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FINTECH LANDSCAPE IN SUB-SAHARAN AFRICA - THE CASE OF MOZAMBIQUE: WHO IS BEHIND FINTECH FUNDING?

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FINTECH LANDSCAPE IN SUB-SAHARAN AFRICA - THE CASE OF MOZAMBIQUE

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Abstract

The lack of access to traditional finance makes Sub-Saharan Africa an attractive market for the adoption of FinTech services. This report provides an overview of Sub-Saharan Africa’s Fintech landscape, highlighting the case of Mozambique. By constructing a database of active fintechs in the region, the report identifies top Fintech verticals and countries. To assess the factors behind FinTech success, a scoring model covering five pillars – regulation, demand, talent, capital and feeling of community – is also designed. These results served as the basis to explore the opportunities and challenges of Mozambique’s FinTech ecosystem and provide recommendations for its growth.

Keywords: Fintech, Sub-Saharan Africa, Mozambique

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Introduction

The global FinTech phenomena: FinTech refers to Financial Technology companies, particularly businesses that use technology seeking to improve and automate the delivery and use of financial services. The introduction of FinTech has been capable of impacting the financial system by offering innovative and competitive products that can (i) reduce the costs of financial services, (ii) create market opportunities for new entrants, (iii) expand access to new customers and segments and (iv) affect the competitiveness of incumbents (IMF 2019). Over the past decade, the adoption of FinTech services has been rising fast across the globe. By 2025, an estimated 5.9 billion FinTech users are expected, a 50% increase from 2020 (Figure 1).

FinTech in Sub-Saharan Africa: Currently, the Sub-Saharan Africa region (SSA) still accounts for a limited proportion of global FinTech activity. However, FinTech adoption amongst Africa is expected to increase rapidly in the upcoming years, reaching 10% of global users by 2025. With a largely underdeveloped financial sector, SSA’s market is particularly well-suited for the adoption of FinTech services. Across the region, FinTech has the potential to promote financial inclusion, by providing access to vital financial services to a large share of unbanked population — according to the World Bank, over 59% of SSA’s adult population does not have a bank account.

The Case of M-Pesa: Despite the low access to traditional finance, SSA has become a leader in mobile money adoption. The 2007 introduction of M-Pesa in Kenya marks FinTech’s first large-scale impact in the region. At the time, a large part of the population lacked safe and unexpensive means to transfer money across the country. Leveraging on the country’s high phone penetration, M-Pesa enabled its users to exchange tokens via text messages, which in turn could be redeemed by regular money in agent networks that were spread across the country, hence overcoming challenges such as the lack of internet access. The unprecedented adoption of M-Pesa helped raising Kenya’s share of financial included population from 27% to 83% (Central Bank of Kenya 2021). Today, the service is still active, having reached 48 million monthly active customers,

Despite M-Pesa’s success in Kenya, other countries, such as Tanzania and Uganda, have failed to gather the same level of adoption. The low level of market infrastructure, tailored pricing strategy and regulatory openness were identified as factors behind the success of this service in Kenya (Mas & Radcliff 2011), which were harder to replicate in other countries. These conclusions reinforce the strong level of heterogeneity within SSA countries, which demands FinTech to be dynamically introduced. Particularly, it points to the importance of a welcoming regulatory landscape, and the need for pilot experimentation and adaptation of products to customer needs (Batista 2020), which must be done on a country-by-country basis.

Beyond Mobile Money: M-Pesa is not a “one hit wonder”, as currently the region has four unicorn fintechs¹ – mobile money services Opay, Wave and payment infrastructure providers Flutterwave and Interswitch. Following the success of mobile money, the range of FinTech services has been expanding to include online payments and transfers, micro-lending, saving and insurance services or crypto-based solutions. These fintechs are widening the reach of financial services, with applications across several fields, such as agriculture, e-commerce, healthcare, mobility or education.

Footnotes:
¹Vodafone Annual Report – 2021
²Unicorn fintechs correspond to fintechs which have reached a valuation above 1 billion dollars
Introduction

Research topic: This report aims to provide an overview of the FinTech landscape in SSA, with a particular focus in the case of Mozambique. Specifically, it looks to assess the evolution of the FinTech phenomena in the region and identify the opportunities and potential challenges for the development of the FinTech sector.

To achieve this, a database of 432 fintech companies based in or operating in SSA was constructed. By leveraging on recent data and market activity, the report provides up-to-date conclusions on the current state and trends governing SSA’s FinTech landscape – which startups are fuelling ecosystem growth, where they are based and what kind of services they offer.

Our findings suggest that levels of FinTech development are still largely different within SSA verticals and countries. The main results indicate that fintech in SSA is mostly driven by Payments & Transfers companies (variants of M-Pesa’s business model) both in terms of funding and number of companies. Moreover, three FinTech Hubs – Nigeria, South Africa and Kenya – stand out as market leaders, both based on the number of operating companies and the amount of investment attracted. To enable other countries to replicate this success, an analysis of the main factors supporting FinTech development in these countries was conducted.

While the high projected growth of SSA’s young population and the widespread cell phone availability have been often pointed out as key fundamentals for the expansion of FinTech services, other factors – such as innovation-friendly regulation, internet penetration, support from local players and access to talent and capital – can be critical to fuel fintech growth, as seen by the different levels of adoption of M-Pesa. To provide a comprehensive view on the factors enabling FinTech development in each Hub, a scoring model was designed, assessing the attractiveness of a FinTech ecosystem across five pillars – regulation, demand, talent, capital and feeling of community.

The results of SSA’s FinTech overview were then used to provide recommendations for the development of the Mozambican FinTech ecosystem. Despite being relatively recent, FinTech activity in Mozambique has been expanding. In a country where 79% of the adult population is unbanked and the penetration of mobile money services is increasing (Finscope 2019), the potential for FinTech adoption is significant.

Mozambique’s FinTech ecosystem was chosen as the centre of our analysis given the opportunity to collaborate with local players, which was essential to provide a clear picture of the state of FinTech development in the country. Specifically, surveys were conducted amongst local members of FinTech.Mz – the country’s association of FinTech companies – to better assess the key barriers preventing their growth. Moreover, interviews were conducted with FinTech startups, professors of the Computing and IT courses at “Universidade de Engenharia de Moçambique” (UEM) and Professor Esselina Macome, Executive Director of FSDMoç.

Although Mozambique has developed key financial and regulatory innovations, some challenges – such as overly restrictive regulations, lack of consumer trust and limited funding opportunities – can still limit FinTech growth. By leveraging on the identified best practices of FinTech leaders in SSA, this report aims to provide actionable recommendations to policymakers, entrepreneurs, investors and associations looking to engage with the local FinTech sector. The results of this analysis can be further applied to similar countries looking to develop their FinTech ecosystem.

The rest of the report is organized as follows: Section 2 looks into the methodology adopted, Section 3 explores the FinTech landscape in SSA, Section 4 presents the Hubs’ scoring model, Section 5 focuses on Mozambique’s ecosystem and Section 6 provides final recommendations.
Database Methodology

This report focuses on a quantitative analysis of the SSA FinTech ecosystem, which is based on a list of 432 companies and more than 15 parameters for each of the companies collected. Most of the data was extracted from Crunchbase, initially by filtering it to Sub-Saharan African based companies, classified as FinTech or Insurtech by the platform. From this database, a case-by-case approach was applied to define which of them met the criteria to be further considered as an active fintech startup, resulting in a total of 364 companies.

Financial technology companies include any business that brings innovation to the financial sector through tech-enabled solutions, which generally come as a challenger to the traditional banking system. Actually, to answer the rapid changes in the banking industry, some incumbents are starting to integrate a fintech component to their services, which in this report will not be considered as a fintech startup. Even if it fulfils the fintech requirement, any product or service that is run by a bank, insurer or any kind of established corporation should not be accounted for as it does not classify as a startup company. Companies with over 1000 employees and founded before the year 2000 were also excluded for the same reason. Plus, company selection was not restricted to Sub-Saharan African headquartered fintechs. Instead, the database also considers internationally headquartered firms which currently hold active operations in SSA countries. Furthermore, the criteria used to define if the fintech startups in the sample were currently active was based on whether they presented an operational website or not – companies without one were considered to be closed.

For each of the companies that passed through all the criteria, specific data was collected from the Crunchbase platform, according to a list of relevant parameters for the subsequent analysis. These variables went from the founding dates to the funding amount collected, as well as specifics of each funding round, namely the dates, type of investor, name of the investor, etc.

Finally, by applying a case-by-case approach to each of the companies considered, the fintechs were associated with one of the nine categories that were defined for the purpose of this report, depending on the nature of its core business.

1. Payments & Transfers startups in SSA have primarily emerged to facilitate money transfers. The high costs and risks associated with transferring money in cash led the population to rapidly adopt the fintech alternatives, which allowed them to send remittances to their peers using mobile money. Progressively, businesses within this vertical started to integrate payment solutions, offering individuals new ways to pay their bills, together with an improved customer experience in accessing their finances (Digital Wallets). These include online and offline payments, as well as point-of-sale (POS) solutions, which allow small and medium enterprises to accept payments through different channels.

2. Lending & Marketplaces fintechs provide borrowing solutions to consumers through online platforms. Inside the SSA financial system, these alternative credit solutions are usually targeted to individuals who are not eligible to traditional credit applications, so most companies also care for assessing a borrower’s credit worthiness using alternative data. This framework considers consumer and SME credit providers, Peer-to-Peer (P2P) lending and crowdfunding platforms.

3. Digital Banking includes all startups that offer banking services exclusively online and lack a physical branch of any kind. The services operated by these companies typically replicate the ones offered by a traditional bank, usually at a lower cost and with higher transparency. In general, digital banks offer savings accounts and wealth management tools along with credit solutions. Increasingly, more companies are providing digital infrastructure for banking services to third parties (“Banking as a Service”).
Database Methodology

4. **InsurTech** comprises all firms related to the Insurance field, in order to cover the inefficiencies of the industry. In the case of SSA, most companies facilitate access to insurance, by providing tools for individuals to compare prices and choose the most adequate alternative. Nonetheless, other startups are actually operating as insurers and challenging the traditional sector by integrating tech-enabled tools in the definition of each client’s premiums, thus offering a more efficient product.

5. **Business Administration** companies provide other businesses with a variety of solutions that help them to optimize operations. The services offered by this kind of startups go from facilitating invoicing processes to payroll and tax management through the use of online platforms.

6. **Blockchain & Cryptocurrency** includes two main concepts: Blockchain Technology and Cryptocurrency. The first one contemplates companies that provide solutions for the financial industry by leveraging on decentralized data storing systems (DLT). In SSA, blockchain companies focus on the improvement of the payment infrastructure, on identity verification and security of property rights. Regarding the latter, Cryptocurrency refers to new means of exchange that make use of blockchain technology. As for this vertical, companies that provide crypto-based transfers, access to these markets and exchange mechanisms will also be considered.

7. **Personal Finance** fintechs, also known as Personal Finance Management tools (PFMs), are platforms that provide managing and monitoring assistance to individuals’ personal wealth, as their financial accounts, bills and credit. Within the African ecosystem, these kind of tools and services motivate individuals to set personal financial goals, while teaching them how to better govern their finances.

8. **RegTech** considers companies related to the supervisory sector. Within this vertical one should consider companies that can potentially increase the transparency of other companies’ operations as well as their protection, complying with the regulatory guidelines of the financial industry. Furthermore, within the African FinTech environment, most RegTech companies focus on services related to risk management, identity management, Know Your Customer (KYC) / Anti-Money Laundering (AML) and transaction monitoring.

9. **InvestTech** startups relate to online platforms that provide access to trading solutions for a vast pool of investors, which go beyond high net worth individuals, allowing for more individuals to invest in local and global capital markets. Most of these companies include advisory and portfolio management services that leverage on technology to boost margins.

LIMITATIONS

**Gaps on FinTechs Included:** The database was based on Crunchbase’s data, which comes from multiple sources, being dependent on voluntary disclose.

**Time lapses:** A certain fintech creation or funding round may be registered in Crunchbase a period of time later than when it actually occurred. Thus, the number of operating fintechs or funding rounds a past year can potentially increase over time.

**Time boundedness:** Several of the insights mentioned contained an evolutive dimension. As time passes these become increasingly less accurate. Plus, some dimensions such as Regulation may suffer abrupt and non anticipated changes. Plus, the data relative to 2021 corresponds only up to November.
SSA’s FinTech Landscape: General Overview

The FinTech landscape in SSA comprises 364 active fintechs and has attracted more than 3.45 billion dollars in funding from 201 companies since 2000. Following a 29% Compounded Average Growth Rate (CAGR) in the number of fintechs over the past 10 years, SSA’s FinTech ecosystem seems to be maturing. After peaking in 2018, with 67 new fintechs, the number of new fintech launches has been decreasing (Figure 2). So far, only 12 fintech launches have been recorded in 2021. Note that the Covid-19 impact is also likely to have aggravated this trend, resulting in a significant drop in startup creation in 2020.

As the market consolidates, existing companies are also becoming more established: the average startup in our sample has been operating for more than 5 years. This has resulted in an increased offer of more robust and diversified FinTech solutions, spanning across multiple categories.

While a fintech boom has been experienced in the past few years (2015-2018), the number of startup closures has also increased. These years of FinTech growth in SSA saw the rise of many fintech companies offering relatively similar solutions, particularly in the Payments & Transfers space. While that has led to many success cases, it has also been reflected in the number of closures. In fact, 16% of the initially considered fintechs are no longer active. This proportion is even higher for companies created between 2016 and 2017. As the space become more crowded and market leaders start to emerge, barriers to entry are increasing. Progressively, new startups are shifting their focus to unexplored FinTech areas and markets, with increasing opportunities for financial inclusion in the region.

SSA FINTECH LANDSCAPE IN NUMBERS, 2000-2021

<table>
<thead>
<tr>
<th>Year</th>
<th>Active fintechs 2021</th>
<th>Funded fintechs</th>
<th>US$ in funding</th>
<th>CAGR 2010-2020</th>
<th>Average fintech age 2021</th>
<th>FinTech closures</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>364</td>
<td>201</td>
<td>3.45B</td>
<td>29%</td>
<td>5.2Y</td>
<td>69</td>
</tr>
<tr>
<td>2010</td>
<td>432</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>382</td>
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<td>2018</td>
<td>331</td>
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<tr>
<td>2017</td>
<td>264</td>
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<td>2016</td>
<td>202</td>
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<td>2015</td>
<td>154</td>
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<td>2014</td>
<td>102</td>
<td></td>
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<td>2013</td>
<td>73</td>
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<td>2012</td>
<td>56</td>
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<td>2011</td>
<td>41</td>
<td></td>
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</tr>
<tr>
<td>2010</td>
<td>34</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Source: Own database
SSA’s FinTech Landscape: Funding Evolution

The amount of funding attracted in SSA’s FinTech ecosystem is reaching all-time records (Figure 3). 44% of fintechs in our sample have secured some form of formal investment, with 70% of these having attracted funding in the past three years. This number is likely to increase as investors keep on reinforcing their presence in this growing market.

The impact of the Covid-19 pandemic in investor’s activity led to a decrease in 2020’s funding, following a striking growth in 2019. While the number of deals was not severely affected, there was a 50% drop in funding amounts. This was mainly due to a big fall in average ticket sizes (-90%), as investors became more wary of allocating their funds to riskier, international investments.

Funding amounts have since peaked in 2021, showing signs of a successful recovery of the sector. Total funding has largely surpassed 2019 values, with average ticket sizes reaching US$26.1 million, a 125% increase from 2019. In fact, the reported US$1.9 billion funding are close to matching the collective amount raised by fintech startups over the past decade, as global investment in FinTech continues to rise (KPMG 2021).

The biggest five rounds of the year alone account for more than half of the total capital raised (Table 1). As a result, 2021 saw the rise of three new SSA FinTech ‘unicorns’ – payment companies Opay, Wave and Flutterwave – following the steps of Nigeria’s payments processor Interswitch, which was the first to achieve the status in 2019.

Mergers and Acquisitions (M&A) activity in SSA is also rising. In 2021, payments companies Mangwe, Wayaway and Digiduka were acquired, following five acquisitions in the previous year – most notably the $US200 million acquisition of Nigeria’s Paystack by US-based fintech Stripe. Interestingly, most acquisitions are being driven by SSA-based fintechs seeking to scale, supporting the market consolidation trend.

<table>
<thead>
<tr>
<th>Company</th>
<th>Year</th>
<th>HQ</th>
<th>Funding type</th>
<th>Money raised (US$ million)</th>
<th>Main Investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opay</td>
<td>2018</td>
<td>Nigeria</td>
<td>Series C</td>
<td>400</td>
<td>Softbank Vision Fund, Sequoia Capital, 3iV Capital</td>
</tr>
<tr>
<td>Wave</td>
<td>2018</td>
<td>Senegal</td>
<td>Series A</td>
<td>200</td>
<td>Stripe, Sequoia Heritage, Founders Fund</td>
</tr>
<tr>
<td>Flutterwave</td>
<td>2016</td>
<td>International</td>
<td>Series C</td>
<td>170</td>
<td>Avenir Growth Capital, Tiger Global Management</td>
</tr>
<tr>
<td>Chipper</td>
<td>2018</td>
<td>International</td>
<td>Series C</td>
<td>150</td>
<td>FTX</td>
</tr>
<tr>
<td>Tala</td>
<td>2011</td>
<td>International</td>
<td>Series E</td>
<td>145</td>
<td>Upstart, IVP, Revolution Growth, Lowercase Capital</td>
</tr>
</tbody>
</table>

Table 1: Top 5 SSA FinTech deals in 2021, by amount raised

Funding amount

Source: Own database
Vertical Analysis: General Overview

When looking at the overall data sample, one can identify 3 top FinTech verticals in the SSA space, both in terms of size and in funding amount. These categories are: 1) Payments & Transfers, 2) Lending & Marketplaces and 3) Digital Banking.

From the 364 active fintech companies in the sample, 30% belong to the Payments & Transfers category, immediately followed by Lending & Marketplaces (22%). The third place is nearly shared between Personal Finance with 12% and Digital Banking with 11%. As for the other 26%, the market seems to be quite diversified among the remaining sectors, with RegTech and InvestTech somewhat behind with 3% and 4% of total companies, respectively.

The Payments & Transfers sector alone is responsible for more than 50% of the total funding. As the first vertical to emerge in SSA, the companies operating in this space are seen as more mature, attracting later stage investors willing to invest in concepts that have already proven its worth. Plus, it is more likely that these businesses become profitable, because the high acceptance of the population for payments and transfers solutions offers a higher potential for scalability and an overall larger customer base, thus generating higher revenue. Albeit at a lower scale, Lending & Marketplaces and Digital Banking have started to attract more funding than the other categories, accumulating 43% of the remaining total funding amount. However, there is little information on revenues and profits, limiting the scope of the analysis.

All other companies may be considered as part of emerging sectors. Entrepreneurs realized the need of the population for other services, as insurance or savings alternatives, while other tried to replicate trends that worked in more developed markets, as cryptocurrency. Over time, the market is diversifying away from the Payments & Transfers initial dominance towards other new and innovative fintech categories. However, the data in Figure 4 shows that most of these categories come down to 0% to 2% relative to total funding, revealing that investors might still be wary of getting involved in non-established FinTech areas.
Vertical Analysis: Payments & Transfers

**PAYMENTS & TRANSFERS**

The Payments & Transfers vertical represents most of the SSA’s fintech space, both in terms of size (number of companies) and amounts of funding. Companies within this vertical have been developed to tackle the need of the population to make secure, fast, and efficient transfers among them, solving for the inefficiencies left by incumbents. Most of these transfer solutions implied that people exchange physical money into mobile money in order to make transfers and ultimately, process payments through their mobile devices. The Kenyan M-Pesa’s huge success has encouraged entrepreneurs to create similar solutions across the continent.

As of 2021, Payments and Transfers companies account for 30% of the active fintech startups, with 110 businesses operating. However, this percentage of the total number of companies constitutes a record low for the vertical, indicating that the market is diversifying towards other segments. Figure 5 shows that the proportion of Payments & Transfers new fintechs relative to the total number of fintech launches per year has been persistently decreasing in the past 5 years, except for 2021. One possible reason for the number of new companies to decrease throughout the years is the increase in competition, which leads to higher barriers to entry, thus indicating the market is becoming more saturated.

At the same time, the already established companies in this vertical have space to scale up and expand their businesses, thus attracting higher levels of funding throughout time, totalling more than US$2 billion. Indeed, the diversification towards new segments is more visible in the number of fintechs than in funding amounts. As these businesses are still in its infancy, it is natural for the investment trends to react more slowly to innovation, while investors wait for them to mature and prove its value. Plus, as the companies in the Payments & Transfers space are becoming larger and expanding their businesses internationally, investment rounds tend to increase in value, thus accounting for a higher proportion of total funding in subsequent years.

