CAPITAL MARKETS AUTHORITY

Promoting the Integrity and Growth of the Capital Markets

CMA KENYA REGULATORY SANDBOX IMPACT REPORT

June 2024

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MARKETS AUTHORITY

Promoting the Integrity and Growth of the Capital Markets

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List of Abbreviations

AML	: Anti Money Laundering
BETA	: Bottom-up Economic Transformation Agenda
IOSCO	: International Organization for Securities Commissions
SRC	: Sandbox Review Committee
CMA	: Capital Markets Authority
CDD	: Customer Due Diligence
CFT	: Counter Terrorism Financing
CIS	: Collective Investment Schemes
REIT	: Real Estate Investment Trust
I-REIT	: Income Real Estate Investment Trust
KYC	: Know Your Customer
CAGR	: Compound Annual Growth Rate
IBC	: Investment Based Crowdfunding
CCAF	: Cambridge Centre for Alternative Finance
MSME	: Micro, Small, and Medium Enterprises
CGAP	: Consultative Group for Assisting the Poor
GBBC	: Global Blockchain Business Council
PGN	: Policy Guidance Note

Chairperson's **Statement**

I am pleased to unveil the Regulatory **Sandbox Impact Report, 2024.** The purpose of this Report is to take stock of the Regulatory Sandbox›s contribution to the capital markets and to the economy. In this Report, we are reflecting on the impact and value addition of the Regulatory Sandbox.

One of the principal objectives of the Authority is to promote the development of the capital and commodities markets with particular emphasis on removal of impediments to long term investments in productive enterprises. It ensures the fulfilment of this objective by allowing testing of innovative products, solutions and services that broaden and deepen the capital markets.

Kenya's Vision 2030 which is the national economic development blueprint aims at creating a globally competitive and prosperous country with a high quality of life by 2030. Innovation is one of Vision 2030's foundations. Further, the Ninth Sustainable Development Goal on Industry, Innovation and Infrastructure recognizes that investment in innovation and technological progress is a key driver of economic growth and development. Therefore, CMA's Regulatory Sandbox aligns with Kenya's Vision 2030 and the UN's Sustainable Development Goals as a key facilitator of innovation.

These aspirations were cascaded for implementation through the Capital Market Master Plan (2014-2023), the capital markets industry strategic document. The Master Plan envisioned that the Kenyan capital markets would become the choice market for domestic, regional and international issuers and investors seeking to invest in East and Central Africa. To achieve this, the capital market was envisioned as the centre of excellence for technology services and financial inclusion, while leveraging its strength to develop innovative products and services. Likewise, the CMA Strategic Plan 2018-2023 focused on leveraging the potential impact of new technologies in the capital markets value-chain. Under the new Strategic Plan 2023-2028, the Authority sees an effective Regulatory Sandbox as a critical means to growing the investor base and ultimately growing market capitalization by KShs.1 trillion by 2028.

At the international level, the International Organization of Securities Commission (IOSCO) the global standard setter for financial markets regulation highlights in its 2022 Annual Report that the emergence of financial technologies has the potential to improve the services offered to consumers of financial services and products. This is achieved by expanding choices, improving transparency in products and markets and increasing financial inclusion. However, fintech also creates new challenges for financial sector regulators.

IOSCO's Growth and Emerging Markets (GEM) Committee, in its July 2022 Report on the Use of Innovation Facilitators in Growth and Emerging Markets highlights that a regulatory response to financial innovation requires a balanced approach between potential opportunities for innovation and the risks to investors, integrity of markets and the stability of the financial system.

The recommendations of the Committee are that an effective framework to support fintech in the capital markets requires a clear and transparent eligibility criterion for entities and transparency of objectives and functions of innovation facilitators. I would like to confirm that the Authority's Regulatory Sandbox's framework complies with the recommendations by the GEM Committee. The Regulatory Sandbox not only encourages innovation in the capital markets space, but also highlights any risks associated with novel products during testing and proposes suitable risk mitigation strategies considering investor protection.

Since the inception of the Regulatory Sandbox in 2019, 15 firms have been admitted into the sandbox for evidence based live testing of innovative capital markets products. Nine of these firms have successfully exited the sandbox. These firms have rolled out their products to the mass-market and their success demonstrates the importance of innovation in the capital markets in promoting transparency and financial inclusion.

As I sign off, I would like to express my sincerest gratitude to the team of professionals constituting the leadership of the Authority and the Sandbox Review Committee for their relentless dedication to working with applicants for admission to the Sandbox. Particularly in overseeing testing of innovative capital markets products, highlighting any risks that the products pose to the public and mitigation strategies for the same.

Ugas S. Mohamed
Chairman
Capital Markets Authority

KENYA VISION 2030 *aims at creating a globally competitive and prosperous country with a high quality of life by 2030.*

CEO's Statement

The primary objective of the **Regulatory Sandbox** is to provide an environment for licensed and unlicensed firms, and other fintechs operating in the capital markets to test **innovative products, services,** and **solutions** in a contained environment.

Cognizant of the role of technology and innovation in the evolving financial sector landscape, the Regulatory Sandbox is an avenue for the Authority to review regulations that had the unintended consequence of stifling innovation, but instead adopt more facilitative frameworks. After extensive and broad stakeholder consultations, the Regulatory Sandbox was launched in March 2019.

Five years since the launch of the Regulatory Sandbox, this Impact Report draws on our valuable experiences in reviewing applications for admission to the Sandbox, overseeing the experimentation and live-testing processes and transitioning FinTechs to mainstream supervision by the Authority. In addition, we note the factors that have made the Regulatory Sandbox unrivalled in the region, thus becoming a thought leader to other peer regulators. CMA set out to admit five firms to the test environment between 2018 to 2023.

However, by 30 May, 2024, 15 firms have been admitted to the live-test environment, nine have successfully exited, testing by seven was discontinued and three are in the process of testing. As a result of successfully exited firms, a total of KShs. 18 billion has been mobilized into the capital markets through retail aggregators. The investor base has also grown significantly by 900,000 new and active investors.

We remain optimistic that an effective Regulatory Sandbox will be instrumental in expanding the pool of issuers and investors in our market, and thus enhancing our savings levels to fund Kenya's investment needs. I am hopeful that this will contribute significantly to Authority's objective of increasing aggregate market capitalization from the current KShs. 5.6 trillion to KShs. 6.6 trillion by 2028. Increased uptake of capital markets products and services, enhanced market liquidity, enhanced customer experience and evidence-based policies and regulations are some of the benefits that come with this initiative.

Looking ahead, the effectiveness of the Regulatory Sandbox is achievable through a Regulatory Sandbox Plus model in which the Authority goes beyond the review and admission of FinTech participants to connecting them to funding to scale up their businesses.

In addition, the Authority could link successfully exited firms to transactional advisors in preparation for potential listing or future exits through the Nairobi Securities Exchange. To ensure that innovations strike a delicate balance between market development and investor protection, there is still need for increased coordination and collaboration among all players in the public and private sectors.

In conclusion, I would like to acknowledge the support we have received from the Cabinet Secretary, The National Treasury and Economic Planning, as we embarked on this journey which has been very successful. Indeed, this is a testament to the Government's firm commitment to support innovation to drive economic growth and transformation.

FCPA Wyckliffe Shamiah
Chief Executive Officer

18 Billion
has been mobilized into the capital markets through retail aggregators.

Hopeful market capitalization increment to Authority's objective form

5.6 Trillion
to
6.6 Trillion
by 2028

We remain optimistic that an effective Regulatory Sandbox will be instrumental in expanding the pool of issuers and investors in our market, and thus enhancing our savings levels to fund Kenya's investment needs.


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Executive **Summary**

The CMA Regulatory Sandbox Impact Report 2024 traces the journey and contribution of the Regulatory Sandbox since its launch in March 2019 and assesses how the objectives of the Sandbox as envisaged in the PGN have been met. Upon the establishment of the Sandbox Review Committee, the Regulatory Sandbox has received numerous applications and inquiries from innovators seeking to have their solutions tested in the sandbox. Out of the many applications received, the Authority has admitted 16 firms into the Regulatory Sandbox, out of which 9 firms have successfully exited and are operating in the mass market.

The Regulatory Sandbox has provided an opportunity for innovators who are mostly start-ups and MSMEs to test their innovations, access the market, obtain capital funding and develop financial products that enhance efficiency, convenience, democratize investments through products tailored to retail investors, to promote a culture of savings. It has also enhanced their brand visibility, thereby enabling their expansion to other markets.

Through the firms that have been admitted and successfully exited from the Regulatory Sandbox, over KShs. 18 billion investments have been mobilized through these platforms. The lessons learnt from the testing of these applications have enabled the Authority to develop evidence-based and responsive regulatory frameworks such as the Crowdfunding Regulations, Intermediary Service Platform Provider License category under the new CIS Regulations, and the amendment to the REITs Regulation among others. These legislations provide a legal framework under which the exited firms are licensed and supervised.

Furthermore, the Regulatory Sandbox has facilitated the development of a RegTech solution that has enhanced regulatory reporting, monitoring, and compliance. It has equally contributed to national policies such as the Vision 2030 and the Bottom-up Economic Transformation Agenda (BETA) by providing for a fintech and technology ecosystem, reducing the cost of access to investments, and enhancing service delivery through digitization and automation. The interactions with co-regulators and global partners have enabled the Regulatory Sandbox to gain global competitiveness through adoption of best practices.

Whereas FinTech innovations have enabled inclusive economic growth by providing financial products that target retail investors and enhanced savings, they have also introduced new risks and challenges for the regulator. These include risks related to weak corporate governance structures, cyber-security, money laundering and terrorism financing, and disruptive fintech innovations that stretch the scope of the regulator's supervision.

As the Authority continues to champion innovation, the Regulatory Sandbox remains a cornerstone of its efforts to grow the customer base and democratize wealth through leveraging technology to deliver capital market services and products. Looking ahead, the recommendations outlined in this report, including the implementation of targeted support initiatives, are poised to further amplify the impact of the Sandbox and propel the financial sector towards greater innovation and prosperity.

01 INTRODUCTION

1. Introduction

The Capital Markets Act establishes the Capital Markets Authority (CMA) with the dual mandate of developing and regulating the capital and commodities markets. Close to a decade ago, regulatory sandboxes became one of the initiatives adopted by financial sector regulators globally to keep abreast of technological solutions and innovations that change how financial services and products have been traditionally offered or structured.

In addition to innovation labs, accelerator programmes, hackathons and tech sprints, regulatory sandboxes seek to equip tech firms with information and knowledge on financial regulations that they may not be aware of while experimenting with their activities and technologies in a live-test under a controlled environment.

According to the International Organization of Securities Commissions (IOSCO) Report on The Use of Innovation Facilitators in Growth and Emerging Markets (2022), a regulatory sandbox is a controlled, live environment with special exemptions, allowances, or other limited, time-bound exceptions under a regulator's supervision.

In a parallel manner, sandboxes are a means for regulators to understand the emerging technologies and the risks they portend for market participants while providing concrete means to addressing the risks. Some of the first implementers of regulatory sandboxes from whom the Authority has learnt from include;

FINANCIAL CONDUCT AUTHORITY

ASIC Australian Securities & Investments Commission

MAS Monetary Authority of Singapore

ABU DHABI GLOBAL MARKET
سوق أبوظبي العالمي

In Africa, several jurisdictions have explored the Regulatory Sandbox as a means of overcoming regulatory barriers and addressing the rising growth of FinTech, alternative finance and its impact on financial services. Within the capital markets context, countries such as Namibia; Mauritius; Nigeria; Sierra Leone; Ghana; and Zambia have established regulatory sandboxes. The World Bank and Cambridge Centre of Alternative Finance (2019) Regulating Alternative Finance – Results from a Global Regulator Survey report noted that the emergence of alternative finance models such as peer-to-peer lending (P2P), equity-based crowdfunding, and Initial Coin Offerings (ICOs) in Africa triggered the need for regulatory change. Regulators in Africa thus considered regulatory sandboxes as potential avenues through which emerging technologies and finance models that do not fit neatly within the existing regulatory framework could be tested within the confines of certain safeguards. As a result, countries within the continent adopted regulatory sandboxes and a test-and-learn approach towards FinTech and alternative finance.

