



Operational innovations in AML/CFT compliance processes
and financial inclusion: Emerging Case Studies

January 23, 2014

Contents

- **Executive Summary**
- Background
- Survey Overview
- Research Findings, Key Themes and Analysis
- AML/CFT Compliance Operational Processes Innovations
- Case Studies
- Research Observations
- Appendices – Survey Questionnaire and Results

Disclaimer

- The **target audience** of this research is financial service providers. It is aimed at identifying emerging case studies that demonstrate innovations, which have the potential to enhance the effectiveness of operational processes supporting AML/CFT compliance within a business offering financial services. Client acquisition and on-going monitoring was particularly in focus, as designing lower cost, more efficient electronic processes for client acquisition and on-going monitoring are critical factors to enable financial inclusion.
- The **term “innovation”** as defined for the specific purposes of this study are:
 - Improvements implemented in operational processes in order to support AML/CFT compliance, resulting in cost and time savings for the financial service provider. This may be related to the use of new technology that has enabled/supported low income persons access to more secure, transparent, efficient, cost effective access to financial services, while also facilitating AML/CFT compliance for the financial service provider.
 - Increased ability to provide lower income customers access to financial services through new targeted products and different delivery channels, as a result of such provider level operational improvements.
- The research only highlights **live deployments** already in place in selected countries. As only financial service providers were interviewed for the purposes of this research, it did not take into account any risk assessment of the selected innovations, against national AML/CFT frameworks or international standards. According to the interviews, in most cases, innovations of practices and products, in the countries that have been part of the research, have been introduced in close collaboration between financial service providers and the supervisory authority.
- The study **does not use** FATF terminology and does not interpret the FATF standards. It does not assess what is considered compliant according to FATF standards in relation to the issues and innovations presented.

Disclaimer

This study identified innovative** operational practices among financial service providers in, broadly speaking, the following stages of the AML/CFT compliance process only: (1) Identification (2) Verification (3) Monitoring (4) Sanctions and Reporting and (5) Ongoing Management/Exiting. The definition of each stage for the specific purposes of this study is described in Slide 14.

As mentioned in the previous slide, the study does not use FATF terminology and does not interpret the FATF standards. It does not assess what is considered compliant according to FATF standards in relation to the issues and innovations presented.

However, the researchers are aware that the aforementioned stages of the AML/CFT compliance process reflect some elements of FATF Recommendation 10: Customer Due Diligence. For example, FATF Recommendation 10 states the following CDD obligations (verbatim) should be taken by financial institutions:

- (a) *Identifying the customer and verifying that customer's identity using reliable, independent source documents, data or information.*
- (b) *Identifying the beneficial owner, and taking reasonable measures to verify the identity of the beneficial owner, such that the financial institution is satisfied that it knows who the beneficial owner is. For legal persons and arrangements this should include financial institutions understanding the ownership and control structure of the customer.*
- (c) *Understanding and, as appropriate, obtaining information on the purpose and intended nature of the business relationship.*
- (d) *Conducting ongoing due diligence on the business relationship and scrutiny of transactions undertaken throughout the course of that relationship to ensure that the transactions being conducted are consistent with the institution's knowledge of the customer, their business and risk profile, including, where necessary, the source of funds.*

FATF Recommendation 10 is comprehensive and could be incorporated into national legal frameworks and provider-level compliance practices to effectively mitigate money laundering and terrorist financing risk. FATF Recommendation 10 also includes elements that are not reflected in this research.

***The term "innovative" for the specific purposes of this research is defined in Slide 3.*

Glossary (1/2)

Term	Definition
Aadhaar	The Aadhaar scheme, a unique identification project being implemented by the Unique Identification Authority of India (UIDAI)
AML	Anti-Money Laundering, refers to a set of procedures, laws or regulations designed to stop the practice of integrating illegally obtained funds into the legitimate financial market
Agents/BC's	Business Correspondent are 3 rd parties, not employed directly by the financial services provider. They can be an individual or legal entity. They are typically stores, shops, local coops, where other trade already occurs. BCs can perform account opening, cash-in and cash-out, other transaction such as transfers or bill payments, and increasingly other AML/CFT compliance related activities
Branchless banking	The delivery of financial services outside conventional bank branches, often using agents and relying on information and communications technologies to transmit transaction details – typically card-reading point-of-sale (POS) terminals or mobile phones
Cash-In/Cash-Out	Refers to the depositing of cash into an electronic wallet/withdrawing cash from the balance in your electronic wallet
CBN	Central Bank of Nigeria
CFT	Combating the financing of terrorism
CGAP	The Consultative Group to Assist the Poor
CNIC	Computerized National Identity Card
e-Wallet / mobile wallet	Prepaid stored value financial product, used by consumers to store, send and receive money
eKYC	Electronic KYC