Within this vertical, the top three success cases in terms of funding include **Opay** (29%) of total funding in Payments & Transfers, **Chipper Cash** (15%) and **Flutterwave** (12%). The first two are digital wallets, particularly focused on bill payments, quick and easy money transfers. The latter, on the other hand, mainly offers merchant services, guaranteeing that businesses are able to access payments from any customer and various payment channels.
**Vertical Analysis: Lending & Marketplaces and Digital Banking**

**LENDING & MARKETPLACES**

- Active companies: 79
- Of the SSA’s FinTech space: 22%
- Of Total funding amount: 29%

*Source: Own database, 2021*

Following the success of Payments & Transfers in SSA, other businesses saw an opportunity to meet the needs of a largely underbanked population. As a result, Lending & Marketplaces solutions started emerging to provide fast, unsecured, short-term loans to individuals and SMEs by relying on alternative data, like mobile phone usage and mobile transactions, to assess their creditworthiness.

As of 2021, this category counts with 79 active fintechs, representing 22% of SSA’s FinTech space. The number of active companies grew steadily from 2010 to 2015 – on average, more than 50% per year - taking up some of the space previously dominated by Payments & Transfers. Though growth in fintech launches has slowed down in the past three years (31%), in line with the overall market, the high gap in credit access in SSA is likely to keep on fuelling growth for incumbents and the surge of local players in less developed FinTech markets.

The growth potential of this space has been reflected in the investment attracted. Since 2013, lending companies raised more than $US1.1 billion in funding and represent 29% of total investment in SSA’s FinTech. However, much of this funding is still concentrated in international companies with proven business cases. International players Tala (31% of total funding) and Branch (24%) and Kenya-based Lendable (13%) are the top three fintechs with the highest amounts of funding. It is expected that more local players will be able to access funding in the future, as investors and customers increase their confidence in the business model.

**DIGITAL BANKING**

- Active companies: 41
- Of the SSA’s FinTech space: 11%
- Of Total funding amount: 14%

*Source: Own database, 2021*

While much of the initial activity in SSA’s FinTech space came from companies offering niche services, such as transfers or loans, fintech companies seem to be diversifying their product offerings. Increasingly, more startups are being created with the purpose of becoming fully digital banks, by integrating saving solutions, money transfers and credit, or providing banking infrastructures through their platforms (“Banking as a Service”). As a result, Digital Banking has emerged as a rising phenomena in SSA’s FinTech landscape.

In 2021, this category counts with 41 active companies, representing 11% of companies in SSA’s Fintech space. However, this number has been growing at a fast pace over the past three years (43%), driving much of the growth in overall FinTech count.

Investors have been receptive of this business model, which has gained popularity in more developed FinTech markets. Since 2014, 25 Digital Banking fintechs have secured more than $US666 million in funding. Its biggest success cases include banking platform provider Jumo (41% of funding) and digital banks TymeBank (32%) and Kuda (17%).

As customers increase the adoption of “one stop-shop” solutions, it is expected that traditional players in other verticals, such as Payments & Transfers and Lending, continue to diversify their product offering and start expanding into this space. However, competition from incumbents, technological infrastructure requirements and stricter regulations are still challenges for the development of this vertical.
Vertical Analysis: Personal Finance and InsurTech

PERSONAL FINANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active companies</td>
<td>43</td>
<td>12%</td>
</tr>
<tr>
<td>Of the SSA’s FinTech space</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth in nº of active fintechs 2019-2021</td>
<td>54%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Own database, 2021

Tapping into SSA’s unbanked population, Personal Finance has grown as an instrument to ease the practice of savings and managing money. SSA’s PF product range include solutions such as savings plans or other savings alternatives, credit and wealth management or products towards financial literacy. The launch of these solutions has helped and empowered a share of the population to better manage their financial reality, considering long-term financial plans.

In 2021, the Personal Finance category counts with 43 active companies, corresponding to 12% of total FinTech companies. This sector has more than doubled the number of companies operating since 2016 - on average, there were 6 new fintech launches per year. Indeed, personal finance solutions have only started to grow substantially after 2015. As a still growing segment, Personal Finance has shown one of the largest growth rates in the number of fintech companies in the past 3 years (54%), highly above the 32% of the overall SSA FinTech market.

Personal Finance is only responsible for less than 1% of total SSA FinTech funding. A possible reason behind this modest percentage is the fact that Personal Finance fintechs is oriented by financial inclusion, rather than pure financial returns. Cowrywise (47.6% of total PF funding), TopCheck (17%) and Wala (17%) can be found as the top three Personal Finance fintechs with the highest level of funding.

INSURTECH

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active companies</td>
<td>20</td>
<td>6%</td>
</tr>
<tr>
<td>Of the SSA’s FinTech space</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth in nº of active fintechs 2019-2021</td>
<td>11%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Own database, 2021

The phenomenon of InsurTech was introduced in SSA as a response to the low insurance penetration — the highest penetration rate accounts for only 17%¹ of the population (South Africa). Despite the raise of household income over the last 5 years, insurance is not considered as an essential product to a large share of the African population. All in all, startups have introduced more relatable and tech-based products that are aligned with the continent’s reality — such as the high mobile phone penetration or the high percentage of agricultural activity.

The InsurTech space is composed by 20 active fintechs and adds up to 6% of SSA total number of fintechs. From 2004 to 2015, the launch of InsurTech companies exhibited a positive growth rate, reaching its peak in 2015 (with the launch of 5 fintechs). Since reaching its maximum point, annual growth rates have declined. Furthermore, the launch of InsurTech companies was more present in more developed and mature markets, namely South Africa (holding 65% of total Insurtech companies). This phenomenon is usually explained by a comparatively higher level of disposable income and financial literacy, thus a higher willingness to purchase insurance.

InsurTech corresponds to 1.02% of total SSA FinTech funding, where Naked Insurance (37% of InsurTech funding), Pineapple (23%) and Inclusivity Solutions (14%) can be found as the main drivers behind this flow of funding. As investors seek scalability, the cultural barrier of low insurance adoption could be considered as a potential reason behind the low investment “appetite” for InsurTech.

¹Information directly retrieved from Statista 2017 data, “Rate of insurance penetration in Sub-Saharan Africa in 2017, by country.
**Vertical Analysis:** Blockchain & Cryptocurrency and InvestTech

### BLOCKCHAIN & CRYPTOCURRENCY

<table>
<thead>
<tr>
<th></th>
<th>Active companies</th>
<th>Of the SSA's FinTech space</th>
<th>Growth in nº of active fintechs 2019-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>25</strong></td>
<td><strong>7%</strong></td>
<td><strong>39%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own database, 2021

The use of cryptocurrencies in SSA is increasing, as digital currencies are providing a cheaper, faster and more secure channel for remittances, payments or investments. This enables individuals and businesses to deal with the high costs of international and intra-region transfers and the risks of currency devaluation. As a result, **Blockchain & Cryptocurrency** solutions are increasingly being incorporated into other verticals, such as Payments & Transfers and InvestTech.

This category represents 7% of the fintech count in SSA, with 25 businesses actively operating. Although it ranks 5th in number of companies, this is the most recent phenomena in SSA. In fact, the first registered company in the sample – Kenyan BitPesa – was only launched in 2013. From 2017 onwards, the number of fintech launches boomed, in line with global trends - leading to an 8x increase in 5 years. Despite an above average growth in the number of active fintechs (39%) over the past 3 years, the high volatility of the sector, lack of proper regulation and high energy requirements still constitute barriers to its growth.

In line with the global crypto phenomena, Blockchain & Cryptocurrency fintechs are attracting more investment in the region. Since 2015, this vertical has secured a total of $US52.3 million in funding. Crypto exchanges **BitPesa** (48% of total funding), **CoinFLEX** (22%) and **VALR** (9%) are the top three fintechs with the highest amounts of funding. The relevance of this vertical in SSA’s FinTech space is likely to increase as its scope is expanded to include other uses, such as ID verification and property rights.

### INVESTTECH

<table>
<thead>
<tr>
<th></th>
<th>Active companies</th>
<th>Of the SSA's FinTech space</th>
<th>Growth in nº of active fintechs 2019-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>14</strong></td>
<td><strong>4%</strong></td>
<td><strong>56%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own database, 2021

**InvestTech** companies try to facilitate investing in African and global stock markets. These platforms, which ease the way for people to invest their money are growing by providing everyday investors with access to the financial markets. The recent growth in household income, paired with the lack of traditional investment options has opened the doors for InvestTech fintechs, particularly among the young population.

InvestTech companies account for 4% of the SSA fintech market, with a total of 21 active companies in 2021. The sector has been growing steadily throughout the years, with an average of 2 to 3 company launches being registered per year. Despite being one of the smallest fintech spaces in SSA, InvestTech has shown a 56% growth rate in the number of active companies over the previous 3 years, the highest one among all FinTech verticals.

**Bamboo**, a digital investment platform that provides real-time access to buy, hold or sell stocks is, the company with higher funding amounts (84% of InvestTech fundings), followed by **ProsperiProp** (11%).

In essence, despite the existing opportunities for InvestTech fintechs, the existent regulatory barriers, reduced internet penetration and limited financial literacy, amongst others, can still hinder the vertical’s level of investment attractiveness.
## Vertical Analysis: Business Administration and RegTech

### BUSINESS ADMINISTRATION

<p>| | | |</p>
<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Active companies</td>
<td>Of the SSA’s FinTech space</td>
<td>Growth in no of active fintechs 2019-2021</td>
</tr>
<tr>
<td>23</td>
<td>6%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Source: Own database, 2021

**Business Administration** fintechs aim at facilitating a company’s management process. This becomes particularly valuable to SMES, which lack the resources or knowledge to perform tasks such as accounting, liquidity handling, customer data analysis, amongst others. In SSA, 80% of the jobs are provided by SMEs (CSIS 2021), hence highlighting the relevance of this fintech vertical to the region.

In 2021, there are 23 companies in the Business Administration space, corresponding to 6% of the overall FinTech space. While between 2010 and 2014 only 2 fintechs from this vertical were launched, the number of companies has been increasing progressively over the past 6 years. In fact, there has been 44% growth in the number of companies over the last 3 years, one of the biggest drivers of growth in SSA’s FinTech count.

The recent growth of this vertical may be partially associated to the maturing Payment & Transfers solutions. In a way, as payments and transfers needs become satisfied, other business management challenges began to be tackled. Ultimately, raising expectations regarding the attraction of larger amounts of funding by fintechs in this vertical. The Kenyan based **MarketForce** is the fintech with the largest amount of funds raised, corresponding to 30% of the vertical’s total funding. The company focuses on providing a robust framework for measuring and improving performance, customer experience, and financial KPI’s.

### REGTECH

<p>| | | |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Active companies</td>
<td>Of the SSA’s FinTech space</td>
<td>Growth in no of active fintechs 2019-2021</td>
</tr>
<tr>
<td>10</td>
<td>3%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: Own database, 2021

**RegTech** fintechs aim at facilitating a company’s interaction with regulatory requirements, making it less expensive and time consuming. They also focus on the improvement of an enterprise’s level of digital security. Essentially, providing services related to risk management, identity management, KYC or AML.

RegTech is the smallest SSA fintech vertical, with only 10 active companies and a modest share of 3% of the total number of fintechs. Still, there are two trends that positively affect the future relevance of RegTech in this FinTech landscape.

The first is the rising number of regulatory requirements, which are expected to accompany the growth of FinTech. Increasingly KYC and AML solutions are being used by Digital Banks and lending solutions. This is particularly important as companies expand their operations to more than one country, especially telecom and payment providers. The second is the adoption of RegTech solutions by many institutional bodies, as these can also benefit from RegTech as they also face compliance supervision which entails costs.

Within the SSA region, the Nigerian based **i.Sec** is the most prominent RegTech focused fintech, having secured 90% of the total funding attributed to this vertical. Essentially, the company provides identity management and access authorization services to banking institutions.
Country Analysis: Nigeria, South Africa and Kenya as main FinTech Hubs

Much of the growth in SSA’s FinTech ecosystem has been driven by the activity in three major Hubs: Nigeria, South Africa and Kenya. These countries account for 72% of the total number of active fintechs and represent more than 58% of the total funding captured, making them impressive success cases in the region. The factors that dictate their success will be explored in detail throughout this report.

Though South Africa dominated the space until 2019, Nigeria has since taken the spot as the region’s major Hub. For the past three years, the country has given room to more than half of the new fintech launches, followed distantly by Kenya (16%) and South Africa (10%). This trend is also reflected in the age of fintech companies: the average South African fintech has been operating for more than 7 years, in comparison with 5 in Kenya and less than 4 in Nigeria, showcasing the different maturities of these markets.

Nigeria’s growing importance in SSA’s FinTech landscape is also reflected in the amount of funding attracted. As of 2021, Nigeria represents 30% of active fintechs and has been responsible for a proportional share of funding flows in the region. Despite accounting for a close number of companies, South African fintechs have contributed to less than 20% of funding. Similarly, Kenya, with 15% of active fintechs, accounts for only 7% of funding flows. The gap between fintech presence and the amount of investment attracted by each country is mostly explained by the presence of international players in the region, which will be further explored in greater detail.

Figure 6: Share of active fintechs per country (%), 2010-2021

Figure 7: Number of active fintechs in SSA, 2021

TOTAL OVERALL FUNDING (%)

Source: Own database

15
**Country Analysis: A Closer Look into Nigeria**

Nigeria is the largest country in SSA in terms of population, accounting for 206 million people in 2020. As of 2021, Nigeria is home for 111 fintechs, having as its pioneer the company Interswitch — an integrated digital payment platform.

**Vertical Distribution:** If considering a segmentation of these fintechs by verticals, the sector of Payments & Transfers accounts for 29% (32 fintechs) of the total number of companies, followed by Lending & Marketplaces (20%) and Personal Finance (16%), as illustrated in Figure 8. The rise of Personal Finance within the Nigerian market was linked to the national economic recession in 2016, where the national currency, the Naira, devalued against the USD. As a response to the low interest rates provided by traditional banks, Nigerians turned into the fintech-based technologies to better save their money and potentially invest, leading to the launch and rise of platforms such as Cowrywise or EvolveCredit.

**Funding Analysis:** Regarding its magnitude of investments, Nigeria has attracted an amount of 1.21 billion dollars of funding as of 2021, corresponding to the country with the highest total funding in SSA. However, a noticeable difference is perceived in the level of funding within its diverse range of verticals. Once again, the vertical Payments & Transfers remains in #1, accounting for nearly 80% of total funding, followed by Digital Banking and Lending & Marketplaces, respectively. This rise of funding within the vertical of Payments & Transfers was highly fuelled by the outstanding number of Nigeria's FinTech unicorns, namely Opay (47% of total funding) and Interswitch (17%), representing 2/4 SSA FinTech unicorns.

**SPOTLIGHT ON Interswitch**

Interswitch is not only Nigeria’s pioneer fintech, but it also has become one of the very few companies to be considered an African fintech unicorn. As a digital payment and e-commerce provider, Interswitch has grown in significant scale over nearly two decades, achieving metrics such as: 1) a valuation of 1 billion dollars in its last round of funding or 2) 90% market share of all electronic transaction in Nigeria. The company has been able to support this vast growth through a successful set of payment and financial service offerings. Its range of products is clustered across three major segments: 1) Transaction processing and enablement; 2) Card Network (Verve) and 3) Consumer Financial Services (Quickteller). As its next step towards international expansion, the company has considered going public through an initial public offering (IPO), since 2016. Given this potential IPO, the company is expected to raise fresh financing through a lower cost of capital, comparatively to its cost of financing if it were to stay private.

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1. GDP per capita as of 2020, directly retrieved from Statista; 2. Exchange rate as of January 2021, directly retrieved from Statista; 3. Despite being based outside of Nigeria, Flutterwave can also be considered as a Nigerian fintech;
Country Analysis: A Closer Look into South Africa

South Africa remains the most developed economy when compared to its Sub-Saharan peers, accounting for the largest GDP per capita and lowest poverty rate. Due to its comparatively high degree of development, South Africa was the first established FinTech hub, launching its first fintech company in 2000. This hub is currently composed by a total of 97 FinTech companies.

Vertical Distribution: When looking at South Africa's vertical distribution, there is a large presence of the Payments & Transfers vertical, accounting for nearly 30% of total companies. The second largest verticals are Lending & Marketplaces and InsurTech (13% each). Furthermore, the South African pool of fintechs experiences a high presence of emerging verticals comparatively to the remaining hubs, as South Africa contains the highest number of InsurTech, Business Administration and InvestTech companies across SSA. All in all, the activity in these emerging spaces can be largely traced to this market's maturity.

Funding Analysis: Funding wise, South Africa captures a grand total of US$ 667 million. Within this value, the single sector of Digital Banking represents approximately 60% of total funding, followed by Payments & Transfers (22%) and Lending & Marketplaces (12%). Furthermore, JUMO and TymeBank, the two largest Digital Banking platforms across SSA, are the main drivers behind this outstanding percentage of funding (51% of total). As South Africa's digital and financial infrastructure present a relatively higher development, investors might show a higher attraction to this market when investing in Digital Banking solutions — given that this infrastructure can better support the activity of these more “complete” platforms, when compared to other SSA markets.

1 GDP per capita as of 2020, directly retrieved from Statista
2 Exchange rate as of January 2021, directly retrieved from Statista
Country Analysis: A Closer Look into Kenya

With one of the fastest growing digital economies, Kenya has been established among one of the world’s leaders in mobile money penetration and the most successful adopter of mobile wallets (FT Partners 2019). Within its 40.9 million population, Kenya is home for 56 fintech companies since 2004.

Vertical Distribution: When compared to the three main SSA hubs, Kenya is the only market that is not led by the Payments & Transfers when considering the number of fintechs. In contrast, Lending & Marketplaces presents the highest number of active companies, with a corresponding percentage of 32% of total number of national fintechs, followed by Payments & Transfers (29%). A wide gap is found between the second and third largest verticals regarding the number of fintechs. Digital Banking, Personal Finance and Business Administration share the third place (9% each, as illustrated in Figure 10). The rise of the number of companies within the Kenyan Lending & Marketplaces is highly linked to the increasing demand for alternative mobile and digital lending solutions, as many individuals with capital needs were not satisfied by formal lenders (FSD Kenya 2017).

Funding Analysis: A total value of $US238 million was raised by Kenyan fintechs as of 2021. Furthermore, the largest share of funding was led by the Lending & Marketplaces vertical, which captured over 50% of all investment. The sector of Payments was left in #2, accounting for an overall of 32%. Remaining verticals such as Blockchain and Cryptocurrency or InsurTech accounted for less than 10% each. The main contributor to Kenyan funding was Lendable, a Lending & Marketplaces fintech, which accounts for more than 60% of total Kenya’s funding (achieving funding rounds as large as $140M).
Country Analysis: Other players are gaining share in the market

OTHER RISING COUNTRIES

The share of active fintechs originated outside of the three major countries increased considerably throughout the earlier Fintech years, remaining stable at around 30% since 2015. Much of the growth from other players has been driven by increased FinTech activity in two countries: Ghana and Uganda. Together, these countries represent 45 active fintechs (12% of SSA’s total). As well-known FinTech Hubs start to mature, these ecosystems have the opportunity to expand and reinforce their presence in the region. Despite the positive outlook, these countries have yet to attract significant funding rounds, which can pose some challenges for their future growth.

FINTECH LAUNCHES 2019-2021

<table>
<thead>
<tr>
<th>Country</th>
<th>Launches</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>9</td>
<td>8.9%</td>
</tr>
<tr>
<td>Uganda</td>
<td>5</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

Other success cases have also been emerging from relatively smaller FinTech ecosystems, such as Seychelles, Mauritius, Cameroon, Cote d’Ivoire, Rwanda, Senegal, Zambia or Zimbabwe. Though their contribution to overall SSA funding is still minimal in most cases, these countries are likely to expand their relevance as more success cases emerge. Interestingly, Senegal’s Wave $US 200 million Series A in 2021, the biggest ever recorded in SSA, turned it into the fourth country with the highest amount of FinTech investment in SSA, right after Kenya.

INTERNATIONAL PLAYERS

As previously mentioned, the gap between the number of companies in SSA’s FinTech ecosystem and the amount of funding attracted can be explained by the presence of international players. These are companies that operate mainly in SSA’s countries, but have their headquarters located elsewhere. Most of the players identified (80%) originate from the US, with the remaining being from the UK and the EU, and tend to have African members in their founding team.

International companies are responsible for 34% of all funding flows, more than any individual country, despite accounting for less than 3% of active fintechs.