Within the economic pillar of the Medium-Term Plan III of the national development agenda, Vision 2030 for the period 2018-2022 under financial services, the development of legal and institutional frameworks to support financial technology (fintech) was emphasized as a key deliverable under the flagship project on digital finance. This ambition was then cascaded by the Authority and the industry to the Capital Market Master Plan (2014-2023) and the CMA Strategic Plan 2018-2023, with the overall aim of taking a proactive approach to promoting the responsible adoption of fintech.

One of the strategic objectives of the Capital Market Master Plan was to stimulate innovation to broaden product and service offering, deepen market participation and drive transformative economic development.

The Master Plan recognized that market participants themselves are the drivers of innovation, identifying opportunities and developing new products and services to meet them. Moreover, the Authority's Strategic Plan incorporated as one of its core objectives, the need to leverage technology to drive efficiency in the capital markets value chain.

The Authority's journey to the establishment of a regulatory sandbox commenced with research in June 2016. The outcome of the research process was a concept paper on the feasibility of using a regulatory sandbox approach in Kenya. This was followed by the development of a policy framework for the implementation of a regulatory sandbox to support FinTech innovation in the capital markets. The framework was subjected to discussion and validation by industry players, policymakers, and other stakeholders in 2017 through various consultative forums.

This process was essential to facilitate stakeholder input, buy-in, and awareness of the proposed sandbox program. Stakeholder consultations included targeted outreach to FinTech players, Regulators, Ministries, the National Treasury and Economic Planning, capital markets industry and FinTech industry associations, institutions of higher learning, business incubators and accelerators and the public. Further, the Authority with the facilitation of FSD-K 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 Kenya's capital markets. The Authority with the support of these partners developed the Policy Guidance Note (PGN) which established the regulatory sandbox in Kenya.

Timeline

Event	Date
Principles- Based Regulation Capital Markets Act 12A	2013
Capital Markets Master Plan	2014
Regulatory Sandbox Research Paper	March 2017
Consultative Paper on draft Policy Framework	June 2017
National Consultation and Validation workshop on draft Policy Framework	June 2017
Regulatory Sandbox Opinion Editorial Business Daily	Sept 2017
Kenya Fintech Market Landscaping with the support of FSDK	July 2018
CMA Strategic Plan Launch	July 2018
ADGM CMA Cooperation Agreement	Aug 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
Regulatory Sandbox PGN Approved by CMA Board	March 2019
Admission of first 3 Fintech firms to the sandbox	June 2019
Review of the draft digital finance policy paper	March 2020
4th Fintech Firm admitted	March 2020
Update on the implementation of the regulatory sandbox	Jan 2022
Regulatory Sandbox. Update on the implementation of the regulatory sandbox & next steps.	Sept 2022
The case for crypto innovations applications to the regulatory sandbox- the crypto ecosystem	Oct 2022
16th Firm admitted into the Regulatory Sandbox	Dec 2023
9th Successful Firm exits Regulatory Sandbox	Jan 2024
Board update on asset tokenization applications for admission to the capital markets authority's regulatory sandbox.	Apr 2024
1st tokenization firm admitted into the Regulatory Sandbox	May 2024
Regulatory Sandbox Impact report	June 2024

1.1. The objectives of the Regulatory Sandbox

Regulatory sandboxes offer benefits to regulators, innovators and investors. The Authority developed four key objectives for setting up its Regulatory Sandbox which are:

01

To provide a regulatory environment that is conducive to the deployment of a variety of innovative business models and emerging technologies that have the potential to deepen or broaden the capital markets in Kenya. This includes reviewing and adapting regulatory requirements that may unintentionally inhibit investor-friendly innovations or render them non-viable under current regulations.

02

To accelerate its understanding of emerging technologies by observing fintech experiments.

03

To support evidence-based approaches to regulation that promote investor empowerment and protection, capital markets deepening and broadening, in line with its mandate.

04

To facilitate experimentation and live-testing of innovative capital markets-related products, solutions, and services prior to launching into the open market.

To enable the Regulatory Sandbox to achieve these objectives, the Authority established the Sandbox Review Committee (SRC) as an internal multi-disciplinary Committee tasked with the responsibility of overseeing the implementation of the Regulatory Sandbox PGN. Since its inception, the Regulatory Sandbox has tested innovations in diverse areas including; e-KYC, crowdfunding, peer-to-peer lending, robo-advisory, RegTech, asset tokenization, securities lending and borrowing, and collective investment scheme intermediary service platform providers.

02 THE CMA REGULATORY SANDBOX

2. The CMA Regulatory Sandbox

The Regulatory Sandbox operates in a rapidly evolving and complex environment. This environment is characterized by the need to balance regulation and promote cutting-edge innovations that often aim to push boundaries that broaden and deepen the capital markets.

It is for this reason that innovators are required to demonstrate the regulatory reliefs sought during the testing to enable the Authority to assess an innovation against the capital markets regulatory framework.

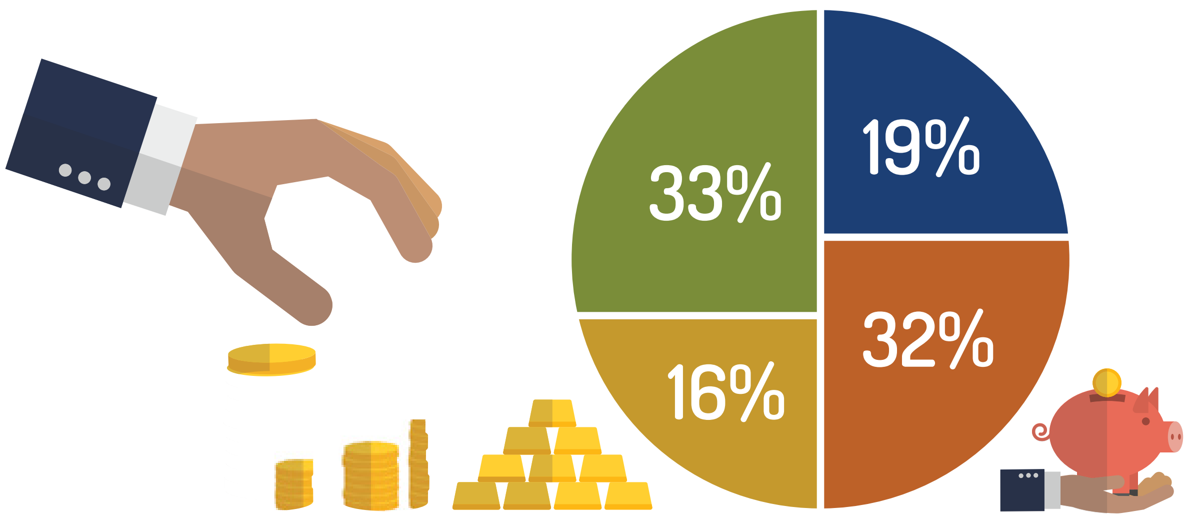
This chapter aims to demonstrate the process flow, eligibility criteria for admission, the role of the Sandbox Review Committee, and what keeps the regulator awake in view of emergent fintech innovations and the lessons learned from the Regulatory Sandbox.

2.1. The Process Flow of Admission into the CMA Regulatory Sandbox.

The CMA Regulatory Sandbox has a clear procedure for the admission of innovations. Applicants are required to apply for admission to the regulatory sandbox in a prescribed form. Upon receipt of the application, the SRC conducts a preliminary review, to confirm that the applicant meets the eligibility criteria.

Any outstanding matters on the application together with the next steps on the admission process are communicated to the applicant within 14 days of receipt of the application.

A relationship manager is appointed and becomes the contact person between the SRC and an applicant. A fitness and probity assessment is conducted with respect to the applicant's directors and key personnel. During the review process, the applicant is invited to appear before the SRC to present their value proposition and conduct an end-to-end demonstration of the platform or system that forms part of the innovation.



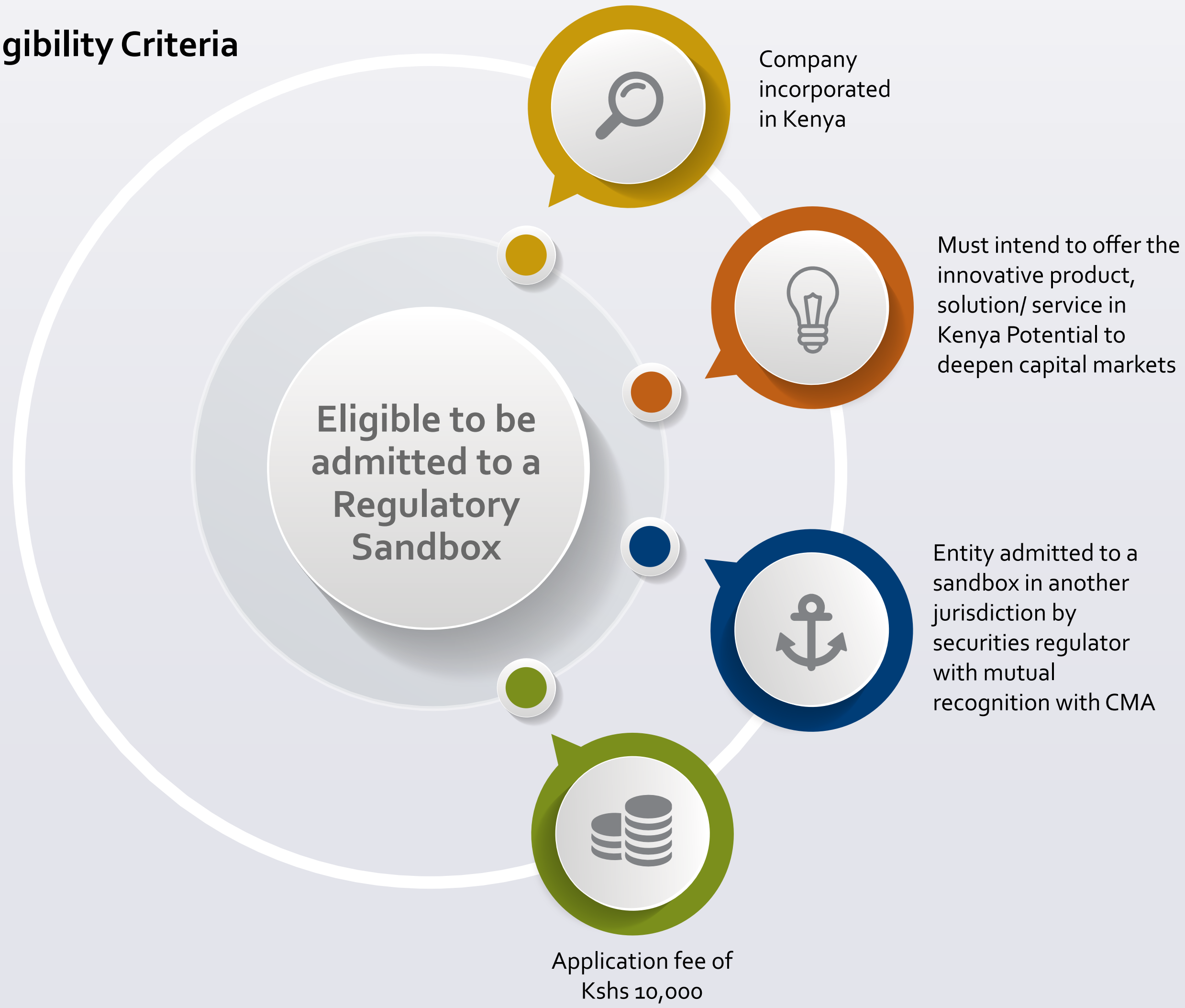
Some of the key documents submitted to support the application include the test plan, which contains the following key information;

1. Key test objectives (including the specific regulatory questions, regulatory reliefs or hypotheses to be tested in the Regulatory Sandbox);
2. Testing metrics and/or performance indicators;
3. Testing methodologies;
4. Scope and testing parameters (e.g., number and/or kind of investor and/or test market, aggregate value and/or frequency of transactions, etc.);
5. Proposed testing period;
6. Relevant reports to be submitted during the testing period and feedback mechanisms; and
7. Safeguards and remediation measures.

Furthermore, a sandbox applicant is required to incorporate appropriate safeguards to identify and manage potential risks and mitigate the consequences of failure, such as undisclosed risk of financial loss or other undisclosed risks to customers, investors, market participants, and the Kenya capital markets. The safeguards plan is designed by the participant in consultation with the Authority.

