

FINTECHS REPORT MZ





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FOREWORD

his report, which I have the honor to preface, is published in a context marked by important changes in the financial sector, determined by the remarkable growth of digital services offered, above all, by Fintech institutions. This growth, driven especially by startups, has been rapidly consolidating and encompasses numerous spheres of activity in the banking and non-banking financial sector, such as electronic money, insurance and the capital market.

The development of fintechs solutions contributes to the modernization, security and efficiency of instruments and means of payment, as well as to the dynamism of innovative mechanisms for the provision of financial activity, using channels and technologies such as, among others, the blockchain, distributed ledger technology (DLT), contactless payments (QR code) and crowdfundings.

Like other markets worldwide, the Mozambican market has been registering, significantly, the emergence of new business models made available by fintechs. This segment is one of the solutions to increase the levels of financial inclusion in the country, as digital financial services have the potential to reduce costs for customers and providers, thus increasing the levels of access to formal and financial services and the national banking rate.

It is precisely by recognizing this potential that the Banco de Moçambique launched the second edition of the regulatory sandbox for fintechs, an initiative that has the partnership of FSDMoç and that aims to leverage financial innovations, in a controlled and excellent environment, creating conditions for the development and testing technology-based financial solutions.

In addition to this measure, the Banco de Moçambique has taken other actions to ensure a leveling-off between the objectives of financial inclusion and financial stability and integrity. Among these actions, I highlight, in the context of adapting the legislation in force to the reality and challenges of the financial sector, the approval, by the Council of Ministers, of the Decree on Payment Service Providers.

This legal instrument, which qualifies such companies as financial companies, will allow fintech institutions to be licensed and operate autonomously, contributing to the dynamization of financial services, through the improvement of access and use of financial products and services, using digital channels, in an integrated and interoperable way.

The Banco de Moçambique is also committed to adjusting the framework for the supervision and inspection of digital financial services, in order to guard against the risks that these initiatives may involve and to identify measures to mitigate them. The achievement of this purpose, however, doesn't depend solely on the efforts of the Banco de Moçambique, but on the existence of strong collaboration and dialogue between regulators and policy makers, fintechs, investors and the private sector.

I have a well-founded expectation that FSDMoç and partners will continue to be relevant players in promoting space for sharing ideas, carrying out activities, exploring opportunities and overcoming challenges, thus making a decisive contribution to improving levels of financial inclusion in Mozambique.

Rogério Zandamela,

Governor of the Banco de Moçambique







INDUSTRY OVERVIEW

INDUSTRY OVERVIEW



The role of fintechs in promoting inclusion

By Hélder Buvana*

n her article in Forbes Magazine, titled: The Fintech Revolution Is Here. Can It Help Build A Better Economy? Jennifer Pyerce, gives a good summary of the importance of fintechs, as follows: "Fintech advances are made possible through data and efficiency. Platforms use alternative data sources, such as utility bills and predictive information, to understand their customers' financial lives and assess their ability to repay. Relying on this data, they can create products tailored to their customers, for example providing loans based on cash flow instead of collateral. This enables borrowers without significant wealth or assets such as a home or land to get a loan. And as operational efficiencies increase with improved technology, costs decrease, and Fintech platforms can afford to serve harder to reach customers who need small loans - something that traditional banks won't do."

Since inception, FSDMoç recognized the need to build a more dynamic fintech environment. Not just the need to create fintech ideas(the use of financial technology), but the need to create fintechs (sustainable businesses) themselves, as companies that focus on understanding the problems and how to resolve them using a combination of technology and financial services, to only later worry with how to monetize from the solutions they create. Usually the problems or market failures (as the development industry calls them) they resolve, are normally never considered by traditional banks, because these institutions don't see a business on them. It's not surprising that lot of fintechs start as quasi social businesses, with a challenging sustainability model only possible with strong financial backing, before they can start worrying any commercial bank.

In Mozambique, with FSDMoc as catalytic investor, interesting innovations were brought to market and some are already in the market and it's worth mentioning. SOMA which allows for registration and operations of savings groups (SGs), with potential to also serve Xitiques. Pagalu, Paytek and e-Kutiva are creating platforms which will allow for aggregation of payments without having to worry whether the source is a card or mobile wallet or from which institution the funds are coming from. E-ticketing solution for public transport from Maputo Metropolitan Agency (AMT), implemented by Maxcom, and also Appload which offers convenience and reduces logistics costs in trading of agriculture commodities. But there's also the work on digital identification to foster financial inclusion by easying authentication, increasing convenience trough transactional data and promote open banking, which is being discussed with private and public institutions.

The work done by FSDMoç is having a strong impact in reducing inequalities and building inclusivity via removing barriers to financial inclusion. The trade credit insurance product launched by Britam, which will contribute on access to working capital by Mozambican small and medium enterprises (SMEs) is another good example of this work. Ultimately, these products and platforms will play an important role in improving the lives of many Mozambicans, especially those at the bottom of the pyramid. Unequivocally, if SOMA goes to market it will not only improve the formation and training of savings groups, and also security of their money, it will also increase its visibility to other financial service providers, mainly commercial banks. In fact, in Kenya, Sacco Supervision Annual Report 2018, released by Sacco Societies Regulatory Authority (SASRA) in August 2019, reveals that Deposit-Taking (DT) Saccos paid an interest on the deposit at an average rate of 7.10 per cent in 2018, compared to an average rate of 6.95 per cent paid by other financial institutions in 2017.

In developing countries in Sub-Saharan Africa and Asia, fintechs are focusing on Artificial Intelligence (AI) to develop applications which facilitate crowdfunding, digital identification, blockchain and other solutions that are contributing to level the social field. People with irregular income can access loans which are allowing them to contribute to their investments in areas like housing and agriculture. In Mozambique, platforms such as SOMA are contributing to reduce the risks and costs of serving these previously invisible groups. Although not a fully-fledged fintech, Biscate, similarly to Lynk in Kenya, can become an important agent or self-provider, to informal professionals/artisans, into jobs and access to credit for tools, in a manner that a traditional bank can't offer or have not been able to do.

Borrowing from examples from various countries, the impact of fintechs in promoting development is undisputed, but it will only happen if concrete majors are taken to incentivize their existence. The regulator, Banco de Moçambique (BM), is taking this seriously and partnered with FSDMoç to launch a regulatory Sandbox in 2018, which had four fintechs in its first cohort and open applications for the second cohort to start in first quarter of 2020. However, BM can't do it alone, it will need support by other institutions, both public and private. Therefore, committing to fintechs is a priority and an effective way to promote inclusion and reach the sustainable development goals.

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DIGITAL ECOSYSTEM

Supply and demand for digital financial services improves in Mozambique

Despite the numerous constraints surrounding the Mozambican digital ecosystem, the supply and demand for digital financial services has significantly improved in the country, according to the study entitled "The Ecosystem of Digital Financial Services in Mozambique", produced by Financial Sector Deepening Mozambique (FSDMoç).

he study "The Ecosystem of Digital Financial Services in Mozambique", launched in July 2018, addresses "the main scopes for developing the digital ecosystem in Mozambique, including its stakeholders: companies, regulators, development partners and Government" as well as "the business environment quality, the degree of competitiveness in the economy and the innovation environment in the country."

With regard to the expansion of services, this study points out that, from 2015 to 2016, the number of financial institutions went from 418 to 462, registering an increase of 44 institutions in just one year. Microcredit companies grew the most, registering 380, followed by banks and insurance companies, both with an equal number of 19. With only three companies, mobile wallet operators (M-pesa, M-kesh and E-mola) come in last place, despite their notoriety and their impact on rural communities. Credit unions, which total 9 in total, also occupy the last position.

As for the composition of the national financial sector, the Study indicates that the Bank of Mozambique's National Financial Inclusion Strategy 2016-2022 identified three guiding pillars, namely: access and use of financial services; the strengthening of financial infrastructures and consumer protection, and financial education.

Mozambican digital ecosystem: what do the indicators reveal?

Regulators, commercial banking, microcredit / finance institutions, payment systems and networks, mobile and secure wallet operators are the six themes that, in the light of the study, operate in the Mozambican digital ecosystem. These, in turn, are analyzed, one by one, according to the following indicators: regulation, digital innovation, technical knowledge, proximity to customers, government support and development partners.

Microcredit / Finance Institutions

In this theme, on a scale of 0 to 5, "government support", "regulation" and "proximity to customers" are the indicators that have the lowest ratings, with 1.5 and 2 points equal to the latter, respectively, due to the fact that there are no "incentives to operate in rural areas" and "a limitation of regulation on both the consumer and supplier sides".



Due to this reality, the Study calls for "the regulator and institutions (banks and telecommunications) to invest more in the technical capacity of the sector. Without the necessary training, challenges such as fraud can be more difficult to intercept. Altogether, adding the points obtained in other indicators such as "digital innovation", "technical knowledge" and "support from development partners", this theme presents 15.3 points, out of 30 possible points.

Regulators

In 2018, the year in which the Study in question was published, FSDMoç appealed, within the framework of the sector's regulation, for a law to be specifically focused on fintechs. Today, almost two years later, Bank of Mozambique informed startups participating in the Sandbox that the Council of Ministers has already approved the law. It is expected that this law will benefit the stakeholders involved, especially the fintechs, even if they were not heard during its elaboration, as explained by João Gaspar and Fei Manheche, representatives of the PayTek and Robobo fintechs, respectively. However, when preparing this Study, the Bank of Mozambique and the National Institute of Communications of Mozambique - INCM reported "good levels of innovation and support from development partners". In 30 possible points, this theme has 19.5. The study identifies "the issue of literacy as a major constraint, reducing the rate of accessibility to digital financial services", although "there is a strong expansion of digital platforms." And advises ARECOM to "develop a digitalization strategy" with a view to consolidate national inclusion and broadband strategies.

Commercial Banking

Commercial banking reports that there is a "good level of innovation", but "requires more financial education initiatives", according to the study. For this reason, the indicator with the highest rating is "innovation", with 3.8 points, since "all banks interviewed have a mobile account and use USSD technology",

Digital Ecosystem Index – Clusters

The Ecosystem industry cluster with the highest self-rating score is Payment Network (SIMO) and the lowest are Insurance and Consumer Finance.



allowing citizens to have access to financial services without a mobile phone with internet access. However, "most banks report that they have limited internal skills, causing them to outsource the development of some solutions to foreign companies." What's more, "there is excessive documentation required for opening an account." Altogether, this topic relies on 18.1 points, out of a possible 30 points.

Payment systems and networks

This theme has the best ranking, with a total of 24 points, out of 30 possible points. The industry reports that it has "excellent" support from development partners, "good levels of innovation" and "proximity to the consumer". The Study explains that, on a scale of 0 to 5, the last indicator - "proximity to the consumer" - has 4 points, given the "interoperability between banks, faster payments and lower transaction costs", but calls for "greater commitment to eradicate financial illiteracy."

Mobile wallet operators

In recent times, there has been a great evolution

in access to financial services through simple mobile platforms, such as M-pesa, M-kesh and E-mola. These mobile account operators explain that the sector has an excellent level of innovation and there is good support from development partners, according to the Study. Second only to "payment systems and networks", this topic has a rating of 20.7 points, in the same universe. The innovation, which they say is excellent, has 4.7 points, on a scale of 0 to 5. The adoption of the USSD system and interoperability between banks "allowed greater accessibility, as it is easy to use and can be accessed from a basic cell phone, without internet access.

"Another factor that contributes to the growth of this segment is its penetration capacity, "mainly where banks cannot reach". However, among the range of disputes, "the compliance requirements and the liquidity ratio of 8 percent, similar to those of banks, stand out, which stifles their capacity for innovation", concludes the study. It should be noted that the representatives of the fintechs covered by the Sandbox hope that this scenario will change, with the approval of the new law of the sector.

Digital Ecosystem - Dimensions

The dimension with the highest self-rating score is Innovation and the lowest are Government Support and Regulation.



Insurance Sector

With a total of 15.9 points, out of 30 possible points, the "Insurance sector" is the second worst ranked, second only to the "microcredit / finance institutions" segment, which has 15.3 points. Cited by the study, the industry reveals that its "proximity to customers" is good, despite its low penetration capacity. The same document points out that the insurance culture in the country "is very limited", in addition to the fact that "insurance products are not available through digital platforms". The lack of a specific legal or regulatory instrument that accommodates digital financial services in the insurance sector is seen as a "challenge for insurance companies that wish to innovate", according to the operators cited by the FSD-Moç Study.

Some general challenges

The Mozambican digital ecosystem presents "innovation" as the indicator with the highest score (23.5) and "regulation" and "government support" with the lowest ratings (14.8) and (16.0), respectively, despite the initiatives for dialogue, public-private partnerships and the creation of the Electronic Transactions Law, approved in 2017. With regard to themes, the best classification is held by "payment systems and networks", with 24 points. The lowest belongs to the item "microcredit / finance institutions", with 15.3 points. The study points to the "lack of specific regulation", since the existing regulation serves conventional financial services, not adapting to digital innovations, and excessive bureaucracy and digital and financial illiteracy are revealed as some of the challenges to taken into account.

INDUSTRY OVERVIEW

Roadmap



1

Catalized Fintechs



FINTECH'S BY NUMBERS

Achievements



1.

Fintech Challenge

Within its agenda to promote digital solutions to increase financial inclusion, FSDMoç launched the Fintech ideas challenge to identify the best, most innovative and scalable solutions in Mozambique from entrepreneurs, developers, technology startups, financial service providers, students, researchers and others. From the 22 proposals received, 7 were selected:

#	Company			
1	Heuristica			
2	Pontual Business Services, El			
3	Publiaki Servicos, ei 2 - Banco Digital)			
4	UX			
5	Publiaki Servicos, ei (Grupo Lending)			
6	Edu Digital (APP for Xitique)			
7	Mconnect			
8	Edu Digital 2 - Financial Literacy App			
9	ekuschool			
10	Carteira Movel Mkesh			
11	Tabech			
12	Energy Recharge Remotely			
13	APAUMA			
14	Quick-e-Pay			
15	Maximum Consult			
16	E-Novation, Lda			
17	Simansoft, Lda			
18	IzyShop			
19	Sislog			

#	Company
20	Biscate
21	MZNyeleti
22	PZC Services, Ida
23	ALPHABIT LDA
24	Kuma
25	Techzone Ida
26	Innovatus Holding, Lda
27	Zoona
28	EasyMoney
29	Bibi Money
30	Mukuru
31	Obra Fácil app
32	LaFamba
33	Pontes de Mocambique
34	Wari
35	Bilhetes online
36	Robobo
37	Tablutech
38	M-Xitique

Results of the challenge fund:

- 22 fintech's participated at the challenge fund but only 7 were selected as winners and 5 were supported by the project
- From this list 02 are part of the Regulatory Sandbox
- HACK4MOZ for Startups including fintech's: The event was for 3 days promoted by PDE, and FSDMoç participate as member of the Jury



2.

Contribution to capacity building initiatives

3rd edition of Seed Star event: In total FSD-Moç sponsored nearly 40 startups – Fintech to participate at the various moments of the event namely:

- STARTUP GROUP SESSIONS: International and local startup were pre-selected to join the startup group sessions or "knowledge exchange sessions" with experts on the technicalities of raising investment, technical development session and a human centered design workshop (this last was sponsored by FSDMoç)
- BUSINESS / INVESTOR BRUNCH: FSD was invited to participate in the invite only business / investor brunch and presented;

Startup Delegation: FSDMoç invited entrepreneurs in the Financial Inclusion Sector to be part of the regional summit and benefit from mentorship and the workshop. In addition, FSDMoç sponsored the presence of Amitabh Saxena, Managing Director da Digital Disruptions e Adjunct Faculty, University of Maryland, who gave a workshop training on Human Centered Design thinking (which counted with 58 startups)

• Workshops: FSDMoç hosted a workshop on financial inclusion. The main question that were asked to audience were: What are the barriers that fintech entrepreneurs encounter to innovate? How can entrepreneurs successfully scale their solutions? How do we guarantee the adoption of new solutions by the final users?

FSDMoç sponsored 9 fintechs to participate at the bootcamp during the seed start even:

UX	xitique app
Carteira Movel Mkesh	xitique app (includes micro insurance)
Heuristica	financial agribusiness platform for lenders and small/beginner farmers
APAUMA	payment gateway
PZC Services, Ida	online invoicing and accounting system
Publiaki Serviços, ei	Online platform for group lending
Ekutiva Solutions (Quick e-pay)	payment gate-away using USSD
UEM/DMI	Taki payment aggregator
UEM/CIUEM	APP Mopa-Fiscal

Under the Regulatory Sandbox and financial inclusion

FSDMoç invited Ivo Jenik a financial sector specialist from CGAP on various moments:

- Open lecture at the Standard Bank Incubator: 20 participants
- Training workshop for the Fintech's at the Sandbox space: the 5 Fintechs participating at the 1st cohort of Sandbox
- Training provided by Jay Tikam, director of Vedanvi, on risk assessment: the 5 Fintechs participating at the 1st cohort of Sandbox



3.

Moztech Event 2019

FSDMoç contributed with to a panel of the Future Bank were:

- Yoland Van Wyk Steyn as a guest speaker (CEO of FNX Consulting in South Africa)
- Haysam Fahmy Consultant on Digital Banking and Online Marketing



4.

MOZEFO YOUNG LEADERS

"We are the Future" was the motto of the 2nd edition of MOZEFO Young Leaders (MYL), which took place, on 28 and 29 November 2018, at the Joaquim Chissano International Conference Center, in Maputo.

MOZEFO Young Leaders is a "conference venue" dedicated to young people and, through different debate shapes, discusses and promotes the sharing of knowledge and experiences in order to contribute to their training and to develop their leadership skills. The initiative promotes the debate around the themes of economic development that most concern young Mozambicans, stimulating their civic participation in society.

FSDMoç was present at two MYL moments. The panel on "How to finance startups and entrepreneurs in Mozambique" was represented by Tatiana Pereira of IdeaLab and in the parallel session an open class on the topic "The future of the Digital Economy - The challenges of Mozambican startups" was presented by Carlos Valente Mondle, manager of Digital Financial Services in the organization.

5.