This success can be attributed to the proximity of international investors. Admittedly, all companies considered have attracted international funding. This has also been reflected in larger ticket sizes, with international fintechs securing an average funding of $US27.3 million, five times more than local companies (Table 2).

<table>
<thead>
<tr>
<th>Company</th>
<th>Year</th>
<th>HQ</th>
<th>Primary market</th>
<th>Total funding (US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TALA</td>
<td>2011</td>
<td>US</td>
<td>Kenya</td>
<td>349.4</td>
</tr>
<tr>
<td>Chipper</td>
<td>2018</td>
<td>US</td>
<td>Various</td>
<td>302.2</td>
</tr>
<tr>
<td>branch</td>
<td>2015</td>
<td>US</td>
<td>Kenya</td>
<td>274.3</td>
</tr>
<tr>
<td>Flutterwave</td>
<td>2016</td>
<td>US</td>
<td>Nigeria</td>
<td>234.7</td>
</tr>
</tbody>
</table>

Table 2: Top 4 international companies operating in SSA, by total funding
Introduction to the Scoring Model

The leading hubs – Nigeria, South Africa, Kenya – distinguish themselves through its relatively more advanced FinTech ecosystems when compared to the remaining SSA markets.

Any ecosystem is driven by a set of pillars that influence its overall strength and evolution. In the case of SSA FinTech, we consider that this ecosystem includes the following pillars: Regulation, Demand, Feeling of Community, Talent and Capital. Each individual pillar will be explained in further detailed and analysed in the following section (“Pillar Analysis”). Furthermore, Figure 11 illustrates the relationship between different pillars and corresponding stakeholders.

In order to better understand the development of each hub, an analysis was conducted looking at each individual pillar and corresponding dimensions (what we considered as “ecosystem framework”). By providing a score from 1 to 5 (being 1 the least favourable and 5 the most favourable), this scoring model tries to recognize the indicators that drive the largest positive impact within each hub. All in all, this framework and scoring model can be valuable from a learning perspective, as growing FinTech companies and markets can observe the best practices being applied within each pillar based on the reality of the SSA landscape.

Figure 11: Relationship between stakeholders and pillars inside the FinTech ecosystem

Figure 12: Illustration of the analysis structure
Pillar Analysis: Regulation

The fast growth experienced within SSA’s FinTech landscape has created challenges for regulators across the region, which are struggling to keep up with the fast pace of innovation. The absence of specific “FinTech laws” in most countries requires multiple regulators to continuously adapt existent frameworks, often resulting in unclear and overlapping rules for FinTech businesses (Afriwise 2021).

High compliance requirements also represent a major regulatory burden for SSA fintechs. On the one hand, the costs and time needed to attain a license constitute high entry barriers in the space. On the other, regulators have been rolling out KYC and AML rules, with high penalties for non-compliance.

Conflicting and fragmented national regimes have made it difficult for companies to expand cross-border operations, mainly in the payments space. This has led to a surge in calls for regulatory convergence across the continent (Africa Forum 2021). The African Continental Free Trade Area Agreement (ACFTA), which came into force in 2021, is expected to drive regulatory alignment between 54 African countries.

Despite this, we have been witnessing a rise in pro-innovation regulation in the SSA FinTech ecosystem, through the widespread adoption of innovation facilitators. Considering this, four dimensions were selected to assess the strength of this pillar: (i) Robustness, (ii) Fragmentation, (iii) Compliance requirements and (iv) Innovation support.

To properly score each dimension, comparable indicators were chosen (Table 3). A favorable regulatory ecosystem is thus characterized as having high robustness, low fragmentation, suitable compliance requirements and support of innovation. Overall, it should balance the need to ensure stability and protect consumers with the desire to support innovation and promote financial inclusion, through a proportional assessment of the risks represented by fintech businesses.

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Table 3: Regulation scoring framework

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robustness</td>
<td>Incomplete / lack of clear regulation</td>
</tr>
<tr>
<td></td>
<td>Sudden changes in regulation</td>
</tr>
<tr>
<td>Fragmentation</td>
<td>Nº of regulating entities</td>
</tr>
<tr>
<td>Compliance</td>
<td>Costs of attaining a license</td>
</tr>
<tr>
<td></td>
<td>Time to attain a license</td>
</tr>
<tr>
<td></td>
<td>Complexity of KYC/AML rules</td>
</tr>
<tr>
<td>Innovation Support</td>
<td>Nº of innovation facilitators</td>
</tr>
</tbody>
</table>

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CLOSER LOOK INTO INNOVATION FACILITATORS

Regulatory sandboxes have been adopted by regulators globally to provide innovators with a controlled environment to test out new financial products and services, usually under alleviated regulatory restrictions. This concept has taken the interest of regulators in SSA, with more than eight sandboxes having been established in the region to date.

Innovation offices act as central contact points to answer questions and offer guidance to companies, helping them navigate regulatory requirements.

Regulatory/innovation accelerators are responsible for enabling partnerships between fintech firms and regulators, helping companies understand the policymaker’s needs and support them in gaining understanding of emerging technologies.

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1 According to World Bank definitions (2020)
Pillar Analysis: Regulation

1. NIGERIA

Robustness: Though Nigeria’s regulatory ecosystem is still not robust, the rise of diversified fintech solutions has forced regulators to expand their scope. In 2021, regulatory frameworks were issued for equity crowdfunding and open banking, two unregulated areas. Regardless, sudden changes in regulation still represent a major hurdle for Nigerian fintechs. The recent ban on crypto assets by the Central Bank of Nigeria (CBN) or the Securities Exchange Commission (SEC) decision to forbid the offer of foreign stocks to Nigerian investors are examples of regulatory instability.

Fragmentation: Nigeria’s ecosystem is particularly fragmented, lacking a unified approach to regulation. Besides the CBN and the SEC, the two main regulatory entities, there are nine other regulators. This often results in a regulatory overlap, as the mandates of each entity are not properly defined. In fact, the crypto ban by the CBN came after the SEC announced that it was already working on a regulatory framework and a sandbox for cryptocurrencies.

Compliance requirements: Both the cost and time associated with the licensing process are considered challenges for Nigeria’s fintechs. This is often aggravated by the fragmentation of the system, as companies can be required to attain multiple licenses to operate. Though KYC/AML rules have not represented a big barrier to fintechs, compliance with data protection and cybersecurity rules has been considered costly. To mitigate these risks, the CBN has announced the introduction of a 4-tier licensing model enabling fintechs to enter the market with lighter conditions.

Innovation support: Despite the challenges still faced, Nigeria’s regulators have been supportive of innovation. In 2019, the FSI launched an industry sandbox with the support of the CBN. Following its success, the latter decided to launch its own regulatory sandbox in 2021 and the SEC has announced the roll out of the Regulatory Incubation Program for companies in the capital markets. Additionally, both the SEC and the Nigeria Deposit Insurance Corporation (NDIC) have set up innovation offices.

2. SOUTH AFRICA

Robustness: Being one of the first movers in the FinTech space in SSA, South Africa’s regulatory ecosystem started developing early on. Nonetheless, there are generally no FinTech-specific laws in place, forcing regulators to encompass fintech activities within existent frameworks. This often results in lack of clarity for fintech firms, which find themselves unaware of which laws they need to comply with. For instance, while equity crowdfunding and P2P lending may fall under 6 different jurisdictions, there is no specific regulations for these areas. Likewise, crypto assets remain an unregulated area, though a regulatory framework covering this category is being developed.

Fragmentation: The existence of multiple regulators has resulted in a fragmented regulatory ecosystem. The creation of the Intergovernmental FinTech Working Group (IFWG), in 2016, has managed to alleviate some of these problems. The IFWG brings together the seven South African regulatory bodies and works as a “one-stop shop” to engage with fintech firms.

Compliance requirements: Costs of attaining a license are not considered to be overly impeditive to the activity of fintech businesses, neither are KYC/AML rules in place. On the contrary, the time required to attain a license stands out as one of the biggest regulatory hurdles of South African firms, more than in the remaining Hubs.

Innovation support: In 2020, the IFWG set up an Innovation Hub to assist innovators through three different avenues: a Regulatory Guideline Unit, aimed at providing answers to regulatory enquiries, an Innovation Accelerator, responsible for organizing workshops, hackathons and other policy-driven initiatives and a Regulatory Sandbox, which has since then welcomed its first cohort of 8 innovators, including crypto-based transfer solutions, crowdfunding platforms, InsurTechs and even an incumbent bank.

1 These include the NDIC, NAICOM, FCCPC, NCC, NITDA, NOTAP, Corporate Affairs Commission, FRC, and NBSS. In Nigeria and the SARB, Prudential Authority (PA), FSCA, NCR, FIC, PASA, FSOC, and FSIC in South Africa. 2 Financial Services Innovators.
Pillar Analysis: Regulation

KENYA

Robustness: Since the launch of M-Pesa, in 2007, Kenya has followed a “test and learn” approach to FinTech regulation. The Central Bank of Kenya’s (CBK) issuance of a “letter of no objection” to Safaricom to develop the mobile money service is an example of this. In fact, specific payments frameworks were only introduced in the country four years later. While this strategy ensures that fintech firms are not subject to overly restrictive requirements, it can also be seen as granting less protection, resulting in a less robust regulatory ecosystem. Admittedly, the lack of formal fintech frameworks has led to regulatory gaps. Although not prohibited, the areas of digital credit, cryptocurrencies, equity crowdfunding and P2P lending remain unregulated.

Fragmentation: Besides the CBK and the Competition Authority of Kenya (CAK), there are four other regulatory entities. The nature of Kenya’s regulatory approach, which is institution rather than activity-based, poses concern for several fintech categories, whose legal “umbrella” is not properly defined. Nonetheless, attempts of consolidation have taken place with the 2018 Financial Markets Conduct Bill, which proposed the establishment of a regulator to oversee fintech activities.

Compliance requirements: Though the costs of attaining a license are generally not impeditive for firms, the time it takes to get it is still a constraint for Kenyan fintech business. On the other hand, existent KYC/AML rules are not seen as challenge.

Innovation support: Kenyan regulators have also led the way in promoting innovation initiatives. In 2019, the Capital Markets Authority (CMA) launched a Regulatory Sandbox, which has since received 24 applications from various innovation areas, including crowdfunding, blockchain-based platforms and robot advisors. Additionally, the Insurance Regulatory Authority (IRA) has launched a regulatory sandbox (“Bimabox”) focused on insurance innovations and an Innovation Accelerator (“BimaLab”) to promote collaboration on insurance products and services.

OVERALL ASSESSMENT

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicator</th>
<th>Nigeria</th>
<th>South Africa</th>
<th>Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robustness</td>
<td>Incomplete / lack of clear regulation</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Sudden changes in regulation</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Score</td>
<td>3.0</td>
<td>3.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Fragmentation</td>
<td>Nº of regulating entities</td>
<td>2</td>
<td>3.5</td>
<td>4</td>
</tr>
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<td></td>
<td>Score</td>
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<td>3.5</td>
<td>4.0</td>
</tr>
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<td>Costs of attaining a license</td>
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<td>5</td>
<td>4</td>
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<td></td>
<td>Time to attain a license</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Complexity of KYC/AML rules</td>
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<td>4</td>
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<td></td>
<td>Score</td>
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<td>4.0</td>
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<tr>
<td>Innovation Support</td>
<td>Nº of innovation facilitators</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Score</td>
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<tr>
<td>Total Score</td>
<td></td>
<td>3.4</td>
<td>3.8</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Table 4: Regulation scores per country

METHODOLOGY FOR INDICATORS

Source To perform a quantitative evaluation of the Robustness and Compliance requirements indicators, data from the 2021 Africa FinTech Radar was used. This joint initiative from Findexable and UK Tech for Growth surveyed 200 fintechs to identify areas that presented biggest regulatory burdens. Updated information on regulatory entities and innovation facilitators was collected by the Catalyst Fund.

Score Based on the data available, numeric intervals were defined for each indicator, which were later converted to a scale of 1 to 5. Given that the data matched the qualitative assessment, there was no need to adjust scores. The score of each dimension represents a weighted average of each indicator’s score. Similarly, the final score corresponds to a weighted average of each dimension, as all dimensions were considered equally important.
Pillar Analysis: Demand

In every market the demand plays a structural role, and the FinTech market is no exception. Currently, the demand for FinTech services in SSA can be thought of a combination of two different perspectives: potential demand and existent demand.

Potential Demand corresponds to a fintech whose business model is based on SSA’s lack of financial inclusion and reflects an earlier stage of such landscape, with M-pesa replicating this perspective. Within such perception, a fintech will typically look for isolated populations with willingness and capacity to absorb FinTech services. The following indicators measures these two conditions:

- Rural Population
- Bank Agencies per 100,000 citizens
- Phone Penetration
- Young Population in 2030
- Internet Access

Existent Demand corresponds to a fintech that aims at providing services to citizens already financially included and reflects a more mature stage of the SSA FinTech Landscape. Within such perspective, a fintech will typically look for signs of FinTech services adoption. The following indicators measure such adoption:

- Population that made Digital Payments in the last year
- Sent/Received Remittances through a mobile phone
- Mobile Money account
- Borrowed from a financial institution/used a credit card

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Demand</td>
<td>Rural Population</td>
</tr>
<tr>
<td></td>
<td>Bank Agencies per 100,000 citizens</td>
</tr>
<tr>
<td></td>
<td>Phone Penetration</td>
</tr>
<tr>
<td></td>
<td>Young Population in 2030</td>
</tr>
<tr>
<td></td>
<td>Internet Access</td>
</tr>
<tr>
<td>Existent Demand</td>
<td>Made Digital Payments</td>
</tr>
<tr>
<td></td>
<td>Sent/Received Remittances Digitally</td>
</tr>
<tr>
<td></td>
<td>Mobile Money Account</td>
</tr>
<tr>
<td></td>
<td>Borrowed from a financial institution/used a credit card</td>
</tr>
</tbody>
</table>

Table 5: Demand scoring framework

METHODOLOGY FOR INDICATORS

Source: The indicators mentioned, and their values were extracted from the Global Financial Inclusion Databank by the World Bank, from the most recent year available. The indicators relative to the Existent Demand were available in percentage of total population, having then been multiplied by the total population of the relative year.

Benchmark: The indicators were also extracted from the remaining SSA countries, to act as a benchmark. Based on that data, different intervals were defined for each indicator, with each interval having a score associated.

Perspective Relevance: Although two different perspectives were identified, given SSA still fragile levels of financial inclusion, potential demand was deemed more relevant when attributing a score – equivalent to a 75% weight on the overall demand score.

The interval range for each indicator, the SSA countries used as benchmark and the performance of each country per indicator can be found in Annex 4, 5 and 6 respectively.
Pillar Analysis: Demand

1. NIGERIA

Potential Demand: Nigeria is indisputably the country with the strongest potential demand for FinTech services in SSA. In fact, it achieves the highest score on current rural population, expected young population and internet access, thus ensuring willingness and capacity of absorption of the services. Also, it has the largest amount of mobile phone penetration and a low level of bank agencies per 100 000 inhabitants, hence exhibiting a high degree of population isolation, ultimately scoring 4.75/5 from this perspective.

Existential Demand: This demand perspective contrasts with the previous one, which leads to a worse performance compared with Kenya and South Africa. The demand for digital wallet and borrowing services are the lowest, leading to a score of 1.75/5 and bringing the overall score down to 4.

2. SOUTH AFRICA

Potential Demand: South Africa exhibits low levels of population isolation as its rural population is reduced and comparatively has more bank agencies per 100 000 citizens, thus negatively impacting this demand perspective. However, the country displays a medium degree of willingness/capacity of absorption of fintech services due to medium phone penetration, high expected young population and the high level of internet access, ultimately scoring 2.5/5 from this perspective.

Existential Demand: This perspective achieves the same score as the previous one - 2.5/5 - with medium demand for both payments and lending services, and low demand for remittances and digital wallet services. This results in an overall score of 3/5. South Africa ends up having a more mature demand than Nigeria but less relative to Kenya.

3. KENYA

Potential Demand: Kenya represents a medium level of demand regarding willingness/capacity of fintech services (3.25/5), which can be justified by the fact that its FinTech landscape has become more mature. Regarding the level of isolation, the impact of its rural population on the demand is medium, however the lack of bank agencies strongly contributes to such demand, setting a score of 3.25/5.

Existential Demand: Kenya’s ecosystem fares particularly well in this dimension, 5/5. In every demand indicator, the country achieves the highest score possible. Thus, illustrating how its FinTech Landscape has matured, which can be attributed to the success of M-Pesa, ultimately increasing the overall score to 3.5/5.

OVERALL ASSESSMENT

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>Nigeria</th>
<th>South Africa</th>
<th>Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural Population</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Bank Agencies per 100 000 citizens</td>
<td>4</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Phone Penetration</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Young Population in 2030</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Internet Access</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Score</strong></td>
<td><strong>4.75</strong></td>
<td><strong>2.5</strong></td>
<td><strong>3.25</strong></td>
</tr>
<tr>
<td>Potential Demand</td>
<td>Made Digital Payments</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Sent/Received Remittances Digitally</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Mobile Money Account</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Borrowed from a FI/used a credit card</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Score</strong></td>
<td><strong>1.75</strong></td>
<td><strong>2.5</strong></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td>Existing Demand</td>
<td><strong>Total Score</strong></td>
<td><strong>4</strong></td>
<td><strong>3</strong></td>
<td><strong>3.5</strong></td>
</tr>
</tbody>
</table>

Table 6: Demand scores per country

‘Despite these two countries have less than half of Nigeria’s population they still surpass it in various indicators in absolute number, hence support an evaluation of those indicators from an absolute value perspective.'
Pillar Analysis: Talent

The African fintech market growth is compromised by the lack of talent, specifically related to the required technological skills and resources. The demand for talented people is increasing by day, especially for competencies in specific areas such as data science, software engineering and business development (Findexable 2021).

Naturally, the pool of talent that has the potential to contribute for the development of the fintech sector depends on the number of tech-related universities and programs, and of course, on its quality. In fact, the continent still presents an underdeveloped education system. Among the main essential people for the fintech sector development, research conducted by Findexable shows that the matter of qualified employees is more concerning regarding Data Scientists than in other categories, being Software Engineers the more favourable area.

The limited traditional job opportunities can generate a more creative entrepreneurial environment where young people try to reach and develop new and innovative solutions. Nonetheless, there are major barriers in finding the right skill to further develop and scale-up fintech businesses.

To better score this pillar across the three previous hubs, the quantity and quality of talent were considered as main dimensions.

From a quantity standpoint the main indicators considered include:
1) Number of relevant programs
2) Capacity to retain local talent and attract foreign talent

As for the quality dimension, it is assessed by observing the following:
1) Quality of Data Scientists
2) Quality of Computer Science Universities

---

**Dimensions** | **Indicators**
--- | ---
Quantity | Number of Relevant Programs¹
 | Capacity to retain local and attract foreign talent²
Quality | Quality of Data Scientists³
 | Quality of Computer Science Universities⁴

Table 7: Talent scoring framework

**METHODOLOGY FOR INDICATORS**

The methodology for the score of the number of relevant courses and the capacity to retain local and attract foreign talent was similar. The first step was to identify the SSA country with the highest level for each indicator, attributing it a score of 5. Then, the score of each hub was defined as proportion between its indicator value and the maximum value.

**Quality of Data Scientists:** The 2021 Findexable report presents a survey conducted to domestic fintechs in each hub to classify the pool of data scientists. The percentage of fintechs in each hub that classified it as weak is used to determine the score – the lower the percentage, the higher the hub will score in this indicator.

**Quality of Computer Science Universities:** The 2021 top-30 ranked universities are based in 11 different countries. To each country, the respective number of universities included in the top-30 was associated. Then, the larger the number, the better the score for this indicator.
Pillar Analysis: Talent

1. NIGERIA

Overall, Nigeria represents the second position in the Talent pillar among the three hubs. Its main strength is related to quantity, specifically to the number of relevant programs in the country. In fact, it is the country in SSA that offers the highest amount of courses in Computer Science, Technology, Finance & Banking, IT, and Programming, with a total number of 304 programs. For this reason, the hub presents the highest score for the quantity of talent.

Regarding quality, Nigeria’s pool of talent scores relatively low. The main reason why is that according to Findexable (2021), 58% of fintechs classified data scientists in the country as of weak quality - more than half of the surveyed fintechs is not satisfied with available data scientists. On top of this, most computer science universities in Nigeria rank below the SSA's top 30 – there are limited universities of top quality in Nigeria, especially when compared to South Africa.

2. SOUTH AFRICA

South Africa is the hub that scores the highest relatively to its talent pool. This is mainly a result of the quality of computer science universities – leader in SSA’s top 30 ranking. Moreover, it is the country in which the lowest share of domestic fintechs considered the country’s data scientists talent pool weak. For these reasons, the country is able to reach the highest score relatively to quality.

