CMA REGULATORY SANDBOX

Milestones Report- April 2021

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ACRONYMS

ACfA	African Crowdfunding Association
ADGM	Abu Dhabi Global Market
AML	Anti-Money Laundering
ASIC	Australian Securities and Investments Commission
CA	Communications Authority of Kenya
CAK	Competition Authority of Kenya
CBK	Central Bank of Kenya
CCAF	Cambridge Centre for Alternative Finance
CGAP	Consultative Group to Assist the Poor
CMA	Capital Markets Authority
EAC	East Africa Community
EASRA	East Africa Securities Regulatory Authority
E-KYC	Electronic Know Your Customer
FCA	Financial Conduct Authority
FSDA	Financial Sector Deepening Africa
FSDK	Financial Sector Deepening Kenya
GFIN	Global Financial Innovation Network
IBM	International Business Machines Corporation
ICO	Initial Coin Offering
ICT	Information and communications technology (ICT)
ID	Identity Document
IOSCO	International Organization of Securities Commissions
PGN	Policy Guidance Note
RegTech	Regulatory Technology
SRC	Sandbox Review Committee
UK	United Kingdom
UNGSA	United Nations Secretary-General's Special Advocate for Inclusive Finance for Development

BOARD CHAIRMAN STATEMENT

> *The Report is an opportunity for the Authority and the Kenya capital markets to reflect on the lessons that we have learnt since we operationalized the Regulatory Sandbox in March 2019*

I have the honour of presenting this premier Report on the Capital Markets Authority Regulatory Sandbox.

The Report is an opportunity for the Authority and the Kenya capital markets both to take note of the achievements realised and to reflect on the lessons that we have learnt since we operationalized the Regulatory Sandbox in March 2019.

The establishment of the Regulatory Sandbox had been a long time in the making, having been conceptualized in 2014, with the launch of the 10-year Capital Market Master Plan (CMMP). At the time, one of the main outcomes that the CMMP sought was to stimulate innovation that would broaden the products and services offered in the capital markets, deepen market participation and liquidity, and drive transformative economic development.

This desired outcome was further entrenched with the publication of a FinTech Research Report in 2017 by the International Organization of Securities Commissions (IOSCO), the international body that brings together the world's securities regulators and sets standards for securities markets globally. In its report, IOSCO described some of the FinTech innovations that had been observed globally and the risks, challenges, opportunities and benefits they brought to bear on financial markets. IOSCO encouraged stakeholders to become aware and prepared for FinTech.

IOSCO has described FinTech as the variety of innovative technologies and business models with the potential to transform the financial services industry. In 2016, IOSCO observed that certain technology firms had transitioned or expanded from offering technology services to the financial services sector to financial services directly. This technological revolution (also known as digital disruption) has the potential to positively or negatively impact securities market regulators' core objectives, namely financial stability, investor protection and ensuring transparent, fair and efficient markets.

A positive benefit of FinTech for example, has been the growth in financial inclusion, affordability and efficiency in the delivery of financial services. Simultaneously, FinTech has introduced complexities for securities market regulators because some of the products offered digitally now cut across different sectors such as banking, capital markets, insurance and pensions, blurring the perimeters of regulation. These FinTech services also cut across geographical boundaries, emphasizing the need for greater cooperation among regulators globally and locally. Disintermediation has also been noted, for instance with the introduction of online-only banks, which replace traditional banking halls.

These among other considerations, led to the development of a Policy Framework for the implementation of a Regulatory Sandbox for Kenya's capital markets. Subsequently, the Regulatory Sandbox Policy Guidance Note (PGN) was drafted and later approved by the Board of the Authority in March 2019, setting the stage for the CMA Regulatory Sandbox to become operational. The PGN is the legal framework on which the Regulatory Sandbox is anchored.

We consider the Regulatory Sandbox as a tailored regulatory environment for conducting live tests of innovative products, solutions and services with the potential to deepen and develop the capital markets. These live tests are conducted within a limited scale. This means that few investors participate in the live tests (up to 10,000 people), so as to contain the risks associated with investments. The tests are also limited to a period of 12 months. It provides an evidence-based tool for fostering innovation and regulation while allowing the Authority to remain vigilant over investor protection, financial stability and integrity risks. The Regulatory Sandbox also supports the broader national policy agenda described in Kenya Vision 2030.

For innovators and FinTechs, the CMA Regulatory Sandbox offers an opportunity to refine their capital markets-related innovations and solutions through an iterative process without having to comply with all provisions in the Capital Markets Act and Regulations. Upon successful exit from the Regulatory Sandbox, other indirect benefits that could accrue include the opportunity to attract investors and raise affordable, long-term capital, the building of a business' profile, access to regional and international markets in which the same innovations can be rolled out and the opportunity for scalable partnerships.

The operationalization of the Regulatory Sandbox was a deliberate and proactive act by the Authority that underpins our commitment to strategically leverage technology to drive efficiency in the capital markets value chain. This is a strategic objective that will guide our actions and investments for the period 2018-2023. We are resolute about proactively promoting the responsible growth of FinTech in Kenya's capital markets. However as will be observed throughout this Report, the need and importance for greater collaboration and coordination among financial sector regulators and policy actors at national, regional and global level cannot be overstated if these FinTech firms are going to succeed and leave the desired impact on the Kenyan and global landscape.

James Ndegwa
Chairman, Capital Markets Authority

CHIEF EXECUTIVE STATEMENT

CMA has been at the forefront of implementing initiatives to stimulate and support the responsible growth of FinTech and innovation within Kenya's capital markets. In line with its facilitative role, CMA consistently seeks to provide a conducive regulatory environment for the deployment of new and innovative FinTech and business models that have the potential to deepen capital markets in Kenya through a Regulatory Sandbox.

The Authority's commitment to the introduction of a sandbox is firmly drawn from the Kenya Capital Market Master Plan (CMMP) 2014/2023 which identifies technological innovation as one of the five centers of excellence of the Kenyan capital markets our industry aspires to deliver.

The emergence of technology has seen CMA taking progressive steps to create a conducive environment to unlock the potential of the FinTech space in Kenya, including the signing of cooperation agreements with regulators with well-established FinTech's frameworks such as the Australia Securities and Investments Commission (ASIC) and the Abu Dhabi Global Markets (ADGM) Financial Services Regulatory Authority. Further the Authority has leveraged these cooperation arrangements to build significant capacity in the area of FinTech to enhance its competence in regulating this everevolving space. We have also benefited from strategic engagements with domestic partners, the Financial Sector Regulators Forum and global organizations such as IOSCO, World Bank Group and Global Financial Innovation Network (GFIN), all in trying to make an informed decision on how to best oversight the FinTech space in Kenya. This journey has also seen us make extensive submissions to the Task Force on Blockchain and Internet of Things in order to contribute to the National Policy on Financial Innovation.

As part of the Management team, I worked within a highly responsive team, including the Board of the Authority. One of the Authority's key strategic priorities as espoused in its 2018-2023 Strategic Plan, is to leverage technology across the entire capital markets value chain. To this end the Authority has been willing to proactively review its supervisory and regulatory model to take into consideration the fast-changing environment across capital markets' product and services design, infrastructure and supervision. As a regulator we are humbled by the sheer number of innovators in Kenya and beyond who have positively responded to our calls for consultations on how to create an innovative environment to test their product before they venture into commercial scale.

In this regard, the Authority established the Sandbox Review Committee (SRC) whose mandate is primarily to review applications for admission into the sandbox and monitor the implementation of test plans and the transition process after exit. In addition, the committee serves as a channel for information sharing, both internally and externally. Other roles include reviewing and informing policy and legislative amendments relating to the products or service innovations arising from the sandbox, among other duties.

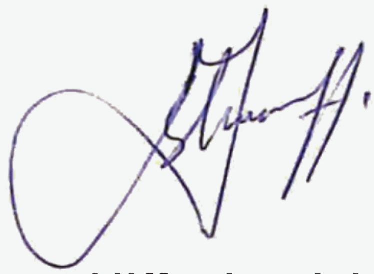
We believe that well-structured partnerships with key stakeholders are a critical catalyst for the growth and development of our capital markets. We have in this regard, initiated discussions with fellow sectoral regulators on concerns raised touching on their jurisdictional remit and I am pleased to report we have received positive feedback towards implementing the FinTech Regulatory Sandbox.