Contribution to Experience Exchange

- Trip to Durban ITU event 2018: 14 fintechs participated at the event in Durban
- Trip to Budapest ITU event 2019: 6 fintech participated and one of them Biscate won a praise on innovation on social impact
- Trip to UK Fintech Summit in 2019: Two Fintechs were sponsored to participate
- Trip to Germany (name of event in 2019): we supported the participation of Tabech.
- Trip to Edinburg in Scotland: we sponsored one Fintech (Meu Txi)
- Participation at the Queen's Birthday Party (QBP) in 2018: Theme of the Event was Youth & Employment
- Three fintechs under the Regulatory Sandbox for Fintech's – a group of innovators working to bring solutions for underserved presented they business models at the exhibition;
- Community tablet A model of delivering financial literacy for youth in remote communities (Kamaleon platform) was also invited by FSDMoc



6.

Fintech Contribution to Financial Inclusion

- 4 financial products are being tested under the Regulatory Sandbox
- 1 digital insurance products is being tested in this market

Contribution to the development of fintech ecosystem

• The Mozambique Fintechs Association formed today has 12 members and is open to more after the launching event in february 2020

ASSOCIATION

JOÃO GASPAR, CHAIRMAN OF THE BOARD OF DIRECTORS OF FINTECH.MZ



For the digital financial inclusion of Mozambicans

The Mozambique Fintech Association (FINTECH.MZ) starts in February 2020, with the leadership of João Gaspar, Chairman of the Board of Directors, and the vision of contributing to the development of new technology-based services that allow increasing financial inclusion of all Mozambicans. Its members intend to have in FINTECH.MZ the dynamic element that can support, promote and defend them with all national and foreign entities with whom they interact or depend, whether to obtain financing, present products and create or change laws and regulations.

What are the reasons for the creation of the Mozambique Fintech Association?

The idea of creating FINTECH.MZ, the Fintech Association of Mozambique, materialized during 2018. In September 2018, a group of technological startups that participated in the ITU (International Telecommunications Union) 2018 in Durban, had a first meeting and the initiative was launched.

At that time, the Regulatory Sandbox of the Banco de Moçambique was being operationalized with the support of FSDMoç, and the companies promoting the idea considered that it would be important to have a single voice that represented Fintechs, namely with regulatory bodies such as the Bank of Mozambique, Insurance Institute of Mozambique or ARECOM.

On the other hand, it was considered that it made sense to create an association because there were already associations of banks, IT professionals, among others, but there was no associative body focused on the financial and insurance sector with a strong component of technological innovation. There is also a group of digital financial services professionals with an important role in various sectors of activity in the country, namely in terms of financial inclusion, which we consider to be potential members of this association.

What is the strategic vision defended by the Association? What are the members' expectations?

FINTECH.MZ intends to promote the use and development of new technologies for the financial and insurance sector in Mozambique.

It is our vision to contribute for the development of new technology-based services that will increase the digital financial inclusion of all Mozambicans. For this reason, we have to act in several areas, involving the actors that, increasingly, are integrated in the financial technological innovation solutions such as banks, insurance companies, telecommunications operators and regulators.

Our associates intend to have in FINTECH.MZ the dynamic element that can support, promote and defend them with all the national and foreign entities with whom they interact or depend on, either to obtain financing, present products and create or change laws and regulations.



Shanna Chicalia

What is the outlook for technology companies in Mozambique?

Focusing on technology companies in the financial and insurance sector - Fintechs, we can separate into two distinct groups with different objectives and needs.

One like established companies that innovate in a product or service using digital technology, such as a mobile wallet, a new access channel to a bank system or the sale of insurance through a mobile application. These companies already have a portfolio of clients that support them based on the provision of other services that we can call more "legacy", not normally suffering from the financial problems of how to sustain the organization or support a campaign to publicize the new service. The technological innovation brought by these companies comes from internal developments or from the integration of applications normally provided by foreign software-houses.

The second group is represented by companies called technological startups, usually created by young

entrepreneurs who are finishing university courses. The company is created to support the development of an idea or concept, immediately struggling with problems of financial support, deficient management strategy or lack of regulation that fits the new service or product.

Support for these companies has to be carried out at various levels, the most relevant of which is to create a strategic business plan that is realistic and enhances the attractiveness of financing.

Mozambique has a very large market potential for innovative solutions in the area of banking and insurance as long as they are easy to adopt and targeted to the users' needs of users. The new financial technology startups (fintechs), can play a fundamental role in conquering this market due to their attitude of being able to think "outside the box" and having a much more flexible organizational and decision structure.

However, there are barriers that have to be overcome and that FINTECH.MZ can help to overcome, either by enabling companies to present their We believe that the market can start looking at FINTECH.MZ not only as a catalyst for new technological startups, but also as an aggregator of solutions for its members that can be used by already established companies.

innovations to potential funders, either by supporting the regulatory framework or promoting partnerships with other fintechs, foreign companies, promoting an exchange of solutions and business.

What challenges is the Association expecting to face in the short and medium terms?

The challenges will be constant, but that doesn't upset us because Socrates already said: "A life without challenges, is not worth living". Certainly, the next challenge will be to start the Association, as we are starting from scratch, with few resources, but with a great desire to move forward.

We will have organizational, financial and affirmation challenges with the market and the various entities with whom we want to relate. But we are positive about the future of FINTECH.MZ because we know that there is a lot to do in this area and that there is a good receptivity from companies in relation to the technological innovation that fintechs can bring to the banking and insurance sector. We believe that the market can start looking at FINTECH.MZ not only as a catalyst for new technological startups, but also as an aggregator of solutions for its members that can be used by already established companies.

One of the main challenges seems to be the creation of a regulation for fintechs, which covers the issue of data protection. At what level does the organization expect to intervene in this area?

We know that the first step has already been taken by the Bank of Mozambique and that a decree-law is regulating the activities of the so-called Aggregators and Payment Service Providers. However, in this area of fintechs, innovation is constant and it is necessary that the regulation accompany this evolution as new supervisory paradigms are put in place for the regulators. FINTECH.MZ can play an important role in mediating between companies and regulators, collaborating in the proposal to change the current laws and in the elaboration and revision of new laws that will certainly be necessary. The issue of data protection is not just about the companies and services that FINTECH.MZ represents. This matter needs to be addressed from a global perspective due to the increasing integration between the financial, insurance and telecommunications sectors. Information security and access raises data protection issues in terms of access and sharing, but also in terms of the risks they may cause at the level of organizations, their customers and the sector in which they operate. These are matters in which FINTECH.MZ has to be involved helping its members to find the best practices to identify, assess and mitigate the risks that may occur in the management of data under their responsibility.

What was the Association's support when it started?

We created FINTECH.MZ with 12 founding members who supported the initial legal costs and we now have the support of FSDMoç and DFI - Digital Frontiers Institute for the official launch of the Association and this first publication, which we intend to reissue annually. We are starting to recruit members for FINTECH.MZ and we hope that other national and foreign entities can also contribute to the development of the initiatives planned for the coming months as well as to the creation of the support structure of the Association.

We also count on the collaboration of ARECOM, which works in collaboration with FSDMoç in support of travel related to the annual ITU conferences. In Durban (2018), 14 companies were present and in Budapest (2019) six.







REGULATORY SANDBOX

FINTECHS EVALUATE THEIR PARTICIPATION IN THE REGULATORY SANDBOX

"It was a very good experience, but we expected greater inclusion and celerity"

The representatives of the four fintechs participating in the first edition of the Regulatory Sandbox take a positive view of the initiative and ask for its continuity. Launched in May 2019 by Bank of Mozambique (BM) and Financial Sector Deepening Mozambique (FSDMoç), Regulatory Sandbox is a platform that, through the empowerment of startups operating in the sector, aims to promote financial inclusion. In the first phase, the companies Ekutiva, Mukuru, Paytek and Robobo took advantage of the platform. Find out how their experiences were.



Shanna Chicalia



Ekutiva Solutions

kutiva Solutions was born in 2016 and was founded by Jaime Chizavane and Maizer Gomes. Although today it has several products, the main motivation that led to the creation of the company was "eKuSchool, an online platform whose name is formed by the initials of eKutiva and School, and is used for academic management", according to Chizavane.

At the time, details the founder, the group was challenged by the then Education Department of the City of Maputo to develop "a digital service with a total number of over 100 thousand active users". Therefore, the eKuSchool platform was introduced in the education system in 13 schools, in a pilot phase. "At the time, we had to have a legal entity" and we were waiting for some bureaucratic procedures at the level of the Education Department, but, currently, the service is "fully developed" and it was from this product of the startup Ekutiva that all the others emerged.

A little audacity, daring and ambition was the "cocktail" that gave rise to the company's second largest product, Quick-e-Pay. A product of aggregation of payments, which, in the end, was the solution that made the Ekutiva team participate in the Regulatory Sandbox". Jaime Chizavane says that the product arose from the need to have a real-time payment platform, without the user having to physically go to the bank or even use complementary services.

"The service works as a kind of PayPal or Stripe adapted to the Mozambican reality, without an



exchange rate or addition of a debit card, as we noticed that the debit card for the Mozambican reality is not one of the effective payment methods, but the mobile wallets are popular ", he explains.

The group of products developed also includes Mussuruco (meaning money, in Portuguese), a billing service for small and medium-sized enterprises.

"We found that there are many billing systems approved by the Mozambican Tax Authority and the Ministry of Economy and Finance, but the user must adapt to the cost of acquisition and the complexity of the systems". However, with this service the billing system for making payments becomes simple and accessible, according to one of the mentors of the idea. And because the objective is to diversify the product portfolio, Jaime Chizavane adds: "we have yet another range of services to be developed in the background".

In the medium and long term, the company plans to expand its services and add other types of payment, so that "the user has convenience in making any type of payment regardless of the channel he is using, as long as it is inserted in a financial system with a mobile wallet or through a bank ", he reveals.

With regard to the profitability of the services developed, the founder explains: "the product that generated the most revenue so far was eKuSchool, which transformed us into a company, guarantees us the income from some fees and the payment of office expenses, among others". Despite the national and international demand and the success achieved when the service was launched, Quick-e-Pay doesn't guarantee any profit for the company, since Ekutiva is not yet legalized by the Bank of Mozambique. Nevertheless, the founder reveals that there is a great appetite to cooperate with international companies.

But is the investment worth it? For Jaime Chizavane, yes.

"Some products are available just to have the look and feel. Others even implemented it at cost zero [Mussuruko's case] because the biggest gain we wanted at the time was for the user to return with their feedback, saying: 'look, I didn't like this, change it here and there', since we wanted to make the product adapted (and that fit like a glove) to what is the reality of Mozambican traders".

Accounts made, from 2016 to this part, Chizavane

considers "participation in the Sandbox" and "making eKuSchool available to more than 13 thousand students from two higher education institutions and technical institutes of high school" as the company's greatest achievement.

Regarding the influence of the Financial Sector Deepening Mozambique (FSDMoç) in the company's participation in the Regulatory Sandbox, Jaime Chizavane shows his recognition: "FSDMoç gave us a big push in terms of influence to be able to be here - with training, coaching, let it be known! ".

The Government stipulates, in the regulation chapter, the construction of infrastructures in the country as one of the requirements for the licensing of fintechs. Is it justifiable? Here is one of the questions asked to the founder of eKutiva. "For a small startup that doesn't have that much capital, getting your own infrastructure is not sustainable," he replied.

In addition, according to Jaime Chizavane, a solution that, annually, can cost the company 400 thousand USD right from the start and "for those who are not yet generating a profit and do not have any equity financing, it is a very big investment". In this sense, entrepreneurs question the possibility of making some exceptions for fintechs with regard to the value of support for infrastructure, accessibility, promotions and market facilities. For example, why could operators not make a freebasics product available to some fintechs - since the use of mobile data is a challenge in the national market? Why is there no provider committed to the large-scale marketing of hosting services for startups? These and other issues are challenges for the Regulator, and beyond. In fact, it should be noted that the new sector law is expected to change this and other issues.

Ekutiva Solutions

Website: www.ekutivasolutions.com Start of activity: 2017 (officially) Core business: software and systems development Products: Quick-e-Pay, Mussuruko, eKuSchool Team: 2 founders and 15 freelancers

Shanna Chicalia

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ukurudotcom

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THE EASIEST WAY

O SEND MONEY

ICA

Vera Manjate, representative of Mukuru in Mozambique

Mukürü

Mukuru

ukuru is a company founded in 2006. Vera Manjate, representative of the company in Mozambique, says that "Mukuru arose through two Zimbabweans who were in the United King-

dom and had the need to send vouchers for fuel and other goods home" and when finding themselves unable, had the idea of creating the company. However, the creation of a branch in Mozambique presented a different history from what happens in other countries, according to what she made known.

"In Mozambique, Mukuru arises due to the fact that many Mozambicans, working in the mines, send money in ways that we do not consider safe. For example, by bus, the so-called 'chapa 100', friends ... and often the money doesn't end up reaching the family members".

As the business grew, the company Mukuru, in addition to working with m-Kesh and Standard Bank, also started to cooperate with "the mobile wallet of BCI, M-pesa, BancABC, MyBucks and Moza Banco".

About how the service works, Manjate explained that "they [banks, mKesh and M-pesa] simply capture

the deposit amounts made in other countries like South Africa, Zimbabwe, Malawi and that banks, together with M-pesa and m-Kesh, deliver it to the beneficiaries ". Which involves a web of intermediaries.

On the other hand, another arising challenge is due to the requirements of the BM, "the company cannot make transactions from Mozambique to other countries because the banking legislation doesn't yet foresee this activity, [meaning, it can only receive]", he said.

Pending the approval of the regulator, the company expects that, in the near future, some legal device will be created allowing transactions to be carried out from Mozambique to other countries. That, at least, is one of your expectations.

Cooperation with those financial institutions remains important. However, it is essential to have Mukuru branches so that, for example, there is direct contact with customers and they can present their concerns to them, and not only through the 'Customer Help Line'.

"We have many clients in Gaza that already told us that they didn't feel very comfortable because, sometimes, the service is slow, giving priority to the clients of the institution making the intermediation. Pending the approval of the regulator, the company expects that, in the near future, some legal device will be created allowing transactions to be carried out from Mozambique to other countries. That, at least, is one of your expectations. Cooperation with those financial institutions remains important. However, it is essential to have Mukuru branches so that, for example, there is direct contact with customers and they can present their concerns to them, and not only through the 'Customer Help Line'.

Hence the need for us to want to operate independently", he said.

Regarding the evolution of the digital ecosystem in Mozambique, the representative of Mukuru makes some comments: "We hoped that we were already much more ahead. Unfortunately, there are still many barriers to be overcome, especially regarding the issue of legislation, as I believe that there are many ideas out there, but the main barrier is legislation". And despite recognizing the importance of Mukuru's participation in the Regulatory Sandbox, Vera Manjate made a criticism: "The Sandb ^{Shanna Chicalia} ox project was designed to last only a period of six months, but almost two years have passed. This resulted in some delays for fintechs, but we are hopeful that everything will be settled by the end of this phase".

One of the company's concerns during its stay at the Regulatory Sandbox was, above all, the renewal of the credential, which authorizes it to operate during the testing period. Nevertheless, and knowing that, all over the country, there are people who need to receive money and have access difficulties, the Mukuru representative hopes that, with the company's licensing, there will be a "greater expansion of services and more withdrawal points, since in addition to the headquarters, there are also stations in Magoanine".

Mukuru

Website: www.mukuru.com

Start of activity in Mozambique: 2013 (originating in Zimbabwe and headquartered in South Africa) Core business: international fund transfer (in some countries, such as South Africa, transactions are carried out at national level)

Team: 6 elements in Mozambique

Shanna Chicalia



PAY tek

PayTek

ounded in June 2018, PayTek is the newest company, among the fintechs participating in the Regulatory Sandbox. Focused on providing payment services, "[segment] that is not yet regulated in the country", the company's general director, João Gaspar, explained that "PayTek is a service provider that allows the aggregation of payments for entities and private individuals." According to that entrepreneur, the company has three main lines of development or action. "The line that has given us more strength and that leads us to be here at Sandbox is the activity of providing payment services".

Like other companies, at this moment, PayTek cannot provide commercial services to the general public, but only to a group of people, entities and through a maximum amount of transactions according to a credential issued by the Bank of Mozambique within the scope from SandBox, "This way we can, in fact, check if there are any errors or problems and if we are complying with the rules already in force".

The desire to develop "digital payment tools and services that are much more agile and simple to be used by the population and with radically low costs" is the reason that led to the creation of the company, by those who say they know the financial sector in Mozambique well. With a mix of products, some of which "will only be available in the future", and others are still in a "launching phase", João Gaspar says that the company has developed a risk management system based on the ISO31000 standard, which allows categorizing risks, evaluate them, weigh them and define mitigation strategies and assign actions to certain people, with dates and objectives, so that risks are minimized. This system will soon be presented to the market.

Due to the characteristics of the Mozambican population, João Gaspar recognizes difficulties in accepting the product in more ruralized places. "It will be complicated and we are aware of this, because there is a big problem called financial literacy. The deeper this rural area is, the less used people are to deal with money and much less with digital solutions". On the other hand, it also points out that "One must work on the telecommunications costs and infrastructures to make this type of companies and more fintech solutions feasible".

Regarding the inclusion of fintechs in the drafting of the decree-law already approved by the Council of Ministers, João Gaspar, like other representatives, leaves criticisms: "we are absolutely unaware of this new law. Which, in my opinion, doesn't make much sense that we in a Regulatory Sandbox haven't been heard. The Bank of Mozambique (BM) should have listened to us before publishing the law. And, even, it won't be giving us the law until it is published in BR". This "exclusion", as he underlined, puts SandBox's fintechs in "a level playing field in relation to any other new company that wants to appear now and that hasn't gone through more than a year and a half process at SandBox".

For some time now, data protection and the safeguarding of the right to privacy are issues that have often been discussed. But is it worth so much highlight? João Gaspar has no doubts: "In fact, these points are very important. Therefore, we support it from the first moment. The risk issue, in a new area like this, is very important because they are small companies that, in fact, and if they have a serious problem in terms of risk and credibility with their customers, question not only the company, but all the sector". However, the official points out other aspects: "The need for initial capital. We asked the Bank (BM) to pay attention that these companies are very small niches and are startups made by young university students and that, in fact, at an early stage they may not be able to obtain such high social capital, which can inhibit them to start providing services", he stressed.

