# **Mauritius Research and Innovation Council**

**Financial Innovation** 

**Position Paper** 

December 2023

## Prepared by:

Dr N Gopaul Mrs H Keenoo Ms K Lakheearam Mrs D Pillay-Naiken

## LIST OF ABBREVIATIONS

ARI	Les Assises de la Recherche et de l'Innovation	
AML/ CFT	Anti-Money Laundering/Combating the Financing of Terrorism	
BOM	Bank of Mauritius	
CBDC	Central Bank Digital Currency	
COMESA	Common Market for Eastern and Southern Africa	
CDD	Customer Due Diligence	
EESG	Economy, Environment, Social, Governance	
EU	European Union	
FATF	Financial Action Task Force	
FIAMLA	Financial Intelligence and Anti-Money Laundering Act	
FSC	Financial Services Commission	
FSI	Financial Services Institute	
FSP	FinTech Service Provider	
FDI	Foreign Direct Investment	
HRDC	Human Resource Development Council	
IMF	International Monetary Fund	
IFC	International Finance Centre	
ITOs	Initial Token Offerings	
IPPAs	Investment Promotion and Protection Agreements	
IOSCO	International Organization of Securities Commissions	
lITOs	Issuers of Initial Token Offerings	
КҮС	Know Your Customer	
MRIC	Mauritius Research and Innovation Council	
MITCI	Ministry of Information Technology, Communication and Innovation	
NTRS	National Training and Reskilling Schemes	

NLP	Natural Language Processing
OECD	Organisation for Economic Co-operation and Development
ΡΟϹΑ	Prevention of Corruption Act
RAIEAS	Robotic and Artificial Intelligence Enabled Advisory Services
RPA	Robotic Process Automation
RSL	Regulatory Sandbox Licence
RIMC	Research and Innovation Management Committee
SADC	Southern African Development Community
VAITOS	Virtual Asset and Initial Token Offering Services

## Abstract

The purpose of this paper is to give an overview of key developments in the financial sector, especially in areas pertaining to the Financial Innovation thematic under Les Assises de la Recherche et de l'Innovation 2022 (ARI 2022). ARI 2022 was held in April 2022 whereby stakeholders from the financial sector were invited to participate and contribute in bringing further developments in this sector.

The first part of this paper outlines the Calls for Proposals which the Council initiated to invite stakeholders to submit proposals which would fit the priority areas selected.

The First Call for Proposals was focused on short-term projects in the areas of Telematics Insurance, Payment Infrastructure and Application Programming Interface (API) Provider.

The Second Call for Proposals was geared towards both short-term and medium-term projects. The priority areas which were identified during the Second Call for Proposals were Regulation Tech (RegTech), Marketplace Aggregators and Cybersecurity.

The second part of the paper gives an overview of Mauritius as an International Financial Centre and the Banking and Non-Banking sectors in the country. Recent developments in this sector as well as legislations pertaining to financial products and services are covered in this paper.

The last part of this paper provides an indication of forthcoming developments in the area of Financial Innovation. These include measures being taken to increase awareness among the younger generation which would build up the financial workforce, adoption of Artificial Intelligence in financial products and services, a dedicated webpage on the Council's website with links to updated financial innovation newsfeeds. Initiatives from the Ministry of Financial Services and Good Governance are also outlined in this report.

Keywords: Financial Innovation, International Financial Centre, Banking and Non-Banking Sectors

## Chapter 1: Introduction

One of the Government's vision ambitions to build "an economy in the league of highincome countries, driven by Research, Technology and Innovation and bringing higher levels of growth, equality and shared prosperity".

"Les Assises de la Recherche et de l'Innovation 2022" which was organised by the Mauritius Research and Innovation Council (MRIC) proposed to be a platform that initiates a national dialogue while concurrently providing insights on emerging and frontier innovations.

Prior to "Les Assises de la Recherche et de l'Innovation 2022", a Working Group/Technical Committee was set up for the Financial Innovation thematic area whereby key stakeholders in the financial sector were invited to participate and through active discussions with regards to drafting a roadmap for Technology, Research and Innovation for this particular sector.

The discussions of the Technical Committee were focused on the following questions:

#### 1. Where we are?

- · Situating the existing financial eco-system
- · Identifying the gaps and challenges in the Sector

#### 2. Where we want to go?

• Understanding the aspirations and vision for the sector over the coming years

#### 3. How to reach there?

- New policies and strategic directions
- · New laws and regulations or amendment of existing legislation
- Actions (Innovative ideas, solutions to gaps identified, best practices, projects etc.)
- New Schemes/ support Mechanisms

From the 27th to the 29th April 2022, the Mauritius Research and Innovation Council (MRIC) organised Les Assises de la Recherche et de l'Innovation 2022 (ARI 2022) at Le Meridien Ile Maurice Hotel. The objectives of ARI 2022 were to:

• Develop a national roadmap

- Provide insight into emerging technologies and sectors
- Identify and introduce strategies to drive leadership in emerging technologies and sectors
- Eliminate barriers to innovation
- Coordinate disparate policies toward research, technology commercialization, investments, education, tax, trade, IP, government procurement, and regulatory policies in an integrated fashion that drives economic growth
- Chart incentives for fostering innovation

A total of 7 thematic areas were identified and prioritised. The thematic areas are as follows:

- 1. Blue and Green Innovation
- 2. Health and Wellness Innovation
- 3. Financial Innovation
- 4. Social and Grassroots Innovation
- 5. Travel, Tourism and Entertainment Innovation
- 6. IT, Emerging and Enabling Innovation
- 7. Rodrigues Innovation

The aim of this paper is to look at the Financial Innovation Thematic Area; projects funded by the Council in this area and what is being done in this area at a national level.

