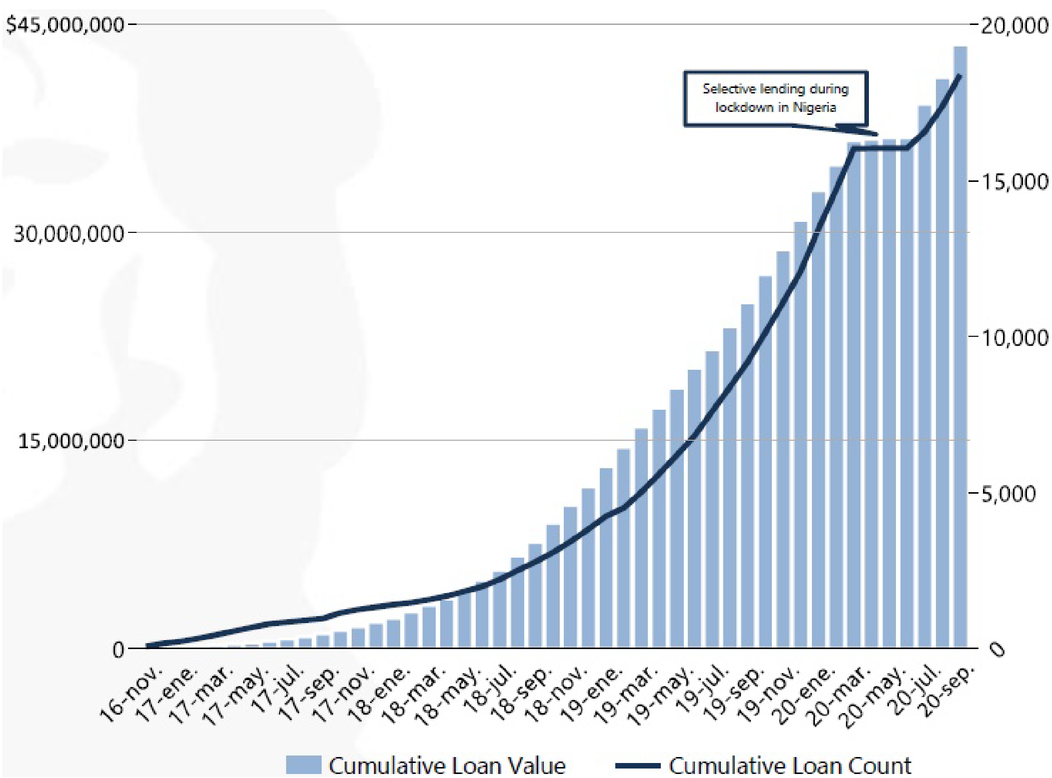
Note: In Dec. 2017, 1 Nigerian Naira = 0.0026 United States Dollar

Exhibit 5B Lidya's Loan Metrics over Time

Metric	Value
Cumulative Loans Disbursed (Nov 16 – May 19)	6,201 loans for $18.8 million USD
Nov – Dec 2016	168 loans for $79k USD
Jan – Dec 2017	1,165 loans for $1.2 million USD
Jan – Dec 2018	2,493 loans for $9.8 million USD
Jan – May 2019	2,374 loans for $7.1 million USD
Cumulative Unique Loan Clients	
As of Dec 2016	32
As of Dec 2017	226
As of Dec 2018	755
As of May 2019	1,213
Average Loans per Client	11
Repeat Rate	95%
NPL Rate	0.5%
Cumulative Invoicing Platform Users (Nov 16 - May 19)	141,279
Geography	~25% Lagos, ~75% rest of the country

Source: Company documents.