PayTek has a corporate structure composed of three bodies. "It's a startup that joins my company, a Portuguese technological company [Innovation Makers] and the university foundation of UEM", says João Gaspar. In fact, the company's partnership with UEM aims to "digitize all campus payments", he clarified.

In this regard, fintech's target group is young people, as its representative points out: "if we manage to convince this age group, we create a great moment for them to later spread it to family, friends, etc."

Despite being a company still in an embryonic phase, with little more than a year, João Gaspar highlights a feat that he considers relevant: "the biggest achievement was right from the start that we had the support of Eduardo Mondlane University, with the dispatch of the Magnificent Dean, that said: I approve the implementation of this project within the university campus".

PayTek

Website: www.paytek-africa.com Start of activity: 2018 Core business: provision of payment services, integration services and application interfaces and digital access channels to financial systems. Products: iMali Team: 5 workers



Shanna Chicalia

ROBOBO

obobo is a startup dedicated to the development of applications and software in the ICT sector and was founded, originally, in the United Kingdom, in 2011, and then in 2017 in Mozambique, by Fei Manheche and Ana

Santos.

Within the group of fintechs participating in Regulatory Sandbox, this company is the oldest, followed by Mukuru, created in 2013. The founder of the startup, Fei Manheche, says that initially the focus was "to develop works in the branch of interface with hardware, which are physical components", with the aim of "designing a low-cost and creative solution". However, "gradually, we moved to software, an area of passion that I love to do, to create business solutions, which can be used by other companies in the search for immediate results, pay salaries and bills", he stresses.

In the fintech business, the company has only

one service, PagaLu. "PagaLu is a payment aggregator. If we were to compare, I would say it is PayPal for Mozambique". In the country, this is a service that arises because it is "difficult to have a systematic form [of payment], especially if I am the owner of the page, to find out if someone has made the payment, if the money is confirmed in the account, among other processes, "explains Fei Manheche.

According to his information, with the Paga-Lu service it doesn't matter if the customer is using M-pesa or another mobile wallet, or even the debit card. "You can use our portal, which will present these payment methods in a viable way". The founder explains that the service "breaks the cycle of dependence on the provider of the mobile wallet". However, if the customer wants to know what his balance is, he should use the usual means. For example, "if you are using M-pesa, the user receives, after a transfer, a message confirming the transaction and the remaining balance," he explains. But is it feasible to have a service Like the other fintechs, Robobo had "a very high expectation" compared to the Regulatory Sandbox. "My expectation is that we were included in the pro- cess of drafting the proposed law. I think that n- techs, especially those that are on the Sandbox plat- form, should already be included in this conversation to know what the minimum requirements are. In that sense, it would be possible to discuss with them what would be viable and unfeasible".

of this nature? For Fei Manheche, yes. "We certify that the payment has been made and allow the person not to be necessarily associated with a single service or mobile wallet", he justifies.

Like other companies, Robobo has several products, one of which is being developed in partnership with DFID, Frontier Technology Livestreaming and Innovabox, UK (Mowoza).

"We have another project that will gain visibility. Working with InnovaBox, UK (Mowoza), we installed an open network on the Zimpeto market three more months ago, which is supposed to be low cost. It will allow women and other market users to have access to the free network". With the implementation of this project, it is expected that there will be "access to communication tools [WhatsApp and Facebook], but also to the expansion of education on how to be a good entrepreneur", maximizing the profitability of that group.

Despite the acceptance of some consumers, PagaLu faces major challenges on the partners' side. "They don't want us to exist," he said.

Access to providers of different mobile wallets "has always been a great challenge", given that the existence of aggregators in the middle of transactions is an almost null hypothesis for those companies. "M-pesa, for example, says that it doesn't want what happened in Kenya to happen in Mozambique, where [some operators] became millionaires overnight. And they say this because many aggregators have come up to charge almost twice what M-pesa charged. And many people who only did the integration charged six percent commissions, while M-pesa earned three percent". "Also due to the way the business is structured, it is not feasible to add other players. In principle, interoperability between mobile portfolios doesn't benefit M-pesa", he highlighted.

As a way to overcome this obstacle, Fei Manheche hopes that the Bank of Mozambique will give them access to the SIMO network, so that they can work with other providers.

Like the other fintechs, Robobo had "a very high expectation" compared to the Regulatory Sandbox. "My expectation is that we were included in the process of drafting the proposed law. I think that fintechs, especially those that are on the Sandbox platform, should already be included in this conversation to know what the minimum requirements are. In that sense, it would be possible to discuss with them what would be viable and unfeasible".

Still on the Sandbox experience, Robobo's founder praises the work developed by the Financial Sector Deepening Mozambique. "FSDMoç has helped and has already made available someone to assist us in methodologies for growing our business, regulatory aspects that we should think about, among other things".

ROBOBO

Website: www.pagalu.co.mz Start of activity: 2011 in the United Kingdom and 2017 in Mozambique Core business: software development in the ICT industry Products: PagaLu Team: 2 founders and 5 workers








DURBAN ITU TELECOM WORLD 2018

Two Mozambican startups awarded

With the motto "Innovation for smarter digital development", the South African city of Durban hosted, from 10 to 13 September 2018, the ITU Telecom World, an event organized by the International Telecommunication Union (ITU), an agency of the United Nations specialized in Information and Communication Technologies (ICT). The event featured 14 Mozambican startups, with Ologa and M-Xitique awarded

he ITU Telecom World is a global event that annually brings together, since 1971, governments of the 193 member states, academic institutions, corporations and technological SMEs dedicated to accelerating ICT innovation, in favor of socio-economic development.

The 2018 conference was officially opened by the President of the Republic of South Africa, Cvril Ramaphosa, and was attended by many international delegations. Headed by Manuela Ribeiro, the then Deputy Minister for Transport and Communications, the Mozambican delegation was composed of senior officials from the National Communications Institute of Mozambique, Mozambique Telecom (Tmcel), Financial Sector Deepening Mozambique (FSDMoç) and representatives of 14 selected national startups (Robobo; Ekutiva; PayTek; Taxi Zip; NextPay; Orien-Págua; ITIS; Kamaleon Events - Community Tablet; Ologa; Tabech - Mobile Care; Dream Solution - Online tickets; M -Xitique; Wenadata, Moovi). The participation of these startups in ITU Telecom World 2018 in Durban was jointly financed by ARECOM and FSDMoc.

Na ocasião, a FSDMoç explicou que a expansão da tecnologia nas áreas rurais é um factor importante para a inclusão financeira. Todavia, é essencial que as comunidades locais tenham acesso ao *smartphone* a um preço acessível, alertou.





Num período de 25 minutos, o secretário-geral da UIT, Houlin Zhao, interagiu com a delegação moçambicana, tendo deixado elogios à mesma devido à sua presença marcante. Ao mesmo tempo, o INCM recebeu um certificado.

While the INCM deputy minister and management team were engaged in high-level meetings, some of which were also attended by FSDMoç, in search of partnerships and investments in the Telecommunications sector, Mozambican startups each had an in an hour the opportunity to present their solutions and establish contacts, in addition to participating in business meetings and networking sessions.

Mozambican startups awarded

As has been the norm for decades, the event features the World Telecommunications Awards Ceremony, in which the best ICT solutions, applications and innovative services for social welfare are honored.

In the 2018 edition, M-Xitique and Ologa, two of the 14 participating Mozambican startups, were awarded. While M-Xitique was distinguished in the "Nomination in Excellence" category for providing and promoting innovative ICT solutions with an impact on the solution, Ologa took third place in the ITU Telecom World Global SME award, in the "Most Scalable Solution" category.

Mozambique participated, for the first time, in this international event, in September 2017, in the city of Busan, in South Korea. We recall that this year, the event will take place in Hanoi, Vietnam, and "Together



building a digital world "Will be the motto, in a space where, among others, partnership and collaboration in the development of the digital government will be the highlight.

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ITU TELECOM WORLD

BUDAPESTE ITU TELECOM WORLD 2019

Six Mozambican startups at ITU Telecom World 2019

Telecom World 2019 took place between 9 and 12 September 2019 in Budapest, the Hungarian capital. Mozambique participated for the third consecutive time in this event of great global importance, organized by the International Telecommunication Union (ITU), an agency of the United Nations specialized in Information and Communication Technologies (ICT) with the support of the Financial Sector Deepening Mozambique (FSDMoç).

he Mozambican delegation included senior representatives of the Mozambican Communications Regulatory Authority (ARE-COM), Mozambique Telecom (Tmcel), Financial Sector Deepening Mozambique (FSDMoç) and six national startups (UX Information Technologies_Biscate, Output Tech Solutions_ Xiphefu, UBI, Tabech Moz_Movel Care, Ability_Meu Txi and Millibran Technologies_Bacelapp), with their participation in Telecom World 2019 being jointly financed by INCM and FSDMoç.

The head of the Mozambican delegation, ARE-COM's CEO, Américo Muchanga, also had a series of working meetings, notably with the Minister of Information and Communications of Vietnam, Nguyen Man Hung, and the Deputy Minister of Telecommunications of South Africa, Pintie Kekana.

The ITU Secretary-General, to find out about the technological solutions proposed by the country's startups, visited stand 501/B, where Mozambican exhibitors attracted the attention of visitors from all parts of the world, exhibiting digital solutions, sharing knowledge, presenting innovative initiatives with a social impact in the field of ICT and networking both organizations and people.

ITU Telecom World is an annual event that has





been held since 1971, constituting a platform for governments, ministers, corporations and technological SMEs dedicated to accelerating ICT innovation, in favor of social and economic development.

Mozambique participated for the first time in this international event, in September 2017, in the city of Busan, South Korea, and for the second time with the presence of 14 national startups at ITU Telecom World 2018, held in Durban, South Africa .

The Mozambican startups present at ITU Telecom World 2019 brought to this annual event major innovations with genuine potential to improve lives and connect disconnected people.

The result of Mozambique's participation in the event was quite positive, if we highlight the fact that INCM was distinguished for its commitment and participation as a valuable partner in ITU events, with Mozambique winning the Government award based on the scores of all startups present in the event that brought some awards home, namely, UX Information Technologies with the portal biscate.co.mz was the winner of the 'World Global SME for the Greatest Social Impact' award and Output Tech Solutions with the Xiphefu application was a finalist in the 'World Global SME for the Greatest Social Impact' award. UX Information Technologies with the portal biscate.co.mz was the winner of the 'World Global SME for the Greatest Social Impact' award and Output Tech Solutions with the Xiphefu application was a finalist in the 'World Global SME for the Greatest Social Impact' award

UX INFORMATION TECHNOLOGIES

Biscate promotes employment in the informal sector

reated in 2016 by UX Information Technologies, a Mozambican startup focused on developing technologies for emerging economies, the biscate.co.mz service is a Mozambican platform that connects informal workers or handymen with technical skills to middle and upper-middle class customers, looking for affordable, quality services.

The registration process is simple: using a basic cell phone without Internet access, the handyman types * 777 # and follows the instructions. After subscription, his professional profile is exposed on the Internet to customers who can search, select, obtain contact and evaluate the worker upon the activity provided.

The project appears in a context in which 95 percent of the national economy is in the informal sector, with the Mozambican labor market being characterized by the existence of only 800 thousand formal jobs for a workforce of 13 million, the latter being aggravated by an annual increase of 300 thousand young people. In parallel, the informal sector offers skilled workers who need better job opportunities.

Today, four years after its launch, the platform

has 31,000 active registered workers. Its service grid includes more than 18 work areas, with electricity, cooking, metalwork, mechanics, plumbing, carpentry and painting being some of them.

The project's sustainability

Frederico P. Silva, one of the co-founders of the company, guaranteed that the objective is to "project Mozambique as a country that is starting to position itself in the ICT sector", during the African Entrepreneurship Award, which took place in 2016, in Morocco.

To guarantee the sustainability of the project, biscate.co.mz has received several funding. As an example, it received, as a result of a contest promoted by the Ministry of Science and Technology, in partnership with IdeiaLab, 1 million meticais for the implementation phase. Through the platform, excluded segments from the formal market increase their job and income opportunities. Recognized as a social inclusion application, Biscate offers several opportunities for informal workers, regardless of their status and location.

Biscate project in 2016, UX Information Technologies won the Innovation Award of the "100 Best National SMEs". Due to its commitment to solving problems in the labor sector at national level, Biscate was highlighted by the Instituto Nacional das Comunicações de Moçambique (INCM), in September 2019, representing the country in the "ITU Telecom World" competition in Budapest, in Hungary. In its passage through the largest technology shopping center in Central Europe, this service was the winner of the "Social Impact" award

Shanna Chicalia



Service quality and stakeholder recognition generate prizes

Months after the launch of the Biscate project in 2016, UX Information Technologies won the Innovation Award of the "100 Best National SMEs". Due to its commitment to solving problems in the labor sector at national level, Biscate was highlighted by the Instituto Nacional das Comunicações de Moçambique (INCM) in September 2019, representing the country in the "ITU Telecom World" competition in Budapest, in Hungary. In its passage through the largest technology shopping center in Central Europe, this service was the winner of the "Social Impact" award, in the "technological based solutions for its innovation and social impact" category.

It should be noted that the distinction in Budapest was preceded by two others: in 2017 it was distinguished among other innovations in Africa and Asia by the GSMA Ecosystem Accelerator, and in 2018, in the Uncharted category, by the African Entrepreneurship Award, two of the most outstanding awards for startups on the African continent.

High infrastructure costs, lack of Internet access and collection strategies: some of the biggest challenges

"The lack of policies appropriate to this nature of business, from the legal and tax point of view and a private sector with little dynamism, are certainly factors that hinder our growth", explains Frederico P. Silva, in an interview with VOA Mozambique, outside the African Entrepreneurship Award. However, these are not the only drawbacks. The challenges faced in the national market are also linked to the collection strategies of people who use the services, given that there is still no habit of paying for services online. In terms of staff, the company currently has 15 employees, from the co-founders, the technicians who work on the creation and maintenance of technological solutions, the official of communications, among others.

FINTECHS: ITU TELECOM WORLD 2019

OUTPUT TECH SOLUTIONS

HTTPS://OUTPUTECH.CO.MZ

Mission Possible: reduce electricity consumption

he project Xiphefu of the startup Output Tech Solutions, created in 2012 by Jessen Moisés Sengulane, was recognized for its commitment to the category with the greatest social impact in the ITU World Awards SME 2019, and aims at home automation and, in the

best scenario, reduction of electricity consumption up to 40%.

Roughly speaking, Xiphefu is a software and an electronic device created to turn on and off the electrical current of the equipment using the mobile phone from anywhere in the world and without the user needing to have access to the Internet. Its target is the middle and upper income population, with companies and private customers. All because the statistics show that every day we spend up to 40% of electricity unnecessarily or because we leave the equipment in standby mode or lamps and air conditioners on, among other equipment such as thermal accumulators or water pumps.

According to Jessen Sengulane, the CEO of Output Tech Solutions, Xiphefu has the functionality to turn electrical equipment on and off, locally or remotely; with option for scheduling; voice command; and local as well as remote consultations on the status of household appliances.

"Today we also attach solar panels for greater gain in energy efficiency in a partial way, being able to use both currents, solar and non-solar (the switch from one source to the other is done automatically)", says Sengulane.

As benefits, Xiphefu presents the reduction of electricity consumption in homes and offices, the money saving as well as the reduction of electricity waste, an added value that contributes to the achievement of one of the millennium goals (ensuring environmental sustainability).



Xiphefu was subject of a good appreciation, to the point that, in May 2019, it was invited by the Embassy of Mozambique in France to participate in the event called "African Week" at UNESCO headquarters in Paris, where for the first time they included technological exhibitions of some countries in Africa. And the highlight was especially the fact that the project was created by a young African.

But the main milestones in the company's short history, do not stop at this participation. Also in September 2019, Output Tech Solutions was taken with INCM and FSDMoç to Budapest, Hungary, to compete in the ITU Telecom World Awards 2019, where it was a finalist in the "The Greatest Social Impact" category. And, in October, the startup participated in the "Seedstars Maputo" competition, where it won second place. Jessen Sengulane, the creator of the Xiphefu project and CEO of Output Tech Solutions, guarantees that Mozambique's commitment to the development of technologies was noticeable. Proof of this is the prize won due to the best score achieved by Mozambican companies competing at ITU in Budapest.

UBI

HTTP://WWW.UBI.CO.MZ/

For Mozambique to have "smart cities"

he UBI project, created in 2014 and launched to the public in 2018, was also present at the ITU Telecom World 2019 competition in Hungary.

With the motto "Live your City", UBI arrived with the objective of connecting citizens to the city through unique experiences and solutions that make their daily lives simpler.

It allows every citizen to have access to useful information about their city, specifically services, news, social and cultural offer, transport - UBI is available anywhere and anytime, whether on cell phones, laptops or on digital kiosks.

The head of Development at UBI, Cristiano G. João, says that the project seeks to take the first step to transform Maputo (pilot project) into a smart city, not only due to the technological factor, but because he believes that a smart city puts people first. "We seek with UBI to create greater access to information, promote digital inclusion and ensure greater transparency between the municipality and the citizen".

"Our participation in the ITU Telecom World 2019 contest was an unparalleled experience. We were able to show the world that Mozambique has the potential to develop technological solutions that can boost its development. And through the interaction we had with representatives of other companies, we could see that we still have a lot to do and that the challenges are many", adds Cristiano G. João.

Still in this context, Cristiano G. João says that access to the internet in Mozambique appears as a major challenge to overcome. For this reason, UBI is currently negotiating with the competent authorities the provision of free Internet through digital kiosks that, until the middle of next year, will be in almost all the main stops in Maputo city.

Until then, the results obtained are encouraging,



in four years UBI managed to be part of a list of the best startups in Mozambique in the area of information and communication technology. And it has also signed partnerships with national companies in order to develop new services.

At the moment, the project has more than 4,000 active users benefiting from the resources provided by the platform.

In summary, UBI is an innovative platform that provides access to a city's information by connecting people to businesses and locations. Through this platform, the intention is to improve and simplify the daily lives of Mozambicans. UBI can be accessed from anywhere, at any time, using a cell phone, computer or digital kiosks around the city. The idea is to transform African cities into truly smart cities using this technological solution that can help improving access to information and promote digital inclusion.