Thereafter, an application is reviewed and if found to be compliant with the Policy Guidance Note, the applicant is admitted into the Sandbox. The testing period is determined through consultations between the Authority and the applicant but is limited to 12 months, with an extension of a maximum period not exceeding 12 months. During the testing period, an applicant is required to submit monthly reports for purposes of supervision and monitoring progress. Upon the lapse of the testing period, a pre-exit meeting is undertaken to determine whether test objectives have been met and whether the subject product is ready for mass market roll-out.

Eligibility Criteria



After the testing period is completed, the Authority considers the following potential avenues that an innovation can be exited through:

a. Granting a participant a license or approval to operate in Kenya subject subject to compliance with existing legal and regulatory requirements; or

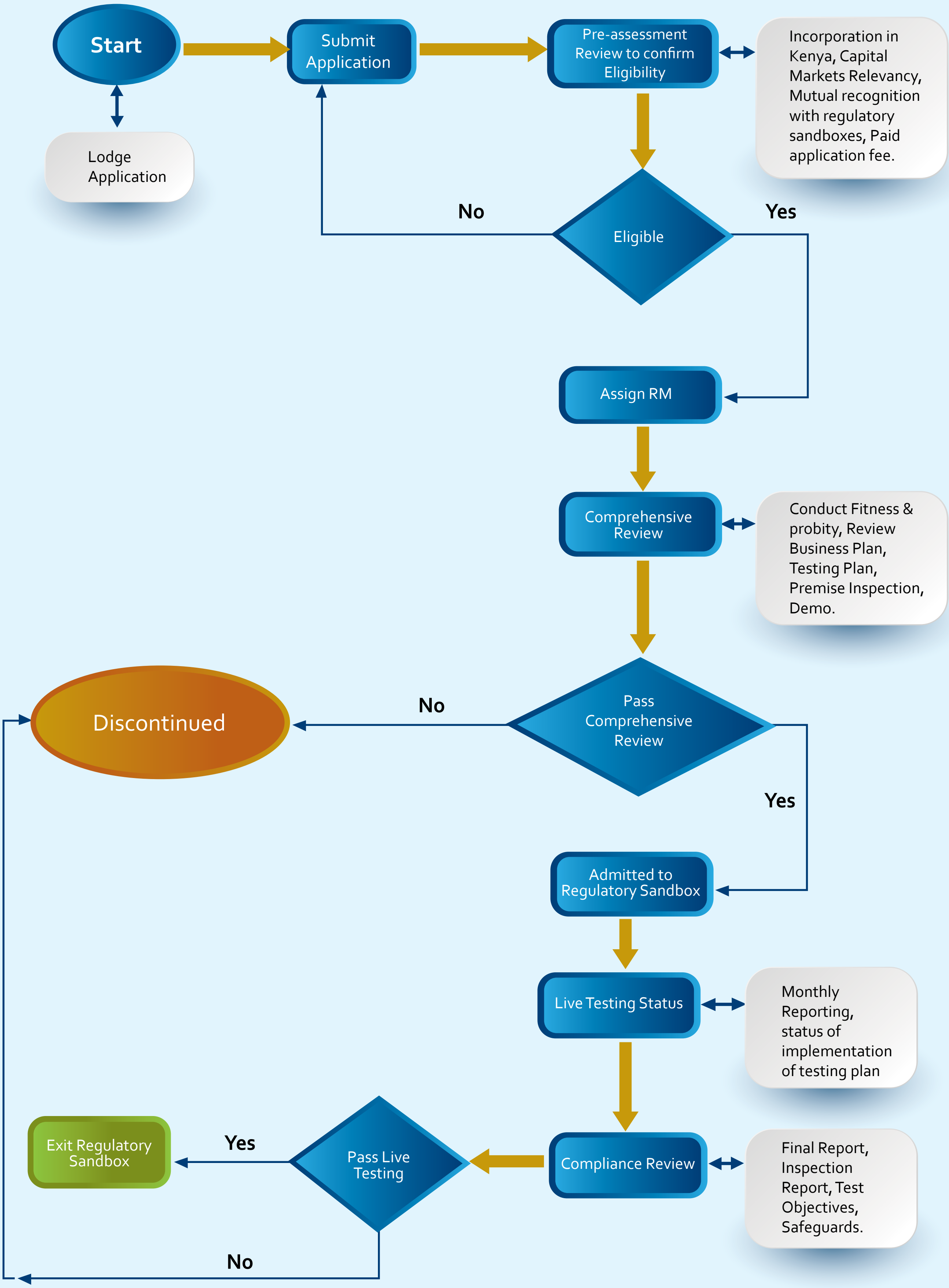
b. Granting a participant permission to operate in Kenya subject to compliance with the terms of the letter of No Objection;

c. Adoption of new regulations, guidelines, or notices based on insights gained from testing in the Regulatory Sandbox;

d. Issue a denial of permission for a participant to operate in Kenya under prevailing legal and regulatory requirements.

Below is a diagrammatic representation of the process flow for admission into the CMA Regulatory Sandbox:

PROCESS FLOW



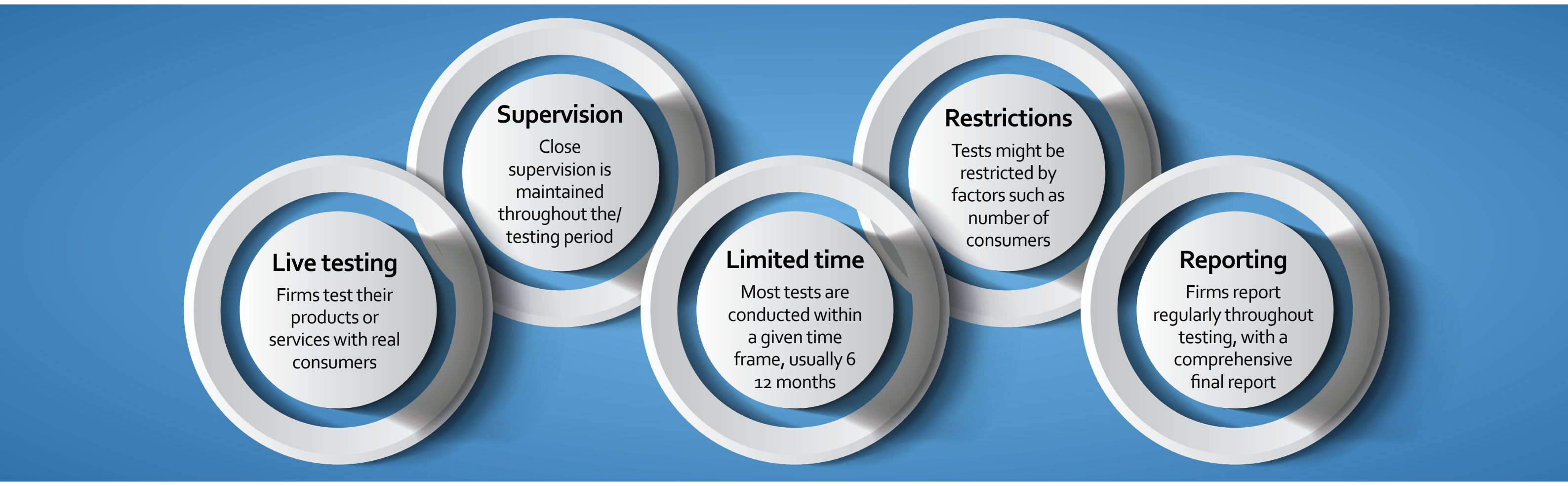
2.2. Role of the Sandbox Review Committee

The primary mandate of the Sandbox Review Committee is:

a. To undertake the review of applications for admission into the CMA regulatory sandbox.
b. To monitor the implementation of test plans and the transition process after the firms exit the sandbox.
c. To serve as a channel for information sharing, both internally and externally.
d. To review and inform policy and legislative amendments relating to the products or service innovations arising from the sandbox.
e. To provide bespoke regulatory support and technical advice when required to the regulatory sandbox participants.
f. To provide feedback on inquiries made by potential regulatory sandbox participants and admitted participants.
g. To work with innovators to build appropriate consumer protection safeguards into new products and services.

2.3. Supervision of Firms Within the Sandbox

Supervision is a key element of a regulatory sandbox. Other components include live testing, limited testing period, restrictions on testing parameters, and reporting requirements as highlighted in the diagram below;



It is imperative that admitted firms are closely monitored throughout the testing period to protect investors. Following an applicant's admission into the regulatory sandbox, the firm is continuously monitored to ensure its adherence to the testing plan and meeting its test objectives.

Firms admitted into the Regulatory Sandbox are required to submit monthly reports on the progress made in the implementation of the testing plan. The content of these interim reports include:

i. Key performance indicators, key milestones achieved and statistical information;

ii. Key issues arising as observed from misconduct, fraud or operational incident reports and, if any, measures taken by the participant to address such incidents;

iii. Steps taken to address customer complaints, emergent risks, or other issues relevant to Authority's assessment of applicable regulatory requirements;

iv. Proposed changes to the participant's key personnel, management, leadership, business plan, or any concerns on financial solvency; and,

v. Any other relevant matters.

The Authority also conducts onsite inspections on the firms admitted into the Regulatory Sandbox to confirm compliance with test plans and to discuss any emerging issues that require regulatory attention.

2.4. Supervision of Firms Post-Exit from the Sandbox

The Regulatory Sandbox PGN is the regulatory framework used to supervise firms while testing in the sandbox and is a temporary regulatory framework developed to facilitate testing. While the testing is ongoing, the Authority reviews its regulatory framework to assess whether there is need to either amend sections of the existing legislation or develop bespoke regulations/guidelines, to support a successful exit. The Capital Markets (Investment Based Crowding) Regulations, 2022 and the introduction of the Intermediary Service Platform operator license through the Capital Markets (Collective Investment Schemes) Regulations, 2023, were regulations developed to support some of the exits from the Regulatory Sandbox.

Accordingly, the eight successful firms are thus oversighted under such regulatory framework and are subject to supervision to ensure compliance. These firms are assessed and profiled based on the key risks, vulnerabilities, and the potential impact they have on the market in line with the risk-based supervision model adopted by the Authority. The firms are also periodically inspected to ensure compliance with the Capital Markets Act and Regulations thereto.

Observations during review of Applications and at Admission Stage

The Authority observed the following issues that hindered applicants from moving to the admissions stage and for those that were admitted, from successful exits.

1) **Immature innovations** – the Authority received enquiries and applications from fintech firms that were not ready for testing. This means that their technology infrastructure had not been fully developed and relationships with critical service providers such as mobile network operators, know your customer, fund managers or custodians had not been established. The existence of these structures is demonstrable through contracts of service. In such cases, the fintech was advised to establish those structures and then, submit the application for consideration.

2) **Ideas that are not capital markets related** – One of the objectives of the CMA Regulatory

Sandbox is to deepen and develop the capital markets in Kenya. As such, products, innovations and business models that do not fulfil this purpose were not progressed to admission. For example, one of the first enquiries the Sandbox received was in relation to real estate investments in North America. Many other enquiries related to testing of a cryptocurrency exchanges in Kenya, fall outside the regulatory mandate of the CMA.

3) **Fintech firms not registered as companies in Kenya** – The Authority received several applications from fintechs who were not registered in Kenya, but whose innovations could enhance the efficiency in the capital markets. In such cases the Authority advised the firms to register their companies in Kenya, to fulfill the requirements of the Regulatory Sandbox Policy Guidance Note.

4) **No test subjects** – Innovations without test subjects, whether retail investors or licensed market intermediaries were not admitted to the Regulatory Sandbox as one of the main aims of the live-testing is to observe how every stage of the product testing affects investors and issues such as market stability.

5) **Lack of a risk assessment plan** – If the fintech applicant has not developed a robust risk assessment and mitigation plan, as part of their application, the Authority is then unable to progress the application to admission stage. This is because risk planning and management is one of the key tenets that fintechs need to demonstrate they have established when they approach the Authority.

6) **Cross-cutting innovations across regulators** – Innovations with blurred regulatory boundaries, for instance, with components touching on the insurance or banking industry as well as capital markets sector, could not be progressed. This, especially, if the capital markets component of those solutions could not operate exclusively from the other sectors. In most cases, the challenge was that the insurance and banking sectors have regulators. Such applications would be referred to the respective regulators.