Financial Innovation can be defined as the creation and popularization of new financial products, processes, markets and institutions (Llewellyn, 1992; White, 1997; Tufano, 2003; Mishra, 2008; Sánchez, 2010; Delimatsis, 2011; Gubler, 2011; Lerner and Tufano, 2011) leading to improvements in products, processes and institutions.

## Recommendations from the Financial Innovation Sectoral Report in the National Roadmap for Research and Innovation

As a key outcome of the Assises de la Recherche et de l'Innovation, a National Roadmap for Research and Innovation was developed whereby a set of recommendations were made following discussions. The following list of recommendations pertains specifically to discussions held on the thematic of Financial Innovation.

#### • Develop a national concerted approach

Developing a national approach is critical. It refers to a learning process where all stakeholders join and discuss together, subsequently enabling innovation across sectors.

• Need to communicate extensively on existing products (Open Banking, MoKloud/Maupass) and Financial Literacy and Financial Inclusion

A national concerted approach brings us to the second recommendation where there is a need of communicating extensively on existing licenses and products. To name a few examples, the Bank of Mauritius has developed an Open Banking guideline, and products such as Mokloud and Maupass have been set up by the Ministry of Information Communication and Technology. This can be done through Financial Literacy and Financial Inclusion.

#### • Set up a Financial Innovation Fund and find alternate means of funding

It is important to set up a Financial Innovation Fund and to find alternate means of funding for start-ups because access to capital is very important. In other International Financial Centres, a lot of emphasis is laid on their start-ups and Fintech. They have an ecosystem which enable investors to come into the country and provide a conducive environment for start-ups to thrive while having access to a plethora of facilities.<sup>1</sup> This issue should be considered by Mauritius.

#### • Create schemes for start- ups to access funding

Creating schemes for start-ups to access funding is one factor which should be considered, where institutions can work together and operate schemes for start-ups in the Financial Services sector.

• Training and skills in digital finance – Review courses to reduce cost of compliance Training and skills in digital finance is very critical. Among questions which were asked during the skill survey carried out recently was "in what areas do you require more people?" It was noted that those areas where it was thought there were already a lot

<sup>&</sup>lt;sup>1</sup> An interesting example is the Dubai International Finance Centre (DIFC) Innovation Hub, which is home to more than 500 growth-stage tech firms, established innovation companies, digital labs, venture capital firms, regulators and educational entities. DIFC Innovation Hub is home to the largest financial technology accelerator in the Middle East, Africa and South Asia (MEASA) region.

of people, were the areas where in fact more people were needed (e.g., in the domain of digital accountancy).

Existing courses at undergraduate level in all local Universities should be reviewed so that certain key components could be addressed. The Open University of Mauritius and Financial Services Institute (FSI) have already initiated major work in that direction. It is important to highlight that the skill gap is a dynamic concept and it is therefore important to constantly check with the market needs to ensure that our education system are actually catering for these skills. r.

• Creation of digital ID for legal and natural persons and Digitalisation of KYC documents and digital KYC process for onboarding of clients

One of the recommendations which came upfront during meetings was that of creation of Digital ID for legal and natural persons. There is also a need for digitalization of KYC documents and digital KYC process for onboarding of clients. Speed is one thing which is very important nowadays. In Mauritius, there are 2 regulators for the financial services space namely the Bank of Mauritius which regulates the banking sector and the Financial Services Commission which regulates the non-banking financial services. Unfortunately there is no possibility for a single point for sharing of KYC to facilitate the onboarding process, this delays the process as well as does facilitate the customer experience, In several instances, investors have left Mauritius because they cannot wait for months to open a bank account. This is hence the first step in Financial Innovation.

• Technology should be mapped with strong legal framework including cybersecurity, to build trust and enhance Risk Assessment and Digital Governance literacy

Technology should be mapped with strong legal framework, inclusive of cybersecurity, to build trust. Mauritius is already amongst the few countries which have implemented a dedicated legal framework for virtual assets with the introduction of the Virtual Asset and Initial Token Offering Act 2022. There should also be training in risk assessment and digital governance literacy. The idea is not to be focused only on Mauritius. Financial Innovation does not stand on its own. The aim should be to think globally.

• Set up a sovereign fund which can be used to foster fintech for the African Region and set up an Africa Regulatory Sandbox in Mauritius to attract start ups

It is important to highlight that access to capital is an important aspect in financial innovation especially when dealing with fintech companies. The last recommendation

is to set up a sovereign fund which can be used to foster fintech for the African Region. The fund should ideally be open to local startups and should be designed to enable African Fintech startups to come to Mauritius. In this context, an Africa regulatory Sandbox can be set up in Mauritius to attract startups from the region. The objective is to allow startups in Africa to come to Mauritius and structure their company to have access to capital and also test their products.

The Council launched Call for Proposals for short-term and medium-term projects under each thematic area.

## Chapter 2: First Call for Proposals

A first Call for Proposals under the Innovation Boost Grant was launched on 28<sup>th</sup> March 2023 for short-term priority projects. The three priority areas which were selected under the Financial Innovation Thematic Area were:

- 1. Telematics Insurance
- 2. Payment Infrastructure
- 3. Application Programming Interface (API) Provider

The Council received six applications under this Call; one application was not retained at administrative screening and the other five were retained for the pitching session.

A panel evaluation committee which included key stakeholders in the financial sector was set up to provide their recommendations on the different projects.

The table below gives an overview of the panel.