Noteworthy is that the emergence of these technologies needs to be treated with due caution. On one hand, they introduce opportunities to drive additional demand for capital market products and services while on the other hand, they have the potential to introduce new prudential risks. These risks cannot only destabilize the market, but also present a new scope of market conduct risks that can put-off retail investors if not properly managed. The Authority is alive to these facts and is working to strike a balance between supporting innovation while ensuring stability of the market.

CMA's membership of the Global Financial Innovation Network is also a key a move to support the transformation of the capital markets in Kenya through nurturing innovation and cements our efforts to support innovation in the capital markets.

Fundamentally, collaboration and support that will enable all of us to make strides in fostering innovation and the adoption of technology in the capital markets industry, and the overall growth of the digital economy.

My sincere gratitude to the Consultative Group to Assist the Poor and Financial Sector Deepening Kenya for supporting CMA through this journey. I am optimistic that this Programme will promote product development, revolutionize and democratize access to the capital markets by Fintech firms and companies in Kenya.



FCPA, Wyckliffe Shamiah
Chief Executive, Capital Markets Authority

CHAIRMAN, SANDBOX REVIEW COMMITTEE STATEMENT

March marks an important month in the calendar of the Sandbox Review Committee because we celebrate our anniversary since the launch of the Regulatory Sandbox Policy Guidance Note and the birth of the SRC. The enthusiasm, teamwork and collaboration exhibited by the members of the SRC has been tremendous. This is evident in the number and quality of applications being channelled out of the sandbox environment and the number of engagements, both physical and virtual which the team has had with applicants and potential applicants since the operationalization of the sandbox.

In recognition of the dynamic and evolving nature of fintech and the disruption it is causing in the financial services industry, the committee has worked in close collaboration with applicants, participants and industry leaders to remain at the cutting edge of supporting innovation in FinTech. Kenya is lucky to have an active and vibrant FinTech community which has led to fast growth of a FinTech ecosystem. The SRC has reached out to this community and had discussions with individual entities in a bid to find areas of potential collaboration to achieve shared objectives. Some of these discussions are still at the very formative stages but the SRC expects that they will lead to positive relationships and yield great results both for the Authority and the FinTech industry.

As you will see in the body of the report, the SRC has reviewed several applications for admission into the sandbox. These applications promise to offer a wide range of solutions, including crowd funding, data analytics, mobile based savings and investment solutions, tokenization of assets, cryptocurrency, cryptocurrency exchanges, token exchanges and other block chain and decentralized finance solutions. While most of the applications are at various stages of review, the Authority has already admitted seven firms into the sandbox and discharged one to deploy its product at a commercial scale. We are optimistic that more firms will be admitted into the sandbox in the coming year.

Just like the sandbox is a test environment for firms seeking to deploy new products and services, for the Authority it has been an experience of learning, understanding, and becoming better. One important lesson learnt from the sandbox experience is to be constantly in touch and working closely with applicants, learning the product or solutions and identifying risks.

For the SRC team these have been the bolts and nuts of striking a balance between supporting innovation while ensuring consumer protection. Goodwill and mutual trust between the CMA and the Fintech firms has been key in making the best out of this process. This way, the identification of risks and mitigation measures become a collaborative effort. This is evident in the brief reports by a select few firms who have agreed to share their experiences and which have been included in this report.

Despite the successes, the Authority has experienced a few challenges and addressed them in various ways. Top among these challenges is the disruptive nature of FinTech solutions. It has been tough making decisions on solutions which for instance are expected to take over the role of the securities exchange and its members, first owing to the complexity of the technology and the uncertainty of the outcome given the myriad of risks this move is likely to bring along. More challenges which have been highlighted in the report.

As we forge forward into the next year, it is my hope that we will continue to work together with FinTech communities, regulators in Kenya and across the globe, development partners and all the other stakeholders to support FinTech firms in deepening and broadening the Capital Markets.

Nyale Yanga
Chairman, SRC

In recognition of the dynamic and evolving nature of fintech and the disruption it is causing in the financial services industry, the committee has worked in close collaboration with Regulatory Sandbox applicants, participants and industry leaders to remain at the cutting edge of supporting innovation in FinTech.

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KEY HIGHLIGHTS OF THE REPORT

Highlight	Details
Stakeholder consultations and partnership in the development of the framework for promoting financial technology and innovation	Development of the Regulatory Sandbox began in 2017, with the following key events: • Regulatory Sandbox Research Paper (March 2017) • Consultative Paper on the draft Policy Framework (June 2017) • National Consultation and Validation workshop on the draft Policy Framework (June 2017) • Kenya Fintech Market Landscaping with the support of FSDK (July 2018) • Draft Regulatory Sandbox Policy Guidance Note (Dec 2018) • CMA Admitted to Global Financial Innovation Network (Jan 2019) • Stakeholder Consultation workshop and capacity building (Feb 2019)
CMA Regulatory Sandbox Policy Guidance Note	The Regulatory Sandbox Policy Guidance Note was approved by the CMA Board in March 2019. This set the stage for CMA to start receiving applications for admission from FinTech firms. CMA's objectives for the Sandbox are to: • Ensure that the capital markets regulatory environment is conducive for the deployment of a variety of innovative business models and emerging technologies; • Deepen the capital markets; • Accelerate understanding of emerging technologies; • Support an evidence-based approach to regulation; and • Help to review regulatory requirements that may inhibit innovation and FinTech in the capital markets
Seven firms admitted into the Sandbox by December 2020	These include: • Pezesha Africa • Innova Limited • Genghis Capital Limited • CDSC • Pyypl Group Limited • Belrium Kenya Limited • Four Front Management The details of their various innovations and tests are set out herein
Sandbox applications currently under review and assessment	The applications under review focus on a variety of innovations including crowdfunding, KYC, tokenization of real estate, analytics, Distributed Ledger Technology (DLT), among others

KEY HIGHLIGHTS OF THE REPORT

Key lessons learnt	• The need for the Regulator to work closely with applicants • Cooperation and coordination among the regulators of the different sub sectors of the financial sector is paramount • The regulator has to build trust and always deal with FinTech firms in good faith • The regulator has to be willing to learn and understand different ideas from FinTech firms • Every innovation is important, however small the firm is • Cross-border collaboration with peer regulators is critical
Key Challenges	• Novelty and complexity of the regulatory sandbox concept and applications received from FinTechs • Insufficient information regarding the risk universe in the various areas • The need for continuous capacity building to enhance regulatory competence to review different types of applications • The cross-border nature of certain solutions like crowdfunding platforms, causing jurisdiction challenges e.g. different property, insolvency and tax laws as well as enforcement • The dilemma of encouraging self-regulation through FinTech associations vis a vis direct state regulation
Impacts so far	• The Regulatory Sandbox has elicited a lot of interest from the FinTech community in Kenya with many coming forward to present their solutions to the Sandbox Review Committee • Many SMEs have benefitted from funding through the first crowd funding platform approved by CMA following successful testing in the Sandbox • The experience of firms has helped inform the development of a facilitative regulatory framework for fintechs
Next Steps	• CMA will work on developing adaptable and more responsive regulatory frameworks to support FinTech and innovation in the capital markets. • From the experience of the crowdfunding firms participating the sandbox, CMA will work with stakeholders to develop a market-wide regulatory framework for crowdfunding • Capacity building and sensitization on the sandbox both within the CMA and externally in the marketplace • Collaboration with other financial sector regulators in Kenya to facilitate a seamless FinTech and innovation platform for financial sector innovations which may span multiple regulatory perimeters • Automation of the sandbox processes including applications, assessments, admission and reporting

1.0. Introduction

Technology has been a key enabler of efficiency and responsiveness of financial services through distribution, cost reduction, and affordability of products and services. FinTech in particular has been a driver of financial inclusion as witnessed with the expansion of financial services and is a key component of the wider digital economy strategy of the Government of Kenya.