7) **Change of product or solution during testing-phase** – Some fintechs in the process of improving their solutions or products, would end up with a completely new software, product or business model that was not capital markets related or was completely different from that which had been earlier approved. Such fintechs were discontinued from testing and requested to submit fresh application with new test objectives and risk management framework to reflect the new solution.

8) **Testing period** – The Regulatory Sandbox testing period is 12 months subject to renewal once. Some applicants overstayed their time in the Regulatory Sandbox without successfully meeting their test objectives, in other cases, we noted that there was no business case for the product, leading to discontinuation. Moreover, other tests were characterized by requests for a three-month testing period which ended up being insufficient for the fintech. Such firms received extension in the Regulatory Sandbox.

2.5. What Keeps the Regulator Awake Because of the Sandbox (Risks)

Technology holds numerous benefits but also carries a risk of unprecedented harm to investors and the financial system, if there are insufficient mechanisms to anticipate and manage risks. The Authority remains conscious of the evolving risks arising from Fintech and continuously works towards identifying new developments and monitoring them effectively. Below are some of the risks that the Authority and the Regulatory Sandbox continue to monitor:

i. Disruptive fintech where existing/current regulatory mechanisms in supervision and enforcement would be inadequate. Supervision of firms admitted into the Regulatory Sandbox requires innovative supervision models. The need to ensure the monitoring of transactions within innovations requires regulators to invest in surveillance tools that come at a great cost.

ii. Continuous capacity building of staff to keep abreast with emerging fintech innovations.

iii. Money Laundering, Terrorism Financing and Proliferation Financing risks. The start-up nature of fintech firms limits their ability to have structures to counter these risks. The digital nature of client onboarding in fintechs may pose a challenge in the ability of the firms to have sufficient information on the beneficial ownership of their customers. Further, transnational funding of fintechs by foreign entities with obscure sources of funds could potentially expose fintechs to the risks of illicit financial flows.

iv. The risk of loss of investor funds- Start-ups have insufficient safeguards to secure investor assets which can result in the potential loss of investor funds.

v. Governance risks- Insufficient governance structures due to the start-up nature of fintechs. Furthermore, key-man risk may manifest affecting business continuity.

vi. Multi Regulatory nature of oversight required on some fintech innovations - Some fintech products are cross-cutting in the financial sector and require multiple regulatory oversight.

vii. Lack of investor awareness /low uptake of some digital products. This can affect the ability of a fintech to scale their products or services.

viii. Regulatory Arbitrage - Innovators may take advantage of lacunas in the regulatory framework which could lead to risk.

ix. Different jurisdictional stands on fintech innovations- Different countries have different policies and regulatory approaches to some fintech applications. This makes it difficult for regulators to cooperate on products not allowed in the other jurisdictions.

x. Cybersecurity Risks - Fintechs are automated and therefore susceptible to cyber threats such as malicious attacks, theft of client information, and ransomware attacks.

03
REGULATORY SANDBOX IMPACT

3. Regulatory Sandbox Impact

This chapter presents the impact of the Regulatory Sandbox since inception. It communicates the impact of the sandbox, both in terms of its intended outcomes and unintended consequences, to various stakeholders including the regulatory sandbox participants, the regulator, partners, and the public.

Overall, the sandbox has had impacts on the following areas:

i. Development of evidence-based Regulatory Framework;
ii. Creation of Global and regional competitiveness;
iii. Investments Mobilization through the capital markets;
iv. Contribution to National Policy; and,
v. Regtech Solutions to enhance Regulatory Reporting, Monitoring, and Compliance.

Statistics In a Snapshot

ITEM	NUMBER
Enquiries	90
Applications	42
Admissions	16
Successful Exits	9
Discontinued	7
Complaints	0

3.1. Evidence-based Regulatory Framework

Among the objectives of the Regulatory Sandbox is to support evidence-based approaches to regulation that advance the goals of investor empowerment and protection, capital markets deepening and broadening in accordance with the CMA mandate. In addition, the Sandbox was established to review and adapt regulatory requirements that may unintentionally inhibit investor-friendly innovations or render them non-viable under the current regulations.

The Authority adopts an evidence-based policy-driven approach to the development of legal and regulatory frameworks, aligned to IOSCO Principles, international benchmarking, peer review balanced with the local environment and stakeholder involvement, including validation.

The Regulatory Sandbox has been an enabler of this approach. In the Authority›s current Strategic Plan 2023-2028, one of the key strategies is to promote inclusivity and grow aggregate market capitalization. To achieve this, the Authority needs to continuously review the policy and regulatory framework to respond to dynamic market needs. Some of the key contributors to the development of evidence-based policies and regulatory framework are the recommendations arising from lessons learnt in the Sandbox.

As a result of innovations tested in and successfully exited from the Sandbox, the following regulations have been enacted and/ or amended:

3.2.1. Capital Markets (Investment-Based Crowdfunding) Regulations 2022

Crowdfunding has emerged as a game-changer in the global financial landscape because it proposes a viable solution to the long-term challenge of access to affordable financing for Micro, Small and Medium Enterprises (MSMEs), who have been locked out of the formal credit sector due to lack of profitability track-record, inadequate record keeping and lack of collateral. Through online platforms, this sector that remains a key driver of economic activity in Kenya, can raise funds from many people in exchange for shares, debt securities or any other investment instruments approved by the Authority. This underpins the Government›s commitment to transform the MSME economy by enhancing their access to affordable credit and digital money platforms.

Statistics indicate that the global crowdfunding market has experienced exponential growth, with projections set to climb further. The Cambridge Centre for Alternative Finance (CCAF) had estimated the value of the African crowdfunding market at approximately US$182 million in 2016, with Nigeria, South Africa and Kenya as the three leading markets. Today, data suggest that the crowdfunding sector in sub-Saharan Africa could potentially reach US$2.5 billion by 2025, representing just 0.1 percent of the global market.

To help accelerate the Authority's knowledge on the potential of crowdfunding in the capital markets, one debt-based crowdfunding platform was successfully tested in the Regulatory Sandbox, offering MSMEs credit in exchange for debentures.

Among the lessons learnt from these tests include the unique nature of local MSMEs and their eligibility to participate in investment-based crowdfunding owing to their incorporation status, ownership of assets, governance structures, credit risk characteristics and overall risk mitigation measures. Secondly, the possibility of regulatory overlaps between crowdfunding and digital lending. Another lesson was the potential risk of obscurity of beneficial ownership information on sources of funding. Lessons learnt from the test period and insights drawn from the experience of peer regulators informed the development of the Capital Markets (Investment Based Crowdfunding) Regulations, which were gazetted on 30 September 2022.

These regulations allow Kenyan registered

MSMEs with a two-years' operating track record and sound corporate governance structures to raise funds from investors through licensed crowdfunding platforms operating in the country while adhering to the principles of investor protection and transparency in their operations. Typically, crowdfunding has three critical players: the issuer who is the person fundraising, the investor, and the technology platform which facilitates interaction between investors and issuers. The regulations apply where the platform is established in Kenya; or a majority of the key components of the platform when taken together are physically located in Kenya, or the platform is located outside Kenya but actively targets Kenyan investors.

3.2.2.The Capital Markets (Collective Investment Schemes) Regulations 2023;

Collective Investment Schemes (CISs) have been identified as effective avenues for mobilizing investments through the participation of retail investors in the capital markets. With the rapid advancements in technology, innovations aimed at improving the accessibility, transparency, and efficiency of CISs have emerged. A key challenge identified in the pooling of funds for investments was the limited reach of CISs to the retail segment owing to high initial minimum investment amounts and lengthy entry and exit processes.

Consequently, the Regulatory Sandbox received innovations that sought to address the divide between retail investors and CISs by providing fintech platforms that aggregated retail investors with significantly reduced investment amounts which were channelled to CISs by these intermediaries. As a result, four innovations tested the intermediary service platform model and through these tests, the Authority gathered evidence on the value proposition of the aggregation model, potential risks with the aggregation, and safeguards for avoiding potential harm to investors. During the tests, the Authority observed the value proposition offered by these retail investor aggregator fintechs offering investments in regulated CISs. The insights gathered include seamless entry and exit from the capital markets through technology, reduced investment amounts, application of e-KYC processes, expansion of the reach of CIS products to unreached segments of the population, and the necessity for licensed fund managers and custodians to ensure the safeguarding of investor interests. The successful exit of these firms coupled with the insights drawn from the test period informed amendments to the Capital Markets (Collective Investment Schemes) Regulations, 2023 that introduced the Intermediary Service Platform Provider license category.

3.2.3.The Capital Markets (Real Estate Investment Trust) (Collective Investment Schemes) Regulations, 2023.

REITs are increasingly popular worldwide, with significant growth in markets outside the United States, particularly in Asia-Pacific, Europe, and emerging markets. Countries like Japan, Australia, and Singapore have well-established REITs markets, while others are developing regulatory frameworks to support the growth of REITs. Reviewing regulations and policies governing the conduct of REITs is key driver towards this growth.

According to Statista data, real estate investments in Africa has experienced steady growth in recent years. By the end of the current year 2024, the African real estate market is expected to reach a value of **US$15.98 trillion,** with the residential segment dominating at a projected market volume of **US$13.39 trillion.** Additionally, Statista anticipates that the African real estate market will grow at an annual rate of **5.92%** from **2024** to **2028,** reaching a market volume of **US$20.11 trillion** by **2028.** *(Data Source: Strathmore University –* **2024).** Kenya's Real Estate sector has been a significant contributor to the country›s GDP, growing at a Compounded Annual Growth Rate (CAGR) of **5.5%** for the past **5 years.** In **2023,** the sector expanded by **5.4%,** reaching **KShs.785.9 billion** compared to **KShs.743.4 billion** recorded in the same period in **2022.** This surge in growth highlights the sector›s increasing importance, with its contribution to the national GDP reaching **10.5%,** up from **10.0%** in the previous year. Several factors have contributed to the Real Estate sector›s growth, including reviewing of The Capital Markets (Real Estate Investment Trust) *(Collective Investment Schemes) Regulations*, **2013** to lower the minimum subscription to **Kshs100,000,** from **KShs.5 million** for Development-REITs (D-REITs), thus enabling retail investors to participate in real estate investments. This was the result of testing an innovation whose key value proposition was aggregating retail investors into real estate by lowering the barriers to entry noting the capital-intensive nature of the sector. The solution offered a ‹cross-over› opportunity to investors from the illiquid nature of land as an asset class, to more liquid real estate products. The potential impact of such innovations lies in their ability to unlock retail investor participation.

3.2. Global, Regional Competitiveness

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 of 30 November 2020. The CMA Regulatory Sandbox is among these sandboxes. The figure below illustrates jurisdictions that have developed such initiatives.

Between 2020 to date, some of the additional African countries that have established regulatory sandboxes include: Namibia; Rwanda; Mauritius; Nigeria; Sierra Leone; Ghana; and Zambia.

3.2.1. Enhanced Visibility of Kenya as a Financial Hub

The presence of the CMA Regulatory Sandbox in Kenya has provided an incentive to innovators across the globe to develop platforms that could be tested in the Kenyan capital markets. Some of the applicants who have expressed interest in the CMA regulatory sandbox were drawn from jurisdictions such as United States of America, United Arab Emirates, Nigeria, South Africa and Pakistan.

The CMA Regulatory Sandbox was benchmarked against the United Kingdom's FCA Regulatory Sandbox, known as the most active sandbox with the longest operating history. The Sandbox has additionally acquired insights from engagements with various regulators such as the Monetary Authority of Singapore and Abu Dhabi Global Market. In line with the Regulatory Sandbox objective to gain insights on emerging technological trends, members› capacity has been built significantly through engagements with International Partners. Specifically, the Authority has exchanged ideas with the Cambridge Centre for Alternative Finance, CGAP, Global Blockchain Business Council (GBBC), The World Bank, IMF, and Securities and Exchange Commission of Pakistan. Additionally, a member of the Regulatory Sandbox is a Co President of GBBC Growth Markets Regulatory Council which aims at having a harmonized global approach to regulation through edification.

The CMA Regulatory Sandbox acts as a bridge between innovators and regulators leading to development of collaborative regulation that recognizes the need for adaptability, creativity and continuous learning. The Regulatory Sandbox has enabled the Authority to be in tandem with current global trends in the fintech sector. Some of the innovations tested in the Regulatory Sandbox e.g. Innova (Regtech platform) have been rolled out in 16 other countries in the region.