Panel Members						
Name	Title	<b>Company/Institution</b>				
Mrs Dovinassy Pillay- Naiken	Lead Analyst, Financial Services	Ministry of Financial Services and Good Governance				
Mrs Tilotma Gobin Jhurry	Assistant Director, Payment Systems Division	Bank of Mauritius				
Mr Neelchandra Bhiwajee	Head of Business Development and Marketing	Mauritius Network Services (MNS)				

Mr Vasish Ramkhalawon	Secretary General	Insurers Association of Mauritius
Prof Theesan Bahorun	Executive Director	Mauritius Research and Innovation Council
Dr Nitin Gopaul	Research Coordinator	Mauritius Research and Innovation Council

Following the pitching sessions, panel members provided their scores and comments on each application submitted. Based on the comments and scores of panel members, three projects were approved by the Council. However, one applicant subsequently withdrew his application given that the maturity of the project at the time of application was insufficient to obtain the necessary clearance that was required by the panel.

The following two projects were approved by the Council:

1. Improving access to financial products through an AI-powered multilingual virtual assistant

The aim of this project is to improve access to the financial products and services proposed by FinClub. The project proposes the creation and implementation of an Al-powered multilingual chatbot to the peer-to-peer lending platform, FinClub.mu. The chatbot, based on Large Language Models and also utilizing Natural Language Processing (NLP), will serve as an assistant to help users to navigate through the platform, understand the processes and related financial procedures in Mauritius as well as answer any queries related to FinTech in Kreol Morisien, French and English languages.

The chatbot which has been designed to respond quickly and accurately to customer inquiries in the users preferred language, shall allow FinClub to provide personalised service, handle multiple customer queries simultaneously and thus provide faster responses 24/7 whenever customers need it. This will be useful for customers who need urgent help outside regular business hours and on the other hand, help FinClub drive lower costs for financial inclusion.

#### 2. Application of Internet of Things (IoT) in Telematics Insurance

This project aims to leverage telematics technology to implement insurance solutions for warehouse facilities (Cold, Chilled and Dry rooms). With the use of IoT devices and analytics, data will be collected and analyzed to assess risk, optimize operations and ultimately, provide tailor-made insurance coverage. End nodes will be installed in a warehouse, to gather statistics for energy monitoring, temperature, humidity, gas/smoke detection and water leak. An analysis will be done downstream to assess risk associated with goods conservation process, damage, spoilage and safety/security factors. The company will develop predictive analytics models to identify potential risks and provide real-time alerts to warehouse managers, enabling proactive risk mitigation measures. The project will involve collaboration with the warehouse stakeholders, insurance provider and the company itself. Upon successful implementation, there will be a great potential to improve risk management practices and provide tailored insurance coverage, which will lead to reduced cost and enhance risk mitigation in this market segment.

## Chapter 3: Second Call for Proposals

A second Call for Proposals was launched from 1st September 2023 to 15th October 2023. The second Call for Proposals focused on short term and medium-term priority projects. Marketplace Aggregators and Cybersecurity were the sub-themes selected for short term projects and Regulation Tech (RegTech) was selected as the sub-theme for the medium-term projects.

The Council received nine proposals, out of which, six were retained for the pitching sessions. Three applications received were not recommended following administrative screening.

A panel evaluation committee comprising stakeholders in the industry was set up to provide their recommendations on the six applications retained. Members were selected based on their expertise in the financial industry.

The table below provides information on the panel.

#### Panel Members

Name	Title	<b>Company/Institution</b>
Mrs Tilotma Gobin Jhurry	Assistant Director, Payment Systems Division	Bank of Mauritius
Mr. Kresh Seebundhun	Director, Financial Services	Ministry of Financial Services and Good Governance
Mrs Varsha Mooneeram-Chadee	Senior Lecturer, Faculty of Law and Management	University of Mauritius
Mr Neelchandra Bhiwajee	Head of Business Development and Marketing	Mauritius Network Services (MNS)
Dr Nitin Gopaul	Research Coordinator	Mauritius Research and Innovation Council

Following the pitching sessions, panel members provided their scores and comments on each application submitted. Out of the six applications which were presented, four applications were recommended and two applications were rejected.

The following four applications were approved by the Council:

#### **1**. Kcious Next generation of sustainability

Kcious, an innovative labeling platform, merges technology with EESG (Economy, Environment, Social, Governance) concerns. It assists companies in embracing EESG by integrating these essential components. The inclusion of SMEs is pivotal for a transition towards a sustainable economy, offering them support and technological expertise A big gap was noticed between small and medium businesses and big corporations when it comes to sustainability and responsible practices (ESG). The aim of this project is therefore to help in decreasing this gap - a platform that acts like a bridge between these two different but complementary worlds. The goal is to help small and medium businesses benefit from ESG, making our economy fairer and more sustainable.

## 2. KasEnnPoz - a first of its kind money supermarket, revolutionising the way Mauritius interacts with financial services

The proposed project is the creation, development and launch of a progressive web app (PWA) for a financial marketplace aggregator (kasennpoz.mu) tailored to the Mauritian audience. The Ripple Association and OuiMoney are collaborating to create KasEnnPoz.mu, a financial services platform which, not only compares financial products but also empowers users with financial literacy content. KasEnnPoz marketplace will be a human-centered design solution, such that it is inclusive, relevant, meaningful, and effective in addressing the specific needs of the underserved and underbanked Mauritian communities. The proposed build will be experimental, innovative and iterative with the kaizen approach towards incremental improvement.

# 3. Enhanced Regulatory Compliance through Financial Technology (FinTech) in Mauritius

Finance Club Ltd proposes integrating Robotic Process Automation (RPA) to enhance regulatory processes and compliance with Anti-Money Laundering (AML) and Counter-Terrorism Financing (CTF) for monetary transactions.