As for quantity, although it presents a lower score relative to the other hubs, South Africa is still the second country in SSA with the largest number of fintech-related programs, with a total of 224. Moreover, the country compares to Nigeria in its capacity to retain and attract talent, but it is below Kenya. Due to its international exposure, it is likely that the country has a higher ability to attract foreign talent, but more difficulties in retaining local one.

3. KENYA

Generally speaking, Kenya classifies as the hub with the lowest overall score relative to talent. This result is mainly driven by the relative lower quality of the available pool of talent, which is mostly negatively affected by the quality of data scientists - 70% of its domestic fintechs classify the country’s data scientists as having a weak quality. Simultaneously, SSA’s top 30 universities include a lower amount of Kenyan schools than South African ones, as in the case of Nigeria.

Relatively to quantity, although the offer of fintech-related programs is lower than in the other hubs, the country leads in its capacity to retain local and attract foreign talent.

OVERALL ASSESSMENT

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>Nigeria</th>
<th>South Africa</th>
<th>Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>Number of Relevant Programs</td>
<td>5</td>
<td>3.75</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>Capacity to retain local and attract foreign talent</td>
<td>3.5</td>
<td>3.5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Score</td>
<td>4.25</td>
<td>3.6</td>
<td>3.75</td>
</tr>
<tr>
<td>Quality</td>
<td>Quality of Data Scientists</td>
<td>2.5</td>
<td>3.5</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Quality of Computer Science Universities</td>
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<td>5</td>
<td>3</td>
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<td></td>
<td>Score</td>
<td>2.75</td>
<td>4.25</td>
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<tr>
<td>Total Score</td>
<td></td>
<td>3.5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 8: Talent scores per country
Pillar Analysis: Capital

When analyzing any FinTech market, a share of its growth and strength must be traced back to investment flows. For that reason, this model will contemplate the capital ecosystem, evaluating the following dimensions:

a) Access to Capital
b) Investment Attractiveness

Consistently, a fintech market with large access to capital, joined by attractive investment opportunities, will naturally have a higher number of companies being able to secure financial resources.

Within the dimension of the access to capital, the indicators presented in Table 9 were observed based on historical data. Overall, we considered the trend of these indicators as an illustration of the market’s connection to investors — meaning that a stronger investment network (better access to capital) will take place as more deals are driven to the market. In addition, as this network expands beyond domestic capital communities, fintech companies will be able to connect to a larger pool of investors, thus enhancing its access to financial resources.

Furthermore, within the dimension of the investment attractiveness, this scoring model considers that an attractive market could be derived from: 1) a sufficient market size, 2) diversification in investment choices (regarding stage of development), and 3) long-term prospects of growth from national businesses (for example, international expansion).

Moreover, it is important to consider that the capital ecosystem is directly affected by the presented pillars, meaning that a favorable capital ecosystem is normally accompanied by a positive juncture of regulation, demand, talent and feeling of community.

---

**Table 9: Capital scoring framework**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Capital</td>
<td>Number of Funding Rounds since 2011</td>
</tr>
<tr>
<td></td>
<td>Average growth rate of funding rounds over the last 3 years</td>
</tr>
<tr>
<td></td>
<td>Percentage of International Investors</td>
</tr>
<tr>
<td>Investment Attractiveness</td>
<td>Number of FinTech companies</td>
</tr>
<tr>
<td></td>
<td>Average growth rate of the creation of FinTech companies over the last 5 years</td>
</tr>
<tr>
<td></td>
<td>Percentage of companies that achieved cross-border operations</td>
</tr>
<tr>
<td></td>
<td>Percentage of companies in late stages of funding</td>
</tr>
</tbody>
</table>

**CLOSER LOOK INTO INVESTMENT ATTRACTIVENESS**

**Market Size** Within the conducted research, it was found that a country may attract more FDI if it has a sufficient and growing market size (Dunning 1998). Consistently, a market with a growing number of companies will naturally have more opportunities to attract funding rounds, in absolute terms.

**Development Stage** As the stage of development plays a large role in the decision-making process of VC and PE firms (Gompers 2016), the percentage of “mature” businesses from a diversification point of view was considered. A relatively high percentage of mature business along with a growing market, provides investors with a larger pool of investment opportunities regardless of their investment focus.

**International Expansion** The trend of international fintechs was considered as a metric of potential scalability of businesses. As companies continue to have the long-term prospect of growing internationally, more capital will be required — potentially increasing investment opportunities.

---

1 The term mature businesses consider all fintechs in mid-late rounds of funding, including PE and Acquisitions.
2 This model consider all fintech companies with cross-border operations as “international fintechs”
Pillar Analysis: Capital

1. **NIGERIA**

**Access to Capital:** Nigeria presents the most favorable investment network based on the evaluated data, achieving the highest score in the 3 indicators. As of 2021, Nigeria presents a grand total of 181 funding rounds and 170 investors, placing the highest values in all SSA markets. With an average of 1.06 investors per funding round and an upward trend of the annual number of rounds (with 55% growth rate over the last 3 years), one would expect that Nigeria's investment network would continue to provide a favorable access to capital to its fintech companies. In addition, this network presents 72% presence of international investors from 23 different nationalities. Following the trend of this metric, the network is expected to further expand beyond domestic capital communities over the next years.

**Investment Attractiveness:** Nigeria is composed by a total number of 110 fintech companies with an average growth rate of 26%, achieving what one believes to be a sufficient market size within the SSA outline. As the fastest growing market in SSA, one could observe that 88% of funded companies since 2011 are still in early stages of development, while only 12% were considered in mid-late stages. From a diversification perspective, a value of 12% was scored within the lower side of the range, as investors with a late-stage focus would be provided with a relatively small universe of companies (7 fintechs). Nonetheless, it is important to consider that as the market continues to grow, more companies will continue to develop, thus expanding the pool of mature businesses. Finally, Nigeria exhibits the lowest percentage of companies with cross-border operations (9%). While some of this companies grew across more than two countries attracting large rounds of funding (e.g., Paystack), it is expected that this comparatively low number of success cases would not stimulate as much interest from investors as other factors (e.g., market size).

2. **SOUTH AFRICA**

**Access to Capital:** The South African fintech market presents a grand total of 134 funding rounds since 2011, placing second within the top three countries with the highest percentage of SSA’s rounds (37%). Despite a more stabilized average growth rate of rounds, South Africa exhibits one of the largest and most established investors network, showcasing above-average values for ticket size ($6.9M) and average investors per funding round (1.32 investors). Furthermore, South Africa comprises 74% of international investors. Even though SA presents a comparatively lower growth rate of international investors coming to the market, this metric should not be considered as strictly negative. This value is a result of the growth of national investors and the consolidation of this domestic capital network. Overall, based on this consolidated network, this model foresees a favorable access to capital.

**Investment Attractiveness:** South Africa was the pioneer regarding fintech creation, presenting the most mature market in SSA. Based on this fact, one can observe a steadier average growth rate of companies (13%), when compared to the previous hubs. As mentioned, currently the country accounts for the second largest market size within the SSA outline. Consistent with its maturity, South Africa demonstrates the most elevated percentage of funded companies in mid-late stages of development (22%), providing a grand total of 14 fintechs. This percentage is considered within the highest interval of this scoring range, as investors with a late-stage focus contemplate the largest universe of mature businesses across SSA. Moreover, companies with cross-border operations, such as JUMO or Adumo, account for 11% of the number of fintechs, taking the second place of the largest group of international companies. Overall, South Africa’s main factors of investment attractiveness are its sufficient market size and corresponding market maturity.
**Pillar Analysis: Capital**

3. **KENYA**

**Access to Capital:** Despite having a smaller number of investors and funding rounds when compared to the remaining hubs (grand total of 74 investors and 74 funding rounds), this market has exhibited a strong annual growth rate of funding over the last 3 years (40%). As expected by the upward trend of funded companies, this model foresees that Kenya would continue to provide a favorable access to capital through a growing investment network. Overall, the presence of international investors constitutes 85% of totality, accounting for 16 different nationalities. Within our scoring range, this percentage was considered as a favorable factor to Kenya’s access to financial resources, as fintechs companies can connect to a vaster pool of investors when compared to the universe of domestic capital communities.

**Investment Attractiveness:** Regarding Kenya’s investment attractiveness, one could observe that this market differentiated itself by having the highest percentage of companies with cross-border operations (25%). Taking the case of Cellulant or DPO, these fintechs were able to support its pan-African growth through big international investments. As these number of success cases continues to expand within the Kenyan fintech scenario, we would expect that more interest from international investors would be driven to the market. Regarding market size, Kenya presents a smallest number of companies when compared to remaining hubs, with an average growth rate of 18%. Despite having a lower magnitude of companies — similarly to the number of funding rounds — this model still considers this market as having a sufficient size when compared to the SSA average. Finally, as a growing market, Kenya comprises 86% of funded companies in early stages of development, while only 14% in mid-late stages. For similar reason as for the Nigerian market (diversification standpoint), we have scored this percentage within the lower side of the range.

### OVERALL ASSESSMENT

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>Nigeria</th>
<th>Kenya</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>Number of Funding Rounds since 2011</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Average growth rate of funded companies over the last 5 years</td>
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<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Percentage of International Investors</td>
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<td>4</td>
<td>4</td>
</tr>
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<td></td>
<td>Score</td>
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<td>Attractiveness</td>
<td>Number of FinTech companies</td>
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<td>Historical average growth rate of the number of FinTech companies (last 5 years)</td>
<td>5</td>
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<tr>
<td></td>
<td>Number of companies that achieved cross-borderer operations</td>
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<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Percentage of companies in late stages of funding (maturity)</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Score</td>
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<tr>
<td>Total Score</td>
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<td>4.5</td>
<td>4.0</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Table 10: Capital scores per country

### METHODOLOGY FOR INDICATORS

**Source** Indicators were based on the historical information retrieved from our constituted data base, focusing on fintech’s general activities, funding rounds and corresponding date, and investors and corresponding nationalities.

**Score** Each indicators was scored through a scale of 1 to 5 based on the lowest and highest observed values. The overall score for each dimension was calculated by an equal average of all indicators. Consequently, as this model values both dimension equally, the pillar’s overall score was also considered as the equal average of the dimensions.
Pillar Analysis: Feeling of Community

The FinTech ecosystem onboards a group of key players whose interactions with each other will influence the overall strength of the system. **These players include startups, regulators, incumbents, accelerators/incubators, consumers, academia, and investors.** As part of the same community, the way these stakeholders connect to each other must be attended as a pillar of the local fintech ecosystem, which is defined as “**Feeling of community**”.

Overall, this pillar is assessed by observing how the local fintech associations in each hub promote the fintech phenomena and the entrepreneurs’ relationships with the remaining players. These organizations typically bring members together by organizing events, challenges, networking sessions on a regular basis, enabling the community to grow their relations. Such events may go from pitch sessions for investors, regulatory discussions, challenges for incubators, etc.

Moreover, it is also to consider that local associations make the bridge with larger, global associations, whose mission is to expand this feeling of community across and beyond Africa, thus transforming the local ecosystems into an African consolidated one. That is the case of the **African FinTech Network**, which was created in Lagos (Nigeria) in 2018, with the purpose of turning the African fintech space more robust, while encouraging countries to coordinate activities and partner with each other. Its ultimate goal is to “Connect Africa and the global community for open dialogue, to build synergies and creation of various opportunities in fintech” ¹. AFN currently counts with 32 member countries, including all the three hubs being analyzed.

All above considered, this pillar should be scored according to the strength of each of three dimensions:

a) Local associations  
b) Industry events  
c) Incubators/Accelerators.

Due to its nature, these dimensions must be classified in a qualitative way, relatively to both the scope and impact of each of these factors.

¹ (Africa Fintech Network s.d)
Pillar Analysis: Feeling of Community

1. NIGERIA

**Local Associations:** Besides being a founding member of the African FinTech Network, Nigeria is a pioneer in creating a local fintech association, which currently counts with 247 members. The FinTech Association of Nigeria (2017) maintains a stable partnership with the Central Bank of Nigeria (CBN) and it has been responsible for much of the development in the Nigerian regulatory system towards a fintech-friendly environment. Additionally, it has been carrying out several initiatives for students, introducing new technologies and thus preparing them for the future of the fintech phenomena. The association has been distinguished as the number 1 success story in Africa by the African FinTech Network.

**Industry Events:** The most established event in Nigeria is the Nigeria FinTech Week, which held its 5th edition this year (2021), hosting close to 1 million people from 80 different countries, allowing startups to pitch their businesses to most of the stakeholders in the industry. This is one of the biggest fintech events in Africa, contributing for the growth of the space and positively impacting the ecosystem by bringing to the table the elements for successful collaboration between stakeholders. Of the same nature, the Lagos FinTech Week has also been impactful for the ecosystem, as well as The FinTech and Blockchain Summit.

**Incubators/Accelerators:** Nigeria has a very strong network of incubators and accelerators that have been driving growth in the fintech community. Among these, one should highlight the Co-Creation Hub, founded in 2010, which provides tech entrepreneurs with the ingredients to grow their businesses in a sustainable way, through their pre-incubation and incubation programs. Other big names in this space include the 440.ng, Leadpath Nigeria and Starpreneurs.

2. SOUTH AFRICA

**Local Associations:** Although being a member country of the African FinTech Network, there is no evidence of an active South African local association as in the previous hubs. A website for this association was not found, which is generally one of the main gateways for fintech startups to get in touch with the rest of the community and find upcoming events that may be of their interest. One should also mention the Africa Women In FinTech & Payment, which empowers women to integrate the fintech and payments world, though this is an association of a more restrict nature. For this reason, SA should not be considered as much of a success case when it comes to strong associations which support the relationships of the fintech startups with the rest of the community.

**Industry Events:** One of the main industry events is the South African Innovation Summit, which counted with the participation of 600 companies, 1340 entrepreneurs and 150 investors in the last edition of 2021. Moreover, the country held editions of the Egypt-based Seamless Africa and the Finnovation South Africa in 2019.

**Incubators/Accelerators:** The main incubators in the South African FinTech Ecosystem include Cape Innovation & Technology Initiative, Alpha Code, and Rand Merchant Investment Holdings, which usually helps startups in seed stage by providing them with services that may go from office spaces to mentorship, in exchange for a relevant portion of the companies’ equity. Plus, the South African fintech startups can count with several accelerator programs, as is the case of The Founders Institute, Grindstone, SW7, etc. Most of these programs are designed for startups in a later stage than what incubators usually do. Overall, South Africa counts with a sound network of incubators and accelerators.
Pillar Analysis: Feeling of Community

3. KENYA

Local Associations: It is less clear than in the case of Nigeria that FinTech Association of Kenya has been driving growth and success for the fintech space, as it seems to behave not so actively to support startups in their main difficulties. As of 2021, a new association – Association of FinTechs in Kenya – was created, aiming at the same purpose as the latter, possibly indicating there was still a need for a stronger presence of a stable and impactful association. Nonetheless, although this space is more fragmented, Kenyan alternative lenders have the support of The Digital Lenders Association of Kenya, founded in 2019 by 11 members which has been growing for the past few years.

Industry Events: The capital of Kenya, Nairobi, has served the stage for Seamless East Africa events for the past few editions, where the future of payments, banking and fintech as a whole has been brought to discussion by regulators, major banks, and fintech startups. This event is one of Africa’s most important fintech events. Besides, Kenyan startups count with the Kenyan Innovation Week and the African Tech Summit Nairobi, which hold several conferences and webinars, as well as smaller, more local pre-events of the same nature. Overall, the Kenyan fintech ecosystem is boosted by these events, which is reflected in its success as an African hub.

Incubators/Accelerators: Much of the growth in the Kenyan FinTech ecosystem has also been supported by several incubator and accelerator programs which allowed entrepreneurs to overcome the environment’s challenges. The top incubators in Kenya are the Catalyst Fund, SC Ventures, Mastercard Financial Inclusion Lab and the Nairobi-based Nailab, among an extensive list of more than 20 available programs. So, it is no wonder that the Kenyan fintech space has been growing at such a fast pace.

OVERALL ASSESSMENT

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicator</th>
<th>Nigeria</th>
<th>Kenya</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Associations</td>
<td>Scope</td>
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<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Impact</td>
<td>5</td>
<td>3</td>
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<tr>
<td></td>
<td>Score</td>
<td>5.0</td>
<td>3.5</td>
<td>2.0</td>
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<tr>
<td>Industry Events</td>
<td>Scope</td>
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<td></td>
<td>Impact</td>
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<tr>
<td></td>
<td>Score</td>
<td>4.5</td>
<td>4.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Incubators/Accelerators</td>
<td>Scope</td>
<td>4</td>
<td>5</td>
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<td></td>
<td>Impact</td>
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<tr>
<td></td>
<td>Score</td>
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<tr>
<td>Total Score</td>
<td></td>
<td>4.5</td>
<td>4.0</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Table 11: Feeling of community scores per country

METHODOLOGY FOR INDICATORS

Source: Most of the information used to score each dimension according to its scope and impact was taken from the local associations’ and incubators’ websites, as well as from The Global FinTech Index 2020, from Findexable.

Score: The scoring of each dimension depended on two indicators: scope and impact. The first indicator was classified according to the number of associations, events, or incubators, balanced with the number of members or participants it may have today or in the past. Secondly, impact was measured according to the achievements of each dimension, be it in terms of growth, successful programs or events (number of guests).
**FinTech in Mozambique: General Overview**

Among the Portuguese-speaking African countries, Mozambique has been a pioneer of innovation in driving financial inclusion, although it still lags behind most SSA countries. However, there have been several developments in most recent years, creating opportunities for fintech solutions to cover the inefficiencies of the traditional financial sector – 46% of the Mozambican population is financially excluded1. Overall, FinTech in Mozambique is still considered as a relatively recent concept, which still presents a series of barriers to development.

Following our analysis of the three largest SSA FinTech hubs, this section of the report will focus on the **Mozambican FinTech ecosystem**. Particularly, a similar framework will be applied – focusing on the pillars of regulation, demand, talent, capital and feeling of community. By leveraging on the best practices of top SSA FinTech hubs and assessing the current state of Mozambique’s FinTech ecosystem, this section aims to provide actionable recommendations on how to support FinTech development in the country. The following conclusions should be relevant for Mozambican regulators, financial institutions, entrepreneurs, associations and potential investors looking to engage with Mozambique’s FinTech market.

To conduct this analysis, we had the opportunity to engage with several member companies of the FinTech Association of Mozambique (FinTech.MZ) – a local association responsible for providing support to fintech startups1, as well as with the responsible professors of the Computing and IT courses at “Universidade de Engenharia de Moçambique” (UEM). From the meetings and interviews conducted, we were able to collect relevant data that enabled us to understand the main opportunities and challenges for the success of fintech in Mozambique. The interactions with these parties will be discussed throughout this section. Additionally, a survey was conducted among FinTech companies to assess the key challenges for the development of their business. The results will be presented in the next section.

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1 Information retrieved from FinScope Mozambique 2019; 1 The scope of FinTech.MZ will be explained in more detail in the next section of the report; 1 While this list may not include all existent FinTechs in Mozambique, it reflects the best efforts of FinTech.MZ in mapping the local FinTech activity.
FinTech in Mozambique: Profile of Surveyed Companies

SURVEY’S METHODOLOGY

This survey was conducted from October to November 2021. Sent to a total of 25 FinTech companies (total number of members of the FinTech.MZ association), a number of 9 responses were obtained. Questions regarding companies’ general activities and operations were considered, as well as the respondent’s opinion regarding the five pillar considered in the previous Ecosystem Framework.

In the following section a general description of the surveyed companies will be presented:

HEADQUARTERS’ LOCATION & CROSS-BORDER OPERATIONS

Amongst surveyed fintechs, 100% of companies are based in Mozambique’s capital, Maputo. Furthermore, 30% of companies were able to scale its operations internationally, namely to South Africa, Nigeria, Malaysia and Democratic Republic of Congo, while 70% maintained strictly national business activities — as presented in Figure 13.

Figure 13: Does your company operate outside Mozambique?

STAGE OF DEVELOPMENT

22.2% of respondents claim to be in the “Pilot/Product Development” Stage, while 55.5% are in an “Early-Stage” and 22.2% in a “Growing Business Stage”. From the criteria considered in scoring model, 100% of respondents would fall under the categorization of “seed” or “early-stage”, and 0% under “mid-late stages”.

Figure 14: Does your company operate outside Mozambique?

CONSUMERS

As observed in Figure 15, 35.3% of fintechs provide services to SME’s and 23.5% to other companies. FinTechs that are exclusively B2C account for 17.65% of total companies, while Public Entities and TFI each capture 11.76% of surveyed demand.