Regulatory sandboxes may open space for improvements in financial inclusion through innovations- for example, biometric ID, alternative credit scoring, e-KYC, blockchain-based remittances, and new business models serving marginalized clients.This is important because the success of financial inclusion largely hinges on the capacity of the financial sector to innovate.[1]

Within the Capital Markets space, FinTech has been part of the evolution for a while now. Investment opportunities have been made more accessible to investors on one hand, while entrepreneurs on the other hand have been ready to raise capital. Crowd funding platforms are perhaps the best example of this kind of matching of users of capital to investors. Other milestones include the reduction of the amount of time required to conduct KYC, onboard new clients and conclude a trade.

1.1 Global Initiatives

Regulatory innovation initiatives have become increasingly common around the world over the last five years. According to the 2020 World Bank Report on Key Data from Regulatory Sandboxes across the globe, there were a total of 73 different sandboxes spread across 57 jurisdictions as at November 30, 2020. The map below illustrates jurisdictions that have developed such initiatives.

Sandboxes Across The Globe (OpenStreetMap)

1.2 Convergence Between Regulating Innovation and Regulatory Objectives

Regulation can have both positive and negative effects on the regulated entities, especially where innovation is involved. That is why there is a need to critically assess the likely impact of a given regulatory framework before it's adopted to ensure that there is a balance between the intended purpose of regulation and fostering innovation. The table below illustrates both the positive as well as the potential negative impact of regulation on four key regulatory objectives of financial inclusion, stability, integrity and consumer protection:

Regulatory Objectives (I-SIP Frameworks)	Positive Impact	Negative Impact
Financial Inclusion	• **Lower costs and more efficient** than traditional and/or informal systems • **Access to credit via alternative data sources** for unbanked and underbanked • **Simple, more reliable, and significantly faster** than informal methods	• **Micro-segmentation of risk** through use of Big Data analytics may lead to financial exclusion • **High borrowing rates on digital loans,** which make it difficult to fully repay • **Gender bias and/or income inequality** from the use of AI, ML and Big Data analytics
Financial Stability	• **Increased diversification of deposit base and loan portfolios** can reduce concentration among systemic financial institutions • **Improved data quality and risk data aggregation** can increase systemic resilience	• **Increased financial interconnectedness** may result in expedited adverse financial shocks • **Increased operational risks,** such as cyber risks, may increase systemic risk
Financial integrity	• **Promote traceability of transactions,** supporting CFT • **Facilitate easier verification for KYC process,** thereby reducing compliance costs • **Regulators' use of technology** to support financial integtrity	• **Virtual currencies may facilitate anonymous funding sources or payments** rendering AML/CFT checks to be difficult • **Decentralized nature of blockchain/ DLT may render AML/CFT enforcement unclear** if operating outside of country
Consumer Protection	• **Increased transparency, more and better information** to consumers, reducing information asymmetries • **Comparison of financial products and sercices** more quickly and easily	• **Limited transparency of fees and charges,** which can mislead consumers • **Over-indebtedness** due to lack of visibility of multiple digital loans of each borrower, push loan tactics • **Lack of data protection,** leading to misuse of customer data

Regulatory Objectives (I-SIP Frameworks) & Their impacts

Stringent regulatory and compliance requirements have previously been more of an obstacle than a facilitator for potential innovators who want to focus on making financial services more reliable, faster, and more convenient but less costly. However, this is beginning to change.

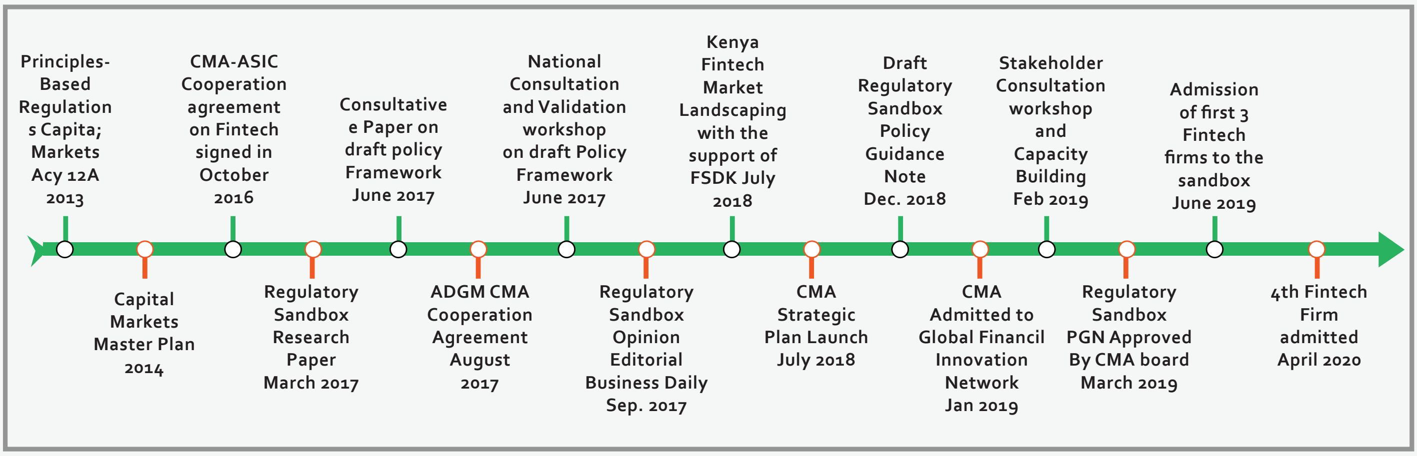
CMA commissioned work on Regulatory Sandbox research in June 2016 through a concept paper on feasibility of using a regulatory sandbox approach in Kenya. This led to the development of a consultative paper- cum- policy framework for the implementation of a regulatory sandbox to support FinTech innovation in the capital markets in Kenya. This was subjected to discussion and validation by industry players, policy makers and other stakeholders in June 2017 through a consultative forum.

Enable	Enable tailored regulatory environment for limited scale, live tests of innovative products and services
Set Out	Set out the eligibility requirements and application as well as testing processes for innovative products and services
Provide	Provide a framework to allow for testing innovative products and services with the potential to deepen/accelerate the capital market
Inform	Inform the review and adaptation of the legal and regulatory enviromnent that mayunintentionally inhabit innovations in the market.
Provide	Inform the review and adaptation of the legal and regulatory enviromnent that may unintentionally inhabit innovations in the

As outlined in the preliminary research, the key objectives of setting up a Regulatory Sandbox in the Capital Markets industry were to:

Under the support of Financial Sector Deepening Kenya, the Authority engaged CGAP to finalize the policy framework for a regulatory sandbox to support FinTech within the capital markets. CGAP worked in conjunction with the Authority's Regulatory Framework Department to develop policy guidance for the introduction for a regulatory sandbox in the capital markets. The Authority with the facilitation of FSDK engaged Open Capital Advisors to conduct a landscaping study aimed at establishing the position, size and number of FinTech firms, and the perceived barriers to innovation in the capital markets. The findings and recommendations from the study formed the basis for a Policy Guidance Note which established the regulatory framework for the operation of the capital markets-focused regulatory sandbox in Kenya.

In accordance with section 12A of the Capital Markets Act, the Authority conducted rigorous public consultation and stakeholder workshops culminating in a national validation workshop on the Regulatory Sandbox research, draft policy framework and Policy Guidance Note prior to implementation. This process was essential to ensuring buy-in and raising awareness of the proposed sandbox programme. The stakeholder consultations included targeted outreach to FinTech players, Regulators, Ministries, National Treasury,Capital Market and FinTech IndustryAssociations, Institutions of Higher Learning and the general public. This journey is summarized in the diagram



1.3 The Sandbox Review Committee

Following the approval of the PGN, the Authority set up the SRC in March 2019 to operationalize the Regulatory Sandbox in Kenya's Capital Markets. This is an internal Committee within CMA with members from diverse departments having the requisite skills and competencies to review and assess sandbox applications and admissions.