ITU TELECOM WORLD 2019

TABECH

HTTP://WWW.MOVELCARE.CO.MZ/

The innovation that makes insurance more accessible

he startup Tabech was another participant in the ITU Telecom World 2019 contest, representing Mozambique, with the Mobile Care Tele-Insurance project.

Created in 2015, the Mobile Care project has the slogan 'life insurance on your mobile phone' and aims to disseminate the practice of insurance in Mozambican culture. It allows family members to have the necessary additional financial assistance when faced with funeral situations or the sudden loss of the life of a loved one.

More specifically, MóvelCare is an electronic solution in the form of a microinsurance platform (EMIP) that uses cell phones, web applications and mobile applications for premium payment, access to policies, claims requests, policy management and maintains proof of being a policyholder insurance.

Tabech thus offers an unlisted insurance platform that uses USSD and SMS to offer subscribers a convenient way to subscribe and claim insurance products. In addition, the USSD subscription and SMS provide access to insurance for users without access to the Internet.

The target is mainly composed of the population without a bank account, women in poorer areas and irregular Internet users, and has attractive benefits. Innovation makes insurance more accessible to low-income people, contributes to financial inclusion (reducing inequalities in access to financial protection and risk solutions).

When asked about the results obtained with the creation of the project, Tauanda points out that the company Tabech has already had the opportunity to participate in several contests such as Seedstars 2017, Tony Elumelu Foundation Funding 2017, SASAwards Finalist 2018, Top 15 Finalist Total Startupper 2019,



where it was the winner. It entered into distribution partnerships with Vodacom, M-pesa and two Mozambican insurance partners. Organized the first Conference on Insurance and Funerals in Mozambique in 2018, with the participation of Sanlam Seguros, FSD-Moç, funeral agencies, among others.

Regarding their participation in the contest, the representative of fintech Tabech underlines that the company has gathered several experiences and highlighted the importance of Mozambican startups to work together in order to become a single force.

ABILITY

WWW.MEUTXI.COM - WWW.ABILITY.CO.MZ

Social Security for Information Workers

((Meu Txi" means "My Money" in Mozambican slang. It is a mobile application that serves to help its users manage their money and make savings plans. The objective of "Meu Txi", by Ability, is to teach financial management, providing information in real time. Basically, it is an interactive application, easy to integrate with banking services and mobile wallets.

With four months of presence in the market, the 'Meu Txi' project, intended to be a digital bank designed for the informal market, which directly helps in personal financial management, awarded in the ITU Telecom 2019 contest in the category "Prize for Excellence in using information and communication technology to create solutions with social impact".

The project is a result of a competition called Hack4Moz with the main objective being to allow users to save money - every time they spend it - using the 'Meu Txi' account.

Ability's general manager, Gerson Zandamela, says that the project's purpose is to make people who have their source of income from informal jobs in Mozambique to find a solution similar to social security in terms of retirement in a bank designed especially for the people. It was in view of the success of mobile wallets, that Ability verified the need that Mozambicans have to adhere to financial services that are comfortable and meet their needs as customers in a realistic way.

As for the participation of 'Meu Txi' in the ITU Telecom competition, Gerson Zandamela said that it offered the opportunity to negotiate a technological partnership with an international company that has already developed digital banks in several African, European and American countries to use part of its software, mainly in the area of security and in conformity of banking processes in order to promote the project's development.

"It was possible to have a new vision of how information and communication technologies should be used in emerging countries. We could see the need to change implementation way, stop simply consuming external products because they were designed to work better in their environment. We must design solutions tailored to our problems and think about unravelling Africa's development potential,"added Gerson Zandamela.



ITU TELECOM WORLD 2019

MILLIBRAN

Bacelaap, the mobile app that offers unlimited discounts

acelapp, a product owned by Millibran Technologies, also participated in the contest and was at UTI Telecom World 2019. It is a mobile application that offers permanent and unlimited discounts of up to 50% to its users in more than 100 commercial establishments, in the cities of Maputo and Matola. The application can be used by citizens who want to have access to products and services at a competitive price. On the platform you can find products and services in the areas of health, food, clothing, entertainment and other services.

In a country with inflated prices, the idea of creating Bacelapp came from young Mozambicans, with the aim of creating an impact on the Mozambican economic scenario, encouraging commercial establishments to introduce promotions throughout the year, in order to generate benefits for their users and results to its partners.

The Bacelapp project was launched in 2019, and has more than 100 commercial establishments, around 2,000 users, and more than 500 purchases have already been made by users with discounts ranging between 5 and 30%.

Millibran Technologies' executive director, Luhane Gagnaux, expressed his satisfaction in participating in the UTI Telecom World 2019 event. "It was a great experience, enriching and very motivating since it was possible to see that Mozambique has good startups like those in other countries, or maybe even better,"said Gagnaux.

It should be noted that in addition to expanding its services, the company has received some distinctions, both nationally and internationally.



DR







CASE STUDY

TIAGO COELHO, UX INFORMATION TECHNOLOGIES CO-FOUNDER

BISCATE from UX wins international award

What can be done, in terms of technology and innovation, in a country where there is a high number of people living out of informal work? This was the motto for the creation of the Biscate platform by the Mozambican company UX Information Technologies. The idea is to bring informal workers closer to customers and potential employers on the web, as a way to improve employability. Tiago Coelho, co-founder of UX, tells us about the company as well as the presence of his team in the International ITU Telecom World 2019 competition in Budapest (Hungary), where they won the maximum distinction in the 'Technological Solution with the Most Social Impact' category.

When did the idea of creating the Biscate platform come up?

Our company started in 2012 with a platform for formal work called Emprego.co.mz, which published private sector employment opportunities throughout the country. It turns out that two years later, we realized the reality of our labor market, which according to our employment data.co.mz there is only one job opportunity for every 19 workers in the country. Therefore, we had to look at "Outside the Box", which curiously was the name of the first competition for innovation ideas in 2014, organized by the Ministry of Science and Technology in partnership with IdeiaL-AB, in which the digital platform Biscate ranked first.

How does the service work?

The idea came from the visualization of signs scattered around the city, made by hand by people offering various services such as plumbing, gardening, sewing, among others, with the service and a telephone number. Then, it was thinking about the service to be created with a view to registering from the phones of these informal service providers and the potential to advertise them in the national market. Hence the Biscate platform, which, at bottom, was built using basic technologies such as the USSD/SMS, because most informal workers have access to basic mobile phones and are people without great purchasing power, so they don't have cell phones with internet access.

biscate

Is there a statistic about the people who benefit from Biscate?

The World Bank has been conducting an investigation based on our Biscate database for three years, as it is a rich source of information in terms of informal work in Mozambique. Due to this wealth of information, we were invited to Paris to present at the OECD/Paris21 statistical data on the informal sector, which by its nature doesn't generate much digital information that can be analyzed by experts. Biscate allows you to see the number of workers registered on the platform and, currently, we have 31 thousand assets. However, we have already had more than 60 thousand registered workers, but only half use the platform continuously. When the benefits of the service were counted, it was discovered that Biscate



For companies with high growth potential (startups) like ours, there are no specific funds or support to leverage growth, as well as a large bureaucratic and tax burden that delays the companies' development

generated more than 60 million meticais for workers registered with Biscate.

How was it to participate in the ITU Telecom World contest?

It was an important experience for the company, especially since we were not only representing UX, but the entire Mozambican nation. Having won the "Technological Solution with Greater Social Impact" award, in a category of the competition in which countries from all continents competed with an ecosystem of startups and with very strong technological companies, was gratifying, and showed that Mozambique also has enormous potential in information and communication technologies.

What is the significance of the prize received in Hungary for UX and for Mozambique?

For UX in particular, it is the recognition of our effort and the hard work we have done in creating technological solutions that solve problems in the labor sector.

We had the possibility to interact with other companies working in the area of information technologies, and partnerships are planned, as well as the exchange of experiences. We found some companies that have complementing products as well as people who showed interest in having Biscate available in their countries, and this was one of the gains for us as a company.

For Mozambique, it demonstrates the existence of a great potential for young Mozambican companies in the technology sector, and is a sign that this potential should be better exploited, because if a company has managed to gain international prominence, it is a sign that there can still be so many others in the country that just need an opportunity to expose their activities on the international market.

Does UX feel supported by the Government to develop its projects?

Yes. Just to highlight, the first financing of one million meticais that UX had for the implementation of Biscate was the result of a contest promoted by the Ministry of Science and Technology. However, most of the funds we have obtained to develop and maintain Biscate come from the international development sector, which has supported a lot of entrepreneurship initiatives at the national level. There are also a number of private sector initiatives that have been instrumental in the development of the ICT sector and startups in general, companies like IdeiaLab, and initiatives like Standard Bank Incubator and Orange Corners at the Embassy of the Netherlands have created several opportunities for our country.

UX is one of the few Mozambican companies that can develop products, keep them available on the market and, above all, manage to make them profitable. However, it is important that much is done so that this quality becomes common in the national market.

What challenges are holding back UX's growth?

We registered several.

First, Mozambique is a country that is far below the world "Doing Business" index. For companies with high growth potential (startups) like ours, there are no specific funds or support to leverage growth, as well as a large bureaucratic and tax burden that delays the companies' development. To give you an idea, a small company like ours that depends on the personal funds of its partners and that provides digital services is applied the same tax and operational burden that is applied to any other small or medium company, which limits the re-investment income to grow the company.

Second, Mozambique is a country where financial inclusion is not yet significant, and most of our potential customers are not used to or comfortable



making payments for digital services, let alone using their credit card to make payments online.

The other difficulty is with access to the Internet. In a country where there are about 28 million inhabitants, only 7% of the population has access to the Internet, and this is a limitation that makes the market even smaller.

What strategies do you use to face challenges and become resilient?

As a way of adapting to the Mozambican reality with regard to Internet access, UX made its services available through the USSD platform that doesn't require Internet access for its use.

The difficulty in the commercial area of this type of project is that, using the USSD channel, it is necessary to have national mobile network infrastructures and it is quite expensive. To overcome this barrier, a partnership was created with the mobile phone company Vodacom, which offered, as part of its social responsibility activities, the infrastructure it has, and which has also been supporting Portuguese startups and looking for solutions for digital payments such as the M-Pesa.

Biscate is used nationally, but it generates more opportunities in the province of Nampula. What is the reason for this phenomenon?

This is something that even surprises us because our services are not generated specifically for one or the other province, but for the whole country. Nampula is a more dynamic province on this issue of informal work. There are fewer workers registered on the platform compared to Maputo, but there are more customers, and this happens organically. We also associate this issue with the fact that it is the most populous province in the country.

Does Biscate have a relationship with multinationals?

Not at the moment, but that is part of our future goals. Just to give you an idea, about 30 thousand informal local workers are part of the database, in areas such as plumbing, carpentry, construction, among others.

The fact that Biscate is able to connect immediately with workers in all these areas means that we have a very privileged market. Therefore, we saw the future of Biscate as a value-added service for mega-projects and for the expansion that the country is expected to have.





Digital businesses that revolutionize the financial market

As seen around the world, in Mozambique the evolution of digital business has been remarkable, despite the existing obstacles. In fact, it is a phenomenon that has revolutionized the economy, in particular the financial sector. Here are some startups that do business from digital innovation.





Nowadays, the investment management segment needs technological companies capable of analyzing the market in a global way, quantifying risks, competitors, profit possibilities and other issues that should be included in the "Market basket" of anyone who wants to invest.

An example of this is the Institute of Technologies, Innovation and Services (ITIS), which facilitates what is a puzzle for several people: investing safely and, of course, obtaining profitability. The startup was launched in 2012 with the aim of creating a more immersive business simulator, adapted to the local context and the Mozambican ecosystem, allowing people to peek at the national market without risk. To make this possible, the company developed SPEE. A web platform that allows the formation of multidisciplinary work groups for the creation and management of virtual companies, facilitating the simulation of real market processes in Mozambique, such as: licensing, commercial and HR management, cash flow, basic accounting, tax payments, and more. Everything done in a dynamic and practical way. SPEE also seeks international experiences, looking at issues such as the local business reality, innovation, and entrepreneurship, among others.



Nextpay is a Mozambican fintech created by Bytecode Soluções Tecnológicas Lda., dedicated to the development of fast, secure and efficient payment solutions for small, medium and large companies. If these companies want to develop payment solutions that require the application of technical skills, it will no longer be necessary, since the platform is a mobile aggregator that works as an online wallet to make payments for any type of service or product. Available in two forms - web platform and API -, the service facilitates integration with the various payment solutions available in the Mozambican market, providing payment information in a single, simple and easy to use platform. With the information generated, the user receives notifications that inform him, for example, when payments are made or if they are about to expire.



To offer greater security and convenience to its customers, Nexpay offers an easy-to-pay solution based on scanning the QR code, allowing users to make instant payments for any product, at any time. With this solution, the company hopes to reduce excess queueing in supermarkets, the physical use of cards and the risk of card cloning. Due to the weak expansion of digital services in the country, the startup also hopes to contribute to the promotion of financial inclusion and encourage online payments.



In terms of transparency and integrity in the provision of public services, fintechs are also providing good solutions. Orien's Pagua allows the reading of the water meter and the printing of invoices at the consumer's home, making the process transparent and allowing the customer to access all transactions that occur at his home or business using his cell phone.

How it all began? Due to the slowness and lack of transparency in the water consumption register, Nério Cutana, a young Mozambican businessman, decided in 2017 to create a solution to alleviate the "cries for help" from the community in which he lived. Unhappy, the young man proposed to the water suppliers a tool that would allow them to read the water meters and print invoices directly at the customer's home and in real time. Thus, with the mobile application, the consumer monitors all fluctuations in consumption, which differs from the current water consumption accounting process, in which the employee goes to the consumer's home, makes the diagnosis and only a few days later is that it issues the invoice for the consumption of the previous month.



Tablutech is a Mozambican ICT startup, focused on the development of financial technologies. As a company that invests in digitization, records and manual transactions, within savings groups, have always been a concern. For this reason, the company developed ROSCAS, its first product. It is a PCR accounting tool (savings and rotational credits) that allows the registration of groups and their members, as well as their transactions (savings, credits, loans and loan repayments) during each PCR cycle. Despite including middle class individuals, the company's target audience is concentrated on the excluded population, without access to credit and loans.

In February 2020, the platform had more than 27 thousand individual members, of which 83 percent were female, 28 thousand PCR accounts and 800 groups. The startup offers, among others, the integrity of transactional information and security as benefits.



According to the study "The Ecosystem of Digital Financial Services in Mozambique", produced by Financial Sector Deepening Mozambique (FSDMoç) in 2018, in Mozambique the insurance culture "is very limited" and the lack of a specific legal instrument that accommodates digital financial services in the insurance sector is considered a "challenge for insurance companies wishing to innovate", say the operators cited by the study. Despite this scenario, which for some is an obstacle, there are resilient companies that seek to prosper. An example of this is Afinidade, an insurtech that has the "Product / Solution", an online site for the sale of civil liability insurance and roadside assistance. Imagine that your car suddenly stops, while traveling to any destination. Road Assistance via Call Center 24/365 - 24 hours throughout the year may be your solution.

With the deal, the startup facilitates the purchase of civil liability insurance and provides an immediate response to road incidents.



Awarded 3rd place at ITU Telecom World Global SME, in the "Most Scalable Solution" category, this is a startup that has seen exponential growth since its launch. Sure Track, one of its products, is a case management, monitoring and evaluation software system to assist programs with social or health workers who provide services at the domestic level. How? Through its systems, which use the Child Status Index (CSI) methodology and incorporate it in a digital format, allowing the capture of information in a database that can be easily analyzed.

The lack of reliable information that can assist in planning and decision making, resulting in a very low impact of programs to support orphaned and



vulnerable children and other disadvantaged populations is the main problem addressed by the tool. Among other features, it offers a structure to identify the needs of children or beneficiaries, creating individualized and targeted service plans. Due to their nature and field of action, NGOs, governments, health professionals and social workers make up the target group.

What benefit can be obtained? Improving the impact of programs, which generate reports and dashboards allowing quick decision-making with accurate, relevant data, to name an example.



Making remote payments easy and secure in Mozambique and facilitate internal e-commerce, in a country where there are multiple payment channels and buyers have their money dispersed across each one. This is the problem that prompted the creation of Multipay, a payment aggregation service that allows sellers a solution to receive remote payments on any channel quickly, simply and securely in a single free integration. To this end, sellers generate a unique bank reference per sale and share it with the buyer through any means (web page, application, SMS, voice, WhatsApp, etc.). In turn, the buyer uses this reference to pay in his preferred payment channel (MPESA, IZI, Mobile24, ATM, Internet Banking, for example).

For security reasons, payments are notified to the seller and accessible via a web portal, to facilitate reconciliation. Sellers of various types of services and products, especially those operating in electronic commerce, constitute the company's target audience, whose service can also be used by those who do not have a bank or mobile account. On the sellers' side, the company highlights simplicity, autonomy, transparency, security and low cost as beneficial, while for buyers, convenience and portability are the main advantages.

It should be noted that the companies Kamaleon Events - Community Tablet, Tabech - Mobile Care, Dream Solution - Online Tickets, Zip Taxi, Wenadata, Moovi and M-Xitique constitute the group of 14 startups selected by FSDMoç and INCM, which participated in the ITU Telecom World 2018, held in Durban, South Africa. The technological M-Xitique was distinguished in the category "Nomination in Excellence" for providing and promoting innovative ICT solutions with an impact on the solution.





INCUBATORS

IDEIALAB

SARA FAKIR, EXECUTIVE CATALYST AT IDEIALAB

Resilience and market will dictate the fintechs' future in the country

IdeiaLab is a Mozambican company founded in 2010 with the purpose of inspiring entrepreneurs, supporting the development of startups, accelerating the growth of SMEs and promoting entrepreneurship and innovation.

intechs' future in the country depends largely on the resilience of the players operating in the field, as well as "the reception of the market", according to Sara Fakir, one of the company's executive catalysts. "Any and all products can be created, but they have to be consumed and this connection between what is being done and whether [the market] really wants to buy is what will be dictated, and like any other company, fintechs will have a future in Mozambigue".