3.2.2. Enhancing Global Influence by Knowledge Sharing with other Regulators in Africa

Most regulators around the world have developed regulatory sandboxes to support fintech innovations that are not supported or fully supported by the existing legislative frameworks. Following the successful adoption of the regulatory sandbox, several jurisdictions in the region have benchmarked with Kenya to learn how to seamlessly establish and operate a successful regulatory sandbox. Some of the jurisdictions that have benchmarked with Kenya include Uganda, Nigeria, Rwanda and Namibia, Zimbabwe, Zambia, and Tanzania.

3.2.3. Supporting Regional Bodies to Adopt a Sandbox Approach

Kenya has been instrumental in supporting the East African region to adopt a sandbox approach to regulation of fintech companies. Kenya has shared experiences in the East African Securities Regulatory Authorities (EASRA), a forum of capital markets regulators in the East African region whose main objective are information sharing, mutual assistance and cooperation among members and advancing the integration of the East African capital markets. Following this knowledge sharing, other countries in the region have considered having their own regulatory sandboxes and this could assist in harmonisation of regulatory frameworks across the region.

3.2.4. Addressing Barriers to Entry for International Applicants

One of the key objectives of the CMA in the Strategic Plan 2023-2028 is to leverage technology and to enhance product uptake and customer experience. To this end, the Plan anticipates that the Regulatory Sandbox will significantly address barriers to entry for applicants whose innovations are not covered under the existing regulatory framework.

3.2.5. International Cooperation

Regulatory sandboxes are a valuable tool to assess potential impact of financial innovations in a controlled environment. Given the opportunity sandboxes offer innovators, there has been a growing global support for the financial innovation. This has led to international cooperation as different countries are learning from each other›s experiences in setting up and implementing regulatory sandboxes.

In 2019, the CMA became a member of the Global Financial Innovation Network (GFIN). GFIN sought to explore the concept of a global sandbox via cross-border testing (CBT). The idea was to create an environment that allows firms to trial and scale new technologies, products, or business models in multiple jurisdictions. GFIN launched a cross-border pilot to test how regulators could collaborate to test fintech innovations real time. There were 17 regulators who participated in the same including Kenya with 8 firms being reviewed. Following implementation of the Sandbox, CMA Kenya has been able to cooperate more closely with other regulators to share practical experiences on operationalization of regulatory sandboxes. The sandbox regulatory framework has been used across the various regions as a benchmark by various jurisdictions in Africa in setting up and operationalization of their regulatory sandboxes.

The Authority also entered into several memoranda of understanding with various stakeholders such as thee Australian Securities and Investments Commission in October 2016. This agreement was aimed to promoting fintechs in both jurisdictions and to share information on emerging trends and regulatory issues.

In a bid to expand its reach and attract foreign innovations, the Authority has engaged the Nairobi International Finance Centre in a bid to collaborate on international firms that need to access the market through the CMA regulatory sandbox.

3.2.6. Domestic Collaboration

The Regulatory Sandbox has received requests for capacity building from domestic regulators and shared experiences and lessons learned with peer regulators.

Furthermore, the CMA is a member of the Joint Financial Sector Regulators Forum where it sits in the Technology and Innovation Sub-Committee. The Sub-Committee is mandated to coordinate the development of a framework for promoting adoption of technology and innovations in the financial services sector to enhance effective regulation and supervision. In this regard, the Sub-Committee is tasked with creating a framework for cooperation between financial services regulators on fintech, emerging technologies and innovation in line with their respective regulatory mandates.

3.3. Investments Mobilization Through the Capital Markets

The Regulatory Sandbox has sought to support the broader national policy agenda of mobilizing savings as contained in the Kenya Vision 2030, BETA and the Capital Market Master Plan. Drawing on emerging global best practices, the Authority continues to seek positioning of the Regulatory Sandbox as a tool for facilitating capital markets innovation and helping to advance the goal of creating a vibrant and globally competitive financial sector. This is coupled with the position Kenya holds as a sophisticated technology market by regional standards.

A key activity in the implementation of the CMA Strategic Plan is to support activities that enhance collective investment schemes by retail investors. The CMA regulatory Sandbox has supported these initiatives through some of the products and innovations such as the intermediary service platform providers which have been tested and successfully graduated from the Sandbox.

Previously, automation on the CIS was limited and was majorly characterized by manual onboarding processes and high initial investment amounts that were out of the reach of the majority of retail investors. The firms under the regulatory sandbox sought to solve this challenge by enabling the ease of entry and exit, digital procedures, and low minimum investment amount. The products tested in the Regulatory Sandbox aimed at mobilizing savings include the following:

Safaricom M-PESA MALI

1. **MALI Money Market Fund (MALI) by Genghis Capital Limited in partnership with Safaricom Plc.**

   MALI Money Market Fund is a solution that leverages on a partnership between a mobile network operator and mobile money issuer on one hand, and a fund manager on the other; to offer an investment product that is affordable, convenient and competitive. It allows M-Pesa customers to conveniently invest funds in their wallets in a Money Market Fund, generating higher returns for investors.

2. **Chumz by Moneto Ventures Limited**

This is a partnership between a fintech startup and a licensed fund manager. It entails a mobile application that aggregates investments into a regulated Collective Investment Scheme with the additional capability of utilizing of behavioural psychology. The app is designed to guide and motivate retail investors on how and when to save and invest based on their lifestyle. The App enables investors to save as low as KShs. 5.

3. **Vuka Platform by Acorn Investment Management Limited**

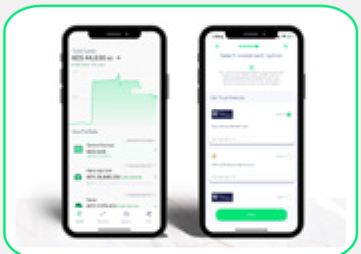
VUKA is a fintech platform used to aggregate retail investors who wish to invest in real estate by acquiring units in a Real Estate Investment Trust (REIT). The platform aggregates funds from retail investors, to enable them acquire units of the Acorn Student Accommodation I-REIT. The REIT is the investment vehicle that owns a host of student accommodation units with a combined 6,000-bed capacity, operated under the brands Qwetu and Qejani. The construction of these units adhered to international green building standards for water, energy and construction materials, ensuring lower operation costs and a low-carbon impact over the long-term.

4. **Ndovu Wealth Limited**

Ndovu Wealth Limited incorporates Robo advisory into investment decision making towards enabling investors invest in both Kenyan and international securities.

5. **Fourfront Limited**

The firm uses Robo-advisory for investment decision making. This involves a data driven algorithm model to construct investment portfolios to suit a client's investment objectives and risk profile.



6. **Cashlet App by Sycamore Capital Kenya Limited** uses mobile technology to distribute CIS products. The solution is designed to encourage a culture of savings and investment among the millennial retail customer segment in Kenya.

Since admission and exit from the regulatory sandbox, the above 6 companies have so far onboarded a combined total of approximately 900,000 investors. In terms of value, the Assets Under Management as of 31 May 2024 stood at KShs.2.7 billion.

Considering the fluid nature of collective schemes coupled with the efficiency of entry and exit brought by these platforms, the total aggregate amount invested is over KShs.18billion.

Below is a further analysis of the impact of these solutions based on different perspectives:

3.3.1 Number of Customers Onboarded

As at 30 April 2024, Mali Money Market Fund had onboarded over **700,00** clients. Chumz had onboarded **135,000** customers. Ndovu Wealth Limited had netted a total of **45,176** customers. Fourfront Management Ltd had **5,544** clients while Vuka by Acorn Investment Management Ltd had **4,098** clients. Sycamore had enrolled 3,794 customers.

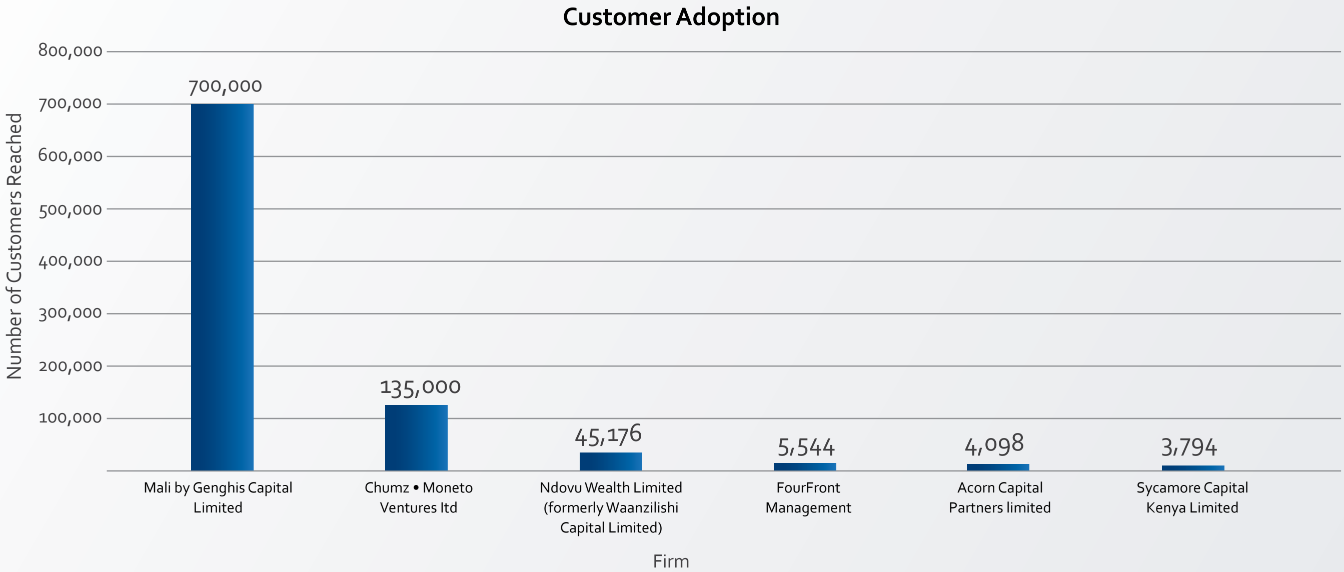


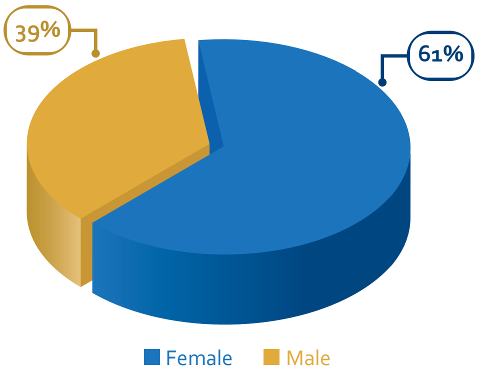
Fig 1: Number of Customers Onboarded by Firms as at 30 April 2024 *Source: CMA Data, 2024*

3.3.2 Distribution by Gender

The participation of women in finance is on the rise, with a growing number entering the investment sphere. This trend, alongside the increasing involvement of younger demographics like millennials, highlights the importance of gender-inclusive analysis in the capital markets. Analyzing investments through a gender lens can provide valuable insights into a more representative customer base, potentially leading to better product development and regulatory frameworks. Research suggests that women may have different risk appetites and financial goals than men (Guiso, Sapienza, & Zingales, 2018), making gender-disaggregated data crucial for understanding investor behavior. This can inform the creation of financial products and regulations that cater to a broader and more diverse set of needs.

Going by data reported by firms on products that have graduated from the sandbox, more women were observed to participate in the investment products. Participation by women stood at 61% while that of men was at 39%, denoting progress in achieving participation of women in the capital markets. It also highlights the need for more engagement towards the achievement of parity between the two genders.

The tables below shows the distribution of investors in the various products disaggregated by Gender.