Figure 15: Who are your company’s main consumers?
All in all, from a revenue/profit analysis, data exhibited that 33% of companies do not generate revenue, with the majority (55%) generating less than $US500K per year (Figure 16). Moreover, only 22% of companies with revenues can generate any profit (Figure 17).

Survey results demonstrated that 78% of total fintechs plan to expand (or further expand) internationally over the near future. The main expansionary targets remain within the PALOP (Portuguese Speaking African Countries), such as Angola or Cabo Verde. Plans to operate in South East Asia were also identified.

When looking at the overall results, one could observe that an average profile of a Mozambican FinTech company could be characterized by the following factors:

**Location**
Maputo, Mozambique

**Cross Border Operations**
Only national operations

**Number of Employees**
8.2 (average)

**Revenues and Profits**
Average revenue of 265K USD. No profit.

**International Expansion**
Yes, with plans to expand to a PALOP nation.
Robustness: Mozambique’s fintech regulatory ecosystem is still in its infancy. Like most countries in SSA, it lacks specific fintech regulations, while existing regulation is tailored towards conventional financial services. As a result, there are several regulatory gaps, and key areas, such as Insurtech, still have no adequate legal instruments regulating them. Accordingly, 78% of respondents identified “Incomplete / lack of clear regulation” as one of their top three regulatory barriers (Figure 19). However, progresses are being made on this dimension. A Decree on Payment Service Providers has been approved by the Council of Ministers, enabling fintech companies in the payments space to be licensed and operate autonomously, in an integrated and interoperable way. Though frameworks are still limited to payments solutions, more regulation is expected to be developed. Moreover, Mozambique’s regulatory ecosystem appears to be relatively stable, with none of the respondents identifying sudden changes of regulation as one of their main regulatory barriers.

Fragmentation: Fragmentation of the regulatory framework was not considered to be a key barrier for fintechs operating in Mozambique, with only 11% respondents placing it within their three biggest regulatory hurdles. The FinTech regulatory landscape is mainly regulated by three entities: the Bank of Mozambique (BM), the Insurance Institute of Mozambique and the National Communications Institute of Mozambique.

Compliance requirements (1/2): License requirements constitute a key barrier for fintechs operating in Mozambique, with 56% of the respondents placing the costs of attaining a license as a one of their top three regulatory barriers, followed by the time needed to attain it (44%). In fact, there is still no fintech company with a permanent license operating in Mozambique. Only 11% of the respondents operate under a temporary license, with added restrictions, while 44% did not apply or are still waiting for approval (Figure 20).
Compliance requirements (2/2): The complexity of other compliance requirements (including KYC/AML rules, data protection or cybersecurity) has also a negative impact on the development of fintechs in the country, with 44% of respondents identifying it as one of their top 3 regulatory barriers. More specifically, data protection requirements are a pain point for many companies. There is still no legal instrument that enables transactions to be carried out from Mozambique to other countries\(^1\), effectively limiting their use for international transfers. Similarly, no data from Mozambican citizens can be stored outside of the country, which restricts the possibilities for cross-border expansion. Infrastructure requirements have also raised concerns among fintechs, as companies are required to build their own infrastructure to attain a license, which is not always feasible for smaller startups. Despite limited rules on KYC/AML, Mozambique’s National Strategy for Financial Inclusion has set the definition of a tiered KYC regime as a top priority.

Innovation support: Though Mozambique’s fintech ecosystem is still nascent, the country has been one of the first movers in the promotion of innovation facilitators. In May 2018, the BM launched its first Regulatory Sandbox, in partnership with the Financial Sector Deepening Mozambique (FSDMoç). For the first cohort, five companies were selected, out of more than 20 candidates, and four completed the testing process: Mukuru, a fund remittance company and account aggregators Robobo, Paytek and Ektutiva. A second edition of the Regulatory Sandbox is already in place, including the presence of a new cohort of 6 fintechs, ranging from payments (Paga or Pyypl Group) to crowdfunding (Pertence) and RegTech solutions (ACGEST). A third edition has since started in November 2021. On top of this, BM has also promoted an innovation hub\(^2\) that brings together fintechs, regulators, providers and other specialists to discuss possible regulatory frameworks. Despite these initiatives, 33% of respondents have pointed to the lack of support from regulators as one of their top regulatory barriers.

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1 Based on interviews to fintechs included in FinTechs Report.mz, FSDMoç (2020)
2 While this has been referred to as an Innovation Hub, it fits better into the Regulatory Accelerator criteria presented in the previous framework
57% of surveyed fintechs classify low demand for FinTech services as having a somewhat negative impact on the development of their business.

**Potential Demand**: From this perspective, Mozambique has a lower score than the other three hubs, as one would expect. Relatively to the hubs, excluding the reduced number of bank branches per 100,000 citizens, Mozambique exhibits weaker fundamentals supporting a potential demand for FinTech services - namely a lower number of rural population, expected young population, phone penetration and level of internet access.

**Existent Demand**: From this perspective, Mozambique only achieves a higher score compared only to one hub, namely Nigeria. Thus, implying that the first has more mature demand relative to the second. This conclusion is motivated by the fact that the Mozambican demand for both digital wallet and lending services outpaces the one of Nigeria.

**Demand from Surveyed FinTechs Perspective**: The three main challenges which are currently affecting the demand for fintech services are the lack of trust on fintech provided solutions (56%), limited financial literacy (44%) and limital digital literacy (33%) (Figure 21).

Trusting FinTech solutions and a minimum level of financial literacy are, to some extent, necessary conditions to adopt FinTech services. However, the supply of these services can be more easily adapted to the lack of digital literacy. FinTech services which do not require internet access are an example of such adoption. Nevertheless, this can strongly limit innovation and usability of FinTech services. Hence, digital literacy should remain a priority to promote the demand for such services.

Figure 21: Challenges affecting the demand for FinTech services

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Trust on Fintech Provided Solutions</td>
<td>56%</td>
</tr>
<tr>
<td>Limited Financial Literacy</td>
<td>44%</td>
</tr>
<tr>
<td>Limited Digital Literacy</td>
<td>33%</td>
</tr>
<tr>
<td>Reduced Market Dimension</td>
<td>22%</td>
</tr>
<tr>
<td>Lack of Access to Technological services</td>
<td>22%</td>
</tr>
</tbody>
</table>

Some of these indicators are the most recent available, namely Internet Access, Mobile Money Accounts and Phone Penetration. The remaining are from the World Bank 2017 database

*The indicators for the application of these methodology to Mozambique’s case can be found in Appendix 2.*
As mentioned, the three main challenges faced by the demand for FinTech services in Mozambique are the lack of trust on fintech solutions, reduced financial literacy and reduced digital literacy. Several initiatives have been taken to tackle these challenges. Below, some examples of those initiatives are described.

LACK OF TRUST IN FINTECH SOLUTIONS

The lack of trust in fintech solutions is partially driven by a reduced financial and digital literacy. In fact, citizens with a lower financial and digital knowledge are prone to fall victim to frauds, thus frequently avoiding fintech solutions despite their potential benefit. Relative to traditional financial institutions, by nature, fintechs lack the institutional weight or brand recognition. To promote trust despite the lack of financial or digital literacy, several mechanisms have been used. For instance, actively presenting existent partnerships with traditional financial institutions. Moreover, marketing campaigns sharing the stories of those benefited by fintech solutions can also enhance the acceptance of these services.

FINANCIAL LITERACY

Mozambique Leaf Tobacco’s (MLT) case is an example on how private initiative can contribute to higher levels of financial literacy, thus contributing to a stronger demand for FinTech services. Its tobacco growing fields are set in rural and isolated areas, employing a large number of people who do not have access to banking facilities, making them eligible to FinTech services. However, the employees’ lack of financial literacy prevents them from realizing its potential demand. In 2014, the company introduced a program of financial literacy. This course reached 75 000 people and led to the deposit of 13 000 dollars in accounts that remain active (Universal Leaf Mozambique 2015). Moreover, MLT is looking at extending its financial literacy courses to include E-wallet services, thus further reinforcing the FinTech demand.

DIGITAL LITERACY

Tablet Comunitário is a member of the FinTech MZ association whose mission is to “promote digital inclusion to all rural communities” of Mozambique. Since its inception in 2015, it is estimated to have helped educating more than 1 million Mozambican citizens. It does so through a vehicle equipped with several solar powered large LCD screens, which share important messages with the communities, based on a gamification approach. Ultimately, this vehicle exposes isolated communities to a digital interaction, thus contributing to higher levels of digital literacy while instructing themes such as health and even financial literacy.
FinTech in Mozambique: Talent

67% of surveyed fintechs classify lack of talent as having a somewhat negative impact on the development of their business.

Generally, Mozambican fintechs have difficulties accessing talent. In fact, only 13% of surveyed fintechs claim not experiencing talent shortages.

Quantity: The fact that Mozambican talent opts for more established companies is pointed as the biggest challenge faced by fintechs when it comes to attracting human capital (as identified by 47% of respondents). This can be attributed to the fact that potential employees perceive more established companies as being capable of providing larger job security.

Potentially, the lack of access to Mozambican talent could be compensated by attracting foreign talent. However, that is not the case. As pointed by the surveyed companies, Mozambique is not attractive to foreign talent. Besides cultural and linguistic barriers, the reasons preventing foreign talent to come to Mozambique consist mainly of poor health care, infrastructure limitations (Maputo Reallocation Solutions 2020).

Quality: Following informal interviews, it was stated by most Mozambican fintechs that the country’s educational system does not fully provide its students the necessary skills. However, only 13% of surveyed fintechs have identified this as a barrier to access talent. Compared to the limitations of attracting foreign talent, improving the quality of educational programs is easier to achieve. To understand the current status of these programs, an interview with two academic members of Eduardo Mondlane University (UEM), Mozambique’s highest ranked university for computer science in the Scimago Institutions Ranking 2021, will be presented.

SURVEY RESULTS

Figure 22: What are the main barriers to access talent?

- Mozambican talent opts for more established companies: 46.70%
- Mozambique is not attractive to foreign talent: 26.70%
- Educational institutions do not provide the necessary skills: 13.10%
- I do not experience talent shortage: 13.10%

MOZAMBICan UNIVERSITIES WITH TECHNOLOGIC-RELATED COURSES

- Universidade Eduardo Mondlane
- ISCTEM
- Universidade Católica de Moçambique
- Universidade Zambeze
- Universidade Lúrioc
- Instituto Superior Politecnico de Tete
## FinTech in Mozambique: Talent

Lúcia Ginger is a professor and director the UEM’s engineering school of and Carlos Cumbana is the school’s director of the computer science program. Below, the most prominent topics discussed regarding the role of Mozambican universities in providing talent for the FinTech ecosystem are presented.

<table>
<thead>
<tr>
<th>Main Takeaways</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UEM graduates are mostly employed in established sectors</td>
<td>Despite not keeping a record of the student’s labour placement, Carlos pointed that most students usually start working in established sectors such as banking, utilities, large industries (such as the oil industry).</td>
</tr>
<tr>
<td>The university is taking efforts to update the curriculum to meet market needs</td>
<td>“The courses are designed with the needs of the labor market in mind. The university makes occasional revisions in order to fit in the courses the technologies that are being developed”. The university recognizes that currently they are not a newly designed course. Still, the faculty has been careful, as far possible, to bring students up to date.</td>
</tr>
<tr>
<td>The computer science program tries to expose students to FinTech through practical projects, but there is still no courses on FinTech</td>
<td>“The university has encouraged students to include mechanisms for implementing financial inclusion in their projects. E.g.: When students develop some application for payment services, they are encouraged to work with mechanisms that can be within the reach of a larger part of the population. Currently there is a lack of content directly targeting FinTech.”</td>
</tr>
<tr>
<td>There are still no formal mechanisms to connect students with the labour market, however Steps have been taken in this direction</td>
<td>There are ongoing processes for formal internships, but official regulations by the university are still in production. Students are free to request a credential from the university to present to the employers and these have contacted the university to request students for internships. However, there is no formal mechanism for bringing students and employers together, only initiatives like careers fairs, end up being the exception to this lack of formal mechanisms.”</td>
</tr>
</tbody>
</table>
**FinTech in Mozambique: Capital**

56% of surveyed fintechs classified lack of access to capital as having a very negative impact on the development of their business.

**Access to Capital:** When looking at this dimension within the Mozambican FinTech scenario, a different view must be applied relative to the aforementioned Capital model. Given that 100% of Mozambican fintechs are within very early development stages, the access to traditional investors (Venture Capitalists or Private Equity Funds) is conditioned — the “truth is risk appetite for early-stage funding remain a challenge for Mozambican fintechs” (Matteo Rizzi’s interview to the FSDMo in 2020). Based on this fact, Mozambican fintechs should consider other funding alternatives, such as private or public grants. Despite 23% of surveyed companies being funded through this type of capital, 69% still rely on own funds or family and friends to support their organizations. This large percentage of personal capital is highly driven by the “lack of a developed investment network” and the corresponding “struggle when finding investors with an aligned vision”, as 36% of respondents pointed to these two factors as the main barriers to access capital. Other factors, such as the lack of knowledge regarding funding alternatives also seem to further hamper these fintechs’ funding. Overall, this low level of investment is not due to a lack of “eagerness” for funding, as 89% of respondents stated having plans to raise external funding in the next two years. In conclusion, Mozambican fintechs present high needs of external funding, however there are large barriers when it comes to finding and realising suitable funding options — such as private grants.

**Investment Attractiveness:** In addition to these low attraction for early-stage, there is still needs for developing the skills that increase the quality and the preparation of the entrepreneurs, illustrated by 9% of respondents pointing to the lack of organized financial statements when trying to raise funds.

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**Figure 24:** What is your company’s main source of funding?

- Own funds/Friends and family: 69.2%
- Private Grants and Awards: 23.1%
- Incubators: 7.7%
- Angels Investors: 0.0%
- Bank Loans: 0.0%
- Public Grants: 0.0%
- Venture Capital Funds: 0.0%

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**Figure 25:** Does your company plan to raise external funding in the next two years?

- Yes: 89%
- No: 11%
**FinTech in Mozambique**: Feeling of Community

68% of surveyed fintechs classified a **weak relationship with the ecosystem** as having **some negative impact** on the development of their business.

**Local Associations**: The **FinTech Association of Mozambique (FINTECH.MZ)** was recently launched in 2019 and it has been a major milestone for the country's fintech ecosystem so far. Having started with 12 founding members, the association currently counts with around 20 member companies and collaborates with FSDMoz and Digital Frontiers Institute (DFI) in the development of their upcoming initiatives. Plus, Mozambique is already a member country of the African FinTech Network, which is one of the biggest achievements of its local association since launch. Nonetheless, it is somewhat inactive on the continent level, meaning that it does not participate in the major international industry events and discussions – something that its member companies pointed out as highly valuable for the success of their business (Figure 26).

Having financial inclusion in Mozambique as an ultimate goal, the association intends to bring the community players together (from national to global ones) for the development of their local businesses. The first step would be to dynamically support the fintech sector in approaching the regulatory challenges - still the biggest drawback in the Mozambican environment.

**Industry Events**: The **FinTech Week** has served as a launching gateway for the FinTech Association of Mozambique, bringing the member companies together with national and international key players of the fintech environment. In its last edition, it counted with the participation of CPLP countries, which turned it into a success. This initiative is to occur every year which would be essential to keep this dynamism for the next few years. On the other hand, small initiatives as Hackatons, MozTech, and business challenges have an extremely important role in promoting the fintech phenomenon in the long-term, although they count with the participation of a small number of companies at each time. In fact, fintechs do not classify these events as having such an impact in their business, as they have a more short-run oriented vision (Figure 26).

Survey results indicate that fintech companies highly value the interaction with local and international associations – 56% of surveyed fintechs classify it as having high importance to both these factors. Indeed, most of these fintech companies have been collaborating with FinTech.MZ to develop and scale-up their businesses. Ultimately, Mozambique's fintech environment in itself presents lots of barriers for product implementation, so it is critical that fintechs leverage on the community to learn their best practices. As mentioned, the main issue is still the lack of engagement with the international players, which should be a responsibility of FinTech.MZ, rather than from the companies themselves. Actually, FinTech.MZ should become more active in the long-term.

---

**Figure 26**: How do you evaluate the importance of the following initiatives for the success of your business?

- Collaborating with local fintech associations: 44% Slightly important, 56% Somewhat important
- Collaborating with international fintech associations: 44% Slightly important, 56% Somewhat important
- Participating in industry events (hackatons, challenges, conferences): 33% Slightly important, 33% Somewhat important, 33% Very important

Survey results indicate that fintech companies highly value the interaction with local and international associations – 56% of surveyed fintechs classify it as having high importance to both these factors. Indeed, most of these fintech companies have been collaborating with FinTech.MZ to develop and scale-up their businesses. Ultimately, Mozambique's fintech environment in itself presents lots of barriers for product implementation, so it is critical that fintechs leverage on the community to learn their best practices. As mentioned, the main issue is still the lack of engagement with the international players, which should be a responsibility of FinTech.MZ, rather than from the companies themselves. Actually, FinTech.MZ should become more active in the long-term.
FinTech in Mozambique: Feeling of Community

Incubators/Accelerators: There are 4 main incubator programs in Mozambique:

Supported by the Bank of Mozambique and FSDMoç, the Regulatory Sandbox allows Mozambican startups to work together as part of an innovative hub, where they are invited to share their best ideas and practices. This program allows fintechs to adjust their products within the regulatory framework. However, the impact of this incubator over the success of the fintech companies is very hard to measure as it depends on acquiring a license at the end of the program. The conducted survey indicates that 3 out of 9 companies already participated in the program but none has acquired a permanent license since then.

Founded in 2010, IdeiaLab focuses on accelerating the growth of SMEs by encouraging innovation. The company’s main role is to educate young entrepreneurs the skills to bring innovation into the market, while fostering financial inclusion in Mozambique.

Orange Corners has several initiatives in different countries. Launched in 2017 by IdeiaLab in Mozambique, it aims at helping graduates to develop their businesses from an early stage. Until 2020, 66 graduates participated in the program, which involves business training and resources provision. The company is confident that 76% of those businesses are still in place, which are encouraging results for the program.  

Standard Bank incubator emerged in 2017 and it has carried out several successful programs since then – the most successful one in collaboration with IdeiaLab. The bank intends to help entrepreneurs in building their capacities, as well as to understand where the real market opportunities lie. Plus, while recognizing that it may be hard for small businesses to comply with the requirements of a bank loan, the bank tries to provide alternative funding sources to allow for a higher flexibility.

All in all, although most companies are familiarized with the available programs, none has ever participated in one besides the regulatory sandbox, which could serve as a preparation for the latter, as most have difficulties in getting in the program (Figure 27)

Figure 27: Are you familiarized with the existence and/or have participated in any of the following incubation programs?

- **Bank of Mozambique**: 38% Participated, 100% Familiarized, 25% Not familiarized
- **IdeiaLab**: 88% Participated, 88% Familiarized, 13% Not familiarized
- **Orange Corners Maputo**: 88% Participated, 88% Familiarized, 13% Not familiarized
- **Standard Bank**: 88% Participated, 88% Familiarized, 13% Not familiarized

FSD (Financial Sector Deepening) is an international association which has been driving economic prosperity across Africa. As part of it, FSDMoç promotes the development of the Mozambican financial sector, ultimately aiming at giving excluded people access to basic financial services. Of course, it has been contributing very positively for the progress and growth of the fintech space so far, by participating in the most relevant discussions on the topic and supporting FinTech.MZ in achieving its main goals. Actually, most of the achievements made by now (the regulatory sandbox as an example) have been carried out together with FSDMoç.
OVERVIEW

While Mozambique’s FinTech Ecosystem is taking its first steps, several factors – such as the promotion of innovation facilitators and strong presence of local associations - highlight the potential for the development of FinTech in the country. Still, key challenges still remain. An underdeveloped regulatory framework, the low levels of trust and financial/digital literacy and the limited access to talent and funding opportunities still hinder the growth of Mozambique’s FinTech ecosystem.

The next section will provide actionable recommendations to tackle some of these challenges. These recommendations are targeted at different actors of the ecosystem, including fintechs, FinTech.MZ, FSDMoç, regulators, universities and the private sector. Although different levels of feasibility were identified, these recommendations should be effective in partially mitigating some of the current challenges.

ECOSYSTEM STRENGTHS

1. Regulatory sandboxes and accelerators have been used to promote the introduction of FinTech solutions in the market;
2. The introduction of a specific law for fintechs in the Payments space has provided fintech companies with more regulatory coverage and possibility to operate in the market with less restrictions;
3. The existent penetration of some FinTech services, namely mobile money, creates a considerable market for FinTech adoption.
4. Current initiatives to include the FinTech topics in university’s curriculums.
5. The creation of FinTech.MZ has been driving substantial results for the community on a country level – specifically, through the FinTech Week and collaborations with FSDMoç, fintech companies are able to connect with a larger base of stakeholders.