#### A. Report Automation and Visual Analytics

Leveraging RPA, FinClub plans to automate regulatory reporting and employ visual analytics. This includes automated data sourcing, reconciliation, and report generation. RPA will analyze vast datasets to uncover money laundering patterns, assign risk scores, minimize errors, and provide a unified platform for consolidated regulatory reports. Visual analytics will be used to represent data meaningfully.

#### B. Optimization of Identity Management and Controls

The focus here is on comprehensive Customer Due Diligence (CDD), streamlined client onboarding through eKYC procedures, watchlist screening for potential matches and politically exposed individuals, and automated alert triage and investigation. RPA will prioritize alerts based on risk, streamline investigations, and facilitate the creation of Suspicious Activity Reports (SARs), ensuring a robust compliance framework.

#### C. Continuous Transaction Reconciliation & Monitoring

RPA will enable continuous monitoring of customer transactions, including interbank activities, using screening and anomaly detection methods.

#### 4. Risk Management and Reporting System

The project aims to revolutionize the financial landscape in Mauritius by introducing a state-of-the-art integrated system that caters to risk management, entity management, automated reporting, and document verification for financial institutions. This dynamic solution combines cutting-edge technologies, including artificial intelligence, blockchain, and biometric verification, to address the complex challenges faced by the financial sector in Mauritius.

The primary objectives of this project are to enhance risk assessment, streamline entity management, automate reporting processes, and expedite document verification, all while ensuring compliance with the rigorous regulatory standards set by the Financial Services Commission (FSC) and the Financial Intelligence Unit (FIU) in Mauritius.

This project not only fosters a more efficient and secure financial environment but also empowers financial institutions to provide superior services to their clients. By automating critical processes and reducing the burden of manual tasks, our solution paves the way for increased competitiveness and innovation within the financial sector while adhering to global best practices and regulatory guidelines.

The next part of the report gives an overview of Mauritius as an International Financial Centre and recent developments in the Banking and Non-Banking sectors.

### Chapter 4: Mauritius International Financial Centre

Over the years, Mauritius has established itself as a reputable and resilient international financial centre (IFC). Mauritius has positioned itself as one of the few countries to be classified as largely compliant or compliant with all 40 FATF recommendations. The Regulatory Sandbox License (RSL) was launched and administered in 2016 which has led to new and innovative financial products and services. For instance, this framework has contributed to the introduction of a

comprehensive legislation on Virtual Assets and Initial Token Offerings (VAITOS) which is complaint with the FATF and AML/CFT regimes. This Act regulates the issuance and trading of virtual assets and initial token offerings (ITOs) in Mauritius. Mauritius is internationally recognised and is on the OECD "whitelist" of jurisdictions which has implemented internationally agreed tax standards and has adhered to compliance regulations.

Given its geographical location and being a member of the Southern African Development Community (SADC) and the Common Market for Eastern and Southern Africa (COMESA) has attracted foreign entrepreneurs to set up their businesses in the country which has also contributed to the inflow of Foreign Direct Investments (FDI). In addition to its strategic position, Mauritius has a well-developed infrastructure thus making the country a gateway for African businesses looking to access global markets and investors seeking points of entry into Africa. Mauritius has signed the Investment Promotion and Protection Agreements (IPPAs) with several countries including several African nations. These agreements encourage investment as well as provide a framework for the free repatriation of capital and returns.

Mauritius is attractive to startups as they can incorporate their companies and benefit from financial incentives, socio-political security and a prominent regulatory framework. The Bank of Mauritius has issued the National Payment System Regulations recently which makes it easier for the payment, clearing and settling of payments in both Mauritius and abroad. The Mauritius IFC uses the latest fund management and administration software and the regulatory and supervisory framework for global funds in the country complies with the International Organization of Securities Commissions (IOSCO).

## Chapter 5: The Banking Sector

#### 5.1: Digital Banking

For the last two decades, digitalization has had an effect on a variety of sectors, promoting new business prospects and encouraging novel systems of innovation (Barett, 2015). The financial sector is continuously involved in experimentation and invention with the power of technology's digitization and it is also among the few sectors that have successfully embraced digitization. One of the most commendable

digital developments in the financial sector is the widespread adoption of digital banking over traditional banking methods.

The Banking Act 2004 of Mauritius was amended in 2020 to introduce the Digital banking licence. The Banking Act defines digital banking business as a *"banking business carried on exclusively through digital means or electronically."* 

During Financial year 2021-2022, the Bank of Mauritius (BoM) has, with the assistance of IMF's Regional Technical Assistance Centre for Southern Africa (IMF AFRITAC South), developed a comprehensive licensing and regulatory framework for digital banks in Mauritius which provides for an operation and supervisory mechanism of digital banks in Mauritius. This framework ultimately culminated into the issuance of a guideline on digital banks on 6<sup>th</sup> December 2021. The Guideline introduced a phases-in licensing process and enabled new entrants to operate flexibly and progressively in a controlled environment.

The Guideline is proof of BoM's commitment to strengthen and modernize the "traditional" banking landscape in Mauritius. It paves the way for more cost-effective and user-friendly services to customers compared to their brick-and-mortar counterparts. In this context, the Guideline could possibly promote financial inclusion. (Dacruz, 2022).

#### 5.2: Digital currency

In June 2023, the Bank of Mauritius (BoM) released a public consultation paper on the issuance of a Central Bank Digital Currency (CBDC), the Digital Rupee. Since inception of this project in 2020, driven by the aim of providing the public with a safe and user-friendly Digital Rupee, the Bank has been adopting a prudent approach in studying the benefits of a CBDC and in designing the digital rupee.