The manager also explains that if national entrepreneurs are not prepared to respond to market demands, "foreign solutions will invade the country to solve our problems", which is why "we need an orchestration of the fintech ecosystem, bringing the Central Bank for discussions about these startups". "The work of the Central Bank cannot be just that of dealing / regulating commercial banking activity, it needs to open space and encourage the emergence of new financial services", she warns. Bringing the regulator to the discussion table is not the only recommendation left by Sara Fakir. According to the same, "as a country, we need to take a little risk", because "if it doesn't work, it doesn't matter". However, what is verified, in her opinion, is that "everything that constitutes a risk is not done and, therefore, there is no room to innovate and create solutions", although "the Financial Sector Deepening Mozambique tries, in several ways, raise awareness and create this capacity for innovation and diversification of digital services in the country ".

"Any and all products can be created, but they have to be consumed and this connection between what is being done and whether [the market] really wants to buy is what will be dictated, and like any other company, fintechs will have a future in Mozambique"

Shanna Chicalia



With regard to banking, one of the main members of the financial sector, the official says she hopes that this will change the mindset, becoming more innovative and that it will realize the immense opportunities that can be found in collaboration with the various stakeholders (entrepreneurs included) and that this ability to innovate and collaborate is vital to the sector's growth. "The banking sector must realize that it gains more by allowing other instruments or elements of the financial system to develop", warns the entrepreneur, stressing that "it is important that people within banks know the need to reinvent itself as an organization".

Digital ecosystem: education, language and lack of collaboration are obstacles

Asked about the role of IdeiaLab in promoting financial inclusion, the manager replied that her company's intervention is based on "developing entrepreneurial skills, bringing financial education [money management tools, financing mechanism, etc.] within of a group that never found itself doing business". The company bets on women and youth entrepreneurship as fundamental pillars. This is "a target that we thought was excluded from the labor market and formal employment", she explained.

Regarding the evolution of the digital ecosystem in the country, Sara Fakir points out the lack of collaboration between the agents, the language and the quality of education as impediments to its growth, considering that there is "little dynamics in the sector, although there are achievements". "On the continent, we are a periphery because of the language and because we have an education system that when compared to those in Namibia and Botswana is weak. We do not see the link between the agents of the ecosystem [Banking, Government, Entrepreneurs, etc.]. Everyone is alone and isolated". "Collaboration and interdisciplinarity are fundamental for the development of the digital ecosystem", she stresses.

INCUBATORS

ORANGE CORNERS MAPUTO

SARA FAKIR, ORANGE CORNERS MAPUTO

"Collaboration is the key to innovation"

The Orange Corners incubator Maputo is an initiative of the Government of the Kingdom of the Netherlands and its local Embassy, which aims to support young Mozambicans, university students and recent graduates, in the development of their business initiatives. This incubator has been implemented by IdeiaLab since October 2017 and in the three editions of the #Biz incubation program, it has already graduated 66 entrepreneurs. According to Sara Fakir, Executive Catalyst of IdeiaLab and responsible for implementing and promoting Orange Corners, the results are extremely encouraging.

Orange Corners is an initiative that is being implemented in different countries. What are the particularities of the program in Mozambique and how does it differ from the rest?

For Orange Corners Maputo (OCM), a program was designed to serve a young audience, university students and recent graduates. This choice went through a wide debate, in the initial phase of the project, but what was intended was that this initiative could serve as a bridge for job creation. We know that Mozambican families have made a major investment in the education of their children, but we also know that the lack of employment is a real problem in our society, which leaves young people in a situation of vulnerability and frustration. Sooner or later, these situations, in the future, can bring a kind of social upheaval and we want to contribute to avoiding it. Starting in March, we will open the OCM to graduates of technical and professional courses and test the interactions between these two audiences.

For example, in Sudan, Orange Corners has a greater focus on supporting women entrepreneurs and in South Africa (which already has three Orange Corners), at least one of the centers, located in one of the poorest areas of Johannesburg, is targeted to support entrepreneurs in need, that is, entrepreneurs whose businesses have little potential to grow.

Obviously, depending on the audience, the content and content of the programs also change. A particularity of Orange Corners Maputo is that it offers a business English course in its program.

What is #Biz and what tangible results did it have?

Orange Corners develops different activities. #Biz is the incubation program, lasts six months and during this period, young people validate their business concepts and enter the market. In the last three editions, we graduated 66 young entrepreneurs who had access to training, business advice and resources (network, market, visibility, etc.). Last year, and after a year of graduation from the first program participants,

Marlon e k7 Photography



we made an assessment of the impact of the program and found that 82 percent were still in business and confirmed that their sales volume had grown, 76 percent went on to working with a greater number of employees, because this starts to spiral, 'one thing feeds the other'. More than 60 percent of the participants partnered with colleagues and generated good networks for the business. We also found that some of the participants were recruited by big companies.

Your connection with the Embassy of the Kingdom of the Netherlands brings together more partners. Who's involved?

Orange Corners is an initiative of the Dutch Government and is implemented with strong support from the private sector. Partners in this initiative are Shell, bancABC, Heineken, Royal Haskoning, Vodacom and Brithol Michcoma.

Regarding Orange Corners Maputo, were there fintechs within the range of beneficiaries?

Yes. The Orange Corners Maputo program is not related to any specific sector, but we already support some fintechs. Looking at the businesses already supported, those in agriculture and education are at the top, above all, Edutech, which is technology in education. This is noticeable and easy to explain, as innovation occurs at the intersection of diverse knowledge and experiences. A young student or recent graduate, lives the pains of education and knows the problems, so it is easier to propose a solution. The interest in agriculture is more due to what has been said to be the basis for survival, encouraging young people to look to this area. In the space of fintechs we need a greater openness of organizations in exposing the problems to be solved, if these problems are not shared with those who are not in the sector, solutions will hardly arise outside of it. Likewise, we have to see how the financial sector is evolving to allow the creation of an ecosystem favorable to the fintechs' development.

And, in this case, what needs to be done for more fintechs to exist?

In order for fintechs to exist, in my opinion, more than information and training is needed. It takes the will of the different stakeholders in the ecosystem to collaborate. In my opinion, collaboration is the key to innovation and, in this space, I don't see collaboration and openness for sharing.

STANDARD BANK INCUBATOR

SASHA VIEIRA, HEAD OF STANDARD BANK INCUBATOR

"We take digitisation and future proofing of our business very seriously"

At the Standard Bank Incubator, capacity building is the number one priority but access to markets also plays a critical role. Access to the right funding mechanisms is also important for start-ups and the SB Incubator is exploring alternative mechanisms to financing. Shasha Vieira, the head of the Standard Bank Incubator, explain how they contribute for the development of innovative ideas to solve the challenges and which activities are developed to promote and create capacity for start-ups and fintechs and how they are being supported.

What is the strategic vision of Standard Bank Mozambique for the strengthening of the start-up ecosystem and in particular for Fintechs?

To answer this question, I believe it is important to first understand where Mozambique is ranked currently in terms of the maturity of its start-up ecosystem in comparison with the rest of the world.

"The Global Entrepreneurship Index GEI (available at <u>www.gedi.org</u>) is a composite indicator of the health of the entrepreneurship ecosystem in a given country. It measures both the quality of entrepreneurship and the extent and depth of the supporting entrepreneurial ecosystem."

If we look at the GEI report^{*} for 2018, Mozambique ranked only 124 out of 137 countries globally, with an index rating of 14%. Of the 14 areas that get measured, Start-up skills, Risk Capital, Human Capital and Internationalisation had the lowest scores. Below are some of the areas where we see the need to focus on.

Start-ups whether it be tech start-ups (including Fintechs) or any other type of business encounter many of the same challenges. At the Standard Bank Incubator, capacity building as part of our strategic model, is the number one priority. It is imperative that we design and execute on programmes that equip the youth and aspiring entrepreneurs with the ability to understand the science and methodologies behind starting a new business in order to develop innovative ideas but more importantly how these can be turned into sustainable businesses. Tech start-ups typically have the ability to build interesting applications but very few have the know-how and capability to become profitable and scale.

Access to markets also plays a critical role. If there are little to no market opportunities, then ideas and solutions become redundant. At Standard Bank,





Shanna Chicalia

we have challenged ourselves to think of ways that we can partner with local Mozambican start-ups and Fintechs to share our specific challenges and those of our customers and determine their ability to solve for these. This creates an opportunity to link into our supply chain and possibly those of our clients. We believe these efforts will bear fruition in the future as these types of businesses mature and we give them not only our business but access to our expertise and other resources.

Lastly but certainly not least important, is access to the right funding mechanisms. Although we have developed customised products in our lending area for SME's that allow shorter period loans with less arduous requirements, loaning money from a bank is not always feasible or the right form of start-up capital for a seed stage business. To this end we are exploring alternative mechanisms to financing to ensure the entrepreneurs are given the right options suitable to their needs and stage of maturity.

What is SB Incubator's contribution for the development of innovative ideas to solve the challenges that Fintechs face and others?

The Fintech space is still considered to be a very new and unexplored area within the tech ecosystem in Mozambique. To date, there are only a handful of Mozambican start-ups that have emerged and been able to show some level of success.

To understand the challenges faced, organisations need to show a willingness and interest to want to partner with Fintechs. Given that digitisation is a key focus area for Standard Bank, we are committed to creating and supporting the necessary platforms that will help to understand the constraints faced and how these are overcome as well as how we as Standard Bank can become not only an advocator and promoter of Fintechs but also a valued business partner.

However, in order to achieve this we need to partner with other key stakeholders to share learnings and develop solutions and hence why we are proud to support initiatives such as the Fintech Conference hosted by FSD Moçambique Lda, on the 14th and 15th of February 2020.
We have been a proud sponsor of the MozDevz Programming Community for the last three years and supporting their efforts to enable Mozambican programmers and coders get access to good quality training, the tools and resources they need to develop good quality applications.

What are the activities developed in with the aim of promoting and creating capacity for start-ups and Fintechs and how are they being supported?

Standard Bank Incubator has hosted and sponsored a number of capacity building programmes since the Incubator's official inauguration in August 2017. Our flagship entrepreneurship bootcamp programme, #iDeate, delivered in collaboration with Ideialab has been a great success with over 340 participants trained to date in over a year and a half and a number of alumni winning international awards and competitions as well as securing funding for their projects.

We have been a proud sponsor of the MozDevz Programming Community for the last three years and supporting their efforts to enable Mozambican programmers and coders get access to good quality training, the tools and resources they need to develop good quality applications.

Since 2015, Standard Bank has been sponsoring the Seedstars Maputo competition which is part of the Seedstars World Global Summit. There have been six local winners who have gone on to compete in the Africa Regional Summit and the Global Summit in Lausanne, Switzerland. Last years' winners won prizes of up to \$75 000 in in-kind technology prizes as well as access to a three-month Investment Readiness Programme.

As a Group, we are looking at formal structures through which the bank can engage and partner more with Fintechs and other start-ups, recognising the value in their agile solutions, both in the payment and collections space and beyond. The world is evolving, and we take digitisation and future proofing of our business very seriously as well as the importance of collaborations. We look forward to implementing and maturing these frameworks going forward in Mozambique.





\triangleright LOOK FROM OUTSIDE

JOÃO FREIRE DE ANDRADE, CO-FOUNDER OF PORTUGAL FINTECH AND HEAD OF BIG START VENTURES

Mozambican companies are more focused on key issues in the financial sector

Portugal Fintech Report 2019 was launched and we went to take a look at the context and trends of Portuguese fintechs, and to find out what Portugal Finlab's purpose is and its connection to financial regulatory institutions, through the eyes of João Andrade, co-founder of Portugal Fintech and head of BiG Start Ventures. João Andrade reveals the main differences between startups in Portugal and Mozambique as well as his view on the role of fintechs in promoting financial inclusion.

What outlines the fintechs scene in Portugal?

At the end of October 2019, Portugal Fintech Report 2019 was launched, the largest study on the sector in Portugal. The conclusions are evident: Fintech is growing rapidly, there are more conditions in Portugal to do so and there is more and more cooperation with banks and insurance companies.

This movement was evident and inevitable. Most incumbent banks and insurance companies initially resisted or ignored it, but today cooperation with fintechs is already a widespread practice in the industry. The advantages are numerous: if on the one hand the fintechs have an agile culture, innovative technology and are continually improving their products in rapid development cycles focused on the customer, the incumbents have the customers, the confidence of the Portuguese and the necessary licenses.

What data reflect these trends in Portugal?

Currently, 80% of Portuguese fintechs are B2B (Business-to-Business) companies and 46% of the founders stress that it is increasingly easy to work with banks and insurance companies.

The 30 most promising companies offer the Portuguese economy 210 million euros in capital withdrawals and more than 1,100 jobs created. Data that is still impressive because more than 50% of these companies were created in the last three years.

Even the relationship with regulators, which for a long time was identified as one of the main obstacles to innovation, deserved an indication of improvements in accessibility and dialogue by more than 50% of the Fintechs' founders. Much of this positive note can be explained by Portugal Finlab - the innovation hub coordinated between the Bank of Portugal, CMVM (Securities Market Commission), ASF (Insurance and Pension Funds Supervisory Authority) and



Portugal Fintech - created to clarify, in regulatory terms, innovators in the financial sector.

The most pronounced negative note was for the Government, with only 14% of the founders considering that the executive is on the right path. This number is not surprising if we consider the exaggerated tax burden that continues to fall on the Portuguese economy and support for entrepreneurship based on the "fireworks" of the Web Summit but little focused, integrated and consequent to differentiate Portugal in the Fintech themes.

Fortunately, Portugal continues to have the most important thing: the private initiative of the founders, Portuguese entrepreneurs with the courage to challenge the frontiers of the current offer in the financial sector. Proof of this dynamic and improving conditions for Fintech is the birth of Fintech House, the first national co-work dedicated to a single technological vertical. It opened its doors in December at Palácio das Varandas, in Praça da Alegria, in Lisbon.

To what extent is continuous ecosystem mapping relevant to fintechs?

This mapping is very important for several reasons. First, it makes it possible to organize and aggregate information so that national and international investors can, in a simple, credible and independent way, look at the fintechs' information and its ecosystem. Second, it allows quality information to reach the incumbent players, which is one of the objectives. This is particularly important for B2B (business-to-business) startups but also for banks and insurance



companies looking for solutions to serve their customers in a modern, innovative and seamless way, but at the same time, cost-efficient. This is a natural marriage to achieve this paradoxical effect.

It is also important for final consumers to know what is being done in the country. If there is a quality filter, this mapping is even more relevant.

Finally, it is an important piece for creating a community between innovators and different *stakeholders*.

Portugal Fintech has been bringing together entrepreneurs and investors, nationally and internationally. It has joined fintechs to the incubators of financial institutions. How does this happen and what have been the results?

In fact, the incubators of financial institutions are still an unrealized reality in Portugal. The strategy,

until now, has been that of direct connections to those responsible for innovation or business areas in question from the various players in the national and international financial sector. The results have been reflected in the shortening of long sales cycles, one of the most negative points that the ecosystem has identified in the market.

What is Portugal Finlab's purpose and how does it link to financial regulatory institutions?

The purpose of Portugal Finlab is to allow, whatever the size of the institution, it has access to regulators in order to clarify how companies and new initiatives can be 'regulated by design'. In the first edition in which there were 40 applications, 30% of which were international, 40% of the companies received feedback from at least two financial regulators. This I had the pleasure of getting to know the Mozambican fintech ecosystem in 2018. In addition to having been a very enriching experience, meeting so many good technological entrepreneurs working for Africa and from Africa, I realized that the challenges are substantially different from that of Portuguese fintechs. Mozambican companies are more focused on key issues in the financial sector, such as moving money within the country, remittances from emigrants in neighboring countries and money savings. These themes are always closely related to financial inclusion.

particularity of bringing together the different regulators is also a distinctive factor of the initiative.

How do you see the context of fintechs in Mozambique? Is there a bridge between Portuguese and Mozambican fintechs?

I had the pleasure of getting to know the Mozambican fintech ecosystem in 2018. In addition to having been a very enriching experience, meeting so many good technological entrepreneurs working for Africa and from Africa, I realized that the challenges are substantially different from that of Portuguese fintechs. Mozambican companies are more focused on key issues in the financial sector, such as moving money within the country, remittances from emigrants in neighboring countries and money savings. These themes are always closely related to financial inclusion. Portuguese startups, perhaps due to the small size of the country, have opted for a more B2B positioning and, in this sense, I believe that they can not only deliver features to local fintechs, but also to the sector as a whole and collaborate with mature players, such as banks and insurance companies.

BiG Start Ventures invests in startups that innovate in areas such as finance (fintech), insurance (insurtech) and cybersecurity. How does BiG intervene in Mozambique?

BiG in Mozambique was involved in the structuring and implementation of the Public Offer for Sale (OPV) of Hidroeléctrica de Cahora Bassa (HCB), one of the main capital market operations in Mozambique. This operation relied on innovative methods of subscribing shares, namely through a USSD mechanism and an APP for smartphones developed just for this purpose. These innovative concepts allowed the purchase of shares by non-bank persons, who live in remote areas of the country and who otherwise would not have access to this type of financial services.

Do you think that fintechs can help Banking in Mozambique in the battle for financial inclusion?

I have no doubt that yes! Fintechs have, among many, three characteristics that are key to unlocking barriers to financial inclusion: they democratize access to services that would not have been available before for a large part of the population, and they do so by leveraging technology and innovation to bring cheaper models and through accessible channels, often offering the same product with better conditions in these aspects, but many times also changing the product so that it is better suited to different targets. This is the example of BIMA, which not only provides insurance and healthcare through digital channels and at affordable prices to the population in need of these services, but is also capable of breaking classic insurance into micro-insurance, which becomes more flexible and meet the needs of this specific target.

ACCION FINTECH TRENDS

Global trends changing the future of fintech and key challenges to its expansion into underserved markets such as Mozambique

by Amee Parbhoo with contributions by Brian Kuwik an

with contributions by Brian Kuwik and Vikas Raj

s a global nonprofit and investor in fintech for inclusion, Accion stays on top of the key global trends in our dynamic industry and the markets we work in¹, especially innovations in products and services such as the growth of neobanks in emerging markets, innovative models in insurtech, or renewed focus on financial health. Beneath these innovations, the foundations of our industry are moving. As the world shifts, the landscape of fintech for inclusion will be affected — from the ecosystems to the business models and even the customers across markets including those as underserved as Mozambique. We have identified three key trends:

Tech platforms take over. In many of our markets, large tech platforms² like Facebook, Google, Amazon, and Ant Financial have begun to offer

financial services, which could offer new ways to reach substantial numbers of customers who are currently underserved. These companies will continue to expand into Africa, Asia, and Latin America. As they do, we expect that small business and consumer lenders, as well as digital payments companies, will have to explore ways to remain relevant in their markets. This threat is heightened as newer and more local platforms in sectors like ride-hailing or food delivery also begin to offer financial services, which is already happening in Brazil³ and Indonesia⁴.