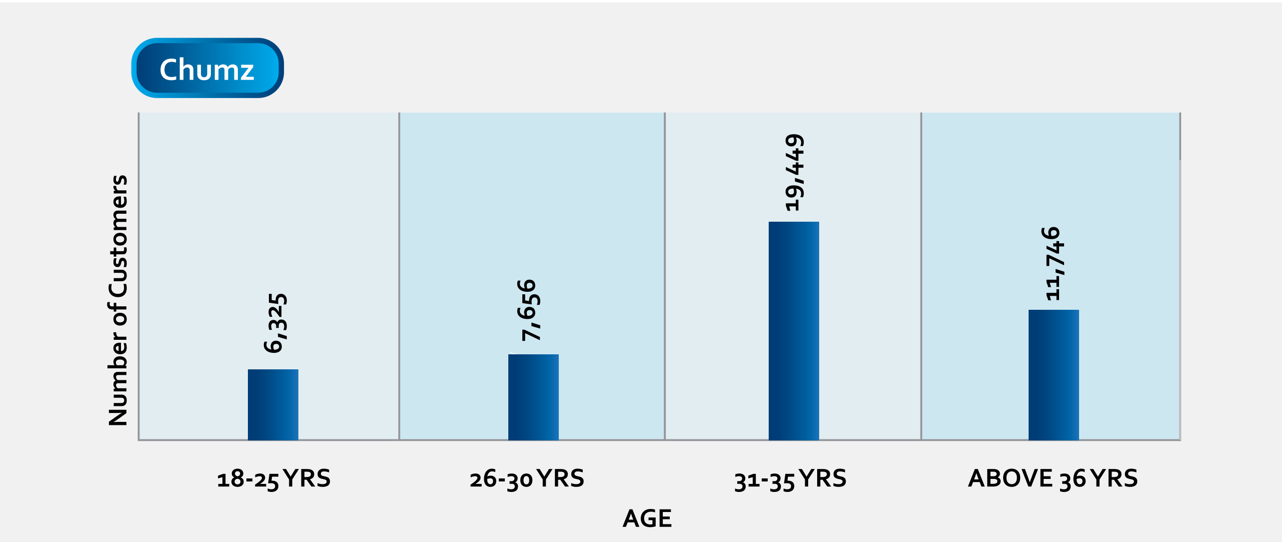


3.3.3 Distribution across Age Groups

One of the key considerations for Millennials and Gen Z to use financial products is convenience. Data reported by firms on products that have graduated from the sandbox, showed that there was significant usage by persons between the age of 18 and 25. This age group have not been active participants in mainstream fund management products before.

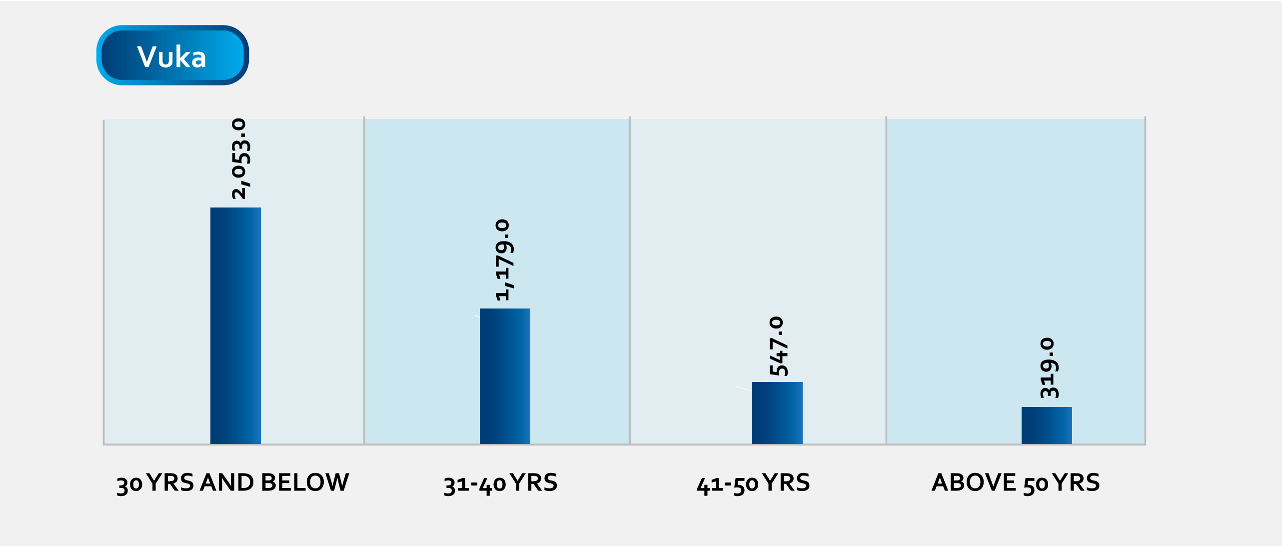
This group embraces emerging technologies and most of them are tech-savvy and therefore it is important to enhance the space for innovation and development of new innovative and dynamic products that meet the needs and expectations of this age group as they have high investment potential in future.

Below is a summary of distribution by age.



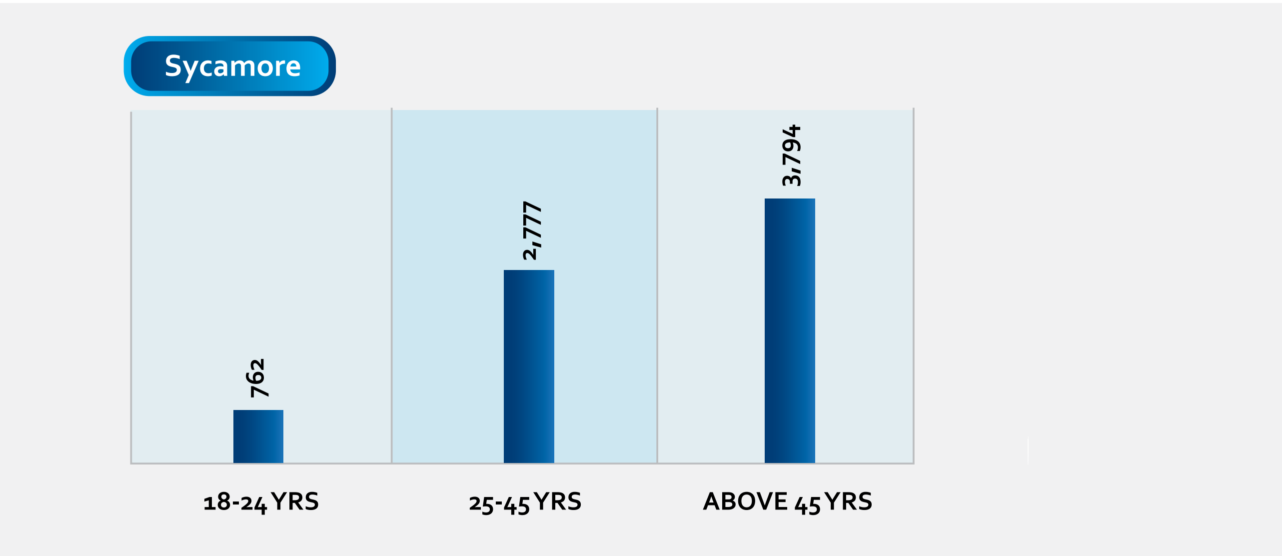
The firm had enrolled 6,325 customers aged 18-25 years, 7,656 customers aged 26-30 years, 19,449 customers aged 31-35 years, and 11,746 customers aged 36 years and above.

Fig 3: Distribution by age - Chumz



Vuka had onboarded 4,098 retail investors, where 2053 were 30 years and below.

Fig 4: Distribution by age - Vuka



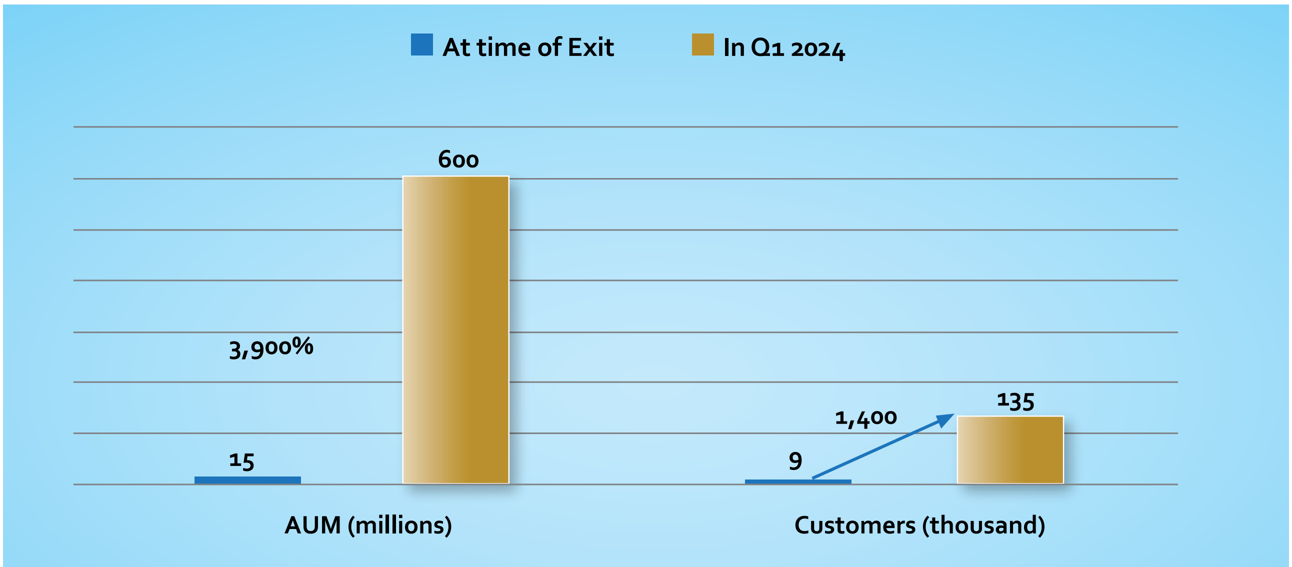
Sycamore had 762 customers aged 18-24 years, 2,777 customers aged 25-45 years, and 255 customers aged 46 years and above.

Fig 5: Distribution by age - Sycamore

3.3.4 Impact on Assets Under Management (AUM)

The firms above also demonstrated remarkable growth in terms of customer numbers and the value of investments mobilized by the various platforms quantified in terms of Assets Under Management (AUM). The section below shows a representation of the movement in value of funds mobilized, comparing the point at which firms exited the sandbox (Baseline) with the first quarter(Q1) of 2024.

Chumz



Chumz by Moneto Ventures Ltd experienced a substantial surge in AUM, rising from KShs.15 million at the time of exit from the sandbox in August 2022 to KShs.600 million as at the end of Q1 of 2024, representing an increase of 3,900%. Similarly, the firm witnessed a significant rise in the number of clients, increasing from 9,000 customers to 136,000 customers, an increase of 1,400%.

Fig 6: Assets Under Management (AUM)- Chumz

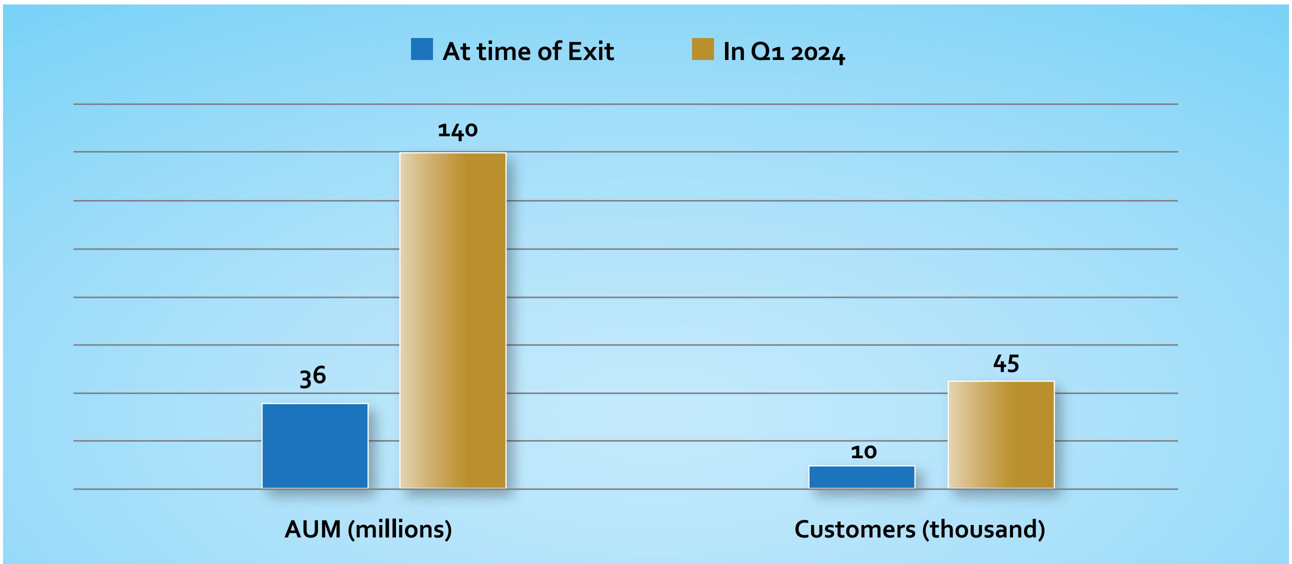


Fig 7: Assets Under Management (AUM) - Ndovu

On the other hand, Ndovu Wealth Limited witnessed a significant increase in Assets Under Management (AUM) following its successful exit from the sandbox. At the time of its exit, the company had 10,000 customers with AUM totalling KShs.36 million, which subsequently expanded to 45,000 customers with AUM totalling KShs.140 million in Q1 2024. This represented growth rates of 293% and 352%, respectively.