The primary mandate of the Committee is to undertake the review of applications for admission into the regulatory sandbox and monitor the implementation of test plans and the transition process after the firms exit the sandbox. In addition, the Committee serves as a channel for information sharing, both internally and externally. Other roles include reviewing and informing policy and legislative amendments relating to the products or service innovations arising from the sandbox; providing tailored regulatory support and technical advice when required to the Regulatory Sandbox participants; providing feedback on enquiries made by potential Regulatory Sandbox participants and admitted participants; and working with innovators to build appropriate consumer protection safeguards into new products and services.

2.0. Review Of Key Milestones

2.1 Number of applications

Since its operationalization in March 2019, the Regulatory Sandbox has received 24 applications, numerous queries and proposals. The zeal and vibrancy from the industry has been encouraging. The table below highlights the applications received since March 2019.

Applications & enquiries	Number
Robo Advisory	3
Blockchain Technology	5
Tokenization of Real Estate	4
Providing access to Global stocks	3
Crowd Funding Platforms	4
eKYC	2
Screen Based SLB	1
Data Analytics	2
TOTAL	24

Out of the 24 applications received, seven firms have been admitted, with a few more in the final stages of review. Two of the admitted firms have completed their testing phase and plan to roll out the products soon.

2.2 Firms admitted to the Sandbox

2.2.1. Innova Limited

Innova Limited was the first firm to make a formal application for admission to the CMA Regulatory Sandbox on 15 July 2019. Innova Limited is a FinTech company based in Nairobi that seeks to develop and integrate an application that would collate data from their clients who include custodians, fund managers and administrators so as to be available on the same platform. This would allow the regulator to verify scheme transactions, and scheme valuations. The development of the system is currently ongoing with regular monitoring by the Authority.

2.2.2. Pezesha Africa Limited

Pezesha Africa Limited was admitted to the Regulatory Sandbox on 16 July 2019. Pezesha, meaning financial empowerment, is an Africa- focused lending marketplace, whose intent is to digitally connect lenders with high quality borrowers. The lending model is participation through crowdfunding. Pezesha conducts due diligence and ascertains the credit worthiness of SMEs through its borrower appraisal system before they can be allowed to place loan notes or debentures on the Pezesha platform and get funding from participating investors.

Targeeted investors are mainly institutional investors such as Development Finance Institutions (DFIs), Asset Managers, Risk Capital Funds and High Net-Worth Individuals. Borrowers are thoroughly vetted through KYC detail verification and credit worthiness assessment by analysing their business models and income streams. The Pezesha platform then disburses the loan to the borrower, and as the borrower makes periodic payments, the platform is also able to distribute the interest and the principal to the lenders.

2.2.3. Gengis Capital

Genghis Capital Limited was the first firm admitted to the Regulatory Sandbox on May 13, 2019 to test their mobile phone based Collective Investment Scheme solution. Being a licensed Investment Bank, Genghis Capital worked in partnership with Safaricom PLC to develop the USSD investment-led application for a Money Market Fund Product called MALI, accessible to both feature phone and smart phone users.

The firm initially requested to be admitted in the sandbox for a period of 3 months but subsequently requested for an extension of this period with the aim to ensure wider reach of customers The firm completed running the tests and exited the sandbox and was authorized to roll out the product on a commercial scale.

2.2.4. CDSC

The Central Depository and Settlement Corporation (CDSC) was admitted to the Regulatory Sandbox on April 8, 2020. CDSC was admitted to test its screen-based Securities Lending and Borrowing (SLB) platform for a period of five months, which was later extended for a further 3 months. CDSC is licensed and regulated by CMA.

The Capital Markets (Securities Lending, Borrowing and Short selling) Regulations anticipated bilateral way of lending and borrowing of securities where the parties enter into a bilateral agreement. However, CDSC was seeking to try the possibility of having a screen-based model where the securities can be borrowed and returned through the system just like the normal buying and selling of securities with the lending fee put in similar to what would be the price of the securities in the traditional market. CDSC is an approved institution by the Authority to provide clearing and settlement services in the capital markets, providing central custody and of investors' assets.

Pyypl

Pyypl Group Limited was admitted to the Regulatory Sandbox on June 19, 2020 to test its Pyypl for Entrepreneurs product, a blockchain-based platform for issuance of debentures (unsecured bonds) among entrepreneurs for 12 months. It is licensed by the securities market regulator in United Arab Emirates – Financial Services Regulatory Authority in line with the Regulatory Sandbox PGN. Its subsidiaries in Bahrain and Kazakhstan are also active and licensed by the Central Bank of Bahrain and Astana Financial Services Regulatory Authority (Kazakhstan) respectively.

2.2.6. Belrium Kenya Limited

Belrium Kenya Limited was admitted to the Regulatory Sandbox on November 27, 2019 to test a blockchain-based and shareable know your customer (e-kyc) solution for capital markets intermediaries and investors. The test was to be executed in a period of nine months. Belrium's parent company, Belfrics Malaysia Sdn Bhd is a reporting institution with the Bank Negara Malaysia.

2.2.7. Four Front Management

FourFront

Four Front Management is a FinTech firm which is a subsidiary of Standard Investment Bank (SIB), a licensed investment bank. The firm was admitted to the Regulatory Sandbox on September 2, 2020 to test a robo-advisory solution targeting 100 investors during a four-month period. This was to happen through its digital platform that provides automated, algorithm-driven financial planning and investing services with little to no human interaction.

3.0. Participants And Customer Experience

This section highlights the perspective of the first three firms admitted to the Regulatory Sandbox. The firms share their experience and the lessons they have learnt in the process. Please note that this text is provided directly by the individual participating firms

3.1 Pezesha Africa Limited

Pezesha is providing a digital crowd lending platform connecting underserved MSMEs with working capital from investors seeking a purposeful way to earn returns through SME debt notes from Pezesha's platform. On one hand, qualified SMEs are vetted through Pezesha's robust digital KYC and credit scoring platform. On the other hand, lenders/investors seeking purposeful returns are also vetted before being matched with SME debt notes in relation to their risk preferences. Furthermore through Pezesha's matching algorithms, the firm minimizes concentration risk by diversifying funds allocation, generating improved Investor performance.

Pezesha Africa (Source: Wetracker.com)

3.1.1. High level progress and achievements so far

Pezesha was admitted to the Regulatory Sandbox in July 2019. While in the Sandbox Pezesha has achieved tremendous success and learnings, all demonstrating that it's possible to develop and implement a scalable crowd lending platform for underserved MSMEs in Kenya.

During the testing period, Pezesha has been able to enhance its credit assessments, formed strategic partnerships, enhance its customer experiences, grow its visibility, and build its expertise. As a result, they have been able to screen more that 1,000 SMEs from diverse sectors. Pezesha plans to reach more than 10,000 SMEs while operating in the Regulatory Sandbox.

Being in the Sandbox has also enhanced Pezesha's participation in local, regional and global FinTech events while generating interest from other Government entities on how its platform can further promote financial inclusion. Some of the lessons learnt by Pezesha so far include the following:

1. ***There is a huge gap of undeserved MSMEs in Kenya, hence the need for enhanced collaboration and tailor-made solutions***
2. ***There is a huge data gap for SMEs impeding their credit scoring and access to credit***
3. ***As technology changes and SME businesses grow, it is vital to maintain touchpoints to better understand their needs as they also evolve in order to enhance value additions beyond credit.***

Pezesha notes that Covid-19 has impacted the businesses of their clients, the SMEs, and are committed to continuously supporting them. Some of their interventions include financial education, waiver of interest for late payments, 1-3 months moratorium, no CRB listings for defaults, among other measures.

3.1.2. Pezesha's experience working with the Authority

This has been collaborative while learning from both parties. There has been lots of opportunities and strategic partners linkages as well from the regulator to drive Pezesha's growth and credibility. CMA has continued to show unwavering commitment to the growth of Pezesha platform in introducing SME debt notes as a new asset class to allow investors to further diversify their investment base, as this will allow more capital to seep into the SME space greatly impacting the lives of business owners and communities at large.