BoM has also requested technical assistance from the International Monetary Fund (IMF) to ensure that the Digital Rupee is elaborated in the most optimal conditions. BoM is the first central bank to have benefitted from technical assistance from the IMF in this field. Additionally, peer central banks and international organisations that focus on digital currency have also helped in crafting of the local Digital Rupee.

As announced by the Governor of the Bank of Mauritius, Mr Harvesh Kumar Seegolam, in April 2023 at the International Monetary Fund/World Bank Community of Central

Bank Technologists workshop on the theme of *"The Future of Central Bank Money in a Digital World"*, the Digital Rupee will be rolled out on a pilot phase, following the sandboxing exercise and finalisation of design attributes of the Digital Rupee, in November 2023.

The Bank of Mauritius Act was also amended to allow the BoM to issue digital currencies. The Central Bank is now also authorised to open accounts for, and accept deposits of, digital currencies from such persons as determined by the bank, and to make rules to establish the framework under which digital currency may be issued by the bank and may be held by the public. The BoM is also working towards the introduction of a retail central bank digital currency.

In a public notice published by the BoM on 10 January 2024, it was announced that the BoM has progressed on its research for the potential implementation of a retail Central Bank Digital Currency, the Digital Rupee. The BoM has embarked on a pilot project with one commercial bank and in due course, other commercial banks and members of the public will be invited to join the pilot.

#### 5.3: Digital onboarding

BoM continues to progress on the implementation of the Central KYC system. The system leverages on KYC data available on the InfoHighway Platform provided by the Government to facilitate the digital onboarding process. This platform provides data on individuals and corporate entities from several government agencies and utility bodies to commercial banks through the Bank.

In this context, in April 2022, BoM signed two tripartite Memorandum of Understanding: a first one with Registrar of Civil status and the Ministry of Information Technology, Communication and Innovation (MITCI), and second one with the Mauritius Police Force (Traffic Branch) and the MITCI for exchange of information through the platform. The signing of these two Memoranda has facilitated the establishment of a Central KYC system.

This project, which is spearheaded by the Bank, reduces the burden, time and cost to both customers and financial institutions, in carrying out document verifications.

BoM is also discussing with other organisations for further exchanges of KYC information.

#### 5.4: Open API and e-KYC

In order to ensure efficient delivery of banking and financial services in response to the COVID-19 pandemic whilst mitigating money-laundering and terrorist financing risks, the Financial Action Task Force (FATF) encouraged financial institutions to make appropriate use of financial technology such as digital or contactless payments and digital onboarding.

A range of measures was proposed by FATF to enable financial institutions to use a risk-based approach to their customer due diligence, including rolling out responsible digital identity and other innovative solutions for identifying customers at onboarding and while conducting transactions.

To this end, BoM embarked on the process of developing a centralized e-KYC platform. This project facilitates the verification of the identity and helps in enhancing KYC control across various segments of activities in the country. The platform has access to the national InfoHighway for the validation of the KYC information, and a National Authentication Framework has been put in place. For example, Maupass now offers seamless access to a number of Government services.

Nonetheless, e-KYC is yet to be rolled out to the financial services sector, where the impact will be huge, with utmost benefit to the public at large. Moreover, the size of the country and the digital impetus within the banking industry will largely facilitate the implementation of e-KYC in the non-banking industry.

#### 5.5: Government Payment Portal

As a banker to the government, BoM worked towards the implementation of the Government Payment Portal, with the main aim of supporting government e-services initiatives and boosting acceptance of electronic forms of payment at all government agencies and online services. This portal offers the public a convenient and easy-to use instant digital platform for payment of government services, hence increasing efficiency in provision of government services.

There are five government institutions namely the Registrar of Companies, Registrar General, National Land Transport Authority, Mauritius Revenue Authority and the Ministry of Social Integration, Social Security and National Solidarity which are ready to go live on this project. Eight other institutions are currently in the process of joining the Government payment portal.

## Chapter 6: The Non-Banking Sector

#### 6.1: VAITOS and crypto assets

During the RCE-OECD African AI & Blockchain Policy Forum held on 15<sup>th</sup> and 16<sup>th</sup> of November 2023, Mr Dhanesswurnath Thakoor, the Chief Executive of the Financial Services Commission (FSC) reiterated that Mauritius is among the first few African countries that has a comprehensive framework regulating and supervising the non-banking cryptocurrency environment especially in relation to virtual asset service providers (VASPs) and issuers of virtual asset offerings to the public (ITOs).

The regulation of VASPs and Issuers of Initial Token Offerings (IITOs) was introduced through the Virtual Asset and Initial Token Offering Services Act 2021 (VAITOS). This legal framework which came into force on 7 February 2022, is in line with international standards of the FATF with regard to managing, mitigating and preventing any Money Laundering/ Terrorist Financing risks (ML/TF).

Section 2 of VAITOS defines a virtual asset as: *"a digital representation of value which may be digitally traded or transferred, and may be used for payment or investment purposes, but does not include a digital representation of fiat currencies, securities and other financial assets that fall under the purview of the Securities Act of Mauritius."* Through a guidance note issued in 2018, the FSC indicated that "cryptocurrency" is a sub-category of virtual assets.

In line with its regulatory objective, VAITOS sets out key requirements related to governance structures, technical requirements, risk management, disclosure of information requirements, and protection of the rights of clients of virtual assets.