Overall, fintech has democratized investing, expanded investment opportunities, and enhanced efficiency in the asset management industry, all of which have contributed to the growth of AUM.

This can be attributed to the following:

i. Access and Affordability: The platforms made investing more accessible and affordable to a broader range of people. Investors can invest smaller amounts at lower costs.

ii. Faster Advise: Robo-advisors are automated investment platforms that use algorithms to provide investment advice and manage portfolios. These platforms speed up decision making for investors as compared to face-to-face approaches.

iii. Data Analytics and Personalization By personalizing investment recommendations and strategies, the platforms attract more clients and increases AUM.

iv. Alternative Investments: The platforms facilitated access to alternative investments including offshore instruments including ETFs that are not yet mainstream in the country.

v. Efficiency and Automation: The platforms streamlined processes in the asset management industry, reducing administrative costs and improving operational efficiency. This allowed firms to charge lower fees thus attracting more clients.

3.4. Contribution to National Policy

Two key objectives of the Regulatory Sandbox entail the provision of a regulatory environment that is conducive for the deployment of a variety of innovative business models and emerging technologies that have the potential to deepen and/or broaden the capital markets in Kenya, and to support evidence-based approaches to regulation that advance the goals of investor empowerment and protection, in accordance with the CMA mandate.

Through these objectives, the Regulatory Sandbox has been able to contribute to the key national policies which are the Vision 2030, the

Bottom-up Economic Transformation Agenda (BETA), and the 10-year Capital Market Master Plan. Capital markets have been identified as a vital source of development capital by these three (3) national policies. The Regulatory Sandbox is therefore seamlessly aligning to these national policies by stimulating and facilitating innovative capital markets products and services, thereby fostering inclusivity, innovation, and bolstering investor confidence.

The Regulatory Sandbox outputs have thus far made significant contributions to the national policies and realized the following outcomes which have had an impact in the economy:

National Policy	Policy Goal	Policy Key Performance Indicator	Regulatory Sandbox Output	Regulatory Sandbox Outcome
Vision 2030 (MTP IV)	To develop a globally Competitive environment that encourages domestic and foreign investment, and inclusive economic growth of the country	Fintech and technology ecosystem in place	15 firms admitted into the Regulatory Sandbox spanning robo advisory, CIS intermediary service platform providers, crowdfunding among others	**1)** Democratization of wealth through expansion financial products to unreached groups through innovations such as crowdfunding and CIS intermediary service platform providers. **2)** Promotion of financial literacy and awareness by fintechs, thus contributing to investor education efforts by CMA. **3)** Development of regulations on new digital investment platforms. **4)** Facilitation of access to financial lending to MSMEs.

Bottom-Up Economic Transformation Agenda	To enhance access to adequate, decent and affordable housing	Giving developers incentives build more affordable housing.	**1)** Testing of a CIS intermediary service platform providers solution for investment in Income REIT (REIT currently providing 6,000 student accommodation with a bed capacity of over 6,000. **2)** Testing of 3 tokenization of real estate solution using blockchain technology.	**1)** Increased investment in the Real Estate Investment Trusts sector which provides green and affordable student housing and creates employment directly and indirectly. **2)** Reduction of the minimum investment amount in Development REITs from KShs.5 million to KShs.100,000 enabling greater participation by retail investors. **3)** Enhancement of fractional real estate ownership, reduction of barriers to entry by investors in the sector and unlocking liquidity in previously illiquid assets.

	Digital & Creative Economy	**1)** Reduce the cost of access to information and investments for wananchi and especially the youth to use online platforms for information and business. **2)** Enhance government service delivery through digitization and Automation of all government critical processes and make available 80 percent of government services online	**1)** Emergence of fintech innovations, such as CIS intermediary service platform providers accessible through USSD codes, removing the need to travel from rural areas to invest. **2)** Re-engineering of Regulatory Sandbox application process and development of an online applications portal.	Enhanced accessibility of Government services and capital markets products.

Therefore, the Regulatory Sandbox presents a transformative initiative that not only enhances the efficiency and competitiveness of the capital markets but also fosters inclusive economic growth and prosperity. By providing a platform for experimentation, collaboration, and learning, the Sandbox catalyzes innovation and progress, shaping the future of finance and driving positive outcomes for the economy.

3.5. Regtech Solutions to Enhance Regulatory Reporting, Monitoring, and Compliance

The provision of a regulatory environment that is conducive to deployment of a variety of innovative emerging technologies that have the potential to deepen and/or broaden the Kenyan capital markets is a principal objective of the Sandbox. RegTech is an emerging technology that has revolutionized the reporting and compliance requirements for firms in the capital markets. According to Institute of International Finance, RegTech is defined as the use of innovative technologies to solve regulatory and compliance requirements more effectively and efficiently. RegTech enables better compliance solutions, increasing efficiency, profitability and reducing barriers to entry to the capital markets.

Financial Institutions in Kenya have various legal reporting obligations that they are required to comply with. These include liquidity reporting obligations, disclosures of counterparty exposures, trading surveillances, mandatory AML, KYC, and CDD checks. RegTech solutions, such as Innova, which was tested in the CMA's Regulatory Sandbox and successfully exited into the mass market have provided these institutions with the necessary technology required to enhance risk management, compliance, and supervision of their businesses.

The embedded technology enables the firms to monitor transactions and large amounts of data and generate automatic reports to be submitted to the Authority as per continuous reporting obligations.

The RegTech innovation has also been beneficial to the Authority by enabling easier analysis due to the standardisation of reports from the licensed intermediaries.

Further, the use of Regtech which has simplified client management, standardized reporting, and management of CISs, amongst other factors, has led to increased Assets under Management for various financial entities. RegTech solutions have been deployed by several fund managers in Kenya since August 2020. Assets under management have grown exponentially by 119% from KShs.98 billion in Q3 2020 to KShs.215 billion in Q4 2023.

3.6. Lessons Learnt by the CMA (How Has the Regulatory Sandbox Impacted Our Work at CMA)

Since its introduction, the Regulatory Sandbox has had a significant impact on the Authority. The Sandbox Review Committee, which is a multi-disciplinary committee with members drawn from different departments, has gained the following key lessons that have impacted the Authority's regulatory and market development roles:

i. Provided valuable insights into the complex interplay between innovation and regulation, highlighting the importance of collaborative and adaptive approaches to regulatory oversight in an increasingly dynamic and technology-driven world.

ii. Provided an opportunity to understand existing regulations deeply, and reflect on the continued relevance of provisions in regulations, as well as a chance to conduct a thorough assessment of how existing regulations impact business operations.

iii. The need for collaboration between regulators owing to overlapping mandates;

iv. Sandboxes provide a pathway for businesses to transition from testing to full compliance with regulatory requirements. This phased approach allows businesses to gradually scale their operations while ensuring that regulatory standards are met over time.

v. The Sandbox enabled the committee to learn by doing, gaining practical insights into the regulatory implications of emerging technologies or business models within a controlled environment.

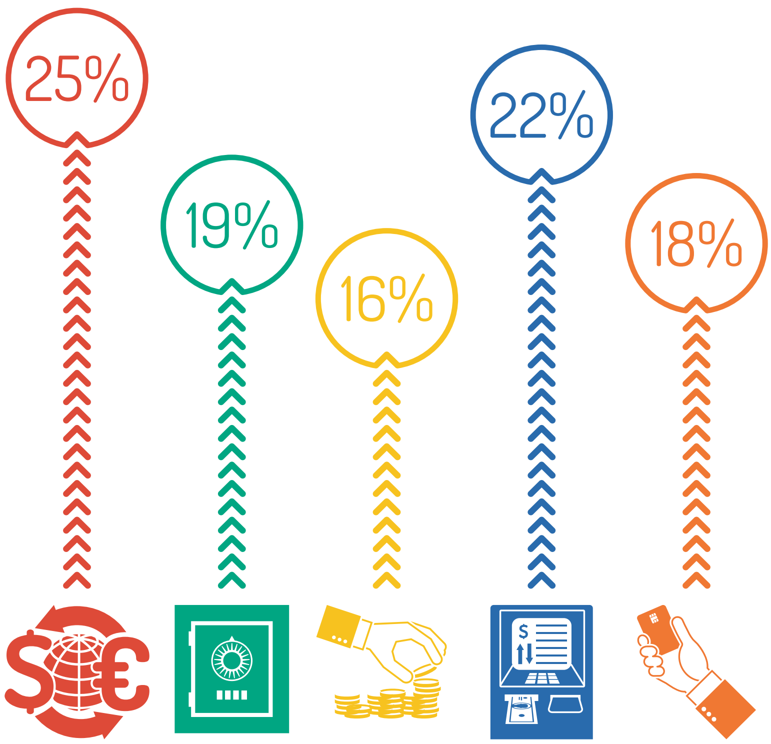
vi. The objectives and principles of capital markets regulation remain the same notwithstanding the emergence of new products and distribution channels;

vii. The need to shift mindset to supervising platforms as opposed to brick-and-mortar operations for market intermediaries;

viii. Strategies of managing the changing nature of investor protection in terms of rights of investors in electronic platforms owing to the non-face to face distribution channels;

ix. Globalization of the market- Local investors are able to access global investments from the comfort of their homes as well and foreign investors are able to access real-time investments locally;

x. The need for balancing innovation and investor protection for fintech innovation.



04

OPPORTUNITIES, CHALLENGES, AND EXPERIENCES

4. Opportunities, Challenges, and Experiences

4.1. A Regulatory Perspective

i. Similarity among innovations: Participants often mimic existing products rather than introduce novel solutions, hindering innovation within the sandbox.

ii. Lengthy period for enacting laws or regulations: Graduating firms face delays in regulatory implementation, impeding the timely rollout of innovative ideas.

iii. Cross-regulator challenges: Overlapping mandates among regulatory bodies resulting in competing regulatory priorities that may lengthen the review and live testing of innovations.

iv. Misconception of sandbox admission: Some participants mistakenly view admission to the sandbox as an alternative regulatory avenue for obtaining a license, leading to potential misrepresentation.

v. Novelty and complexity of the regulatory sandbox concept and applications received from FinTechs that introduce opportunities on one hand and new prudential risks on the other.

vi. Novelty and complexity of the regulatory sandbox concept and applications received from FinTechs that introduce opportunities on one hand and new prudential risks on the other.

vii. The cross-border nature of certain solutions like crowdfunding platforms, causes jurisdictional challenges such as different property, insolvency, and tax laws and enforcement.

viii. Incomplete and/or applications outside the regulatory perimeter of the Authority.

ix. Resource-intensive nature of regulatory sandboxes.

x. Sandbox participants solely use their admission into the regulatory sandbox as means to solicit funding.

4.2. Participating Firms Perspective

A. Outdated or varying 3rd party systems resulting to incompatibilities that delayed or prevented system Integrations.

B. Challenges partnering with 3rd parties who didn't understand the regulatory sandbox.

C. Lack of legitimacy of sandbox innovations as the investing public inherently lack trust around new financial services brands.

D. Low capital markets literacy levels thereby necessitating the need for investor education which is not only difficult but also expensive for Fintechs.

E. Mobile money, for all its convenience, is expensive for retail investors. The cost of transfers has the potential to wipe out the gains/returns that they make on investments.

F. Isolated Innovation by firms where firms operating within the sandbox may not be fully aware of other fintech players and the innovative solutions they bring to the table. This isolation can lead to missed opportunities for collaboration and synergy, hindering the development of a thriving fintech ecosystem.