Pezesha aims to continue to further enhance its partnership with the CMA, which gives Pezesha and FinTechs at large, a path to validate their products and services and in the long run building credibility. Ultimately, fostering growth and competition in the SME space will lead to a developed economy which increases the number of jobs available consequently lowering the youth unemployment rate in Kenya that is currently at 39 percent and in the process, increasing financial inclusion to underserved SMEs which is Pezesha's mission.

Pezesha exited the Sandbox in August 2020 and are currently progressing plans to roll out its product to the mass market. The participation of Pezesha in the sandbox and the testing of its crowdfunding innovation has provided the Authority with the opportunity to tailor a facilitative regulatory framework for crowdfunding in the capital markets.

3.2 Genghis Capital Limited

Since 2017, Genghis Capital shifted its focus to a technology driven strategy to create market deepening and financial inclusion of the unbanked mass by tailoring retail products that solve the needs of this market segment who are often left out in traditional investment space under the Capital Markets Authority.

In 2019 after rigorous planning and review, Genghis Capital entered into a partnership with Safaricom PLC to develop the USSD investment-led application for a Money Market Fund Product called WEKEZA (later changed to MALI) in order to cater for both feature phone and smart phone users.

Genghis submitted its application to join the Sandbox Program on 29 April 2019 and were admitted in May 2019.

Genghis migrated its systems to production environment on 14th May 2019 and tested functionalities to ensure all was ready. From 15th May 2019, they officially began pilot test of the product by whitelisting only a smaller group of users to be able to access the product for the next 2 weeks.

After starting the pilot phase all the way till exit, Genghis sent weekly reports to the Sandbox Review Committee as well as maintained bi-monthly meetings with the Authority to discuss progress, customer patterns, learnings, improvements and monitoring Key Performance Indicators (KPIs) from the live data we were interacting with to build a collaborative engagement.

During the testing period, Genghis made improvements on its innovations based on customer experiences. To allow for the deployment of the upgraded version of the product, Genghis was granted an additional four months to test it.

Genghis shared its lessons and observations and its proposals for regulatory and policy changes desired for such a technology driven Collective Investment Scheme (CIS) product in comparison to the traditional CISs'. As a result of the test lessons, the Authority has been reviewing its collective investment scheme framework to facilitate the use of technology.

Following the successful completion of the testing process, the Authority wrote a letter of "No Objection" to Genghis to proceed to launch the Product to the public on December 31st, 2019. The Authority also approved the amendment of the incorporation documents of the underlying fund to make it a stand-alone fund as opposed to being under an umbrella like it was before, in preparation for the operationalization. This was to create independence and separate it from the other funds.

3.3 Innova Limited-Data Analytics

Innova Limited (Innova) is a FinTech company incorporated in 2010 in Nairobi - Kenya. Innova specializes in the development of practical tech-driven solutions that aim to solve real issues affecting the financial and capital markets across Africa. Innova provides integrated software financial solutions to over 30 institutional clients (Fund and Unit Trust Managers, Custodian Banks, Administrators, Actuarial Firms etc) across 7 countries in Africa (Kenya, Uganda, Tanzania, Rwanda, Ghana, Mauritius and Zambia).

The volume of data generated in the capital markets has grown exponentially over the past decade, resulting in massive amounts of high-velocity, heterogeneous data. This trend shows no signs of slowing down. In many cases, the rate of growth of data in the financial markets has out-paced the ability of its consumers to effectively utilize tools and techniques for timely and accurate data-driven analysis and decision making.

The evolving capital market landscape, increased investor participation and sophistication, regulatory reforms and new financial products and services, have made it increasingly necessary for capital market stakeholders to integrate with or adopt robust platforms with in-built real-time analytical capabilities.

As such, as part of a wider scope (involving Augmented Analytics (AA), Artificial Intelligence (AI) Machine Learning (ML) and Predictive Modelling (PM)), Innova (in collaboration with fund/unit trust managers, custodians, actuaries and administrators) is currently testing an integrated cloud-based real-time data-analytics platform capable of various analytical functions in the Regulatory Sandbox. The platform includes the following capabilities:

Portfolio Modeling & Optimization	Security Selection, Asset Class Allocation, Risk Diversification
Fund/Scheme Performance Analysis	Standardized GIPS Performance, Attribution
Statistical & Trend Analysis	Between multiple schemes/funds, assets/ securities, macros
Risk & Volatility Analysis	Risk/Return Analysis (per scheme/fund, asset/ security), systematic risk simulation (interest rate risk, inflationary risk, market risk) on portfolios or securities
Exposure Analysis	Asset, sectoral, geographical, currency etc, per scheme/fund
Behavioral Analysis	at portfolio, investor, fund manager. Custodian and market level
Compliance Analysis	Regulatory/Statutory limits, Asset Allocation etc. per scheme/portfolio

The platform securely spools and analyses data (macro, scheme/portfolio/fund transactional data, pricing and other financial data) from multiple sources and integrated systems to a secure cloud- based analytics platform as illustrated.

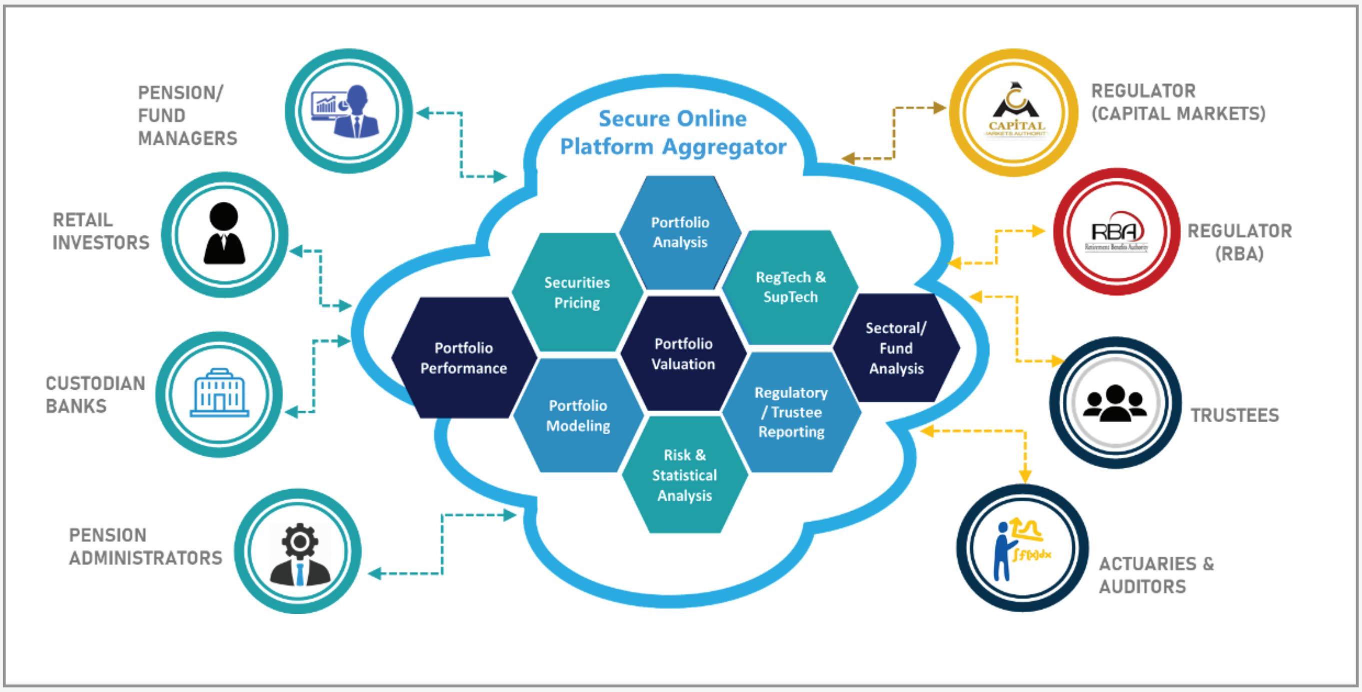


Figure 1: High-Level Innova Analytics Platform Architecture

The initial phase of the Regulatory Sandbox Test involved identifying the unique analytical and reporting requirements of different stakeholders (Fund Managers, Custodians, Administrators and Regulators), reviewing and documenting various Models and Algorithms (Financial, Risk, and Statistical), Pricing and Valuation methodologies. Concerns surrounding Cybersecurity, Data Protection, Legal and Regulatory issues were key considerations in determining the platforms architecture.