The activities that are licensed under VAITOS are:

- Class M (Virtual Asset Broker-Dealer) licence to carry out activities such as exchange between virtual assets and fiat currencies;
- Class O (Virtual Asset Wallet Services) licence pertaining to the transfer of virtual assets;

• Class R (Virtual Asset Custodian) licence for safekeeping or administration of virtual assets or instruments enabling control over virtual assets;

• Class I (Virtual Asset Advisory Services) licence for the participation in and provision of financial services related to an issuer's offer and/or sale of virtual assets; and

• Class S (Virtual Asset Market Place) for setting up and running a virtual asset exchange.

In accordance with VAITOS, holders of the above licences are also subject to the local anti-money laundering and prevention of terrorism financing legal framework inclusive of the Financial Intelligence and Anti-Money Laundering Act 2002 (FIAMLA), The Prevention of Corruption Act 2002 (POCA), The Prevention of Terrorism Act 2002 (POTA) and the AML-CFT Handbook.

Nevertheless, the Financial Crimes Commission Bill 2023 which will be repealing and replacing POCA, the Asset Recovery Act, the Good Governance and Integrity Reporting Act and Part II of the FIAMLA, will be tackling all financial crimes related to virtual assets and ITOs once it has been proclaimed.

#### 6.2: Fintech Service Provider Rules

With the view of consolidating Mauritius as the centre for the FinTech ecosystem in the region, the FSC has set up the regulatory landscape for the FinTech Service Provider (FSP) licence. Issued under Section 14 of the Financial Services Act, the FSP licence aims at offering providers of technology services to financial institutions, with a conducive supervisory regime if they wish to establish commercial presence and operate in or from within Mauritius.

In the advent of the growing nexus between technology and financial services over the recent years, Mauritius has been witnessing increased use of new or emerging technologies and the innovative use of existing technologies in financial services. With its licensees becoming increasingly reliant on providers of RegTech solutions, it is crucial for FSC to ensure these services are in good standing.

Hence, the FSP licence and its corresponding regulatory framework are intended for licensing and supervision of technology service providers providing RegTech, other technology solutions or software as a service, to financial institutions. By virtue of being a licensee, the holder of FSP license will be required strict adherence with the relevant acts under administration of FSC.

#### 6.3: Special Support to FinTechs

In the midst of worldwide digital revolution, even the Financial Services sector in Mauritius has seen the growing need for FinTech. As the country already possesses the right ecosystem to assist the global ambitions of FinTech companies, regulators constantly try to provide special programmes supporting the fintech ecosystem, fintech startups (regulatory sandboxes and accelerator programmes) and regulations regarding their special support.

As regulators, the BoM (regarding banking-related services) or the FSC (regarding nonbanking-related services) operate a regulatory sandbox authorisation for business activities for which there are no legal frameworks or inadequate provisions under existing local legislation.

This authorisation creates a controlled "safe space" where innovative products and business models can be tested without immediately being subject to all of the regulatory requirements. Applicants can conduct live experiments with fintech or other innovation-driven financial services, under supervision, to test the viability of innovative business models.

Any corporate body can apply for the regulatory sandbox authorisation. All applications with regard to banking-related services and non-banking related services should be made to the BoM and FSC, respectively.

#### 6.4: Robotic and artificial intelligence enabled advisory services

In June 2021, the FSC issued The Robotic and Artificial Intelligence Enabled Advisory Services (RAIEAS) Rules to provide a local regulatory framework aimed at promoting the adoption of novel and emerging technologies by licensed service providers in Mauritius. Under the Rules, RAIEAS is defined as the provision of digital and personalised advisory services through a computer program and/or artificial intelligence-enabled algorithms with limited human intervention. Thus, providers of innovative technology-driven solutions developed to comply with regulatory requirements - commonly known as RegTech or InsurTech fall under the scope of this licence. No person can carry out RAIEAS without a licence issued by the FSC.

The Rules also provide that advisory services include discretionary and nondiscretionary investment and portfolio management services. The licensee is required to ensure compliance with the minimum competency standard and fitness requirements for its promoters, shareholders, directors, beneficial owners and key staff members.

Licensees are also required to assure the soundness of the advisory services they are providing. They should implement adequate policies, processes and controls to ensure that algorithms continue to perform as intended and maintain a robust framework for the design, monitoring and testing of the algorithms through periodic and random reviews.

Licensees also have the obligation to comply with all applicable laws, regulations and codes relating to Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) in Mauritius, including those issued by the FSC.

#### 6.5: Securitisation of receivables of financial institutions

The National Budget 2021/2022 announced the introduction of a Securitisation Bill for Mauritius as part of new products and incentives to sustain the development of the financial services sector.

While acknowledging that securitisation is a valuable financing tool that contributes to economic growth and the efficient diversification of risk in the Capital Markets sector, the FSC issued the Securitisation Bill in March 2023 for public consultation. The Draft Securitisation Bill represents a comprehensive and coherent framework for regulating the securitisation of financial institution-originated receivables.

The Securitisation Bill outlines the significant steps for corporations seeking registration as securitisation vehicles under the oversight of the FSC. These requirements include submitting a business plan, identity documents for key personnel, and other relevant information. A minimum capital requirement is also established to emphasize the importance of financial stability.

The legislation further establishes guidelines for the proper transfer of receivables, ensuring full compliance with its regulations. It underlines the legal binding of such transfers, hence safeguarding the interests of both originators and securitization vehicles.

The responsibilities assigned to originators within the securitisation process are clearly defined in the Bill to ensure avoidance of conflicts of interest and the upholding of ethical practices, thereby maintaining the industry's integrity.

Supervisory measures and powers are also introduced to uphold the industry's stability and credibility. In this context, the Chief Executive of the FSC has the authority to suspend a securitisation vehicle's registration in cases where industry integrity is compromised.

Once enacted, this legislation could stand as a pivotal tool for guiding and overseeing the securitisation landscape within the financial sector.

