



صندوق النقد العربي
ARAB MONETARY FUND

AI Adoption in the Financial Services

African AI & Blockchain Policy Forum
November 15-16, 2023

November 16th, 2023

Agenda



Overview



Ethical use of AI – data management



Risk management processes



Building National Strategies for AI in the financial industry



Different countries initiatives in Regulating and Governing AI

Policy Considerations

- **Policy makers and regulators have a role in ensuring that the use of AI in finance is consistent with regulatory aims of promoting financial stability**, protecting financial consumers, and promoting market integrity and competition
- Policy makers should consider sharpening their focus on **better data governance by financial sector firms**, aiming to reinforce consumer protection across AI applications in finance
- Policy makers should consider **disclosure requirements around the use of AI techniques** in the provision of financial services and that it may impact the customer outcome
- Regulators should consider **promoting the ongoing monitoring and validation of AI models**, which are fundamental for their risk, as one of the most effective ways to reinforce model resilience, prevent, and address model drifts
- Policy makers could consider **the increased technical complexity of AI**, and whether resources will need to be deployed to keep pace with advances in technology.



Ethical use of AI - introduction

- Unprecedented growth in sophistication and application of AI – increasing ethical responsibility
 - **Pre-emptive and pro-active** action required
- Numerous examples: academic, public-private and political:
 - Academic – e.g. parallel between ethical AI and Principlism (medical ethics) (Mittelstadt 2019)
 - Adoption of principles and standards spanning international borders (OECD 2019)
 - Well-defined political guidance and strategies (e.g. UAE, UK's recent AI strategy 2021)
- **Diversity of approaches and applications of AI** (even within the financial services) means it is difficult to **create encompassing ethical frameworks or guidelines**, as well as translate these into actionable outcomes.

Ethical use of AI - key concerns

Non-maleficence and beneficence

Do no harm, maximize benefit



Transparency, explainability, justice, fairness

Bias and manipulation



Responsibility and accountability

Mistakes, costs etc.



Privacy and surveillance

Including data



Sustainability

Socio-economic



Superintelligence



AI/ML RISKS

Data
(Availability , Quality,
Privacy , Compliance)