Thereafter, an iterative approach to developing the analytics platform involving development and deployment of the first set of pricing, valuation and analytical models was carried out. Continuous prototyping, regression and back-testing was also conducted in collaboration with participating clients.

Phase1alsoincludeddevelopment,testingandpilotingofGIPScompliantPortfolio/FundPerformance Measurement, Attribution/Contribution models, Absolute Risk Measures, Relative Return Measures (Capture Ratios), Risk Adjusted Models and Fat Tail Analysis Models.

These models may be applied per Security, Asset Class, Asset Category and Portfolio/Fund level. The platform also enables one to concurrently run and compare the above-mentioned models across multiple funds.

Diverse team backgrounds in Actuarial Science, Data Science (use of tools such as F#, Python, R etc), Economics, Financial Math & Analysis, Portfolio/Fund Management, Software Engineering and Statistics played a significant role in defining and shaping the analytics platform.

As we progress to the next phase, we expect to further broaden the scope and analytical capabilities of the platform by inviting wider stakeholder participation (including providing analytical functionality and access to retail investors), and integrating and testing with other stakeholder systems (3rd party applications). We will also continue to focus on enhancements with respect to process optimization, visualization of data and security.

Over the past 12 months, the Regulatory Sandbox has provided us a conducive environment within which to conceptualize, test and implement innovative solutions that address specific capital market challenges. However, to achieve this, a significant amount of investment in human resource and capacity, technical infrastructure (hardware & software + associated licences) as well as time was required from participating firms.

To cushion participants against these participatory costs and encourage wider participation, we recommend that further to the contribution made by the admitted participants with respect to the Sandbox, additional funding support from the Authority and Partners be extended to admitted firms.

Going forward, as our capital markets evolve, there is need for us to continuously enhance internal capacity. By growing the team, deepening and expanding our domain knowledge through various training programs and certifications in Actuarial Science, Data Science, Financial & Risk Analysis, Mathematical & Statistical Modelling and Software Engineering we expect to build a strong human capital base over the next couple of years.

The financial and capital markets are some of the more data-driven sectors of modern-day. As the amount of data continues to grow and influence key decision making, the importance and significance of timely and accurate data analysis will grow in tandem. Capital market dynamics, coupled with modern day challenges posed by global systemic risks such as the Covid-19 pandemic will continue to encourage wider adoption of technology, particularly cloud-based.

Ultimately, the Analytics Platform is expected to provide tooling designed to enable Investors (Retail and Institutional), Analysts and Regulators across multiple markets and exchanges securely analyse securities and portfolios remotely. This we believe, will support ongoing efforts to promote wider financial inclusion and further deepen our capital markets.

4.0. Key Lessons Learnt, Limitations, Risks And Opportunities

4.1 Key Challenges

A 'Sandbox' is largely seen as a western concept. It is a play area for children constructed using wood or plastic in child-friendly shapes and is filled with sand. Sandboxes are large enough to accommodate several children. They are found in families' backyards, schools or a public playground. Children play with their toys within the confined space of a sandbox and as they dig, scoop and build using sand, they develop their motor, sensory and imaginative skills.

The term and concept of a Sandbox is not familiar among many Kenyans as this was not our experience growing up. We innovated albeit differently. For example, if a group of children lacked a football, they made one using plastic papers tied with rubber from the tubes of tyres which are no longer in use. Children also made toys like cars using tetra packs from discarded juice or milk boxes, broom sticks were used for front and back axle and bottle tops were attached to these axles as tyres.

Because of unfamiliarity with the term Sandbox among local stakeholders we have engaged with, it was observed that majority thought the Regulatory Sandbox to be a physical space, a laboratory or an actual building where the Authority would provide

FinTechs a work-station to test their innovations. We have used the communication channels available to the Authority to clarify that the Regulatory Sandbox is regulatory flexibility to conduct live tests of innovative products and business models with the potential to deepen the capital markets within a limited scale in terms of limited test subjects or investors and limited time period of a maximum of 12 months.

The journey towards developing the Policy Guidance Note for the Regulatory Sandbox and implementing it has not been an easy one. It required a lot of resources in terms of time and funds. The landscaping study, stakeholder engagements and training of market participants and members of the SRC all involved application of funds. Thanks to our partners, we managed to overcome this challenge.

The other challenge which is closely related to resources is the technical nature of the applications we have received for admission into the Regulatory Sandbox. Given the complexity and novelty of the solutions and products presented for review, the SRC has to go out of its way to understand these products and solutions before they are approved for admission into the sandbox. Constant consultation and capacity building, working with applicants and other partners has been handy in overcoming this challenge.

Divergent views or positions taken by fellow regulators in the financial and other sectors has made the process of reviewing certain applications quite tasking, especially where the applications have aspects which are cross cutting.This is a problem especially because regulators are at different levels of embracing FinTech solutions or ideas. There have been concerted efforts towards convergence in approach especially for the financial sector regulators.

The Joint Financial Sector Regulators Forum (JFSRF) constituted a working group on collaboration in promoting adoption of technology and innovations in the financial services sector to enhance effective regulation and supervision. This is expected to play a key role in enhancing convergence in thinking and developing a common front in approach towards regulation of FinTechs.

Because Regulatory Sandboxes are still a novel regulatory tool, many jurisdictions are still grappling with challenges of early adoption, including the lack of certainty on the expected outcomes. For this reason, there are not so many predecessors at the same level as Kenya in terms of peer regulators from which to benchmark and compare notes on some FinTech solutions under review. Further, there is fear of some of the likely consequences of disruption in the market like disintermediation. There has not been a comparable market or jurisdiction to benchmark from.

The table below summarizes some of the challenges faced when engaging firms making enquiries for admission to the Regulatory Sandbox, reviewing applications, and post admission. They have been classified according to the nature of the applications:

Type of Application	*Summary Of Challenges*
CROWD FUNDING	• The thin line between crowdfunding as a lending product under banking regulator or a fixed income investment under capital markets. • The dilemma on whether to regulate the crowdfunding platform provider or the issuers using the platform. • This model of funding has a significantly higher level of risk when it comes to the possibility of being run as a scam/Ponzi scheme. • The concern that developing crowdfunding regulations will take longer than the period it will take to graduate the first batch of firms from the sandbox; and what framework will guide their operations post exit. • The cross-border nature of crowdfunding brings jurisdictional challenges e.g. different property, insolvency and tax laws as well as enforcement. • The dilemma of encouraging self-regulation through FinTech associations vis a vis direct state regulation.