## Chapter 7: What is next?

#### 7.1 Building-up the financial workforce of tomorrow

Mauritius Finance, as the leading voice for the financial services industry in Mauritius, brings together leading players in the realm of the Financial Sector comprising of banks, management companies, accounting firms, law firms and institutional investors, the Stock Exchange of Mauritius and all other licensees of the Financial Services Commission (FSC).

With the objective of developing Mauritius as an International Financial Centre of substance and acting as the flagship body representing the global business industry and the broader financial services sector in Mauritius, Mauritius Finance has introduced several initiatives to build the financial workforce of tomorrow:

#### a) Training Centre

- Mauritius Finance contributes to capacity building through advancing knowledge sharing and e-learning and hosting training session in the form of regular workshops and conferences.
- Provides training in partnership with the Human Resource Development Council (HRDC) under the National Training and Reskilling Schemes (NTRS).

#### b) National School competition

 Organisation of the Mauritius Finance National Secondary School competition in August 2023 on the theme of *"employment in the financial services sector: Opportunities and challenges for the Youth"*. Mauritius Finance got 17 entries for the National School competition.

#### c) <u>Career fair</u>

 Career fairs are organised by Mauritius Finance to provide school leavers with the opportunity to unlock their career with the National Training and Reskilling Scheme (NTRS)

#### d) Job vacancies

 Job vacancies in the financial sector are posted on their website and social media pages.

#### 7.2 Rise and impact of AI on financial services

The adoption of AI in financial services is increasing. While Predictive AI systems have already been deployed across various functions, further growth is expected in parallel with the adoption of Generative AI. Though Generative AI is still in its early stages of deployment, it is being explored carefully by many financial services institutions with technical maturity and customer outcomes in mind.

However, broader implementation of Generative AI in financial services faces many challenges including technical limitations, building a strong innovation foundation and recruiting the appropriate skill set. In addition to the challenge of ensuring alignment with existing legal frameworks, firms must also manage the uncertainty about the direction of future AI regulation.

The most common Predictive AI use cases are within Know Your Customer (KYC), fraud detection, document authentication and risk modelling. For instance, outlier detection tools can identify suspicious transactions by comparing them to past payments. These outlier transactions are either blocked directly or are flagged to clients, who can review them, then approve or reject the payments.

Generative AI is expected to be more prominent in both productivity and operations, and growth and retention functions. For Generative AI, applications include assisting with translating codes between languages, document searches and responses within internal policy and procedures, and generating marketing contents.

Predictive AI is a relatively mature technology in comparison with Generative AI. Consequently, the uses and risks of Predictive AI in the financial sector are better understood. According to experts, the key blockers to the innovation process for Predictive AI are data availability and technological constraints which is consistent across all types of financial institutions and their level of Predictive AI adoption.

#### 7.3 Web page

Taking into account the lack of updated useful links and blogs about financial news into a single platform, the MRIC seeks to create a dedicated page on its website with the links to updated financial innovation newsfeeds and blogs including for example Bloomberg, Financial Times, CNN Money, CNBC, and theStreet.

#### 7.4 Initiatives from the Ministry of Financial Services and Good Governance

There are also several initiatives which are being triggered at the level of the Ministry:

- (i) Creation of a Blueprint for Fintech in Mauritius in collaboration with the UN
  Economic Commission for Africa
- (ii) Implementation of a Fintech City in Mauritius which will provide a conducive environment for Mauritian and African startups to take their project from ideation to acceleration and even expansion to the African market.

#### **BIBLIOGRAPHY**

#### **Reports and Articles**

Bank of Mauritius, 2022. *Annual Report Year ended 30 June 2022* [online].Available at:<u>https://www.bom.mu//pdf/Research\_and\_Publications/Annual\_Report/StatisticalTables2021/BOM%20AR%202022.pdf</u> [Accessed on 14 September 2023]

Bank of Mauritius, 2023. *Public Notice: Public Consultation paper on the Central Bank Digital Currency: The Digital Rupee* [online]. Available at: <a href="https://www.bom.mu/media/media-releases/public-notice-public-consultation-paper-central-bank-digital-currency-digital-rupee">https://www.bom.mu/media/media-releases/public-notice-public-consultation-paper-central-bank-digital-currency-digital-rupee</a> [Accessed on 15 September 2023]

Bank of Mauritius, 2024. *Public Notice: Digital Rupee – Pilot* [online]. Available at: <a href="https://www.bom.mu/media/media-releases/public-notice-digital-rupee-pilot">https://www.bom.mu/media/media-releases/public-notice-digital-rupee-pilot</a> [Accessed on 11 March 2024]

Barrett M, Davidson E, Prabhu J, Vargo SL., 2015. *Service innovation in the digital age special issue: service innovation in the digital age service innovation in the digital age: key contributions and future directions* [online]. Available at: <a href="https://www.researchgate.net/publication/283825550">https://www.researchgate.net/publication/283825550</a> Service Innovation in the Digi <a href="https://www.researchgate.ne

Chambers and Partners, 2023. *Banking & Finance 2023 Mauritius* [online]. Available at: <a href="https://practiceguides.chambers.com/practice-guides/banking-finance-2023/mauritius">https://practiceguides.chambers.com/practice-guides/banking-finance-2023/mauritius</a> [Accessed on 24 September 2023]

Delimatsis, P, 2011. "Financial Innovation and Transparency in Turbulent Times," Papers 254, World Trade Institute

Financial Services Commission (FSC), 2022. AML/CFT Guidance Notes for Virtual Asset Service Providers & Issuers of Initial Token Offerings [online]. Available at: <u>https://www.fscmauritius.org/media/119965/aml\_cft-guidance-notes-for-vasps-and-</u> <u>iitos.pdf</u> [Accessed on 24 November 2023]

Financial Services Commission (FSC), 2021. Consultation Paper Regulatory Framework The Fintech Service Provider Licence [online]. Available at: <u>https://www.fscmauritius.org/media/94366/fsp-consultation-paper\_19b21.pdf</u> [Accessed on 16 November 2023] Gubler, Z.J; 2011. The Financial Innovation Process: Theory and Application. *Delaware Journal of Corporate Law (DJCL)*, 36(1), 55-119.