MAIN CHALLENGES

1. Despite the adoption of innovation-friendly policies, the lack of appropriate and clear legal frameworks still hinders the development of FinTech companies. High costs/time to attain a license, other compliance requirements and lack of regulatory support were also identified as regulatory barriers;
2. The current lack of trust on FinTech provided services.
3. Low levels of financial literacy which compromise the demand for FinTech services.
4. Low levels of digital literacy which compromise the demand for FinTech services.
5. Despite efforts, the academic curriculums are still not adapted to the needs of FinTech.
6. Lack of official mechanisms to connect students with fintech companies.
7. Mozambican fintechs’ unawareness of funding alternatives that are more appropriate to their current stages of development or operating scenario.
8. FinTech entrepreneurs need to develop stronger preparation skills to engage with potential investors.
9. FinTech.MZ shows little presence in the international community.
10. There is limited adoption of incubator/accelerator’s alternatives to the Regulatory Sandbox.
## Final Recommendations

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Challenge</th>
<th>Recommendation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>REGULATION</td>
<td>Lack of clear regulation/regulatory support</td>
<td><strong>1</strong> Set up a regulatory repository</td>
<td>Innovation Offices have been used by main Hubs to help innovators navigate through regulatory requirements. <strong>By creating a user-friendly, online repository</strong>, Mozambican entrepreneurs could access relevant regulation and frequently asked questions split by regulatory topic or submit enquiries to regulators. This office could be set in partnership with FSDMoç to offer support to innovators beyond the Sandbox.</td>
</tr>
<tr>
<td></td>
<td>High compliance requirements/unregulated areas</td>
<td><strong>2</strong> Introduce a tiered licensing regime for unregulated fintechs</td>
<td>The Central Bank of Nigeria has introduced a tiered licensing regime for fintechs, with South Africa following suit. Given the high costs and stringent licensing requirements identified by fintechs, Mozambican regulators could expand on their Payments' law and develop a risk-based licensing framework covering unregulated fintech areas, with the goal of reducing barriers for new market entrants.</td>
</tr>
<tr>
<td>DEMAND</td>
<td>Low trust on fintech provided solutions</td>
<td><strong>3</strong> Create a best practice book to promote trust on FinTech provided solutions</td>
<td>As mentioned, some mechanisms have been used by different fintechs to promote trust on FinTech solutions. For instance, actively presenting existent partnerships with traditional financial institutions. To further develop the trust level, a best practices book for these mechanisms based on fintech’s individual experience could be created under FinTech.MZ coordination and later distributed amongst other fintechs.</td>
</tr>
<tr>
<td></td>
<td>Lack of digital and financial literacy</td>
<td><strong>4</strong> Engage with large employers to promote financial/digital literacy teaching programs</td>
<td>Like MLT, many companies operating in the primary sector and in rural areas end up employing many citizens with low levels of digital and financial literacy. Thus, similarly to what MLT has done, teaching programs can be introduced to raise these two types of literacy. These programs could be developed and taught by fintechs and based on the respective use of the fintech’s services.</td>
</tr>
</tbody>
</table>
## Final Recommendations

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Challenge</th>
<th>Recommendation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TALENT</strong></td>
<td>Academic curriculums are still not adapted to the needs of fintechs</td>
<td>Further develop the integration of FinTech related topics in universities</td>
<td>This can be done by introducing short-term courses focused on fintech related skills (e.g., applied data analysis, blockchain technologies), which can both be integrated in the curriculum's program or expanded to interested parties (former students, industry professionals). Ultimately, these initiatives can be introduced without compromising pre-existent programs.</td>
</tr>
<tr>
<td></td>
<td>Lack of official mechanisms to connect students with fintech companies</td>
<td>Establish partnerships between universities and fintechs to promote internship programs</td>
<td>Potentially, these partnerships could be developed with the aid of organizations such as Fintech.Mz. Through this program students would acquire a strong contact with the Fintech sector and the fintechs could improve their access to talent.</td>
</tr>
<tr>
<td><strong>CAPITAL</strong></td>
<td>Unawareness of funding alternatives</td>
<td>Create a mapping of available funding options (list of suitable grants and investors)</td>
<td>The introduction of the mapping of suitable grants and investors (that are aligned with these fintechs’ development stages and limited profits) potentially provided by FSD.Moç would largely improve Mozambique's investment network. <strong>This list would specially focus on private grants</strong>, including names such as FSD Africa or UNICEF VC, <strong>governmental grants and impact driven investors</strong>, as MZ fintechs walk towards financial inclusion.</td>
</tr>
<tr>
<td></td>
<td>Need for a higher preparation of entrepreneurs</td>
<td>Create workshops towards a better preparation of entrepreneurs</td>
<td>As grant applications or investment pitches can be considered as a timely and challenging process, <strong>workshops towards the training and familiarization with this procedures could be conducted by associations such as FSD.Moç</strong>. Workshops could be specialized in concepts such as “how to fill applications” or to “how to maintain your financial statements organized”.</td>
</tr>
</tbody>
</table>
## Final Recommendations

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Challenge</th>
<th>Recommendation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEELING OF COMMUNITY</td>
<td>Lack of international presence</td>
<td><strong>Focus on expanding the community internationally, both on a continent level and CPLP (Community of Portuguese Language Countries).</strong></td>
<td>As a member of the African FinTech Network, FinTech.MZ should leverage on the opportunity to engage with a larger network of companies and investors. This would allow member companies to participate in the major industry events and learn the best practices on a continent level. For a more global perspective, Mozambique should invite its CPLP peers to participate in its future events and discussions - namely Brazil, Portugal, and Cape Verde.</td>
</tr>
<tr>
<td></td>
<td>Limited participation in private incubator programs</td>
<td><strong>Promote fintechs’ participation in incubator and/or accelerator programs prior to regulatory sandbox.</strong></td>
<td>It would be interesting to see regulators engage with some of the incubator private initiatives to promote the rejected candidates for their programs. Incubators should thus create a network that could work as graduation steps until getting into the regulatory sandbox.</td>
</tr>
</tbody>
</table>

### IMPLEMENTATION FRAMEWORK

Based on the feasibility and time needed to implement the previous recommendations, an implementation framework was designed. It divides recommendations into those that could be implemented easily by local players like FinTech.Mz and FSDMoç (“quick-wins”), those that require engaging with external partners like private sector companies, banks, universities or regulators (“Medium-Term”) and those that require a more active change to be implemented by regulators, universities or other international agents (“Long-Term strategies”).
Final Remarks

The aim of this report was to provide an overview of SSA’s FinTech landscape, reflecting on current market trends. When analysing the market as a whole, variables such as funding amount, number of fintechs or average fintech age were considered. Complementary indicators of fintech activity, such as revenues and profits generated would add valuable information, particularly to explain recent trends in funding and number of fintechs launched. However, this information was not publicly available at the time of the analysis, thus limiting its scope.

The report also sought to identify the key pillars behind a strong FinTech ecosystem. While the chosen pillars were selected to provide a comprehensive view on the state of development of a FinTech ecosystem, other relevant factors, such as the existent technological infrastructure or the relationships with incumbents in the financial sector could provide a broader picture. All in all, the framework serves as a starting point that could be adjusted to fit the needs of various FinTech markets. Although the scores attributed are not meant to provide an independent evaluation of the performance of each country, they are useful to assess relative performance in comparison with other FinTech ecosystems. These results should also be updated in further analyses, to take into account changes in regulatory frameworks or other FinTech initiatives.

Identified best practices from top FinTech Hubs were used to provide recommendations for Mozambique’s FinTech ecosystem. The selected countries were chosen due to their position as FinTech market leaders. However, this analysis could be expanded to cover other countries with less developed FinTech markets that can be used as a more similar benchmark to Mozambique. Moreover, a thorough mapping of the local Mozambican players could also help provide further recommendations. Associations and policymakers should leverage these results to explore potential partnerships within the wider ecosystem – such as private companies, commercial banks and development funds.

Overall, this report provides a comprehensive view on SSA’s FinTech activity with a particular focus on Mozambique. It paints the picture of a maturing SSA FinTech ecosystem, where new solutions are arising and expanding the potential for wider financial inclusion. Investors seem to be backing up this success, with funding amounts reaching all-time records. Albeit at a earlier stage of development, Mozambique is seeing the rise of innovative FinTech solutions adjusted to the needs of a still largely rural and underbanked population. The potential of FinTech to promote wider economic impact has been vastly identified. While our research focused mostly on the current market dynamics, it could be interesting to assess the overall contribution of FinTech companies to economic development, considering the potential to create jobs, generate income, promote entrepreneurial endeavors and strengthen the private sector through efficient payments systems.

Although much needs to be done to provide an ecosystem where all fintechs can thrive – through robust regulatory frameworks and investment in infrastructures, to name a few – we conclude that the future of the FinTech in SSA is showing promising signs.

FINAL ACKNOWLEDGMENTS

We would like to thank all individuals and entities that supported us in the preparation of this report, namely our advisor Cátia Batista; the Chairman of the Board of Directors of FinTech.Mz João Gaspar; Tiago Borges, from UX Technologies; Ian Zaqueu, Igor Domíngos and Maira Musa, from Pertence; the investor Matteo Rizzi; Lúcia Ginger and Carlos Cumbana, from University Eduardo Mondlane and all the Mozambican fintechs that engaged with us in the process of making this report. A special acknowledgment is directed to Professor Esselina Macome, Executive Director of FSDMoç, that served as our bridge to the Mozambican FinTech ecosystem and whose contributions were highly appreciated throughout the project.
Appendix 1: Framework for the final list of SSA active fintechs

- **Companies extracted from crunchbase**: 464
- **Resulting fintech startups**: 432
- **Active companies**: 364

Does the company classify as a fintech startup?

Does the company have an active website?
Appendix

Appendix 2: Regulation Evaluation

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicator</th>
<th>Nigeria</th>
<th>Kenya</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robustness</td>
<td>Incomplete / lack of clear regulation</td>
<td>10%</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>Sudden changes in regulation</td>
<td>12%</td>
<td>33%</td>
<td>55%</td>
</tr>
<tr>
<td>Fragmentation</td>
<td>Nº of regulating entities</td>
<td>11</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Compliance requirements</td>
<td>Costs of attaining a license</td>
<td>12%</td>
<td>35%</td>
<td>57%</td>
</tr>
<tr>
<td></td>
<td>Time to attain a license</td>
<td>12%</td>
<td>32%</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>Complexity of KYC/AML rules</td>
<td>38%</td>
<td>33%</td>
<td>57%</td>
</tr>
<tr>
<td>Innovation Support</td>
<td>Nº of innovation facilitators</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Results for the Robustness and Compliance Requirements dimensions are based on the Africa FinTech Radar 2020 and constitute a Net Promoter Score (lower values represent a higher negative impact of the indicator to the development of the business).

Appendix 3: Scoring Criteria for Regulation

<table>
<thead>
<tr>
<th>Score</th>
<th>Robustness &amp; Compliance requirements</th>
<th>Fragmentation</th>
<th>Innovation support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;=0</td>
<td>&gt;=12</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>1-9</td>
<td>10-11</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>10-19</td>
<td>7-9</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>20-35</td>
<td>4-6</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>&gt;=36</td>
<td>1-3</td>
<td>&gt;=4</td>
</tr>
</tbody>
</table>

The criteria for Robust & Compliance requirements was based on the distribution of Africa's FinTech Radar survey results and Fragmentation and Innovation support scores were defined based on the possible number of regulators and initiatives. Though South Africa's nº of regulators is equivalent to a 3, an extra point was added to reflect the fact that they are aggregated under the IFWG.
# Appendix

## Appendix 4: Interval Range per Demand Indicator

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1 Point</th>
<th>2 Points</th>
<th>3 Points</th>
<th>4 Points</th>
<th>5 Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Population</td>
<td>218K</td>
<td>20.1M</td>
<td>20.1M</td>
<td>40M</td>
<td>60M</td>
</tr>
<tr>
<td>Phone Penetration</td>
<td>1M</td>
<td>41.8M</td>
<td>41.8M</td>
<td>83.4M</td>
<td>123M</td>
</tr>
<tr>
<td>Young Population 2030</td>
<td>242K</td>
<td>155M</td>
<td>155M</td>
<td>29.8M</td>
<td>44.5M</td>
</tr>
<tr>
<td>Sent/Received domestic remittances: through a mobile phone</td>
<td>239K</td>
<td>6.5M</td>
<td>6.5M</td>
<td>12.8M</td>
<td>19M</td>
</tr>
<tr>
<td>Internet Access</td>
<td>388K</td>
<td>9.1M</td>
<td>9.1M</td>
<td>18M</td>
<td>27.1M</td>
</tr>
<tr>
<td>Paid utility bills: using a mobile phone</td>
<td>32K</td>
<td>3.8M</td>
<td>3.8M</td>
<td>7.5M</td>
<td>11.2M</td>
</tr>
<tr>
<td>Borrowed from a financial institution or used a credit card</td>
<td>486K</td>
<td>1.7M</td>
<td>1.7M</td>
<td>3M</td>
<td>4.3M</td>
</tr>
<tr>
<td>Made digital payments in the past year</td>
<td>669K</td>
<td>9M</td>
<td>9.5M</td>
<td>9.5M</td>
<td>13.9M</td>
</tr>
<tr>
<td>Used a mobile phone or the internet to access a financial institution account in the past year</td>
<td>367K</td>
<td>3.2M</td>
<td>3.2M</td>
<td>2M</td>
<td>7M</td>
</tr>
<tr>
<td>Mobile money account</td>
<td>94K</td>
<td>4.4M</td>
<td>4.4M</td>
<td>8.8M</td>
<td>13.1M</td>
</tr>
<tr>
<td>Banks per 100k citizens</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>

Intervals used to attribute a score per variable. Contrary to others, the indicator Banks per 100k citizens achieves a higher score with a lower value. The amplitude of each interval corresponds to the sample range divided by 5, the number of categories.

## Appendix 5: Countries used for Sub-Saharan Benchmark

<table>
<thead>
<tr>
<th>Angola</th>
<th>Benin</th>
<th>Botswana</th>
<th>Burkina Faso</th>
<th>Burundi</th>
<th>Botswana</th>
<th>Cameroon</th>
<th>Central Africa Republic</th>
<th>Chad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condo, Dem. Rep</td>
<td>Cote d'Ivoire</td>
<td>Ethiopia</td>
<td>Gabon</td>
<td>Ghana</td>
<td>Guinea</td>
<td>Kenya</td>
<td>Lesotho</td>
<td>Liberia</td>
</tr>
<tr>
<td>Madagascar</td>
<td>Malawi</td>
<td>Mali</td>
<td>Mauritania</td>
<td>Mauritius</td>
<td>Mozambique</td>
<td>Namibia</td>
<td>Niger</td>
<td>Nigeria</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Senegal</td>
<td>Sierra Leone</td>
<td>Somalia</td>
<td>South Africa</td>
<td>South Sudan</td>
<td>Tanzania</td>
<td>Togo</td>
<td>Uganda</td>
</tr>
<tr>
<td>Zambia</td>
<td>Zimbabwe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

List of countries used to act as the SSA benchmark for each indicator.
## Appendix

### Appendix 6: Performance per country and per indicator

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Nigeria</th>
<th>Kenya</th>
<th>South Africa</th>
<th>Mozambique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Population</td>
<td>99.9M</td>
<td>39.3</td>
<td>19.3</td>
<td>20M</td>
</tr>
<tr>
<td>Phone Penetration</td>
<td>204.2M</td>
<td>61.4</td>
<td>96M</td>
<td>11.9M</td>
</tr>
<tr>
<td>Young Population 2030</td>
<td>74.1</td>
<td>19.5</td>
<td>16.4</td>
<td>12M</td>
</tr>
<tr>
<td>Banks per 100k citizens</td>
<td>4.9</td>
<td>4.7</td>
<td>9.2</td>
<td>4</td>
</tr>
<tr>
<td>Sent/Received domestic remittances: through a mobile phone</td>
<td>14M</td>
<td>31.7M</td>
<td>10.9M</td>
<td>5.6M</td>
</tr>
<tr>
<td>Internet Access</td>
<td>53M</td>
<td>9M</td>
<td>32M</td>
<td>2M</td>
</tr>
<tr>
<td>Paid utility bills: using a mobile phone</td>
<td>2.5M</td>
<td>18.6M</td>
<td>3.8M</td>
<td>3M</td>
</tr>
<tr>
<td>Borrowed from a financial institution or used a credit card</td>
<td>1.6M</td>
<td>5.7M</td>
<td>4M</td>
<td>3.3M</td>
</tr>
<tr>
<td>Made digital payments in the past year</td>
<td>7.1M</td>
<td>22.8M</td>
<td>12.8M</td>
<td>8.8M</td>
</tr>
<tr>
<td>Used a mobile phone or the internet to access a financial institution account in the past year</td>
<td>5.3M</td>
<td>17M</td>
<td>7.4M</td>
<td>9M</td>
</tr>
<tr>
<td>Mobile money account</td>
<td>1.6M</td>
<td>21.7M</td>
<td>5.7M</td>
<td>6.5M</td>
</tr>
</tbody>
</table>

Countries Analyzed and their respective population per indicator
### Appendix 7: Talent Evaluation and Scoring Criteria

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>Nigeria</th>
<th>South Africa</th>
<th>Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantity</strong></td>
<td>Number of Relevant Programs</td>
<td>304</td>
<td>224</td>
<td>204</td>
</tr>
<tr>
<td></td>
<td>Capacity to retain local and attract foreign talent</td>
<td>3.39</td>
<td>3.25</td>
<td>3.38</td>
</tr>
<tr>
<td><strong>Quality</strong></td>
<td>Quality of Data Scientists</td>
<td>58%</td>
<td>40%</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>Quality of Computer Science Universities</td>
<td>2</td>
<td>10</td>
<td>2</td>
</tr>
</tbody>
</table>

### Appendix 8: Talent Evaluation and Scoring Criteria

<table>
<thead>
<tr>
<th>Score</th>
<th>Number of relevant programs</th>
<th>Capacity to retain local and attract talent</th>
<th>Quality of Data Scientists</th>
<th>Quality of Computer Science Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 - 62</td>
<td>&lt;1.9</td>
<td>80% - 100%</td>
<td>&lt;1</td>
</tr>
<tr>
<td>2</td>
<td>62 - 122</td>
<td>1.9 - 2.9</td>
<td>60% - 80%</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>122 - 183</td>
<td>2.9 - 3.9</td>
<td>40% - 60%</td>
<td>2 - 5</td>
</tr>
<tr>
<td>4</td>
<td>183 - 243</td>
<td>3.8 - 4.9</td>
<td>20% - 40%</td>
<td>5 - 8</td>
</tr>
<tr>
<td>5</td>
<td>243 - 304</td>
<td>&gt;4.9</td>
<td>0% - 20%</td>
<td>&gt; 8</td>
</tr>
</tbody>
</table>
## Appendix 9: Capital Evaluation and final values

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>Nigeria</th>
<th>Kenya</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>Number of Funding Rounds since 2011</td>
<td>193</td>
<td>79</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>Average growth rate of funded companies over the last 5 years</td>
<td>55%</td>
<td>40%</td>
<td>37%</td>
</tr>
<tr>
<td></td>
<td>Percentage of International Investors</td>
<td>72.94%</td>
<td>70.27%</td>
<td>70.25%</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>Number of FinTech companies</td>
<td>110</td>
<td>56</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>Historical average growth rate of the number of FinTech companies (last 5 years)</td>
<td>25.83%</td>
<td>17.57%</td>
<td>13.27%</td>
</tr>
<tr>
<td></td>
<td>Number of companies that achieved cross-boarder operations</td>
<td>9.09%</td>
<td>25.00%</td>
<td>11.34%</td>
</tr>
<tr>
<td></td>
<td>Percentage of companies in late stages of funding</td>
<td>4.55%</td>
<td>8.93%</td>
<td>11.34%</td>
</tr>
</tbody>
</table>

## Appendix 10: Capital model scoring criteria

<table>
<thead>
<tr>
<th>Score</th>
<th>Indicators</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ticket size (total funding amount/#FinTech companies)</td>
<td>1</td>
<td>20</td>
<td>50</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Average growth rate of funded companies over the last 5 years</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>Percentage of International Investors</td>
<td>50%</td>
<td>55%</td>
<td>60%</td>
<td>71%</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>Number of FinTech companies</td>
<td>5</td>
<td>15</td>
<td>30</td>
<td>80</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Historical average growth rate of the number of FinTech companies (last 5 years)</td>
<td>9%</td>
<td>14%</td>
<td>19%</td>
<td>24%</td>
<td>29%</td>
</tr>
<tr>
<td></td>
<td>Number of companies that achieved cross-boarder operations</td>
<td>2%</td>
<td>5%</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Percentage of companies in late stages of funding</td>
<td>1%</td>
<td>4%</td>
<td>7%</td>
<td>10%</td>
<td>13%</td>
</tr>
</tbody>
</table>
## Appendix