Customers have more fintech options. Fintechs are operating in an increasingly crowded space. As a result, it is getting more expensive to acquire customers online⁵ and getting more important for companies to focus on the right acquisition channels to reach new customers they can effectively serve. This will involve finding win-win solutions with channel partners who have direct relationships with customers and are looking for their own ways to build a stronger value proposition. We are learning from what our own portfolio companies are doing working with

¹ https://medium.com/accion/7-fintech-trends-to-watch-in-2018-3fa96310732f

² https://www.cgap.org/blog/series/platform-economy-what-it-means-financial-inclusion

³ https://www.forbes.com/sites/eladnatanson/2019/07/01/from-food-delivery-to-fintech-the-new-app-convergence-in-brazil/#48a390d257cc

⁴ https://www.forbes.com/sites/eladnatanson/2019/05/14/indonesia-the-new-tiger-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e4544c76ceinter-of-southeast-asia/#68e454c46ceinter-of-southeast-asia/#68e454c46ceinter-of-southeast-asia/#68e454ceinter-of-southeast-asia/#68e454ceinter-of-southeast-asia/#68e454ceinter-of-southeast-asia/#68e454ceinter-of-southeast-asia/#68e454ceinter-of-southeast-asia/#68e454ceinter-of-southeast-asia/#6

⁵ https://liftoff.io/resources/report/mobile-finance-apps-2019/?__hstc=241307293.228d43615f0d5539896fac05c1a-

⁵f6ac.1561572502255.1561572502255.1561572502255.1&__hssc=241307293.1.1561572502256&submissionGuid=43ac8e38-041d-4a47-8ddf-1ad93 9e60778



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As fintechs build and scale their businesses and expand into more underserved markets such as Mozambique, they will need to adapt to realize these opportunities

retailers (like Toffee¹, which sells 'bite-sized' insurance through retail partners in India), manufacturers (such as Pula², which sells insurance to smallholder farmers through seed and fertilizer providers in Africa), and supply chain players (like Tienda Pago³, which provides inventory finance for MSMEs through FMCG distributors).

Fintech needs to do more. While the vision of fintech was an unbundled world where customers could pick and choose what they needed from an à la carte menu of apps and websites, many people⁴ still have an appetite for an all-in-one solution. So, fintech companies are making moves to expand their offerings beyond their initial use cases — providing insurance on top of credit, business management tools along with payment solutions, etc. We expect to continue to see new digital banks emerge, offering customers better services across all of their financial needs.

With an increasingly competitive landscape in many markets and the cost of new customer acquisition increasing, the focus for many fintechs is shifting to how well they can retain customers and expand into more underserved markets. There are many strategies which can improve retention — such as introducing better terms or new products — but a major part of it will be improving the customer experience for underserved customers. As fintechs build and scale their businesses and expand into more underserved markets such as Mozambique, they will need to adapt to realize these opportunities and overcome two key challenges:

Finding the right balance between tech and touch. Customers' needs and preferences are evolving as technology becomes cheaper, faster, and more readily available and as customer attitudes to this technology and financial services in general shifts. These changes present tremendous opportunities for fintechs to reach more of the underserved, but it will require them to take a more nuanced view of specific customers' needs and preferences. While customers are becoming more comfortable with using technology, things are still slow to change. Worldwide, nearly 2 billion of 5 billion mobile subscribers remain offline⁵. In Mozambigue, it is estimated that more than 90% of subscribers are offline⁶. Even where they have access to affordable handsets, reliable data connectivity, and stable power, many people find accessing digital financial services challenging. After all, these customers may not be familiar or comfortable with technology or financial products, and they may not have reason to trust financial service providers. The result is that fintech companies will need to continue balancing new digital technologies with appropriate human interactions7 to engage, educate, and support their customers.

Protecting customers matters more than ever. With more underserved people and businesses

¹ https://toffeeinsurance.com/

² https://www.pula-advisors.com/

³ https://www.tiendapago.com/

⁴ https://www.pymnts.com/news/banking/2018/unbundled-banking/

⁵ https://www.gsma.com/r/mobileeconomy/
6 https://researchictafrica.net/2019/04/04/ict-in-mozambique/

⁷ https://www.accion.org/the-tech-touch-balance



accessing digital financial services, there is a growing awareness of the need for stronger consumer protection¹ – preventing overindebtedness, ensuring data privacy and security, communicating transparency in pricing, and much more. The introduction of GDPR has shifted data privacy laws in the European Union. While data protection remains a largely unregulated space² in many emerging markets including Mozambique³, that is changing⁴. We will see consumers, investors, and regulators take a closer look at these issues, and fintech companies should be proactive in evaluating their consumer protection measures. The Center for Financial Inclusion at Accion's Smart Campaign recently drafted Client Protection Standards for digital credit⁵. Expectations for fintechs to protect customers will continue to grow. We have already been working with our portfolio companies to build out responsible practices, particularly around data protection (see our resource for fintech startups here⁶).

In 2020, as the landscape shifts in many markets, fintech for inclusion will continue to grow globally and offer new opportunities for customers to access and use financial services. With many mobile subscribers offline, Mozambique has relatively low levels of fintech adoption by consumers and small businesses and few protections are in place. Key stakeholders should take steps to improve Mozambique's ecosystem and regulatory environment to keep pace with these global trends and attract more investment in fintech for In 2020, as the landscape shifts in many markets, fintech for inclusion will continue to grow globally and offer new opportunities for customers to access and use financial services.

inclusion.

Accion is a global nonprofit committed to creating a financially inclusive world with a pioneering legacy in microfinance and fintech impact investing. Amee Parbhoo is the director of investments with Accion Venture Lab, Accion's seed-stage inclusive fintech investment initiative. Brian Kuwik is Accion's chief regional officer for Africa, and Vikas Raj is managing director at Accion Venture Lab. For further information, visit https://www.accion.org.

4 https://www.standardmedia.co.ke/business/article/2001332615/no-crb-listing-for-loan-defaulters-before-6-months?__s=sebus7a8bmixxhrbcir

6 https://www.accion.org/data-protection

¹ https://www.accion.org/how-startups-can-both-empower-customers-and-protect-their-data

 $^{2 \}quad https://qz.com/africa/1271756/africa-isnt-ready-to-protect-its-citizens-personal-data-even-as-eu-champions-digital-privacy/data-even-as-eu-champions-data-ev$

³ https://www.dlapiperdataprotection.com/index.html?t=law&c=MZ

 $^{5 \}quad https://www.smartcampaign.org/about/smart-microfinance-and-the-client-protection-principles/digital-credit-standards and the standards are standards are standards and the standards are standards$

DIGITAL FRONTIERS INSTITUTE

Capacity Building in Fintech

e know from our Fintech Talent Africa reports¹ that there is a critical shortage of people with the knowledge and experience necessary to promote the growth of digital financial services (DFS) worldwide. Employers, regardless of location, report how difficult it is to find and retain talented and skilled resources in this rapidly growing and fast-moving industry. This human capacity gap is leading to escalating human capital costs, hiring delays and stalling business progress and success.

We can see from responses that leaders do understand the importance and value of talent, but don't have the necessary skills or capacity to be effective in this area. Organisations regardless of size, need to develop strategy on how to attract, remunerate, retain and develop talent to stay ahead in this competitive industry.

Start-ups and smaller organisations in particular can struggle with affordability and budgetary constraints. Flexible working, location of offices for commuting, relaxed dress code and working from home were non-traditional benefits reported as being important. Broadening remuneration packages beyond a focus on salary can offer a competitive edge.

Once you recruit talent it is important to invest in their development and engagement. Our survey showed that only 30% of respondents felt they received appropriate training and less than a third had a career discussion with their manager. Provide opportunities for learning, align your employees' strengths and passions to their roles, and implement succession/career planning. Organisational culture both attracts and retains staff, so ensure you make it a great place to work.

Studies by The World Economic Forum and McKinsey recognised gender-diverse teams increase business performance. Yet 77% of respondents reported difficulty with recruiting female talent, 39% of the team members and 43% of senior/executive teams are



women. Set a focus and develop policy around hiring women and gender parity, implement family-friendly policies, and introduce mentorship programs to cultivate female talent.

The capacity gap is likely to remain with us for the foreseeable future. Differentiate yourself from other organisations by creating a workplace that will appeal to the talent you wish to hire and ensure your leadership team have the skills and strategy in place to recruit, remunerate and retain talent.

¹ https://www.digitalfrontiersinstitute.org/the-institute/2017/12/08/explore-africas-fintech-talent-landscape-with-the-digital-frontiers-institute/



A LOOK FROM OUTSIDE

MATTEO RIZZI, ENTREPRENEUR AND COFOUNDER OF WWW.FINTECHSTAGE.COM

The role of the regulators is essential

Matteo Rizzi is an unconventional entrepreneur and a book author with two decades of experience in Financial Services. For Three years in a row (2014-2016), Financial News has nominated Matteo as one of the "40 most influential fintech executives in Europe". In 2008 he co-founded Innotribe, the innovation arm of SWIFT and launched the Innotribe Startup Challenge, the first global deal flow of its kind. He left SWIFT in 2013. In 2015, Matteo created and cofounded www.FinTechStage.com, a platform for Investors, Innovators and startups to foster fintech innovation globally, with some 50+ missions and events all over the world. In this edition, he gives his vision about global and African industry energized by fintechs.

How do you see the global and African industry energized by *fintechs*?

I believe that African ecosystem has all the assets to leapfrog the innovation that *fintechs* have brought in the rest of the world. There is an opportunity given by the financial inclusion and the financial education aspect, combined with a regulation that is clearly open to ease the path to innovation and - more and more good entrepreneurs willing to build sound businesses.

In 2015, you created and co-founded www. FinTechStage.com, a platform for Investors, Innovators, and start-ups to foster fintech innovation globally. In face of this platform what are the most attractive countries for fintechs in the world?

It depends how you look at it: we created Fin-TechStage because we believe (and back then it was the case) that fintech innovation was worth exploring beyond the usual suspects hubs like London, Singapore or New York, and back then it was quite a novelty.

Right now we have Fintech Associations all over the planet, sandboxes to test and try new ideas, Fintech has evolved in a commodify almost, taken for granted in many places already as a capability. Truth is that emerging markets, with Africa and South East Asia above all, are the one with most potential because of the scale and the growth rate.

How is Africa and its entrepreneurs responding to the innovative challenges?

We launched a new initiative, recently, called Timepledge.org where we bring coaches and entrepreneurs from outside of Africa (where the platform started but there is no reason not to extend it to other markets) and pair them with local coaches when possible to help early stage startups and first time entrepreneurs to better understand how to bootstrap



Fintech startups rarely find in banks a source of capital in their early phase, and Africa makes no exception. There are a lot of opportunities and platforms to make your idea visible, but truth is risk appetite for early stage funding is a challenge. Donors money is not easy to structure, and I think it starts by a better training and business building skills that should increase the quality and the preparation of the entrepreneurs.

their business, how to pitch their idea, to structure their model, basically all the soft skills required to become a better entrepreneur.

In one month of activity we touched over 200 entrepreneurs in three countries (Kenya, Uganda and Nigeria) and the feedback has been phenomenal.

Africa is raising, there is no doubt. The challenge now is to harmonise the ecosystem and to push for interoperability.

One of the main obstacles for fintechs in Mozambique is the lack of funding. From your experience with other fintechs in the world, what kind of alternatives do startups have in addition to conventional banking?

Fintech startups rarely find in banks a source of capital in their early phase, and Africa makes no exception. There are a lot of opportunities and platforms to make your idea visible, but truth is risk appetite for early stage funding is a challenge. Donors money is not easy to structure, and I think it starts by a better training and business building skills that should increase the quality and the preparation of the entrepreneurs. When you observe the different ecosystems, good entrepreneurs always get the money, and there are plenty of examples in Africa. Crowdfunding might be a good alternative to this, but in my opinion needs to be structured in a way investors understand the market gaps and the opportunities in a rational, data driven way.

You devoted time in building Fintech eco-systems, by bringing together what you believe to be the 5 pillars of each financial innovation initiative: the incumbents, the entrepreneurs, the venture capitalists, the regulators and the technology partners. Is this the key for success or can we also ad the academy to the formula?

I think the fact that we have founded www.timepledge.org says it all. Academia as per the catalyst to give the tools and the business.

Knowledge to the entrepreneurs of tomorrow. Actually even when we name the different ecosystem players They are now six players, not five anymore!

In my last book "Talent & Rebels, dealing with



corporate misfits" I actually talked a lot about how incumbents must be open to work with different type of Talent if they want to play the innovation game and survive.

You've been in Mozambique for a panel in Moztech conference, invited by FSD Moç, where you spoke about Fintechs and their importance for the financial inclusion. You said Mozambique is an enormous opportunity for financial inclusion and startups to thrive. What makes you think that?

Three things: Huge opportunity for the rural areas, now that technology will enable better connectivity and widen the digital economy footprint; The fact that there are a number of international incumbents that are already working with finTechs and collaborating with the Portuguese speaking ecosystem; The openness of the central bank and the regulator (including the Telcom regulator) to push for fintechs to develop. It took a while, but is never too late to catch up and learn from other experiences, with the right guidance. The role of the regulators is essential, and I am very pleased Central bank in partnership with FSD Moç launched the Regulatory Sandbox, which was the second in Africa right after our first fintech panel.

How do you predict the evolution of fintechs in Mozambique? Witch trends can we expect?

It will all depends on the degree of collaboration and agility of the different players. You need everyone to play his own part, and there are plenty of models we can learn from. Creating a place for innovation to thrive and where the stakeholders can get together and experiment and share and make life easier for the investors to check and evaluate opportunities would be a great start.





CARLA FERNANDES, DIRECTOR OF THE FINANCIAL INCLUSION OFFICE

"Genuine innovation" is one of the primary conditions for participating in the Regulatory Sandbox

The Bank of Mozambique Regulatory Sandbox is a regulatory regime that allows emerging financial and non-financial institutions to test their financial products and services; business models and innovative solutions. The platform adds an innovation hub - a space that brings together companies, regulators and providers, specialists in the area of innovation, among others, to debate and create an ecosystem that stimulates innovation. The BM's mission with the Sandbox, according to Carla Fernandes, until February director of the Financial Inclusion Office, is to promote financial inclusion through digital channels.

How does the Sandbox work and what are the expectations of the Bank of Mozambique regarding this platform?

The Regulatory Sandbox of the Bank of Mozambique (BM) is a regulatory regime that allows emerging financial and non-financial institutions to test, in a real environment and for a certain period, their financial products and services, as well as innovative business models and solutions, under BM monitoring.

Credit institutions, financial companies, payment service providers and other financial institutions subject to BM's supervision may participate in the Regulatory Sandbox, under the terms and conditions established by the regulator.

The Regulatory Sandbox adds an innovation hub, which is a space that brings together emerging entities, established and active companies, regulators and providers, specialists in the area of innovation, among others, to jointly debate and create an ecosystem that stimulates the innovation, through the exchange of experiences in the form of thematic dialogues with experts, as well as events.

The Sandbox is coordinated by BM, through the Financial Inclusion Office, which ensures the daily management of the activities developed in it, and by a Sandbox Project Monitoring Committee, which evaluates all phases during participation.

The Sandbox is carried out for a period of about 1 year, divided into four main phases, namely, the Participation Authorization phase, followed by Preparation for tests and conducting tests, culminating in the Evaluation and presentation of results.

The Regulatory Sandbox arises at a stage when, in the Mozambican market, a remarkable development of financial services offered through digital platforms, created by financial technology institutions (fintechs), especially startups, is observed.

With the creation of the regulatory Sandbox





and the respective innovation hub, the BM intends to promote financial inclusion, increasing the levels of access and use of financial services, through digital channels. In this context, the BM outlined the following objectives: a) Promote the testing of financial products and services, business models and innovative solutions, and ensure the identification of risks and the adoption of measures aimed at their measurement, management and mitigation, as well as the protection of financial consumers; b) Promote competition and efficiency in the national market, through innovative financial technologies; c) Create an ecosystem that stimulates innovation and encourages the improvement of ideas, from the design phase to the prototype stage; d) Promote debates that explore specific themes, as well as harmonize ideas in the development of technological solutions for the financial sector; and e) Promote the introduction, on the market, of financial products and services, business models and innovative solutions that contribute to the improvement of security, convenience and reduction of commissions, among other charges, as well as the increase of financial inclusion in the country.

What conditions were imposed so that fintechs or technology companies could join the initiative?

There is a set of ten criteria for the eligibility of projects in the Regulatory Sandbox. The "genuine innovation" factor is one of the primary conditions for participating in the Regulatory Sandbox. However, the following requirements have been established: The project must be aimed at the national market; The project must offer direct and indirect benefits to the client, as well as to the financial system, with regard to access, use, security, quality, efficiency and diversity of financial solutions, products and services; The project must not have legal or regulatory coverage or the existing legal or regulatory coverage must prove to be inadequate or insufficient; The project must present solutions ready for testing, with technical and financial capacity for its realization; Security measures must be taken care of; The post-Sandbox business implementation plan must be effective; The project must present solutions that respond to the areas of financial activity determined by the BM.

The solution to be tested should ultimately contribute to financial inclusion in its various The solution to be tested should ultimately contribute to financial inclusion in its various pillars, namely, access to and use of financial services, strengthening of financial infrastructure, consumer protection and financial education.

pillars, namely, access to and use of financial services, strengthening of financial infrastructure, consumer protection and financial education.

Currently, how many fintechs are benefiting from the initiative and what kind of activities are they carrying out with BM'S support?

From a set of more than 20 candidates, in the first edition of the BM's Regulatory Sandbox, five fintechs were selected, after the selection and authorization process, of which four completed the testing process, namely Mukuru, which remits funds, Robobo, PayTek and Ekutiva, which are aggregators of payments.