Note: The definitions of the terms included in this glossary are the researcher's definition solely for the purpose of this study

Glossary (1/2)

Term	Definition
FI	Financial Inclusion
FS	Financial Services
INEC	Independent National Electoral Commissions
Interoperability	Refers to cross compatibility in systems and technology infrastructure across different financial service provider, for example in mobile banking a customer with an account with one service provider could send or receive money to or from the account of a customer with a different service provider.
Innovations (Channel, Process, Product, Service model)	Categorization used to highlight AML/CFT compliance operational innovations. Channel refers to the way products are accessed e.g. mobile phone. Process refers to the way AML/CFT compliance procedures are managed operationally. Product refers to the offering of a new product. Service model refers to the way the client is serviced
KYC	Know Your Customer, refers to the due diligence activities that financial institutions and other regulated companies are performing to ascertain relevant information from their clients for the purpose of appropriate risk assessment and doing business with them
LI/Low-Income	For the purposes of this study low-income consumers is referring to the unbanked population
MFI	Micro-finance institution
MNO (or Telco)	Mobile Network Operator, is a telecom service provider or GSM (Global System for Mobiles) provider.
Mobile money	A term describing the services that allow electronic money transactions over a mobile phone.
NADRA	National Database and Registration Authority, Pakistan
POS	Point-of-Sale device, one type of technology interface in which a transaction is executed
Tiered KYC	Refers to country KYC legal requirements based upon tiers with varying levels of due diligence as per national risk assessment
UIDAI	Unique Identification Authority of India (UIDAI) is an agency of the Government of India responsible for implementing the Aadhaar scheme.

Note: The definitions of the terms included in this glossary are the researcher's definition solely for the purpose of this study

Executive Summary (1 of 3)

Background: This report contains the findings of a research project to identify and categorize leading operational AML* compliance practices among financial service providers for the identification, verification and ongoing monitoring and management of lower income customers. This project began with the hypothesis that an increasing number of financial service providers with products targeting lower income population segments are reducing client acquisition and monitoring costs, and improving efficiency and effectiveness of the processes in scope.

Audience: The audience of this research is financial services providers interested in understanding the landscape of such practices across the jurisdictions in scope.

Methodology: Desktop research was done and researchers performed online surveys, in-person and telephone interviews with a diverse range of financial service providers, including banks, mobile phone network operators, as well as advocacy and support organizations, regulators, and 3rd party services providers. Financial service providers covered in the research represented 24 developing countries across Africa, Asia and Latin America, with 122 survey responses and 67 interviews.

Outputs: The outputs include an overview of the survey results, evaluation of the key findings on innovations¹ and challenges, leading practices from interviewed firms and six case studies outlining examples of AML/CFT compliance innovations. These selected innovations are focused on specific, actionable, operational changes and improvements with an impact on the efficiency and effectiveness of processes for managing AML/CFT compliance in customer identification and verification, transactional monitoring and regulatory reporting, as well on-going management and exiting.

Key Findings:

Anti-money laundering (AML) is a particular focus for regulators, who heavily influence the evolution of financial services in developing countries and try to balance it with AML/CFT regulatory compliance.

- Regulators in a number of countries have facilitated reform in customer identification and verification to enable the development of products such as mobile money. According to financial service providers interviewed, regulators remain cautious and usually react to market developments due to the need to comply with national and/or international AML/CFT standards.²
- Tiered KYC regulations have been introduced quite widely, easing requirements of identification and verification for some products, but this does not necessarily provide a complete solution for financial inclusion, as typically lower tier KYC are for simplified bank account or electronic wallet, which while useful and perhaps merited given risk assessment, does not offer customers access to full banking services.²
- On the other hand, some significant developments are just emerging. For example, the Reserve bank of India is enabling eKYC*³, allowing BCs* to perform customer verification, as well as opening up the potential to allow further outsourcing of some of these processes.
- In general, regulatory guidance around customer verification, particularly for products such as savings and credit, can often remain unclear or complex, adding to the cost and compliance barriers in serving the low-income population.