### Appendix 11: Feeling of Community Evaluation

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicator</th>
<th>Nigeria</th>
<th>Kenya</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scope</td>
<td>High</td>
<td>Medium/ High</td>
<td>Medium/ Low</td>
</tr>
<tr>
<td>Local Associations</td>
<td>Impact</td>
<td>High</td>
<td>Medium</td>
<td>Medium/ Low</td>
</tr>
<tr>
<td></td>
<td>Scope</td>
<td>Medium/ High</td>
<td>High</td>
<td>Medium/ High</td>
</tr>
<tr>
<td>Industry Events</td>
<td>Impact</td>
<td>High</td>
<td>Medium/ High</td>
<td>Medium/ High</td>
</tr>
<tr>
<td></td>
<td>Scope</td>
<td>Medium/ High</td>
<td>High</td>
<td>Medium/ High</td>
</tr>
<tr>
<td>Incubators/Accelerators</td>
<td>Impact</td>
<td>Medium/ High</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

### Appendix 12: Score Criteria

<table>
<thead>
<tr>
<th>Score</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low</td>
</tr>
<tr>
<td>2</td>
<td>Medium/ Low</td>
</tr>
<tr>
<td>3</td>
<td>Medium</td>
</tr>
<tr>
<td>4</td>
<td>Medium/ High</td>
</tr>
<tr>
<td>5</td>
<td>High</td>
</tr>
</tbody>
</table>
### Appendix 13: Fintech.MZ current members (1/2)

<table>
<thead>
<tr>
<th>Name of Organization</th>
<th>Short Description</th>
<th>Category</th>
<th>Year of Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGEST</td>
<td>KYC Database. Multi-entity e-KYC registration and management platform</td>
<td>RegTech</td>
<td>2006</td>
</tr>
<tr>
<td>Ekutiva/Quick-e-Pay</td>
<td>Payment Service Provider – Payment Gateway HTTPS e USSD.</td>
<td>Payments &amp; Transfers</td>
<td>2017</td>
</tr>
<tr>
<td>Flutterwave</td>
<td>Make and accept payments from customers anywhere in the world.</td>
<td>Payments &amp; Transfers</td>
<td>2016</td>
</tr>
<tr>
<td>HOWARD JOHNSON CALL CENTER/DIGIPAY</td>
<td>National distributor / agent network for selling all types of digital services and paying bills.</td>
<td>Payments &amp; Transfers</td>
<td>2007</td>
</tr>
<tr>
<td>Kamaleon Events/Tablet Comunitário</td>
<td>Product and service announcement and internet access on community tablets.</td>
<td>Personal Finance</td>
<td>2015</td>
</tr>
<tr>
<td>Mobile África Lda</td>
<td>Mobile Wallet and System integration</td>
<td>Payments &amp; Transfers</td>
<td>-</td>
</tr>
<tr>
<td>Mukuru/Mukuru</td>
<td>Payment Service Provider – International remittances</td>
<td>Payments &amp; Transfers</td>
<td>2013</td>
</tr>
<tr>
<td>NextPay/Teke Tehla</td>
<td>Payment Service Provider - Teke Tehla, payments with QRCode without physical contact (contactless payment solution)</td>
<td>Payments &amp; Transfers</td>
<td>-</td>
</tr>
<tr>
<td>Ologa /Sure Talk</td>
<td>Technological solutions for social and economic development.</td>
<td>Business Administration</td>
<td>2010</td>
</tr>
</tbody>
</table>
Appendix

Appendix 13: Fintech.MZ current members

<table>
<thead>
<tr>
<th>Name of Organization</th>
<th>Short Description</th>
<th>Category</th>
<th>Year of Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paytek / I. Mali</td>
<td>Payment Service Provider – Aggregator and Digital Payment Account based on QRCode. API for third party integration.</td>
<td>Payments &amp; Transfers</td>
<td>2008</td>
</tr>
<tr>
<td>Paytek / Risk31</td>
<td>Risk management Platform ISO 31000</td>
<td>Payments &amp; Transfers</td>
<td>2008</td>
</tr>
<tr>
<td>Pertence</td>
<td>Crowdfunding Platform</td>
<td>Lending &amp; Marketplaces</td>
<td>2021</td>
</tr>
<tr>
<td>PREMIO MALI TECNOLOGY</td>
<td>Microcredit, Insurance and Payment services</td>
<td>InsurTech</td>
<td>-</td>
</tr>
<tr>
<td>Robobo/Pagalu</td>
<td>Payment Service Provider – Payment Portal</td>
<td>Payments &amp; Transfers</td>
<td>2011</td>
</tr>
<tr>
<td>Sislog/Multipay</td>
<td>Multipay - payments and receipts with a universal reference</td>
<td>Payments &amp; Transfers</td>
<td>-</td>
</tr>
<tr>
<td>Tabech Serviços/MovelCare</td>
<td>MobileCare is a funerary insurance platform that can be subscribed for and paid via mobile phone and mobile wallet services, which is accessible to low and middle class people, guaranteeing the coverage of funeral services and food.</td>
<td>InsurTech</td>
<td>2016</td>
</tr>
<tr>
<td>Tablutech/ROSCAS</td>
<td>Savings group management</td>
<td>Personal Finance</td>
<td>-</td>
</tr>
<tr>
<td>Tablutech/TEAM APP</td>
<td>Customized APP creation platform for groups.</td>
<td>Personal Finance</td>
<td>-</td>
</tr>
</tbody>
</table>
## Appendix

### Appendix 13: Fintech.MZ current members

<table>
<thead>
<tr>
<th>Name of Organization</th>
<th>Short Description</th>
<th>Category</th>
<th>Year of Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UX / Biscate</td>
<td>Biscate - Platform for contracting informal services</td>
<td>Payments &amp; Transfers</td>
<td>-</td>
</tr>
<tr>
<td>UX / SOMAS</td>
<td>SOMA product for management of savings and credit groups.</td>
<td>Personal Finance</td>
<td>-</td>
</tr>
<tr>
<td>VolletAPP</td>
<td>SuperAPP e-Commerce</td>
<td>Payments &amp; Transfers</td>
<td>-</td>
</tr>
</tbody>
</table>
Appendix

Appendix 14: Eduardo Mondlane University Interview

EDUARDO MONDLANE UNIVERSITY INTERVIEW – LÚCIA GINGER

1. Give us a brief introduction of the course: if it is recent, reason for being introduced, etc.

“The course at a private university was created in the last 10-13 years. In its genesis, the computer science course only trained students in the area of information technologies and systems (information systems). This happened due to major limitations in terms of laboratories and other factors at the time, the course was very much geared towards the theoretical part of computer science. A revision of the course was made in 2014 and an introduction to a second version of the same course was also made. The course was divided in two: 1) Course directed to system analysis and computer networks; 2) Development of software systems. This version is currently being applied and offered by the university.”

2. How many students have attended the course, increase in demand, etc.

“The tendency is to increase the number of students. When we started the course, the student base was made up of 2 classes and over the years it has increased. There was a boom in demand in 2003, slowing down slowly in the following years (the university has no specific reason to explain this phenomenon). In the last two years the number of students has been increasing again, similar to the demand in 2003. With the arrival of the pandemic things got "shaky", but the university finds that it is in better shape/conditions compared to periods of more concern (demand slowing down after 2003).”

3. How many students do you have at the moment? Has the number of students increased? What is the Employability rate? And what are the most common outputs (entities)?

“Students have a certain acceptance in the job market, but it is worth mentioning that at some point, both university and employers feel that students could offer a little more (empower the student to be far beyond what is the professional quality they carry when they leave college). We have no concrete information if students are employed abroad. However, the university has students who work within international or even multinational entities/companies. We assume that, within the limitations mentioned above, there is a certain international employability, looking at international companies operating within Mozambique. There are some students who study outside of Mozambique and may work abroad, but there is no formal record of the number of these students.”

5. Regarding technological areas of expertise, what kind of technologies are students capable of operating when they leave university?

“The courses are designed with the needs of the labor market in mind. The university makes occasional revisions in order to fit in the courses the technologies that are being developed. The university recognizes that "they are not at the time of what is a newly designed course". The revisions are not made at the level of the course plan, but at the level of the themes that are discussed. The faculty has been careful, as far as possible, to bring the students up to date (students are introduced to recent topics, not the topics that were covered when the curriculum was designed in the past). Many teachers are also employers so the course also benefits from this point of view to meet the possible needs of the market. To some extent, but not completely, the university believes that the course responds in some way to the updates/needs introduced by the market”
1. **Tell us about the development and history of the Computer Science degree.**

“The tradition of the informatics course comes from the mathematics course (1980's), but in the 90's there was a need for the branching of what was divided into: mathematics, statistics, computer science and information science (mapping). The first computer science course, after the first curricular revision, resulted in some improvement, including not only mathematics, but also a great weight in the programming area. In the second curricular revision, the course was then divided into three different tracks: 1) Software Development, 2) Computer Engineering and 3) Electronics (telecommunications area). After this revision, disciplines/content that had to do with the "thinking" of technologies were also introduced (disciplines of technology analysis and design, software engineering, application development). The last revision reinforced the spec of placing disciplines that respond to the current context. For example: disciplines related to the creation of specific projects, where the student makes use of all the knowledge and skills he or she has had throughout the course and grants a project that he or she must develop until the conclusion.”

2. **Regarding technological areas of expertise, what kind of technologies are students capable of operating when they leave university?**

“Employability depends on the offer and mentoring that the university has given to the students. Students tend to have a specialization in a specific area defined throughout their projects. Areas: 1) Infrastructure (network administration, small number); 2) Application development (mobile devices); 3) Consulting (limited to the area of system design and policies in the technology area). Graduate students are employed in almost all areas. The university (specifically me) acts as a bridge between the companies' requests for recommendation of students and the candidates themselves. Students between their third and final year (fourth) usually already start working. "That student who finishes the course and is not working, is because he is a bad student". There are students working in banking, utilities, large industries (such as the oil industry); including FinTech.”
EDUARDO MONDLANE UNIVERSITY INTERVIEW – CARLOS CUMBANA (2/2)

3. How is your relationship with fintechs? If students have knowledge or interest in the area?

"The university has encouraged students to include mechanisms for implementing financial inclusion in their projects. E.g.: When students develop some application for payment services, they are encouraged to work with mechanisms that can be within the reach of a larger part of the population (comparison between credit cards and mobile money: mobile money makes more sense than credit cards, since they are more used within the Mozambican context). At the moment there is a lack of content directly targeting FinTech, however, together with Professor Esselina, there has been a lot of discussion around the introduction of option courses based on the FinTech concept. "We are falling behind, the FinTech concept from 5 years ago is not the same as it is now, so we are having this effort in order not to fall behind."

4. What about the bridge between students and labor market?

"There are no specific courses that deal with the trends of the industrial revolution, but it has a discipline where it has brought in to some extent the topics of artificial intelligence, internet, entrepreneurship, etc. The entrepreneurship course has brought in many current topics so that the students are familiar with these topics before they are “thrown” into the job market. Students are expected to be able to think on their own and find solutions on their own given these trends in technologies. Ongoing process for formal internships, but regulations for these internships by the university are still in production. Students are free to make contacts and request a credential from the university to present to the employer. In many cases, students stay in the companies where they did their internships. Employers themselves contact the university to request students for internships, but there is no formal mechanism for bringing students and employers together. However, small initiatives (careers fairs, etc.) may be the exception to this lack of formal mechanisms."
References


**Afriwise.** 2021. “Catch me if you can: How regulators will impact Africa's Fintech sector .”


**Financial Sector Deepening Mozambique (FSDMoç); Associação das Fintechs de Moçambique (Fintech.MZ).** 2020. “Fintechs Report.MZ.”


**Findexable.** 2021. “Fintech in Africa - Scale Stoppers: Ramps & Roadblocks.”

**Fintech Association of Kenya.** s.d. Accessed in 29 of November of 2021. [https://fin-tech.co.ke/](https://fin-tech.co.ke/).


References


References


World Bank. 2021. 10 https://www.google.com/search?q=name+of+web+page&sxsrf=AOaemvLI44oI5ExSU9r0GcuXHsiM4ihRaA:1639686558008&source=lnms&tbm=isch&sa=X&ved=2ahUKEwjhu9S2lO0AhXJ8uAKHYUBDdEQ_AUoAXoECAEQAw&biw=1366&bih=657&dpr=1#imgrc=y0TVHhJU6UPkTM.


References


Fintech in Sub-Saharan Africa
Who is Behind FinTech Funding

WORK PROJECT DEVELOPED BY:
TIAGO POMBEIRO, 32058

ADvised BY:
PROFESSOR CÁTIA BATISTA
This report aims at providing a description of who is behind the funding of fintechs based in Sub-Saharan Africa. Namely, what are the most relevant investor categories and where do they come from and how do they position themselves in funding process. For instance, do they invest more frequently, do they invest higher amounts, or both. Moreover, it details the different types of funding used. Lastly, based on the insights retrieved, it will suggest several potential investors to a Mozambican fintech, Pertence, based on its defined criterion.

To achieve the above-mentioned objectives, a database was created. It includes the name of 433 investor entities which have participated in funding rounds of fintechs based in Sub-Saharan Africa, their respective investor category and their country of origin. The participation of the investor entities ranges between 2010 and 2021. Potentially, this database can become a useful resource for every Sub-Saharan Fintech looking to raise capital.

1) Venture Capitalists participate in the largest number of funding rounds and in the ones of higher dimension
2) Accelerators and Angel Investors invest more frequently but in funding rounds of lower dimension, contrary to Private Equities, Companies and Banks
3) Investors based in North America participate in the largest number of funding rounds and in the ones of higher dimension.
4) Sub-Saharan investors participate in many funding rounds but of lower dimension, the opposite of Asian investors
5) Based on Pertence's investor criterion, the following suitable investor entities were identified: Accion Venture Lab, Newid Capital and Nexus Ventures

This report effectively identifies the presence and behavior of several investor entities, however it does not provide the associated implications. To anticipate some aspects of the future of the Sub-Saharan FinTech landscape, it would be interesting to describe the implications of such presence and behavior. For instance, potentially the current strong presence of Venture Capitalists and their investment horizons may have some implication in these fintech's strategic decisions, which otherwise would not occur. Moreover, the strong relevance acquired by North American investors in this landscape may leave it particularly exposed to economic shocks in such region.
Introduction

A sector’s expansion is always dependent on its access to capital and Fintech is no exception. Over the years, the funding of the Fintech sector has evolved in the following ways:

**Worldwide FinTech Funding:** Over the years, as the fintech sector grows, the amount of capital attributed to it has increased, as figure 1 shows. The only exception was in 2020, a year in which many financial decisions were postponed due to the pandemic’s induced uncertainty.

**Sub-Saharan FinTech Funding:** Considering Sub-Saharan Africa (SSA), the funding amount and number of deals increased consistently between 2016 and 2019. In 2020, similarly to the worldwide perspective, the pandemic effects were also registered. In 2021, an exponential growth has been registered, potentially as it includes all the postponed investment decisions of 2020.

As the amount of funds destined to the Fintech sector increases, it becomes important to analyze who are the investor entities involved in such growth and how they engage with such process.

As funding in the SSA fintech landscape becomes increasingly more abundant, the search for it also becomes more competitive. Hence, to fintechs that intend to raise capital, understanding who is behind previous funding rounds is of utmost importance.
Introduction

Since 2010, the SSA Fintech Landscape has had 483 different funding rounds. These funding rounds accounted with the participation of 433 different investor entities, which can be grouped into 11 different categories and traced back to 41 nationalities.

On average, an investor in the SSA Fintech Landscape will participate in more than one funding round, namely in 1.9. Thus, pointing to how this landscape presents itself as an established source of capital disbursement.

This report’s analysis will focus on who has participated in the funding process of the SSA Fintech landscape. It will present the different investor categories and their respective origins. For both category and origin, different relevance stands will be attributed. The criterion used for relevance attribution will be based in two distinct perspectives, namely frequency and magnitude. The better the performance in both perspectives, the highest is the relevance degree.

A frequent investor type or origin has participated in a high number of funding rounds, whereas an investor type or origin with a high level of magnitude has participated in funding rounds which have raised above average funding amounts. Many times, a high degree of magnitude and frequency will occur simultaneously, whenever that is not the case, it will be pointed as to why. Ultimately, allowing for a deep description of the investor profile behind SSA landscape funding.

Moreover, the collaboration dynamics will be analyzed. By collaboration dynamics one refers to funding rounds in which more than one investor entity has participated. This analysis will point to how often these dynamics occur, which investor categories have the highest tendency to engage in them and what are the different investor categories with which they engage.

Finally, the information contained in the elaborated database will be put to use on a practical case. The criterion of a Mozambican fintech which is looking to raise capital in the medium-long-run will be applied to the database, filtering the investor entities and allowing for a short list of suggestions. The usefulness of this exercise is sustained by the above-mentioned fact that an investor entity will on average invest more than once in the SSA Fintech landscape. Thus, for a fintech looking to raise capital it becomes valuable to know the existent investor universe.
Methodology behind the investor database

This report focuses on a quantitative analysis of the funding environment of the Sub-Saharan African Fintech ecosystem, which is based on a list of 483 funding transactions since 2010.

The data initially extracted from Crunchbase summarized the funding transactions as figure 4 shows. Each Transaction Name was the combination of its funding type and the funded fintech’s name. Around 5% of the funding rounds had an unknown type. The Money Raised was presented in its respective currency, followed by a column pointing the announcement Year. Finally, the following columns on the right varied according to the number of investor entities involved, with each one presenting a single investor entity.

Next, all the funding rounds with money raised in currencies other than dollar were converted to USA dollars at the respective yearly average exchange rate. Adding a column named Money Raised in USA dollars. This was made to allow for comparisons amongst funding rounds which took place in distinct years.

Then, the table shown in figure 5 was constructed based on the previously mentioned data. Essentially, all the investors that participated in at least a funding round were listed in the Investor Entity column. Then, their Frequency was added, which is the sum of funding rounds in which an investor entity participated.

Plus, the Amount Associated which corresponds to the sum of the capital invested in every round that said investor participated, regardless of the share that such investor committed.

Lastly, each of one the 433 Investor Entities were analysed to allow for a category and origin attribution.

**IMPORTANT NOTES**

**Amount Associated:** It is presented as mentioned since each individual investor share in a funding round with more than 1 investor is rarely known. Thus, it is impossible to present the exact amount invested per investor. Still, one can assume that an investor participating in funding rounds of higher dimension will commit more capital than an investor participating in funding rounds of lower dimension. This is accounted when presenting the amount associated per investor.

**Origin:** It does not necessarily reflect the capital source, but the country where the investor entity is based. For instance, a Private Equity firm based in the USA will have such origin associated, despite its limited partners being based in other countries, possibly overestimating the presence of USA capital. Still, the tendency is for the capital origin to correspond to where the investor entity is based.

**Category:** In some cases, an investor entity has more than one category associated, for instance both Venture Capitalist and Private Equity. A single categorization was applied based on the type of funding associated to the investor entity. Earlier stage funding determined an earlier stage investor category, and vice-versa.
Listing investor categories

All investment entities that have participated in SSA Fintech funding rounds can be grouped into 11 different investor categories. An investor category focus varies along four types: Entrepreneurial Success, Absolute Return, Strategic and Social Impact.

The Absolute Return focus comprises the investor’s wish of maximizing absolute returns. The Entrepreneurial Success focus comprises the investor’s wish of supporting entrepreneurs in successfully applying their idealized solutions to the market, often including guidance and the supply of basic resources for any enterprise such as office space. The Strategic focus comprises the investor’s intention of obtaining certain synergies, access talent pools or expanding market share. The Social Impact focus comprises the investor’s intention of promoting fintech solutions which will deliver strong social gains, even if not financially sustainable. Figure 6 illustrates the different investor categories and their correspondent emphasis.

The investor categories with an Entrepreneurial Success and Absolute Return Focus are Accelerators, Incubators and Angel Investors/Groups. An Accelerator and an Incubator focus on early development stages and usually take an amount of equity in exchange for capital and mentorship. The first usually takes a lower equity stake than the second and works with minimum viable product rather than just an idea (Crunchbase). An Angel Investor is an individual from the social circle of the fintech founder or a high net worth individual, which invests in early stages. An Angel Group is essentially a network of Angel Investors.

Typically, a Venture Capital (VC) invests in a variety of stages, usually later than Accelerators and Incubators, and has most of its focus on maximizing absolute returns. However, in SSA, given the region’s development challenges, many VCs end up adding a social impact focus which is known as a double dipping approach.