One of the pressing issues is the creation of a regulatory framework for fintechs. To what extent can the platform help designing this picture?

The first edition of the Regulatory Sandbox streamlined efforts made to approve specific regulations for the operation of payment service providers in the country. In addition to promoting the introduction, on the market, of financial products and services, business models and innovative solutions, the BM's Regulatory Sandbox aims to promote the testing of solutions, products and services, whose legal coverage is insufficient. In addition, through its innovation hub, several topics related to innovations in financial products and services may be deepened further, with a view to establishing its regulatory framework.

What conclusions does BM draw from the experience with the fintechs in the Sandbox?

The interaction with the fintechs through the Regulatory Sandbox allowed the BM (i) to follow the ongoing developments in terms of the innovations implemented by digital financial services; (ii) guide the implementation of solutions with a view to mitigating financial risks, especially those related to financial stability; (iii) propose legal and regulatory measures, in order to remedy the gaps in the implementation of technological solutions introduced by fintechs; and (iv) contribute to the improvement of channels for access and use of financial products and services, as well as levels of financial inclusion.

MASSINGUE APALA, GENERAL DIRECTOR OF INCM

"Mobile wallets are revolutionizing the financial sector hugely"

The National Communications Institute of Mozambique has been supporting fintechs and their telecommunications infrastructures have been contributing to the ecosystem of digital financial services, in particular that of digital payments. Massingue Apala, the institution's general director, is of the opinion that mobile wallets are reaching where traditional banking doesn't, promoting financial inclusion. INCM, as regulator of the communications sector, looks at infrastructures and in its position as a great repository of information, points out some challenges to face.

What is INCM strategic vision of fintechs and technological innovation in Mozambique?

At INCM we identify with the fintechs. They are an asset in promoting financial inclusion in Mozambique, so much so that we support the private initiatives of these companies, by promoting and encouraging their development. For example, we have already taken Mozambican fintechs to Durban in South Africa twice, to participate in an international ITU Telecom event, in which some have won prizes. Last year [2019], we also took some companies to Budapest-Hungary, to an international telecommunications forum, in which these companies presented, mainly, digital payment products and solutions and some of these startups came out on top. Therefore, our strategic vision is that we identify with these companies and support them always and as much as our conditions allow.

What was the event that took place in South Africa?

The event that took place in South Africa is the same as the one that took place last year

in Hungary and is called ITU Telecom World. This year, we are thinking again about taking some startups to participate in the same event, which this time will take place in Vietnam.

What has been the contribution of the Telecom sector to the ecosystem of digital financial services, particularly digital payments?

I believe that the Telecom sector contributes greatly to the ecosystem of digital financial services. First, it contributes to its own Telecommunications infrastructure, because for financial services to exist, there must be infrastructure supporting it. Second, the mobile phone today is the great asset for the population, because it also serves to make payments and transactions, which contributes to financial inclusion. There are places where traditional banking doesn't



exist in this country and the mobile phone at these points has been an asset.

On the one side, infrastructure, but on the other, regulation. Right?

Regulation of the Telecomm sector always combines with that of the financial sector. Therefore, here the two regulators must create platforms for unity and mutual communication, so that digital financial services work in Mozambique.

The country has registered a good development on mobile wallets, a fact that has been helping financial inclusion especially in remote areas. How do you envisage these digital services to help the financial sector in the near future?

I think that mobile wallets are revolutionizing our country's financial sector greatly. In Mozambique, traditional banking doesn't reach the entire population and with the emergence of mobile wallets in rural areas, digital currency has become a means of use for those populations, which don't have traditional banking coverage. Therefore, mobile wallets are helping immensely in financial inclusion, and they are also expanding the sector to other areas.

What contribution has INCM made to make the interconnection of the various systems for data sharing viable and operational?

INCM, in the Telecom sector, is a large repository of information, specifically of data from the registration of SIM cards. These data reside at INCM, which is receptive to collaborate with other entities to share them. We are already working with some institutions to make data sharing possible, because our responsibility is to maintain this data, update it and then share it.



With the evolution of digital banking, the first challenge we have is that of infrastructure, because in order to have a digital banking system, a communication network, electricity and identification documents are required.

What are your concerns regarding the protection of that data and privacy, as you have the managers' role?

It is clear that from there challenges arise. First, the issue of theft, data security and citizen privacy. And we have to see how we deal with this issue, because, in fact, the theft of that data and the violation of users' privacy can happen. This is a concern, so we have to work hard.

What measures are currently being taken?

At the moment, there are still no measures [to prevent data theft and violation of users' privacy], because we are at a preliminary stage. We will work with other entities also involved in data protection and then we will see what we do about the privacy of that data.

What are the main challenges in the area of technologies in view of the evolution of digital banking?

With the evolution of digital banking, the first challenge we have is that of infrastructure, because in order to have a digital banking system, a communication network, electricity and identification documents are required. The second challenge has to do with regulation, so we need to have adequate laws and regulations. This is a new area in the country and we need to see how we are going to regulate the sector with appropriate laws. The other challenge concerns the security of digital applications, at the terminals and with the user himself, in order to prevent theft. These are the three major challenges.

How can the Spatial Development Program (PDE) be a benefit, as it produces data that can be used by banks and other organizations?

Coincidentally, the PDE is hosted here at INCM. We have a Memorandum of Understanding with the PDE for the exchange and sharing of data. We think the project came in handy, at a time when the country needs data and an entity that stores and shares it with other entities, either public or private. We believe that INCM's activities are beneficial, because, for example, it helps us to expand the telephone network in the country. We know that there are areas not covered by telecommunications services and the mapping of these areas helps us to expand these services. We, as INCM, have our arms opened and support these initiatives, so we collaborate not only with the Central Bank, but also with the Financial Sector Deepening Mozambique (FSDMoç).





PLAYERS

SALIM VALÁ, PRESIDENT OF THE MOZAMBIQUE STOCK EXCHANGE

"Fintechs are a support of excellence"

The Mozambique Stock Exchange (BVM), in partnership with FSDMoc and other institutions in the sector. have been developing actions in order to strengthen the ecosystem of financial startups. For Salim Valá, the institution's Chairman, "stock exchanges 'all over the world' use technological platforms as a daily work tool". However, in Mozambique there are still no fintechs listed on the stock exchange. Valá points out the lack of knowledge about the role and advantages of BVM and the corporate structure as the major challenges.

What is the Stock Exchange's strategic vision towards fintechs or technological companies?

In the world, stock exchanges use technological platforms as a daily work tool. Nowadays, trading, registration and settlement systems are based on technologies. We regard this vision of using technologies as a permanent means not only of internal work, but of interaction with customers and stakeholders as fundamental. In the capital market ecosystem there are several actors, including stockbrokers, financial institutions, the regulator, insurance companies, tutelage, investment funds, etc., so we need to maintain a permanent dialogue and the fintechs are a support of excellence, which allows to reach further and in real time, as well as a mechanism to maintain a permanent interaction with customers, better understanding their demands, their desires, perspectives and challenges. We have a partnership with ITIS (Institute of Technology, Innovation and Services) that starts from a vision of BVM to work with a dense landscape of institutions that use technology as a fundamental means to reach their customers and obtain excellence in production, dissemination and selling of their services.

What has been the real contribution of BVM to the viability and operationalization of financing mechanisms for companies in the technological field?

As you know, we have 20 years of effective operation. During this period, until the beginning of 2017, we had four listed companies. From 2017 to this part, we did a very intense work of promotion, dissemination, but also of much closer contact, and we have a proximity strategy in which the BVM leaves Maputo and goes to the provinces, districts and municipalities. In 2018, we modernized our website because among its visitors we have many people who do not speak Portuguese and we had to translate the main documents into English. In fact, we have a multitude of areas on the Stock Exchange, but we still don't have any technology company, we only have one advertising company. But we have a partnership with the National Institute of Electronic Government and CEDSIF, which are institutions that use technological platforms, to make the permanent technological dimensioning, modernize our technological trading systems and the Central Securities Exchange.

We have no doubt that if the technological area is developed a lot, by creating a specific, significant and



Shanna Chicalia

Salim Valá, president of the Mozambique Stock Exchange

impactful niche, BVM can create specific markets for companies in the technological field.

Are there fintechs interested in joining the Mozambique Stock Exchange? What are the biggest challenges they face?

There are some companies preparing to join the stock exchange dealing with requirements such as organized accounting, audited accounts and shareholder dispersion, which is mandatory for listing on the stock exchange. One of the great difficulties, not only for SMEs and fintechs, is that the corporate structure that predominates in Mozambique is that of private limited companies and not public limited companies. The first move is to transform this corporate structure into public limited companies, in order to be able to disperse capital. This allows more citizens to scrutinize and that is where the element of good governance comes from. We hope that, by 2021, a technology company area may be listed.

What is the role played by fintechs in the growth and development of the Stock Exchange?

Stock Exchanges, including ours, cannot live without fintechs, without technologies. And in this area, we have two major areas of permanent concern. First, we want to adopt mechanisms for inclusion. This is a key element. That is why we have a Memorandum of Understanding with FSDMoc, an organization that embraces financial inclusion. This is at the heart of our action. For example, the operation of the public offer for sale of HCB shares was the largest operation on the stock market, from the point of view of inclusion and scope. It involved all provinces, most districts, and was the first stock exchange operation to make use of remote means. In the subscription process, 36 percent of interested parties did so using the cell phone or digital system created by BCI. This allowed even those investors interested in buying shares located in remote locations, and without bank branches, to be able to subscribe and buy shares. The Exchange, which had attracted about 7 thousand investors in 20 years, with

The Exchange, which had attracted about 7 thousand investors in 20 years, with the operation of HCB went from this number to more than 21 thousand investors. Therefore, the number of investors registered with the central securities depository has tripled. And in this operation, technologies were at the center of the process.

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How do you assess fintechs and technological innovation in Mozambique and in the BVM?

The area of finance - banking in particular - and insurance are the ones that best accompany technological development. A large part of the quality services available here can be found in large world markets. The financial system has accompanied the development of technologies at the global level. In addition to the need for inclusion, we have permanent contact with several incubators. And even universities are already using incubators based on technological platforms. This reveals a great evolution because it will give all the sustainability to the process, reason why those who graduate today already have very clear notions of fintechs.

We are using experiences from countries like Kenya and Tanzania to create scholarship simulation platforms for students. We want more listed companies and more financial inclusion, increased business volume, liquidity and market capitalization.

What is relationship between the Stock Exchange and the fintechs?

In 2017, we approved BMV's strategic plan and we did it with the support of FSDMoç. We chose the creation of new products and services as a fundamental element. In 2019, we introduced the stock market index and the Third Market. We are currently working with the Bank of Mozambique and with the Ministry of Economy and Finance, with the support of FSD-Moç, to prepare the Master Plan for the development of the capital market in Mozambique. We have no doubt that fintechs are instrumental in ensuring the scope, impact and sustainability of BVM.



PLAYERS

OTÍLIA DOS SANTOS, CHAIRMAN OF THE BOARD OF DIRECTORS OF THE INSURANCE SUPERVISION INSTITUTE OF MOZAMBIQUE

Innovation brings risks and conveniences

The Institute of Insurance Supervision of Mozambique (ISSM) has been accompanying innovative and technological companies that aim to facilitate the sale of insurance products in the market and the idea that stands out is that technology has contributed to the ecosystem of Insurance Services. There is still a way to go regarding the use of digital platforms in the service of Insurance, but 6 of the 21 insurers have already adopted technological means for the marketing of their products. ISSM's CEO, Otília dos Santos, addresses not only the conveniences of innovation but also the risks associated with data protection.

What is the strategic vision of the Insurance Supervision Institute of Mozambique (ISSM) regarding innovation, technology and insurtechs?

The Insurance Supervision Institute of Mozambique recognizes the importance of technological innovation to boost the sale of insurance products and to promote financial inclusion, being open to new initiatives in this area. Similarly, ISSM has been accompanying innovators and developers of technologies that aim to facilitate the sale of insurance products on the market, analyzing its functionality within the scope of the protection of the policyholder and of the principles.

The Insurance Legal Regime doesn't provide for matters related to insurtechs, and the monitoring that ISSM performs allows not only to ensure consumer protection but also to evaluate aspects that deserve treatment and inclusion in the legislation in order to eventually issue specific rules on these platforms.

How has technology contributed to the Insurance Services ecosystem?

In the Mozambican insurance market, there are already operators resorting to some form of technological innovation to market their products and services. For these innovative operators, the customer portfolio has been growing, including in the volume of insurance premiums. On the other hand, innovation has facilitated the way in which the premiums are paid as well as its installments, allowing the customer to make the payment according to their financial availability.

Insurtechs bring benefits, both for the end customer, insurance companies and even for insurance brokers, due to: Reduced bureaucracy with simplified service; New ways of communication with customers, facilitating the understanding of what is being offered and instantly; Personalization of services according to the profile of the insured person; Attracting new consumers to the market; Facilitation of contracting policies; Increased levels of financial inclusion;



Shanna Chicalia



Facilitating the relationship with customers; and Offering more attractive prices.

Is there an insurtech operating in the national market? If so, what and how does it intervene in the sector?

ISSM has already received some innovators who demonstrated the functionality of their systems, revealing a process of facilitating the sale of already existing insurance products, using digital media. From the survey carried out in the national market, it was found that, so far, only 6 (six) of the 21 insurance companies have adopted technological means for the sale of their products.

In general, insurance companies resort to technological applications for the purpose of payments, claim reimbursement and, a small number use insurtechs for the remote subscription of insurance contracts. Some insurance companies have tried to implement the online and digital insurance policy purchase service in Mozambique. What challenges does this dimension pose, especially in terms of regulation, data protection and cybersecurity?

Innovation brings with it ease of commercialization processes, but in parallel it has its risks, the most significant of which is the flow of confidential data / information. In the insurance market, the protection of information and, in particular, of customers is very important. Bearing in mind that insurtechs are based on the use of the virtual environment for their operation, they are subject to the risk of cyber crime, placing consumers exposed to these types of risks.

One of the objectives of any regulatory body is consumer protection. Therefore, aware of the risks that the use of these technologies can subject to policyholders, ISSM has sought to improve its knowledge about the functionalities of this type of platforms to improve monitoring and respective regulation.

PLAYERS

ODETE SEMIÃO, COORDINATOR OF THE SPATIAL DEVELOPMENT PROGRAM

The importance of data for software and platforms fintech

The Spatial Development Program (PDE) is a Unit of the Ministry of Transport and Communications that promotes good practices in spatial planning, by offering products and services of socioeconomic analysis. Recognizing the role of fintechs in transforming the national financial sector, the project coordinator, Odete Semião, speaks of the need for data sharing, while addressing some challenges and opportunities.

How long has the financial inclusion strategy been in preparation and how will it materialize? When did the mapping start and what does it consist of?

The Financial Inclusion Strategy was approved 3 years ago. One of the indicators of the strategy is that, by 2022, at least 75% of the population will have an access point to a financial service within a radius of less than five kilometers. So, first, it was necessary to know what exists in terms of financial access points, that is, their location, and where the population is not covered by services in order to allow better planning of financial institutions.

What is the subsequent step after mapping?

According to the Cooperation Protocol we have with the Bank of Mozambique, after mapping, all georeferenced information – which is being collected on financial access points – it will be hosted on our platform. The platform has georeferenced information from various sectors and has two free accesses (one public and the other general).

What is the PDE's strategic vision and what is the current planning stage in Mozambique?

The Spatial Development Program (PDE) is a Unit with approximately eight years. But we must remember a more distant period ... In 2008, the Strategy for Integrated Transport Development was approved. Since transportation represents the backbone of the country, there was a need to revise the sector's strategy in order to adapt it to the prevailing economic and social environment. That same year, during the coal boom in the area of mineral resources, forecasts for the transportation of large quantities of that commodity for export began to emerge, and looking at the existing infrastructure, the concern was to know how this resource could reach the markets. There was already talk of gas, in addition to traditional products, as at the time there were already projects in the area of forest and wood exploitation. Therefore, it was necessary for the Ministry of Transport to create strategies to meet the demand.

The Strategy was approved and for its implementation the methodology of spatial development initiatives was adopted, which aims to look at the potential of the area and see how the synergies of economic potential and infrastructure intersect. It was in this


Shanna Chicalia

context that the Ministry decided to think about an integrated way to solve the problem, to evaluate what exists in terms of potential to later make the transport infrastructures to be built feasible.

The national network of the GIS (Georeferenced Information System) would be an instrument to carry out spatial qualification. For about three years, we have been creating the platform and collecting spatial data, which are dispersed. And this is how the project comes about.

One of the missions we have is to internalize this spatial thinking at the level of Government and Private Sector institutions. This means that they can use the GIS for integrated planning and make evidence-based decisions. One of the missions we have is to internalize this spatial thinking at the level of Government and Private Sector institutions. This means that they can use the GIS for integrated planning and make evidence-based decisions.



Fintechs need the data to better develop their software and platforms and we have a collection of data for that purpose.

Regarding georeferencing, which are the focal points, ATMs, POS. What is really studied?

So far, bank branches, credit unions, POS, electronic money agents, micro-banks, exchange offices, in other words, everything that is financial service, have been mapped. What is intended at another stage is to do the same with insurance companies. In this process with banking, the biggest challenge was to map the POSs as they are mobile, but we made use of technology using SIM CARDs because from them it is possible to locate the POS being used.

Of the current project, only the mapping phase is complete. For the second phase, it is expected to make this information available for planning purposes, in order to achieve the indicators of the national strategy for financial inclusion, which recommends that, by 2022, 75 percent of the population will have access to a financial point in a lower than 5km radius.

In the middle of this structuring is there a close relationship with the fintechs?

We ended up covering all areas. We intervene in the financial area and beyond. But we have a close relationship with the fintechs, yes. Banks today must develop products that are increasingly closer to customers. And one of the ways to be close is by developing products or applications that allow customers even from home to be close to these services.

Fintechs need the data to better develop their software and platforms and we have a collection of data for that purpose. Unfortunately, there is still a myth regarding data sharing, probably because it feels that the data can be used for purposes other than those agreed upon. Our country still has a long way to go when it comes to data sharing. First, because there is still no legislation. It is true that there are laws that speak of the need for information to be public, but in terms of data, it is still in the process of elaboration.