Executive Summary (2 of 3)

Advancements, particularly in mobile technology, and the introduction of disruptive innovation, are enabling financial services providers to offer more financial solutions across multiple channels and platforms.¹

- Mobile money has made a significant difference to financial inclusion in places like Africa², through the development of the branchless banking channel. This has created both complexities as well as driven innovations in AML/CFT operational processes compliance practices, including the emergence of limited data sharing and alignment of AML/CFT compliance processes of identification and verification of customers between mobile operators and banks.
- Partnerships³ are emerging as a strong model for the go-to-market approach in most countries. This is mainly due to the agility of mobile operators in providing technological innovation and connectivity that the banks are unable to provide alone, often due to issues with the national infrastructure or cost. The use of 3rd party services⁴ to manage business correspondents are also slowly emerging.
- Competition remains very strong between mobile operators and banks, and although they collaborate, this cooperative model is still emerging and is often in the form of an uneasy marriage of convenience. That impacts the ability to fully align customer KYC identification between partners, due to issues with overall customer ownership between the banks and mobile operators.

The national infrastructure needed to enable access to financial services drives significant AML/CFT challenges and opportunities.

- Interoperability⁵ is lacking due to technological challenges and/or competition between providers. As a result customer identification and verification data for products such as mobile wallets is often not transferable between operators, even though some limited KYC data sharing for low risk low value basic e-wallets may benefit poor people. Given that low income persons tend to have multiple SIMs/ constantly change SIMs, overall monitoring of customer activity across usage with different operators becomes also more complex.
- Access to service points or connectivity for branchless servicing is still lacking⁶ in remote areas, making identification and verification for new products more costly to administer through the traditional branch based model.
- The absence of national ID is a major issue for AML/CFT compliance processes in many countries as identification and verification of low-income customers with no documentation is very difficult, especially when combined with the lack of other sources of information.
- National identification systems are making a significant difference to AML/CFT compliance processes, particularly identification and verification in places like Pakistan⁷ and India reducing the complexity and cost of verification. Biometric data (mainly fingerprints) is key for such innovations.

Significant innovations have been introduced in customer onboarding and AML/CFT compliance operational processes.

- Technological automation is increasingly used to capture information for managing identification and verification e.g. mobile phones.
- Agents or business correspondents are widely used to provide access points through designated individuals/legal entities, such as people with local standing or retailers

1. Ideal Model for Financial Services in Africa At the Tipping Point: an inclusive approach, Accenture August 2014, 2. Tanzania hits financial inclusion target early due to mobile surge, July 2014, Bank of Tanzania governor Benno Ndulu statement, 3. Examples of countries' actions to support financial inclusion, Annex 4, FATF Guidance on **Anti-Money Laundering and Terrorist Financing Measures** and **Financial Inclusion, 2011**, 4. Extending the third-party aggregator model from ATMs to Business Correspondents, IFMR Trust blog, 5. Interoperability in Branchless Banking and Mobile Money, CGAP blog, January 2012, 5. 2012 study by Gallup, Inc. and the World Bank, an estimated 2.7 billion people in emerging markets — almost 40 percent of the world's population, 7. NADRA provides free of cost CNICs, verification to IDPs (internally displaced people).

Executive Summary (3 of 3)

Data innovation¹ has advanced at a slower pace beyond the establishment of national ID systems and efforts to build product cross-sell and up-sell algorithms for credit.

- Data sharing captured by partners for registration/identification of customers between market participants is limited. Often identification and verification of customers is even duplicated between partnering organizations. This is mainly due to commercial considerations on overall customer ownership concerns, as well as data privacy issues.
- Processes to request customer consent to share personal information between mobile operators and banks for the purposes of on-boarding/KYC are rarely in place, even though they may be offering products in partnership.
- Data privacy laws may often be unclear or prohibit data sharing.
- Data management¹ to drive analytics and improve product offerings and/or customer identification and monitoring remains a low priority, although it is a future priority.
- In many countries, there is lack of 3rd party data sources that could aid customer verification, except where there is a well established national ID system that has enabled the infrastructure to support AML/CFT verification.

Measuring the explicit cost of AML/CFT separately from other costs of on-boarding and customer management is not a primary area of focus for most organizations at the current market maturity level. The focus is on scaling up business through customer acquisition.