Model
(Algorithm Biased)
Explainability

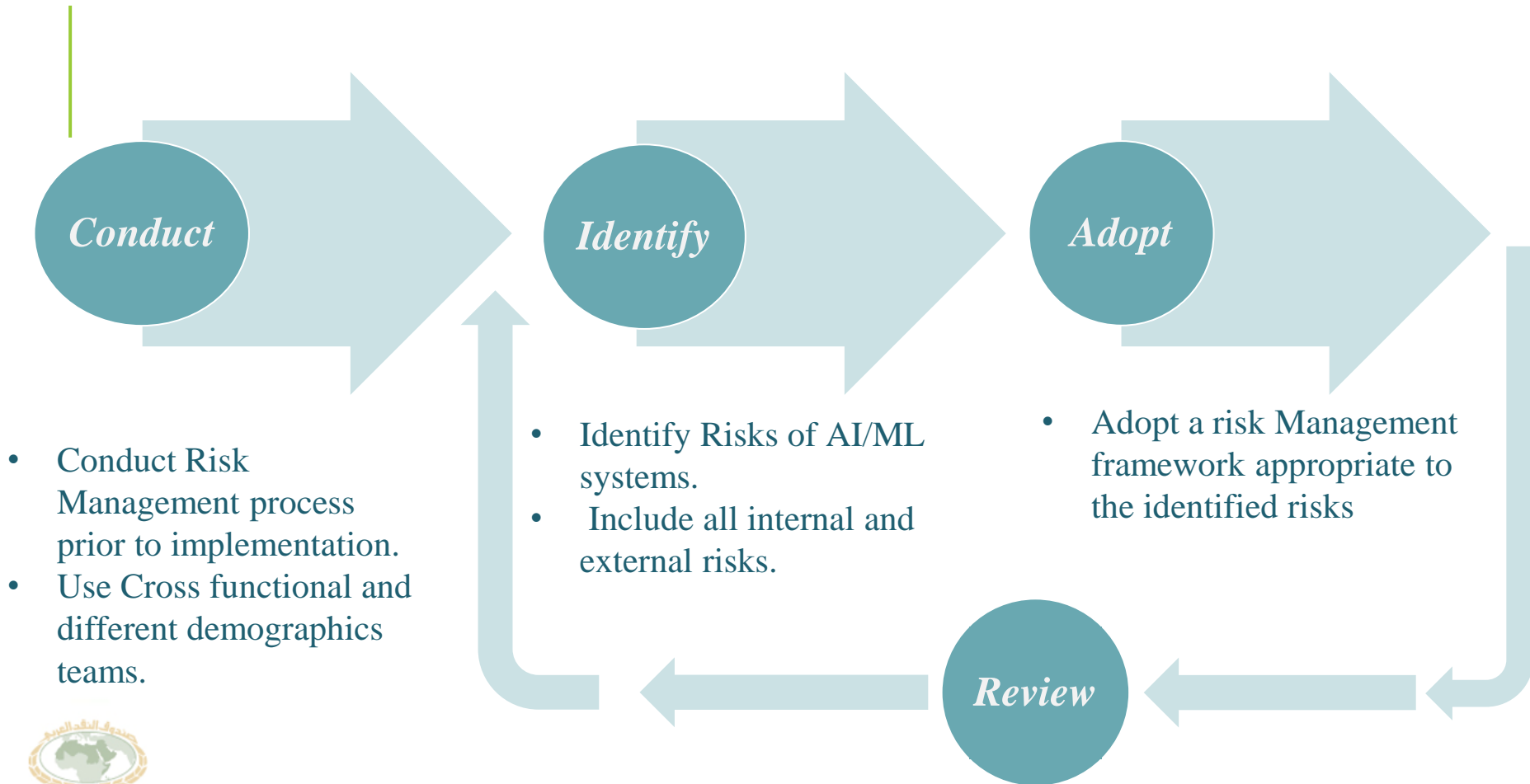
Risk Types

Cybersecurity
(data poisoning attack,
Deepfake,..)

Technology & third party
(Skills gap, Tech Capacity ,
Outsourcing, Cloud, , ..)



RISK MANAGEMENT



RISK MITIGATION

Training and awareness - Risk Management team

**Risk Management Framework specific to
AI/ML**

Oversight and Monitoring

Use of Algorithm for AI Bias (New)

**AI team – different demographics and
cross functional**



The AI Strategy for financial services at the national level, is a policy instrument that promotes the proper & ethical adoption of AI.



Framework fostering the AI Ecosystem

Vision and Objective of AI strategy across the financial sector

Identify: Application areas for AI in financial services, sources and enablers, Stakeholders of AI ecosystem

AI governance scheme

Setting ethical principles for AI adoption

Policies and initiatives to enhance AI in the Financial Sector

Communications with AI strategy stakeholders and collaboration within the AI ecosystem at the national level

Monitoring and evaluation

Monetary Authority of Singapore (MAS)

- In 2018, MAS announced a generally accepted principles to promote **fairness, ethics, accountability and transparency (FEAT)** in the use of AI and data analytics (AIDA) in Singapore's Financial Sector with a clear focus on **client interfaces, data governance, model validation frameworks and control procedures**
- In 2021, MAS announced the Artificial Intelligence and Data Analytics (AIDA) Grant as part of the Financial Sector Development Fund (FSDF) to promote AIDA adoption.

Hong Kong Monetary Authority, PCPD, SFC

- HKMA issued in Nov 2019 a detailed circular on '**High-level Principles on AI** that proposes **12 high-level principles for AI**, including governance, explainability of regulations, data quality, ethical, fair and transparency including implementation of the Ethical Accountability Framework, on-going monitoring and effective management of third- party vendors and data protection.
- PCPD issued the "Guidance on the Ethical Development and Use of AI to embrace **3 fundamental Data Values** being **respectful, beneficial and fair to stakeholders**, and **7 Ethical Principles for AI**.



Countries' Initiatives on AI in Financial Services (Cont'd)



Jordan

- Issued the Jordanian Artificial Intelligence Policy in 2020.
- The policy is based on five pillars of governance, legislative and regulatory environment, digital infrastructure, business and investment environment and capacity building.
- The AI policy document is supporting investment in startups that aim to build and develop AI-based solutions in Jordan. Other facilitations include tax exemptions, research grants, facilitation of bidding procedures, giving priority to AI funding, and localization of digital products that rely on AI and promoting them locally, regionally and globally.



UAE

- UAE financial regulators issued in November 2021 “Guidelines for Financial Institutions Adopting Enabling Technologies”.
- The guidelines aims to provide financial institutions with best practices on how to manage and mitigate risks arising from the use of innovative technologies, while better serve their customers.
- For AI, the guidelines provide a detailed framework covering the governance, accountability, design, management and monitoring, ethics, and customer protection.



KSA

- Established SDAIA (Saudi Data and Artificial Intelligence Authority) in 2019.
- SDAIA – and its sub-entities were established to create a data-driven and AI-supported government and economy. One of the key initiatives of SDAIA is AI Artathon which is a global competition that combines art and AI to create art using advanced artificial intelligence tools.
- Launched the AI strategy based on five pillars including: Skills, Policies & Regulations, Investment, Research & Innovation, and Ecosystem.





Thank you