Type Of Application	Summary Of Challenges
DATA ANALYTICS	• There is a challenge on whether to view this innovation as a product that needs to be regulated, given issues around investor data protection and its Reg-Tech capabilities • Lack of adequate Internal capability to review the technical aspects of the system including algorithms used
DECENTRALIZED FINANCE, BLOCK CHAIN SOLUTIONS, CRYPTOCURRENCY AND ITS DERIVATIVES	• Novelty and complexity of the concept • Insufficient information regarding the risk universe in this area • Lack of Internal capacity to review these types of applications • Objections by Central Banks to issue of cryptocurrencies • Fears around volatility affecting local currency • Concerns around cyber security and data safety • The challenge of multiple FinTech firms providing a solution to solve the same common problem like E-YC using block chain.
TOKENIZATION	• Delinking tokenization from cryptocurrency • Grappling with the idea of stable coins and other Regulators' opinion on the same • Lack of clarity on custodial arrangements of the assets. • Verification and Valuation of the assets • How to handle market bifurcation, where there may exist two markets for the same asset (on chain and off chain) • Concerns around cyber security and data safety
MOBILE BASED SAVINGS AND INVESTMENT SOLUTIONS	• Methods of undertaking AGMs for unit holders may be reconsidered given the massive numbers. • Being mostly a CIS, other players in CIS market could raise objections regarding the exclusions given to this product • The large number of test subjects (50,000 investors) needed to successfully test the product was beyond the sandbox risk appetite
SCREEN BASED SECURITIES LENDING AND BORROWING	• Multiple players some outside the influence of both the regulator and the applicant • The colossal amounts of money involved in bond market make testing risky • Complexity of the product considering its features are customized to local requirements • Market infrastructure limitations mostly relating to post trade settlement • Differences in the tax treatment of interests earned by the lender vis a vis the borrowers
DIRECT MARKET ACCESS	• The fear of disintermediation among market intermediaries

4.2 Key Learning

While it is still too early to assess the impact of the Regulatory Sandbox in the capital markets, one important point to note is that the sandbox allowed the Authority to work with innovators to build appropriate consumer protection safeguards into new products and services.The Authority has benefited a great deal from these interactions in terms of obtaining new knowledge from the market and better understanding the products. Some of the key lessons learnt include:

a. **Regulators must work closely with applicants.** This is mainly because the FinTech firms are the owners of the ideas and they understand these ideas better than the regulator. It is imperative therefore for the regulator to take lessons from the market and make suggestions to the firms to enhance the product to ensure all risks are adequately covered.

b. **In multi-peak jurisdictions, regulators must coordinate and cooperate on FinTech regulation.** Some of the applications we have received for admission into the Regulatory Sandbox are cross cutting and have aspects where different regulators need to be engaged. It is important to have a forum where various regulators sit and discuss such applications.

c. **Create goodwill with the FinTech firms:** To eliminate the element of mistrust between the CMA and FinTechs, there is need for the regulator to be open and act in good faith with applicants.This allows firms to open up to the regulator and even help the regulators with areas of potential risks in their products.

d. **Learn, keep learning and learn more:** There is a bi-directional benefit in learning through the sandbox experience. The regulator has to take every opportunity to learn new ideas.This puts the regulator ahead of the market or at least at par with the market.

e. **Never dismiss any idea before doing a proper assessment of it:** Much as the regulator stands for investor protection, this should not be an impediment to development of new ideas. The regulator has to listen to new ideas and assess them on their merit and workability.

f. **Use internal resources and expertise:** The Authority has constituted an internal cross-departmental committee (SRC) to review applications and engage applicants. The committee has had to go through a steep learning curve to understand the new innovations and make solid assessments of their suitability or otherwise for their admission. The advantage with this is that the experts understand the operations of the market and the core mandate of the Authority. They are therefore able to quickly review innovations and promptly advise on their suitability.

5.0. Key Strategic Partners

The Authority collaborated with various key industry and strategic partners in the design and implementation of a Regulatory Sandbox Regime. Further, CMA has been a member of various local, regional and global coordination groups and standard setting bodies geared towards the development of research, policy and regulatory frameworks for Fintech and emerging technologies. Some of the key stakeholders and strategic partners in the Regulatory Sandbox journey included Consultative Group for Assisting the Poor (CGAP), Open Capital Advisors, Kenya, Africa CrowdFunding Association (ACfA) and Financial Sector Deepening Kenya (FSDK). Other key partners include the Global Financial Innovation Network (GFIN), Financial Conduct Authority (FCA), Financial Sector Deepening Africa (FSDA) and Cambridge Center for Alternative Finance (CCAF).

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i. Open Capital Advisors and Financial Sector Deepening Kenya

The emergence of new technologies has the potential to drive significant change while introducing a change in the modus operandi of financial markets[2]. In a bid to understand the Fintech landscape in Kenya and assess demand for a Regulatory Sandbox, CMA in partnership with Open Capital Advisors and FSDK completed a landscaping study aimed at establishing the position, size and FinTech firms whose innovations are aligned to capital markets. The study results indicated that Kenya's Fintech ecosystem is a very vibrant space where innovations range across products, service, business models and solutions.

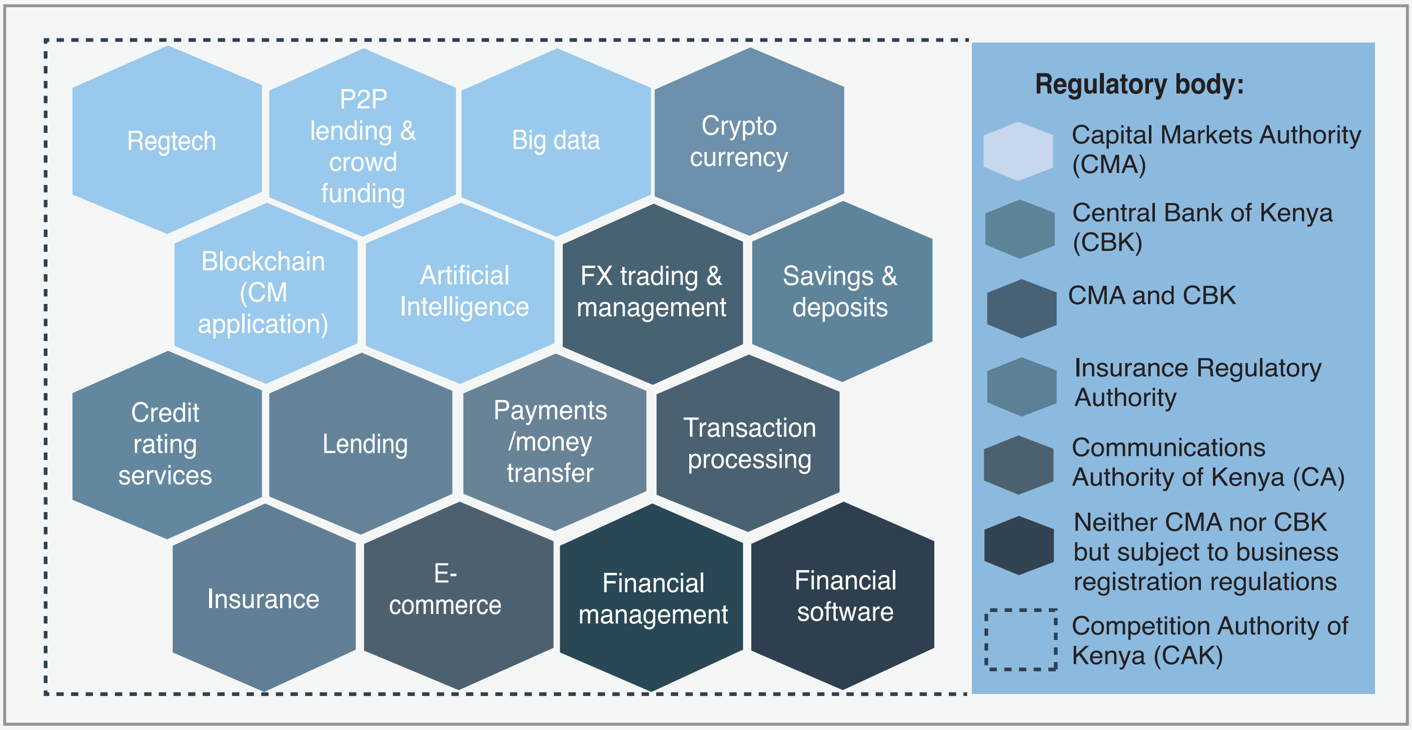

Figure 1: Kenya Fintech Regulatory Mapping Survey
(Source: CMA, FSDK and Open Capital Advisors Kenya Fintech Market Mapping Survey Report for Regulatory Sandbox development May 2018.)

ii. Consultative Group to Assist the Poor

CGAP is a global partnership of more than 30 leading development organizations that works to advance the lives of poor people through financial inclusion. CGAP aims to test, learn and share knowledge intended to help build inclusive and responsible financial systems that move people out of poverty, protect their economic gains and advance broader development goals using action-oriented research. The organization undertakes research and experiment to achieve proof of concept and extract lessons that can be built to scale by key partners that apply insights in the marketplace.