Exhibit 5C Lidya's Loan Count and Value over Time



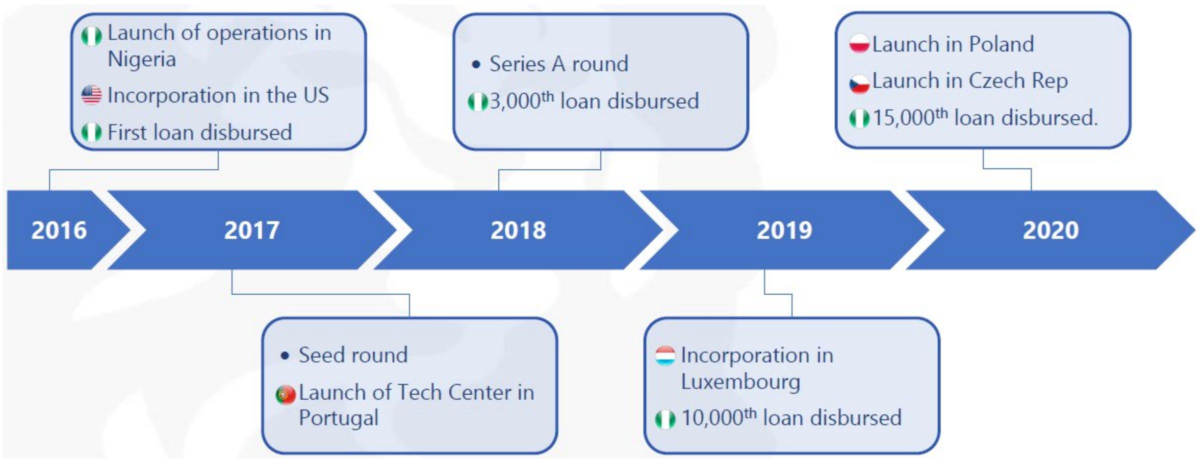
Source: Company documents.

Notes: NPL (90+ day delinquency) remained around ~0.5% (vs. 8-10% of tier 2 banks in Nigeria) throughout this time, powered by credit scoring algorithms and the automatized collection processes.

Exhibit 6 The 7-Point Framework

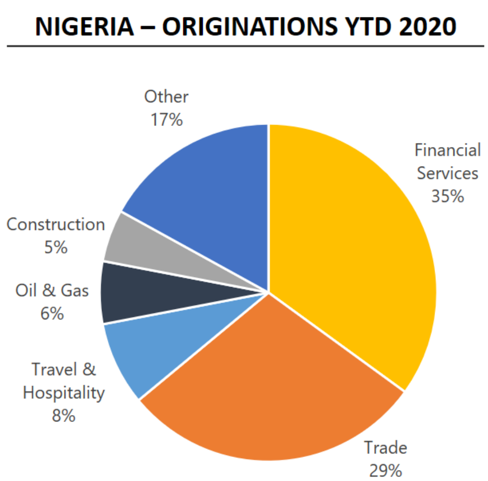
Source: Company documents.

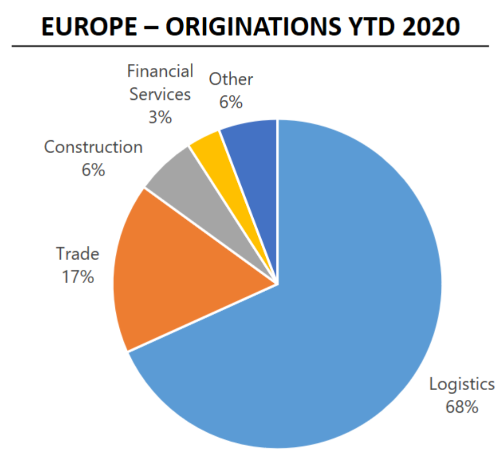
Exhibit 7A Timeline for Lidya, Current and Projected at Time of Expansion Plan



Source: Company documents.

Exhibit 7B 2020 Loan Originations by Sector: Actual YTD in Nigeria and Projected YTD in Europe





Source: Company documents.

Note: Loans per customer in Europe would be larger, with an average loan size in Poland of $4,150 and in the Czech Republic of $9,500.