G. Opportunity to undertake testing of applications in a live environment affording a platform to gather feedback from customers and partners thereby iterating their solutions and business models.

H. Brand visibility arising from participation in the regulatory sandbox. The visibility has enabled firms an opportunity to expand to other jurisdictions across the continent.

05

CONCLUSION, REGULATORY OUTLOOK AND NEXT STEPS

5. Conclusion, Regulatory Outlook and Next Steps

Significant progress has been made since the inception of the Regulatory Sandbox and the outcomes achieved have impacted the capital markets. Nonetheless, the Regulatory Sandbox strives to achieve greater outcomes towards shaping meaningful regulatory change.

This impact report underscores the transformative role of the Regulatory Sandbox in fostering innovation, inclusivity, and resilience within the capital markets ecosystem. By facilitating the testing of novel products, services, and solutions, the sandbox has not only promoted financial inclusion and democratized access to capital markets but has also fostered a culture of innovation, enhanced market efficiency, and fostered a culture of savings and investments.

With capital markets being a vital source of development, the Regulatory Sandbox has been able to contribute to the key national policies such as Vision 2030, the Bottom-up Economic Transformation Agenda (BETA), and the 10-year Capital Market Master Plan through the stimulation and facilitation of innovative capital markets products and services, thereby fostering inclusivity and innovation.

Additionally, the sandbox has contributed to the broader objectives of the Authority by mobilizing funds to the capital markets using the CIS intermediary service platform providers model, democratized wealth by reaching the youth, millennials, and Gen Z who had previously been left out of capital markets. This was achieved through the ease of access of capital markets products and efficiency in entry and exit brought about by these innovations. Whereas low capital markets literacy levels continue to characterize the Kenyan capital markets thereby hindering penetration of capital markets, innovations tested in the regulatory sandbox have been instrumental in enhancing investor education and awareness. Moreover, the regulatory sandbox has proved to be a key pillar in the review and development of regulations and policies that respond to the changing regulatory and business environment. The learnings from the sandbox have demonstrably informed updates to capital market regulations and policies. This ongoing process ensures a dynamic and adaptable regulatory framework that promotes a competitive market.

Through its global, regional, and local networks, the Authority has continued to collaborate with peer regulators, innovation hubs, and relevant stakeholders to enhance fintech adoption to spear innovation and development. Towards this end, the Authority continues to be a key partner in the financial sector Joint Financial Regulators Forum (JFSR), IOSCO, GFIN, and EASRA to support innovation and share practical experiences on the operationalization of regulatory sandboxes.

As the Authority continues to champion innovation, the regulatory sandbox remains a cornerstone of its efforts to grow customer base, democratize wealth for the benefit of all stakeholders through leveraging technology to deliver capital market services and products.

Looking ahead, the recommendations outlined in this report, including the implementation of targeted support initiatives, are poised to further amplify the impact of the sandbox and propel the financial sector towards greater innovation and prosperity.

5.1. Regulatory Outlook

Kenya's regulatory sandbox is poised for a transformative journey, evolving from a testing ground into a launchpad for financial innovation. By actively learning from successful initiatives around the world, the program shall streamline the application process for participants. This will involve offering clearer guidance and reducing unnecessary hurdles, making it easier for a wider range of financial inventions to flourish within the sandbox. The program's impact, however, extends far beyond simply testing new ideas. It envisions building a supportive ecosystem that empowers exited firms. This will be achieved by connecting them with a network of investors, including private equity firms and venture capitalists. These connections will fuel the growth of these innovative companies and empower Kenyan entrepreneurs to reach their full potential. The program's ambition doesn't stop there. It aims to create a clear pipeline for successful ventures to graduate from the sandbox and list on a dedicated technological board within the Nairobi Securities Exchange (NSE). This board would mirror the existing GEMS board for SMEs, similar to the successful IBUKA incubation program which is a premium incubation and acceleration program established by the NSE PLC in 2018 and seeks to support companies to reach their next stage of growth through an incubation and acceleration program tailor-made to suit their needs. This pathway would provide these companies with a clear path to an Initial Public Offering (IPO), further solidifying their place within Kenya's capital markets.

Recognizing the ever-evolving financial landscape, the program acknowledges the growing prominence of private equity. The program will leverage its existing network to unlock crucial funding opportunities for promising ventures after they exit the sandbox. This focus on post-sandbox support ensures these innovations have the resources needed to thrive in the real world. Furthermore, the program aspires to be a catalyst for impactful change. It envisions becoming a breeding ground for groundbreaking financial solutions that empower underserved segments of the population. Imagine a one-click Know Your Customer (KYC) solution developed within the sandbox, streamlining due diligence and accelerating innovation. This, combined with swift turnaround times for approvals, would create fertile ground for ideas that promote financial inclusion, much like the transformative impact of M-Pesa.

The Sandbox understands the dynamic nature of the Fintech industry. It acknowledges the need for constant adaptation to keep pace with emerging trends like Artificial Intelligence (AI), machine learning, and blockchain technology. These advancements will be closely monitored to ensure the sandbox remains relevant and fosters cutting-edge solutions. Additionally, the program recognizes the importance of addressing challenges like resource limitations and ensuring effective monitoring and supervision of participants. By fostering a collaborative environment with stakeholders, engagements with post-sandbox firms, and embracing best practices from around the world, the Kenyan regulatory sandbox is well-positioned to become a transformative force for financial innovation in Kenya. This will ultimately propel the country's capital markets to new heights, solidifying its position as a leader in financial technology on the global stage.

Collaboration among regulators has emerged as an integral component that will enable regulators to monitor developments, supervise, and address risks owing to the cross-border access of innovations and their non-face-to-face nature. The Regulatory Sandbox shall strive to build a legacy by fostering deeper engagement with all stakeholders within the Fintech ecosystem both at the domestic and global levels. This shall enable it to obtain up-to-date developments in technological, and regulatory developments. The Authority shall equally cultivate and enrich strong partnerships with peer regulators to aid in examining successful initiatives and identify best practices to further enhance Sandbox the value proposition.

5.2. Next Steps

Going forward, therefore:

1. **Implement a cohort system** - The Regulatory sandbox shall pursue the combination of admission of participants on a rolling basis with a cohort-based system. This would allow focus on specific Fintech areas of interest and allow for the grouping of similar innovations to be tested concurrently, encouraging collaboration and knowledge-sharing among participants.

2. **Sandbox Express** - Where innovations pose low and well-understood risks, the SRC could develop pre-defined boundaries, expectations and regulatory reliefs for such innovations and provide for fast tracked approvals for such innovations to be admitted to the sandbox. This would promote efficiency in rolling out products into the capital markets space and reduce the backlog of applications for admission into the regulatory sandbox. The Monetary Authority of Singapore established such a Sandbox Express System in 2019.

3. **Sandbox Plus** - The Authority will seek to provide additional value to fintech firms that successfully exit from the Regulatory Sandbox through, for example, negotiating with the Government to fit the fintech firms into the Digital Economy. In addition, the Authority will build the capacity of these firms to ensure that they have strong governance structures that promote investor confidence and protection. The Authority will facilitate linkages between fintechs and private equity and venture capital funds, so that they have the capacity to access affordable capital to scale up their ideas.

4. **Continue to strategically leverage innovation and technology to improve product offerings and customer experience in the capital markets.** Towards this end, the Authority will take advantage of its global networks, including its membership in the International Organization of Securities Commissions (IOSCO) and the Global Financial Innovation Networks (GFIN) towards harnessing FinTech to improve outcomes globally around regulatory developments and to facilitate cross-border testing for interested fintechs.

5. Cross cross-cutting nature of technology continues to spur the need for **cross-border collaboration between financial sector regulators,** as well as other stakeholders. Towards this end, the Authority continues to actively participate in the Joint Financial Sector Forums (JFSR) and collaborate with regulators regionally and across the globe, partnerships with ministries of governments, universities, other institutions of higher learning, and relevant stakeholders to share practical experiences, learn from each other and thereby spurring innovation.

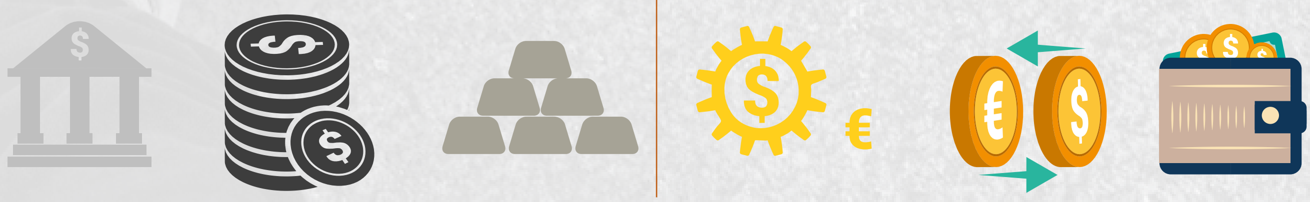
6. **Focus on Customer Experience -** This includes providing clear communication channels, efficient feedback mechanisms, and user-friendly application processes. The Authority is redesigning the sandbox application process to make it more effective and user-friendly for attracting and supporting innovators. To streamline the testing process, facilitate data collection and analysis, and allow for potentially faster innovation cycles, the Authority may consider the introduction of a digital sandbox.

7. **Targeted sandbox programs -** The Authority intends to focus on specific areas of regulatory uncertainty. This allows for deeper dives into specific challenges and facilitates the development of more focused and effective regulations.

8. **Partnering with fintech firms to undertake investor awareness,** especially among the youth and millennials. Reaching young investors, particularly millennials and Gen Z, with effective investor awareness education remains a challenge. Traditional methods may not resonate with these digitally inborn audiences. These partnerships can leverage the reach and engagement capabilities of fintech platforms to deliver engaging and informative investor awareness content.

9. **Promote Wider Adoption -** There is a case for the establishment of regulatory sandboxes across all sectors within the financial markets and establishment of a framework for a joint sandbox for the financial sector for testing innovations that cut across the various financial sector domains with considerations on value addition for the innovators during exits. This encourages broader innovation and nurtures a culture of experimentation that benefits all participants (e.g., traditional institutions, fintech startups).

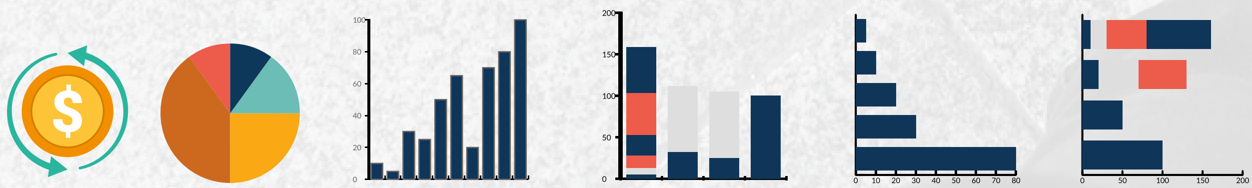
10. **Establishment of a Cross-border/Regional Regulatory Sandbox -** This would provide an avenue for innovative firms in the capital markets sector to easily expand to new markets in other jurisdictions. This is because, through cross-border collaboration, laws and regulations are harmonized on issues such as AML/CFT



compliance, while regulatory arbitrage is minimized. Approval at the sandbox level would allow the subject firm to roll out its products in several markets within a particular region. The Pacific Island Regional Initiative established a regional sandbox in 2020. It supports seven central banks across the Pacific Region and helps fintech firms expand across the region.

11. **Continuous Capacity building** - the rapid evolution of financial technologies, particularly those involving tokenization, and virtual assets presents a challenge for the Regulatory Sandbox Review Committee and the Authority at large. Efficient review and ongoing supervision require a deep understanding of these emerging fields. These calls for continuous capacity building for the Sandbox Review Committee members and members of the Authority at large. The importance of developing and implementing scenario-based training exercises cannot be under scored. This allows participants to apply their knowledge to potential sandbox proposals involving these technologies, enhancing their ability to effectively review and supervise such projects.

12. **Understanding risk:** Recognizing that risk may not always be detrimental if it does not harm the investor is essential for balancing innovation with investor protection. Regulators should adopt a nuanced approach to risk assessment, considering factors such as the nature of the innovation, its potential impact on market integrity, and the level of investor exposure.

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