In parallel, some Non-Profit Organizations (NPOs) will also embrace a double dipping approach, yet most of their focus will be on maximizing social impact.

A Private Equity (PE) and an Investment Company will have an exclusive absolute return focus. The first targets late company development stages relative to a VC and the second has no attributable stage preference, raging between VC and PE stages.

A Fintech, Bank or Company will usually have a strategic focus when funding fintechs, such as accessing complementary services, new customers or human capital. Banks and fintechs, by definition, perform the same operations as fintechs, with the vast majority of the investor entities included in the company category doing it as well. Often, Banks and Companies will fund fintechs from a social perspective, disregarding the similarity of their operations.

1 All of the investment entities that have participated in funding rounds in SSA cannot be categorized within one of the above detailed investment categories due to absence of information
2 This association of investor categories and different focuses is true on a general level, if investor entities are analyzed case by case discrepancies may be found
Cross checking investor categories both by frequency and magnitude

On the right, the different investor categories are ranked from a frequency and magnitude perspective. The following topics arise from such comparison:

- **Venture Capitalists**: Its hegemony remains constant through both perspectives. In essence, Venture Capitalists are the most relevant investor category of all.

- **Accelerators**: Second by frequency but eight by magnitude, which is expected as it invests at early stages, hence small amounts, in many fintechs.

- **Angel Investors**: Ranked third by frequency but sixth by magnitude. Intuitively, even if high net worth individuals, Angel Investors cannot commit as much capital as the five investment categories placed above by magnitude. Thus, justifying their lower rank from this perspective. However, these achieve a high level of frequency. Firstly, as they are the second category with the most entities (after VCs). Secondly, by investing at earlier stages which by nature demand lower capital commitments. Thirdly, by engaging in funding rounds with other investor entities, which will be later analysed.

- **Angel Group and Incubators**: These two investor categories should be ranked higher by frequency relative to magnitude based on similar reasons as Angel Investors and Accelerators, respectively. This is weakly evident in the incubator’s case, with only one rank difference, and not the case of Angel Groups, which are ranked higher by magnitude. It can be attributed to the reduced number of investor entities composing these two categories, only 2% of all investor entities.

- **Private Equity/Company/Bank**: Achieve higher ranks through magnitude, especially banks. Contrary to Accelerators and Incubators, they invest at later stages, hence higher amounts, and less times as the share of mature fintechs is more reduced.

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1 This analysis only considered funding rounds in which the amount of a raised capital was known to allow for magnitude conclusions. Otherwise, if an investor category had a tendency to participate in funding rounds in which the raised amount was not disclosed, its frequency would be overestimated relative to its magnitude.
Deep dive in investment categories

Based on the previous analysis, five different investor categories filled the frequency and magnitude top-3 rank, achieving a high relevance degree. Namely, VCs, Accelerators, Angel Investors, PEs and Companies. Plus, Banks also exhibited an interesting dichotomy between the frequency and magnitude. Next, each one of these investor categories will be analyzed. This analysis will consist of a description of an investor entity which exhibits the highlighted characteristics.

In some cases, the described investor entity will either specialized in the Fintech sector or the SSA region, which points to how this landscape has been asserting itself as a viable capital destination, however that will not always be the case.

**SPOTLIGHT ON FREQUENCY**

The USA based Y Combinator is both the Accelerator and investor entity with the highest degree of frequency in SSA Fintech funding rounds, having participated in 24 funding rounds.

Its funding approach is usually done through a standard deal, which amongst other specificities, consists of a 125 thousand dollar investment in return for 7% of equity. Also, the company offers a 3 month guidance program, ending with the fintech pitching Y Combinator’s investor network.

Y Combinator’s influence in the SSA landscape funding extends beyond the Accelerator category, in fact two of its board members are also Angel Investors.

**SPOTLIGHT ON MAGNITUDE**

USA based Trinity Ventures has the largest amount of funding associated, $240M, having only participated in 2 funding rounds of a single fintech, Branch International.

The first round was in 2018, a Series B round which raised 70 million dollars, and the second in 2019, a Series C round which raised 170 million dollars.

Trinity’s investment scope expands far beyond the SSA region or the Fintech sector. Over time, it has made more than 400 investments.

**SPOTLIGHT ON FREQUENCY**

Omidyar Network is a family office of E-bay founder Pierre Omidyar, which in 2019 spun off its financial inclusion investment arm as the Flourish Ventures (TechCrunch 2019). The pre-2019 Omidyar Network funding round participations and the post-2019 Flourish Ventures participation adds to 15 rounds, the highest degree for a VC.

Flourish Fintech Ventures is based in the USA and has the previously mentioned “double dipping approach”, in result of its connection to Omidyar.

Moreover, it has a long term capital deployment philosophy, which consists of foregoing immediate returns in exchange of higher returns in the future. This philosophy tends to be more present in “double dipping” VCs as the initial period post investment may create a substantial impact despite not generating financial return.
Deep dive in investment categories

**ANGEL INVESTOR**

The Kenyan Aristarichus Weru is the founder and financer of two different fintechs, Uba pesa and The Kueq Limited. Collectively, the fintechs have had three funding rounds, raising 250 000 dollars, with Aristarichus as the only investor.

Aristarichus worked in two different Kenyan banks, Standard and Stanbic bank, with the first also being an investor in the SSA Fintech landscape. There is a tendency for Angel Investors being previous fintech or startup founders, in fact within this landscape 26% of them were.

**PRIVATE EQUITY**

The USA based Victory Capital is the PE firm with the largest amount of funding associated, 240 million dollars, with having only participated in 2 funding rounds, both of Branch International similarly to Trinity Ventures.

This PE’s investment scope largely exceeds this Fintech landscape, however its has invested in the Fintech sector more than once. The company has launched three special purpose acquisition companies (SPACs) to acquire fintech businesses, namely Bakkt, Kredivo and Dave, none of which based in SSA.

**COMPANY**

Visa has participated in three distinct funding rounds of three distinct fintechs, namely Branch International, Interswitch and Paystak. The company has the largest amount of capital associated within its category, with approximately 380 million dollars

As a payments company, Visa’s participation on this landscape often acquires a strategic focus. Currently, the company has developed two programs to support fintechs, which give access to the company’s experts and technology. The Visa Everywhere Initiative which supports fintechs developing and idea as provides Seed and other early stage funding. The Fintech Fast Trach which supports fintechs which have already raised capital.

**BANK**

Japan based Soft Bank has participated in two funding rounds from the same fintech, through its corporate venture arm Softbank Ventures Asia. The fintech funded was the Nigerian OPAY, and the last funding round was the largest ever recorded in this landscape, raising 400 million dollars in 2021.

Soft Bank has shown its strong commitment to funding technology based enterprises, creating two funds for that purpose: Soft Bank Vision 1 and Soft Bank Vision 2. The latter, is solely funded by Soft Bank given the first’s underwhelming performance, reinforcing the Bank’s strong commitment (Barrons 2021).
Description of the funding types

The different types of funding can be split into two groups based on how often they occur, below they are all described based on Crunchbase’s definition. The ones that occur more regularly are listed in figure 8 and can be associated to three distinct stages of a company development process.

The first stage essentially guarantees an idea is transformed into a fintech. It includes Grants, which occur when capital is provided without an equity stake of the fintech in exchange. Also, Non-Equity Assistance, which occurs when an investor provides office space or mentorship and does not get equity in return. Lastly, Angel rounds which are small rounds designed to get a new company off the ground usually done by Angel Investors.

The second stage guarantees the survival of the fintech. It includes Pre-Seed and Seed Round. The first is distinguishable from the second by not having institutional investors or by being less than 150 000$. Whereas Seed Rounds occur while the fintech is young and possibly not profitable, with the amounts raised ranging among $10k–$2M, which are currently getting larger.

The third stage allows the fintech to fulfill all the potential of its business model. It includes Series A and B, which range on average between $1M–$30M. Series A is associated to a development goal and B is associated to increase market reach. Plus, Series C corresponds to rounds for later stage and more established companies. These rounds are usually $10M+ and are often much larger.

The less frequent funding types on average, over the last 5 years, were used only 12% of the times. Especially, Series D funding which was only used 2 times., both in 2019, Initial Coin Offerings which were only used 3 times, all in 2017, and finally Equity Crowdfunding which was used for the first time in 2021. Figure 9 lists these eight types.

![Figure 8 – Most common funding types](image1)

![Figure 9 – Less common funding types](image2)

- **Private Equity Rounds** are led by a Private Equity firm at a later stage when the fintech is more established, with rounds typically above $50M.
- **Corporate Rounds** occur when a company invests in a fintech, mostly, with the purpose of forming a strategic partnership.
- **Equity crowdfunding** are usually done through platform that pools capital from individual investors to fund a fintech.
- **Initial Coin Offerings** consist of a fundraising campaign, either with existent cryptocurrencies or with a new one which, created by the fintech, and which appreciates as backers buy it.
- **Debt** is another type of funding and consists of capital borrowed with a certain interest rate associated, being usually done by mature fintechs which are profitable and can service it.
- **Series D** follows Series C if it was not enough, providing a final push before an IPO.
- **Convertible Note** An ‘in-between’ funding to help companies until their next funding. Once raised the next round, it ‘converts’ with a discount at the price of the new round.
Funding type evolution and consequent maturing signs

A successful fintech will go through at least one or more types of funding from the three mentioned stages of the most common types of funding. Thus, attributing them a consecutive dimension.

In the earlier stages of a Fintech Landscape, when the average fintech age is lower, one would expect the majority of the funding attributed to belong to the first stage, which allows an idea to become a Fintech. As such, as the landscape matures, the majority of the funding attributed eventually shifts from the first stage to the second, and lastly to the third.

Figure 10 illustrates the percentage evolution over the last 5 years of each of type of the most common funding types. The green tones include the funding types that belong to the first stage, the orange to the second and the yellow to the third.

The graph points how the orange share is predominant in all years, which in turn implies some degree of maturity of the SSA Fintech landscape as most of its associated funding rounds are directed at ensuring “survival” rather than “birth”.

Over the period of analysis, the share of stage 1 rounds has been decreasing. It decreased continuously, year after year, starting in 2017 with 22% of the funding rounds and ending with only 10% in 2021. The shrinkage of stage 1 relevance was absorbed by both the stage 2 and 3 rounds, tough their increase of their shares were not consistent. Ultimately, stage 2 had a CAGR of 6% and stage 3 of 10%.

Figure 10 – Share of the number of funding rounds per type of most common funding

Source: Own Database

IMPORTANT NOTE

It is not clear how Angel Rounds represent such a reduced percentage (on average 2%) of the total amount of common funding rounds, given that Angel Investors are one of the investment categories with the most frequency. This can be explained by the fact that Angel Investors are one of the investor categories which partners the most with the other investor categories. In such cases, changing the nature and designation of the funding round from Angel Rounds to others. In fact, many times funding rounds in the SSA landscape include more than one investor category. Next, such partnerships will be examined.

*Besides excluding the less common funding types it also excludes the funds whose type was impossible to categorize. Moreover, the number of funding rounds per funding type and not the value raised was considered as by definition many times, the different types of funding are distinguished by the amount of funds raised. Thus considering the amount of money raised would give a biased image the landscape maturity.*
Collaboration dynamics amongst investor categories

Of all the funding rounds with at least one identifiable investor entity, 30% included more than one investor entity. This partition has remained fairly constant through the years, within 20 and 40 percent interval, as figure 11 shows.

On average, the capital raised in funding rounds with more than one investor entity is 3.5 times higher than the one raised in funding rounds with only 1 investor entity. Intuitively, it makes sense as investors have limited amounts of capital and may wish to limit their exposure to specific fintechs.

Still, if the focus of a funding rounds is strategic, the tendency for collaboration will be lower even with high amounts of capital involved. For instance, Corporate Rounds, which are likely to have a strategic focus, will only have more than one investment entity in 16% of the cases. Even, if considering large capital investments such as the case of Visa’s investment on Interswitch of 200 million dollars.

Some investor categories have a higher tendency to participate in funding rounds with more than one investor entity than others. Those will end up having most of their frequency associated with these type of funding rounds and are listed in table 1 along with their main partners.

Angel Investors have 75% of their frequency associated with collaborations, more than any other investor category. They will often participate in collaborations with other investor categories. In fact, a funding round including more than one investor entity and at least one Angel Investor, will also include another investor category in 81% of the times. As mentioned, these funding rounds are not considered Angel Rounds, which justifies the limited number of these type of rounds and the high frequency degree of Angel Investors.

![Figure 11 – Share of funding rounds with a single or several investor entities](image)

<table>
<thead>
<tr>
<th>Investor Category</th>
<th>Main Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angel Investors</td>
<td>Most Common: Venture Capitalist, Second Most Common: Company</td>
</tr>
<tr>
<td>Venture Capitalists</td>
<td>Most Common: Angel Investor, Second Most Common: Private Equity</td>
</tr>
<tr>
<td>Private Equity</td>
<td>Most Common: Venture Capitalist, Second Most Common: Investment Company</td>
</tr>
</tbody>
</table>

Table 1 – Most collaborative Investment Categories and their main partners (excluding themselves)

*Considers only funding rounds with the known investor entities
Cross checking investor origin by frequency and magnitude

Table 2 ranks the different investor origin regions by frequency and by magnitude, with North America and Western Europe keeping their rank through both perspectives, contrary to SSA and Asia.

North America is ranked first by frequency and by magnitude and is composed almost exclusively mainly by the USAA. Other than the USA, Canada and Cayman Islands provide a marginal contribution for the region’s overall importance.

The SSA region is ranked second by frequency but fourth by magnitude. Thus, indicating that its based investor entities participate in many funding rounds but of lower dimension. The region is mostly concentrated in South Africa, the second most relevant country of all from a frequency perspective, Nigeria which is the fourth and Kenya which is the fifth. Naturally, SSA’s three main Fintech investor origins coincide with region’s the three hubs. Finally, countries such Mauritius, Ghana, and Zimbabwe provide a marginal contribution to the region’s overall importance.

Western Europe is ranked third in both perspectives. It is mainly concentrated in the UK, which is the third most relevant country of all from both perspectives. Besides the UK, the region is highly distributed amongst 15 other countries making it the one with the largest number of participant countries.

Finally, Asia is ranked fourth by frequency and second by magnitude. It is mainly concentrated in China, which is the second country with the highest level of magnitude. Other than China, 13 other countries contribute to Asia’s overall importance.

1This analysis ignores investor entities whose origin is impossible to point, overall, such investor entities represent 5% of all investment entities

2Oceania has Australia as the only country as investor origin, having a percentage of 0.7%
Important notes on investor origin and frequency

From the previous investor origin and frequency analysis, three aspects stood out. Namely, the USA relevance, SSA’s focus on frequency over magnitude and China’s opposite focus.

**USA Relevance:** The USA stands out the most as, by itself, the country has a higher preponderance than the remaining regions. Six out of ten investor entities with USA origin are VCs, the investor category with the highest level of frequency and magnitude. USA’s based VCs presence in this landscape is part of a broader internationalization process of this investor type. In fact, USA’s VC industry has been undertaking a rapid globalization process, which is pointed to be contingent on geographically proximate firms, syndicate partners and similar domestic industry exposure (Matusik 2017).

The geographic proximity in these circumstances cannot be considered a driver for USA’s VCs, given the geographic distance towards the SSA region. Oppositely, syndicate partners has been a frequent feature of USA’s VC presence in this landscape. As previously mentioned, VCs are one of the investor categories that engages the most in collaboration dynamics, and at a USA level this tendency is further amplified. Thus, this engaging capacity positively affects USA’s VCs relevance.

Lastly, similar industry exposure on the domestic market in the home market is also a factor for the internationalization process. Approximately 90% of USA VCs had previously funded fintech’s in their home market, hence positively affecting the USA’s VC relevance in the SSA FinTech landscape.

**Chinese Magnitude:** It cannot be disassociated from its overall presence in the SSA region. It may be more suitable to analyze this presence as an integrate part of the country’s state level approach to foreign direct investment in SAA. Thus, contrasting with the internationalization process of USA VCs.

**SSA Frequency:** The region has a considerable share of investor entities which stand out mainly for their frequency. Namely, Angel Investors and Accelerators which account for 1 in every 5 of this region’s investor entities. Both Angel Investors and Accelerators invest at earlier stages when information asymmetries are higher. Potentially, these two investor categories weight within SSA investors could be related with their capacity of minimizing these asymmetries, due to their geographic proximity, and thus motivating a higher frequency level.

Yet, the region’s infrastructural gaps strongly hamper the communication flows between investors and fintechs, partially decreasing the asymmetries’ elimination. Matteo Rizzi, an expert in SSA’s fintech funding¹, points the shared cultural features between its investors and fintechs as the main factor behind SSA’s frequency.

**Figure 14: Investor category composition of the USA, China and Sub-Saharan Africa**

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¹ Matteo Rizzi has worked with several VCs with a strong presence in the SSA FinTech landscape, having been nominated as part of the Top-40 most influential FinTech executives by Financial News
The case of Pertence and its desired investor profile

On average, an investor entity will participate in more than one SSA Fintech funding round. Many times, successive participations will be concentrated in a single fintech, but it will not always be the case. Currently, 66% of the investor entities participated only once in a funding round. Some of them will not be interested in doing it again, but others will. Moreover, those that funded more than once may also be interested in doing it again. Hence, for a SSA fintech interested in raising capital the analysis of the current investor outlook is of utmost importance. Specifically, the identification of investor entities whose profile fits the fintech requirements.

Pertence, whose profile is outlined in table 3, has demonstrated interest in raising capital over the medium-long-run to scale operations and pursue a horizontal acquisition. The fintech has a clear view of what it is looking for as an investor entity profile, which is shown in table 4.

**Investor Category:** The company is looking to raise around 500 000 $, preferably from a VC. This is based on a VC’s experience and consequent guidance capability plus its pre-defined strategic path, namely regarding time bound growth rates and exit goals. Pertence is also willing to embrace other investor categories, such as Angel Investors, as long as they can entail similar approaches to VCs. It excludes Accelerators or Incubators given its non-matching needs and recent presence on a Accelerator program.

**Previous Investor Presence:** It has demonstrated preference for an investor entity who has invested in South Africa. It points several non fintech related factors such as geographic proximity, large Mozambican emigrant community, lower population relative to Mozambique and similar cultural features. Plus, several fintech related factors are presented, namely South Africa’s capacity to attract large and diverse amounts of capital.

<table>
<thead>
<tr>
<th>Fintech Profile</th>
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<tbody>
<tr>
<td><strong>Activity</strong></td>
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<td><strong>Founded year</strong></td>
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<tr>
<td><strong>Employees</strong></td>
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<tr>
<td><strong>Funding history</strong></td>
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</table>

Table 3 – Pertence’s Profile

<table>
<thead>
<tr>
<th>Desired Investor Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investor category</strong></td>
</tr>
<tr>
<td><strong>Funding type</strong></td>
</tr>
<tr>
<td><strong>Geographic presence</strong></td>
</tr>
</tbody>
</table>

Table 4 – Desired Investor Profile
Application of Pertence’s investor criterion to the investor database

Having established Pertence’s desired investor entity profile, the developed investor database was analysed to find the right fit. Since 2010, there have been 136 funding rounds for South Africa fintechs which have included 120 different investor entities.

Of all those investor entities, 34 of them are Venture Capitalists. In turn, 3 of those VCs participated in Seed funding rounds of Lending & Marketplaces fintechs. Namely, Accion Venture Lab, Nexus Ventures and Newid Capital.

Next, these three investor entities will be analyzed based on their relationship with the SSA region and fintech companies.

Both Accion Venture Lab and Newid Capital are USA based VCs, which provided Seed funding to Lulalend in 2016.1

Accion Venture Lab provides funding from pre-seed to growth stage with an exclusive focus on solutions for those unbanked. It has the SSA as one of its prioritized regions, having participated in 7 funding rounds. Currently, it is already present in Mozambique as it has financed Socremo, a micro-finance bank, which may facilitate Pertence’s approach.

Newid Capital also shares a focus on solutions for those unbanked. It has participated in 3 funding rounds in the SSA region, two in Nigeria and one in South Africa. It is unclear whether it would be willing to fund a Mozambican fintech; it was contacted as to assess it availability and it did not answer.

Nexus Venture Partners is a Turkish VC which has provided Seed funding to UpRise.Africa in 2018, and Equity Crowdfunding fintech which focuses on South African businesses. This has been Nexus Venture’s only participation on a SSA Fintech funding round. The company has no investment philosophy which prioritizes the region nor financial technology companies. Thus, decreasing future collaboration possibilities relative to Accion Venture Lab and Newid Capital.

1 The funding amount was not disclosed

Source: Own Database
Bibliography