CGAP in partnership with the Financial Sector Deepening Kenya consultancy provided technical expertise to CMA policy and regulatory framework in the design and implementation of Kenya's Regulatory Sandbox Policy Guidance Note (PGN). Further, CGAP worked with the Authority in the design of a Regulatory Sandbox implementation road map as well as a governance structure to operationalize the regulatory sandbox and also undertook capacity building for CMA SRC in the design and review of applications and test plans within a Regulatory Sandbox environment.

iii. The Global Financial Innovation Network (GFIN)

The Global Financial Innovation Network (GFIN) was formally launched in January 2019 by an international group of financial regulators and related organisations.The CMA was admitted to the GFIN in January 2019. GFIN seeks to provide a more efficient way for innovative firms to interact with regulators, helping them navigate between countries as they look to scale new ideas.

This includes a pilot for firms wishing to test innovative products, services or business models across more than one jurisdiction. It also aims to create a new framework for co-operation between financial services regulators on innovation-related topics, gaining insights and sharing different experiences, lessons and approaches.

GFIN is a collaborative knowledge sharing initiative aimed at advancing areas including financial integrity, consumer wellbeing and protection, financial inclusion, competition and financial stability through innovation in financial services, by sharing experiences, working jointly on lessons learned and facilitating responsible cross-border experimentation of new ideas.

GFIN has three primary functions:

- **a.** To act as a collaborative group of regulators to cooperate and share experience of innovation in respective markets, including emerging technologies and business models, and to provide accessible regulatory contact information for firms.
- **b.** To provide a forum for joint RegTech work and collaborative knowledge sharing/lessons learned; and
- **c.** To provide firms with an environment in which to trial cross-border solutions.
- **d.** The Network has been fundamental for CMA regulatory Sandbox for purposes of information sharing and in undertaking due diligence of cross border innovations seeking admission to the CMA Regulatory Sandbox.

iv. Peer Regulator Efforts and the Joint Financial Sector Regulators Forum (JFSRF)

The Joint Financial Sector Regulators Forum (JFSRF) constituted a working group on collaboration in promoting adoption of technology and innovations in the financial services sector to enhance effective regulation and supervision.

The financial services sector in Kenya has several prudential regulators that regulate the provision of Fintech products and services that fall within their regulatory ambit include:

- **a.** The Central Bank of Kenya is established under the Central Bank of Kenya Act, Chapter 491 of the Laws of Kenya.
- **b.** The Capital Markets Authority is established under the Capital Markets Act, Chapter 485A of the Laws of Kenya.
- **c.** The Communications Authority of Kenya is established under the Kenya Information and Communication Act, Chapter 411A of the Laws of Kenya.
- **d.** The Competition Authority of Kenya as established under the Competition Act, No. 12 of 2010; and
- **e.** Other regulators such as the Kenya Revenue Authority, Insurance Regulatory Authority and the Retirement Benefits Authority would regulate FinTech products to the extent that they are used in connection with activities that fall under their regulatory oversight.

v. African Crowdfunding Association (ACfA)

ACfA provided technical support during the Regulatory Sandbox Stakeholder workshops and forums. Further, the Authority has been working in close consultation with ACfA on crowdfunding related issues.

On the other hand, the ACfA also developed the ACfA Label Framework which is a pan-African regulatory framework for securities-based crowdfunding. Most regulatory organizations in Africa including CMA Kenya are reviewing their frameworks to explore the feasibility of either aligning to or recognizing and authorizing ACfA as the Self-Regulatory Organization to regulate securities-based crowdfunding in their respective jurisdictions.

African CrowdFunding Association

vi. East Africa Securities Regulatory Authorities (EASRA)

In line with the implementation of East Africa Community (EAC) council directives towards harmonization of legislative frameworks across the region, the East Africa Securities Regulatory Authorities (EASRA) legal issues subcommittee in September 2019 developed the Draft Equity and Debt Crowdfunding Guidelines which are currently undergoing review by the respective regulators.

vii. Financial Sector Deepening Africa (FSDA)

CMA Kenya participated in the "Regulation and Innovation in the Age of Fintech" Forum hosted in London in 2018 by FSDA. The forum was instrumental in facilitating the sharing of insights on regulatory approaches to FinTech around the world, providing capacity building and training to regulatory authorities, and providing a forum for the sharing of lessons learned and good practices.

viii. Surveys

The Authority provided relevant information on Regulatory Sandboxes and Fintech initiatives to the World Bank Group and Cambridge Centre for Alternative Finance survey on Alternative Finance Regulation and the CGAP and World Bank Group Regulatory Innovation Survey.

ix. Awards

The Authority as a result of its key innovation efforts and work on Fintech and Regulatory Sandbox to facilitate innovations in the capital market in Kenya was feted the Most Innovative Capital Markets Regulator in Africa by the International Finance Magazine. The award was also aligned to CMA's consistent evaluation of regulatory approaches to ensure they do not operate as an obstacle but rather as a facilitator for potential innovators who want to focus on making financial services more reliable, efficient, convenient and affordable.

x. Financial Conduct Authority UK

The Authority has worked closely with FCA on information sharing on matters relating to Fintech and Emerging Technologies. The Authority also participated in the UK FCA Global TechSprint on AML and CFT hosted in London in 2019. Further, the CMA supported the UK FCA technical scoping mission on Fintech in Kenya.

xi. Publication Features, Opinion Editorials and Blogs

CMA Regulatory Sandbox work has been featured in various local and global publications and Opinion editorials as listed in the references (Section 7.0)

6.0. Next Steps And Conclusion

Kenya is now regarded by many local and international investors as a sophisticated technology market by regional and global standards. Through the Regulatory Sandbox learning and closer regulatory coordination with Financial Sector Regulators in Kenya, the Authority will work towards developing adaptable and more responsive legal and legislative frameworks for current and emerging technologies on Alternative Finance including Crowdfunding. This is geared to achieving the core objectives of regulating innovation including Consumer Protection, Financial Inclusion, Financial Stability and Financial integrity.

On 11 November 2020, as a strategy of deepening support for innovative solutions in the capital markets industry, CMA joined twenty-three regulators across five continents to test innovative financial products, services, business models and regulatory technology (RegTech).The cross-border tests were conducted under the GFIN, which is an international network of financial services regulators and related organizations, committed to supporting financial innovation.

CMA will continue to strategically leverage the potential impact of and champion the adoption of new technologies in the capital markets value chain. More so, the Authority will continue to work closely with the International Organization of Securities Commissions (IOSCO) and the GFIN towards harnessing FinTech to improve outcomes globally around regulatory developments.

7.0. References

CMA plans FinTech hub to drive financial innovation

3 Kenyan FinTech start-ups picked for CMA regulatory sandbox

CMA invites FinTech firms to its regulatory sandbox

3 FinTech firms admitted into CMA regulatory sandbox

Capital Market's Authority Launches regulatory sandbox for Kenya's start-ups to develop FinTech products

Three firms admitted to the CMA Regulatory Sandbox

Kenya's CMA admits three FinTech's to regulatory sandbox

Update on Regulatory Sandbox by the Capital Markets Authority

CMA approves regulatory policy to guide FinTech companies

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Kenya's Regulatory Sandbox Will Not Accommodate Cryptocurrency Firms Says CMA

CMA seeking new ways to incubate innovation

Regulatory sandbox Policy Guidance Note

Why Kenya's Capital Markets Authority is King in Africa

FSD Kenya engages Open Capital to map the Kenyan FinTech market and identify how to drive innovation

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One Thing Regulators Should Do Before Launching a Sandbox

Regulatory Sandboxes and Financial Inclusion - CGAP

Early Lessons on Regulatory Innovations to Enable Inclusive FinTech: Innovation Offices, Regulatory Sandboxes, and RegTech UNSGSA FinTech Working Group and CCAF

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