We recently prepared the National Infrastructure and Data Strategy, which will be approved by the Council of Ministers, and will define how the data will be used and which should be shared. But we still need to develop the Data Policy.



PLAYERS

TEOTÓNIO COMICHE, PRESIDENT OF THE MOZAMBICAN BANKING ASSOCIATION

"This area of action is of high intensity and requires a lot of <mark>capital</mark>"

The financial sector looks at technology as an essential factor for banking operation and proof of this is that Banking was one of the pioneering sectors in adopting the Internet, as a way of extending services to its customers. On the other hand, it is not possible to make financial inclusion without the involvement and leadership of the financial sector. As such, AMB members develop financial products and services suited to the reality of each region, with the help of digital platforms, and see the activity of fintechs and mobile wallet operators as a positive complement.

In an economy like ours, where thousands of Mozambicans don't have access to adequate financial services, digitization becomes an inevitable and necessary phenomenon, as it helps expanding financial services. What is the strategic vision of the Mozambican Banking Association on digital financial services in Mozambique?

First of all, I would like to say that AMB doesn't have a strategy per se on the topic because each member has defined for itself the way to approach this topic, AMB not having the role of defining the strategy of each bank. However, it is clear that the financial sector looks at technology as an essential factor for banking. I recall that it were the banks that adopted the first main frames to improve their operation and, in Mozambique, the first computers were introduced by Banks. Since that time, technology has been part of the sector and with the advent of the Internet, Banking has been one of the pioneering sectors in adopting this channel to extend services to customers. Much has been said about the digitization of financial services but this topic is not new to the banking sector, which, since 2011, has used the USSD Channel to provide financial services and which, in 2012, introduced the first banking apps. In this sense, we are confident that the financial sector will continue to lead the process of adopting technology to better serve its customers and always in line with the regulations in force.

I'm not in favor of a regulation as restrictive as what happens in European markets, but I also do not believe that some models adopted in some countries, such as China, where there is very little privacy.

How does the Association contribute to financial inclusion, help improve the provision of financial services and strengthen the ecosystem of fintechs operating in the country?

AMB members are the true implementers of the financial inclusion policy defined by the Government and the regulator. Financial inclusion is not possible without a strategy and this is well defined by the Government of Mozambique. But it is also not possible to make financial inclusion without the involvement and leadership of the financial sector. The contribution of associates in this process goes through the extension of accesses with the opening of bank branches and the expansion of the ATM and POS network. It also involves adopting technologies to extend the Banking Channel to the customer. AMB members also develop financial products and services suited to the realities that each region has and, finally, AMB members actively participate in financial education programs in various initiatives.

One of the concerns is with the protection of data and the creation of a suitable regulation. How do you think this regulation will be conceived?

AMB and its associates are significantly concerned with this topic and the legislation in force. This regulation has been very focused on consumer protection and to which AMB subscribes and fully

implements. Naturally, there are opportunities for improvement and AMB is committed to sharing its vision on the topic with the authorities whenever necessary. Personally, I believe that there must be a balance between data protection and the service provided. I'm not in favor of a regulation as restrictive as what happens in European markets, but I also do not believe that some models adopted in some countries, such as China, where there is very little privacy. This balance must be established in a data protection commitment associated with a service and providing clarity in the use of the information that the consumer holds in the sector. Note that the subject of data protection should not be confused with bank secrecy and on this aspect I am of the opinion that bank secrecy is a fundamental aspect in preserving the relationship with the client and that this secrecy must be absolute and in line with the current legislation.



There are challenges to be faced by fintechs that promote the expansion of financial services and financial inclusion in the country. The phenomenon of mobile wallets has, on the one hand, eased banks in terms of geographic expansion and access to users, but, on the other, it poses new challenges for banks, namely competition in capital mobility. What comments do you have?

We do not see mobile wallets as competition, but as a complement and an active participant in the financial inclusion process. Mobile wallet operators are fully connected to banking, as any electronic money value has a direct correspondence in a bank, that is, the money is resident in the financial system. The evolution of electronic money operators came to help, as I mentioned in the process of financial inclusion, extending services to more people, but they also came to bring more liquidity to the sector, contributing to the money that previously circulated physically, now circulate electronically and through the Bank. These steps were only possible with the close collaboration of the banking sector, which immediately embraced the process of interoperability between the financial system and electronic purses.

There are hot issues like the interoperability of banks on the table. What is the perception of banks on this issue?

As I mentioned in the previous point, I don't see any hot issues for debate. There are important issues to be resolved, but this process is part of the evolution process. Banks, by their nature, have intrinsic interoperability in their operation, whatever the transaction may be. See that you can take the Bank A Card and withdraw money from Bank B and make purchases at POS C or even make transfers from Bank C to a Bank B account, through a Bank D ATM. It is therefore natural to expect a customer of electronic money AND you may want to transfer money to an account of operator F and even "deposit" money into your account through a G agent. This level of interoperability will only bring more customers into the system and benefit all participants in the system, from consumers themselves, banks, electronic money operators and the Mozambican state.

How do you anticipate that fintechs may become the right hand of financial institutions in Mozambique?

I only see this happening if there are fintechs with the financial capacity to invest. This area of action is of high intensity and requires a lot of capital, for small returns. It is a long-distance running and not a sprint.

PLAYERS

RUBEN CHIVALE, MEMBER OF THE BOARD OF DIRECTORS AND PRESIDENT OF THE TECHNICAL COMMISSION OF THE MOZAMBICAN INSURANCE ASSOCIATION

"We believe that technology ecosystem is the future"

Contrary to the developments in the financial sector, in which fintechs have recently been gaining more and more importance in the digital transformation, the representative of the Mozambican Insurance Association (AMS), Ruben Chivale, says that "in the insurance sector technological innovation is a very new issue ". Still facing many difficulties, Chivale defends the need to control and minimize risk in terms of fraud as well as guaranteeing customer privacy.

What is the strategic vision that your organization has regarding innovation, technology and *insurtechs*?

The issue of innovation is still very new internationally and particularly in Mozambique. The insurance sector, both at national level, or even in other countries, is moving very slowly. It's a very traditional sector, conservative and that is often clammed up to progress, and that does not follow people's needs in terms of communication and information. As an AMS, we don't have a structured vision, a clear and written policy on information technology in what is our business. But we see the initiative by some associates in terms of connectivity, digital access for citizens to insurance products and services. Currently, there is a movement by almost all the main associates to bring information technologies to the insurance business. I think that those who do this well will have a huge competitive advantage. The level of insurance penetration - looking at GDP - is just 1.5 or 1.6 percent.

Among your associates, which insurance companies are betting on placing digital platforms for the sale of their products and services on the market?

I only heard about Índico, an insurance company that has shown itself to be one step ahead of the competition from the start. It was the first and only insurance company to have an App to bring the USSD service, a very interactive website, uses Chat Boat, and has a range of technological means of contacting customers, which allows not only the sale of products and services, but also the management of the entire insurance cycle. Therefore, risk analysis, quotes, insurance placement, payments, claims participation, is a process that Índico has. These attributes interfere in some way with the competition, which is why there is a tendency for competitors to offer the same services provided by Índico Seguros. Índico will introduce two customer contact solution platforms this year.

What is your appreciation for consumer adherence to insurance through technology? Has technology contributed to the strengthening of the insurance ecosystem?

It contributes a lot. We launched the services of USSD, App, Chat Boat, WhatsApp Business, and these platforms make our job as insurance companies much easier, and the client comes to us with knowledge of the services he needs. The system saves both time and



resources. The level of membership is higher, we have an average of 500 people accessing the platform per day, requesting various services. Therefore, we believe that the technology ecosystem is the future and we are already experiencing the competitive advantages of the systems we put in place.

Is it possible to buy insurance products through the website and how can one access the password?

It's possible. In addition to the website you can look on the different platforms we have at your disposal. You can access documents via email, SMS, in editable PDF format and then you must print them. Therefore, you don't need to have access to the Internet.

Is there an insurtech operating in the national market, that is, an insurance company that only works digitally?

No it doesn't. It is a challenge that requires the approval of the regulator. Our laws are not yet prepared for this and the regulator also has to take steps for this reality to materialize. Some insurance companies have tried to implement online insurance purchase services digitally in Mozambique. What challenges does this dimension represent mainly in terms of regulation, data protection and cybersecurity?

It is a huge challenge because our legislation is still kind of poor when it comes to privacy and data protection. In terms of banking, there has been a lot of progress, but in terms of insurance, not really. The feeling we have is that we are in a phase of revising the legislation to which, eventually, all institutions will be called upon. And there is more ... in addition to these issues related to the insured, there is the issue of fraud on the insurer's side. The other challenge is how to combine the privacy of customer service and the need to control and minimize risk in terms of fraud.



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The focus on training highly qualified workforce

The Eduardo Mondlane University (UEM) and the Instituto Superior de Transportes e Comunicações (ISUTC) are some of the higher education institutions that contribute to the development of the digital ecosystem in the country through the training of professionals in the area and education, investment in research and extension, according to Carlos Cumbana, director of the Computer Science course at UEM, and Elton Sixpence, director of ISUTC's Graduate Programs.

ith the advent of the digital financial market in Mozambique, which requires concern regarding the management and protection of user data, curriculum reshaping is now one of the Academy's highest priorities.

The university professor and director of the UEM Department of Informatics, Carlos Cumbana, explains that, although his institution is the largest and oldest university in the country, "the current Computer course doesn't provide for themes related to management, sharing, models of digital business and data protection. It focuses on the mathematical and statistical basis and then on specialization in technologies, which essentially involves the development of applications for any environment and business area, without, however, including this component of data management and protection ".

However, Carlos Cumbana reveals that a curriculum revision process is underway, "with a view to integrating these subjects, as there is no computer solution that does not have a financial component. "In fact, it is important that the curriculum respond to what the trend is, which is the integration of all systems, including the financial system, because this is where you can see the origin and destination of the money circulating in the country", underlined the UEM professor. Unlike the Eduardo Mondlane University, which is dedicated to the development of applications, ISUTC already presents themes related to data protection in its curriculum, according to Elton Sixpence. "In the degree course in Computer Engineering and Telecommunications, students leave with three to four skills. The first is software development, where they are trained to survey requirements in any type of organization, be it the banking, health, education, or other, and during this process data protection problems are identified, such as who should have access to information and all other elements inherent to security ".

In the opinion of Cumbana and Sixpence, the focus on training highly qualified staff to respond to the demands of the sector, consists of one of the Academy's greatest contributions to the development of the digital ecosystem in the country.

"So far, our contribution has been limited to providing IT and telecommunications engineers for the job market, as well as introducing short courses on various topics, where our students and other schools that are interested participate ", explained Sixpence. "We have been joining efforts to make our students, especially the finalists, aware of the importance of aspects related to the financial area when they are thinking about IT solutions", underlined Cumbana.



New talents

However, there is another aspect that distinguishes EMU from ISUTC. "[We also contribute] through research, involved in FSDMoç teams in carrying out studies to assess the level of use of financial services", pointed out Cumbana.

While at UEM there are examples, among others, of "students who have developed online ticket sales solutions for admission to events and who, in some way, integrate payment modules via M-pesa, credit card, etc." at ISUTC there is a variety: "there are students with initiatives who have participated in competitions and there are others who want to be in large companies" - according to our interviewees.

As an illustration, Sixpence points to the case

of a young man who is part of the group of students who participate in competitions and practice entrepreneurship. "There is a student named Dário Mungoi who is with the company Google, in Canada. He developed software for his company (Moovi), which allows him to buy movie tickets "and" another initiative called 'Banco de Sangue' that has not yet been legalized. It's an application that aims to relate donors to patients and the name of the company will be "Ngati", which means 'blood' in the Portuguese language ".

ISUTC pursues innovation

In 19 years of existence, ISUTC has "trained 948 students, 66 percent of our courses are in Engineering and only two are in the Management area", and in the



ICT's course, specifically Computer and Telecommunications Engineering (LEIT), mobile phone companies and banks are the biggest employers.

As for the teaching methodology, specifically in LEIT, the ISUTC representative guarantees that "from the first day to the last, the student is subjected to a great workload and, at the end of almost five years, he becomes a person who works until dawn. And this willpower makes it easy for them to engage in companies".

With his eyes on the institution's curricular internationalization, Sixpence says that recently ISUTC has become a Palo Alto academy, which is an American multinational specialized in cybersecurity. "We are currently teaching cybersecurity courses based on international standards."

Regarding the evolution of the digital ecosystem in Mozambique, Carlos Cumbana from UEM points out some improvements, although he highlights illiteracy and resistance to change as some of the biggest obstacles. "It is evolving a lot, although it could be better. We believe that the illiteracy of our population is an obstacle, because some population has access to these services, but doesn't use it due to illiteracy. The other big problem is resistance to change".

However, Sixpence has another view. In his opinion, the lack of specialization is one of the biggest challenges inhibiting innovation in the country. "It is evolving a lot, although it could be better. We believe that the illiteracy of our population is an obstacle, because some population has access to these services, but doesn't use it due to illiteracy. The other big problem is resistance to change". *Carlos Cumbana*

"To do innovation, you need highly qualified people with a PhD level. In Mozambique, there is a shortage of people with this level in the area of technologies, so this is a deficiency in evolving in the innovation component". *Elton Sixpence*

"To do innovation, you need highly qualified people with a PhD level. In Mozambique, there is a shortage of people with this level in the area of technologies, so this is a deficiency in evolving in the innovation component". So, as a way to remedy this deficiency, "we have been capturing, in our institution, interesting projects that arise within the scope of the theses presented by the students, and we encourage them to disclose because we think that we have to start somewhere", he explains.

On the quest of financial inclusion

Given these barriers, are there any organizations that support the expansion of digital financial services and financial inclusion in the country? For Carlos Cumana, yes. "FSDMoç has been developing several studies that show the scope and level of use of the various financial services and, through this, has formulated a set of recommendations that allow operators and regulators to improve this ecosystem. FSDMoç has been involved very hard in this process and there are clearly very strong changes in the use of digital financial services in Mozambique".

Regarding the role of the Financial Sector Deepening Mozambique (FSDMoç) in promoting financial inclusion, the director of the IT course at UEM leaves praise, particularly to the institution's CEO: "there is a great effort by Professor Esselina Macome so that we can value the fintechs", which is why "at the moment, we are reflecting on the possibility of using some modules of technical courses linked to fintechs to serve as optional subjects in the computer course", he said.

UEM, like ISUTC, doesn't have formal partnerships with industry bodies, in order to add value to its activities. "We don't have formal partnerships, but informal ones through colleagues who ended up taking on functions in these institutions [FSDMoç, Bank of Mozambique and some commercial banks]", but "we hope that soon we will be able to formalize these relations", said Carlos Cumbana. As for ISUTC, there is "nothing very solid. There is still no solid connection with protocols, activities very well outlined", concluded Elton Sixpence.





AFTERWORD

n your hands, here is the first "Fintech Report of Mozambique", reflecting the trajectory that this sector has been following in the development of the fintech ecosystem in Mozambique, contributing to financial inclusion in recent years.

Fintechs are companies, in most cases startups, that use technology to develop innovative solutions in the financial sector, creating disruptive services for the end consumer. The apps and solutions brought by Mozambican fintechs range from digital payment platforms / gateways, through remittances of international transfers and mobile wallets, to payment aggregators, among others. In the same context, there are insurtechs that develop technologies for the insurance sector.

Currently, in the face of the Covid-19 pandemic, both fintechs and insurtechs are called upon and challenged to bring innovative and relevant solutions to the economy as a whole, and to the most vulnerable strata in particular.

Fintechs face some challenges, such as regulations still in their infancy, access to finance and data, the characteristics of the infrastructure and the security of their applications.

FSDMoç will continue to provide support, enhancing collaboration between different stakeholders, so that fintechs can make their due contribution to the development of financial services accessible to all and, thus, assist in achieving the objectives set out in the Strategy National Plan for Financial Inclusion. The existence of the Regulatory Sandbox proves to be important because it is, in fact, a vibrant space and a stage of genuine innovation, whose focus is on solving the problems of the most vulnerable strata.

It is worthy of our recognition and mention the role that incubators have been playing in offering a space for sharing experiences and a welcoming work environment. It is to be welcomed the sharing of knowledge as well as the bet on the level of excellence by national and international mentors. Initiatives FSDMoç will continue to provide support, enhancing collaboration between different stakeholders, so that fintechs can make their due contribution to the development of financial services accessible to all

such as MozTech, Hackatons, "Business Challenges", BootCamps, among others, undoubtedly play a dynamic role in the sector. It is geographically urgent to start installing these initiatives in other parts of the country in order to provide opportunities for other young people.

In a look devoted to the academia, the emphasis is placed on the training of competent staff in these new matters, a fact that contributes greatly to the development of the digital ecosystem, which, in turn, requires more and more qualified professionals to respond to the needs in the regarding the Digital Economy, on the one hand, and technological risks, on the other, from which, for example, cyber attacks stand out.

With the rapid growth in the digital area, the fourth industrial generation (which we currently live in) is increasingly demanding technical knowledge



and specialists in areas such as Blockchain and Distributed Ledger, Automation and Robotics, Biotechnology, Internet of things, Artificial Intelligence, Printing in 3D, among others. An evolution that requires an increasingly technology-oriented academia.

At the same time, we are seeing achievements such as legal instruments, facilitators of the fintech environment, which are beginning to be published. They announce that the "space" is open to fly. This is the challenge set for the coming years, where I envision a prodigal future for the players in the Digital Financial Services Ecosystem.

Another milestone was the launch of the Fintech Association of Mozambique, which we were pleased to see and was part of Fintech Week. It was undoubtedly a remarkable moment not only for the various events organized but also for the massive presence of actors from the national and international ecosystem. We hope that this dynamism will continue over the next few years.

In a figurative sense, I see ships (the incumbents of the banking system) embracing and pulling more and more speedboats (in this case, fintechs) and, together, sailing and working towards financial inclusion, certainly with the support regulators, service providers, among other elements.

My biggest wish is that, after this first edition of the "Mozambique Fintech Report", I can read in the future editions of this publication, now created, other success stories in the dimension of fintechs and insurtechs!

> Esselina Macome Executive Director – FSDMoç

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