International Bar Association, 2023. Banking Law Committee *Fintech: how is the world shaping the financial innovation industry?* [online] Available at: <a href="https://www.ibanet.org/document?id=Fintech-legal-frameworks-23">https://www.ibanet.org/document?id=Fintech-legal-frameworks-23</a> [Accessed on 22 September 2023]

Dacruz J.V, 2022. *The Rise of Digital Banking in Mauritius* [online]; Available at: <u>https://www.blc.mu/the-rise-of-digital-banking-in-mauritius/</u> [Accessed on 11 September 2023]

Lerner J, Tufano P., 2011. The consequences of financial innovation: a counterfactual research agenda [online]. Available at: <a href="https://www.researchgate.net/publication/228291432\_The\_Consequences of Financial Innovation A Counterfactual Research Agenda">https://www.researchgate.net/publication/228291432\_The\_Consequences of Financial Innovation A Counterfactual Research Agenda</a> [Accessed on 7 November 2023]

Llewellyn, D.T, 1992. Financial innovation: a basic analysis. *In* H. Cavanna, ed. *Financial Innovation*, Routledge, London, 17–33.

Mauritius Finance, 2021. *Report on the Mauritian International Financial Centre May 2021 Issue 1* [online]. Available at: <u>https://mauritiusifc.mu/news</u> [Accessed on 16 November 2023]

Mauritius Finance, 2023. *Bridging the finance gap in Africa, October 2023 Issue 6* [online]. Available at: <u>https://mauritiusfinance.com/knowledge-hub/mauritius-finance-magazine-october-2023</u> [Accessed on 06 December 2023]

Mishra, P. K. 2008. Financial Innovation in Emerging Markets - Possible Benefits andRisks[online].Availableat:https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1262650

Sánchez, M. 2010. Financial Innovation and the Global Crisis. *International Journal of Business and Management,* 5(11), 26-31.

Sovereign Group, 2023. "Special Licences" in Mauritius: Robotic and Artificial Intelligence Advisory Services Licence Mauritius [online]. Available at: https://www.sovereigngroup.com/mauritius/corporate-services/special-licences-inmauritius/robotic-and-artificial-intelligence-enabled-advisory-services-licence/ [Accessed on 23 September 2023]

Tufano, P, 2003. "Financial innovation," Handbook of the Economics of Finance, *In:* G.M. Constantinides & M. Harris & R. M. Stulz (ed.), *Handbook of the Economics of Finance*, Elsevier Science and Technology Books, 307-335.

UK Finance in partnership with Oliver Wyman: *the impact of AI in Financial Services: Opportunities, Risks and Policy Considerations* [online]; Available at: <u>https://www.oliverwyman.com/content/dam/oliver</u>

<u>wyman/v2/publications/2023/nov/uk-finance-report-2023.pdf</u> [Accessed on 7 November 2023]

White L.J, (1997). Technological change, financial innovation and financial regulation in the U.S.: The challenges for public policy. *In:* Harker PT, Zenios SA (eds) *Performance of Financial Institutions: Efficiency, Innovation, Regulation*. Cambridge University Press

#### Media releases and speeches

Bank of Mauritius, 2022. *Media releases: The Bank of Mauritius signs Memoranda of Understanding to facilitate the establishment of the Central KYC System* [online]. Available at: <u>https://www.bom.mu/media/media-releases/bank-mauritius-signs-memoranda-understanding-facilitate-establishment-central-kyc-system</u> [Accessed on 18 September 2023]

Bank of Mauritius, 2020. *Speech of Mr Harvesh Seegoolam, Governor, Bank of Mauritius, at the launch of the Workshop for Money Laundering Reporting Officers organised by the Bank of Mauritius in collaboration with the Financial Services Commission and the Financial Intelligence Unit [online].* Available at: https://www.bom.mu/sites/default/files/opening remarks of governor seegolam wo rkshop for mlro 7 august 2020 2.pdf [Accessed on 20 September 2023]

#### Websites

CNBC [online] Available at <u>https://www.cnbc.com/markets/</u> [Accessed on 13 November 2023]

CNN Business [online] Available at: <u>https://edition.cnn.com/BUSINESS</u> [Accessed on 15 November 2023]

FinancialTimes[online]Availableat:https://subs.ft.com/sale2023?segmentId=baf22a87-7ac7-e095-360b-8eb185d4caa0&ds\_medium=cpc&gclid=e67e492ef29f1ef864a32c42afbda712&gclsrc=3p.ds&msclkid=e67e492ef29f1ef864a32c42afbda712[Accessed on 17 November2023]

The Street [online] Available at <u>https://www.thestreet.com/</u> [Accessed on 10 November 2023]

#### Legislative framework

*Financial Crimes Commission Bill* [online] Available at: <u>https://www.maurice-info.mu/wp-content/uploads/2023/12/The-Financial-Crimes-Commission-Bill.pdf</u> [Accessed on 17 November 2023]

SecuritizationBill[online]Availableat:https://www.fscmauritius.org/media/137642/communique-for-public-consultation-<br/>securitisation-bill.pdf[Accessed on 21 November 2023]