- Most organizations are focused primarily on quickly scaling their business through rapid customer acquisition, so the specific AML/CFT cost management is not a priority.
- Most organizations measure their overall cost of customer acquisition, without making a clear distinction of the AML/CFT component.
- The cost of customer acquisition is more often measured on the basis of cost to onboard an individual or cost of maintaining a branch or agent relationship (incentive fees) or just as part of the overall operating cost

Contents

- Executive Summary
- **Background**
- Survey Overview
- Research Findings, Key Themes and Analysis
- AML/CFT Compliance Operational Processes Innovations
- Case Studies
- Research Observations
- Appendices

AML/CFT compliance operational processes and Financial Inclusion

World Bank research¹ shows that an **estimated 2.5 billion working-age adults** globally—more than half of the total adult population - **have no access to the types of formal financial services** delivered by regulated financial institutions that wealthier people rely on. Instead, they depend on informal mechanisms for saving and protecting themselves against risk. They buy livestock as a form of savings, they pawn jewellery, and they turn to the moneylender for credit. These mechanisms may be risky and often more expensive.

As governments and other international bodies are focusing on increasing the ability of the lower-income part of the population to access formal financial services, there are **two seemingly conflicting aspects** to solving the same problem:

- requirement for **easiness of access** to financial services/products
- **pressure on financial institutions to comply** with increasingly stringent anti-money laundering (AML) regulations.

Thus, the need to **balance AML/CFT compliance with the needs of the low-income/unbanked** populations is therefore greater than ever. This is particularly critical as governments in Asia, Africa, and Latin America seek to increase financial inclusion for low-income populations in order to reduce poverty and support economic growth. Even though financial inclusion and integrity may be mutually reinforcing objectives, the actual balancing act of financial inclusion and integrity can be challenging and there emerges two key questions:

1. Does the increased regulatory burden drive **process complexity and cost for managing AML/CFT compliance at an operational level**, affecting efforts to achieve financial inclusion?
2. What **key innovations** have organizations employed to **address this challenge** across the customer management AML/CFT compliance related operational processes?

This new CGAP research has focused on identifying the **specific innovations and leading practices** for **efficient and effective management of AML/CFT compliance operational processes across** products, processes, channels, and service models.

Introduction to the Research

Background on the Research Study

The Challenges and Innovations with compliance AML/CFT operational processes and financial inclusion study tests the hypothesis that an increasing number of financial service providers with products targeting lower income population segments, are reducing client acquisition and monitoring costs, and improving efficiency and effectiveness of their AML/CFT compliance related processes.

The research sought to identify leading AML/CFT compliance operational processes practices and trends, particularly around customer onboarding and management. Such practices could be focused around partnership agreements and regulatory or technology-driven innovations. This was to be accomplished with a systematic and standardized process of background research, written questionnaires and/or telephone interviews with a diverse range of financial service providers, including banks, mobile network operators, retailers, and technology companies.

Logistical Details

- **Accenture Development Partnerships** conducted this study on behalf of **CGAP**
- The study was conducted between **June 9th– August 10th, 2014**
- The geographical scope of the research was global, covering some of the countries relevant to financial inclusion across: Asia, Africa, and LATAM.
- Research had a deeper focus in the countries listed below, attributed to time/resources and a greater number of survey responses:
 - India, Pakistan, Indonesia, Malaysia, Philippines, Nigeria, South Africa, Tanzania, and Ghana

Scope of the Research

In-Scope	<ul style="list-style-type: none"> ▪ Geographic Scope: The research was conducted in 24 developing countries across Asia, Africa and Latin America. ▪ Organizational Scope: Organizational coverage focused on a CGAP and Accenture list of global target organizations, based on relevance to the study, including: banks, mobile operators, technology providers, regulators, microfinance institutions, and industry experts. The main focus was placed on providers of branchless banking, electronic/digital, or agent based services. ▪ Methodology Scope: Online Survey, Phone Interviews, In-person Interviews, Background Research ▪ AML/CFT Compliance Processes Scope: The research covered AML/CFT compliance processes around customer identification, verification, sanctions, screening and ongoing monitoring, which included the regulatory requirements as well as the broader business function of customer onboarding.
Out of Scope	<ul style="list-style-type: none"> ▪ Geographic Out of Scope: Developed countries were not included in the research. ▪ Organizational Out of Scope: Non-financial institutions and institutions not serving low-income customers were excluded. ▪ Methodology Out of Scope: Research was limited due to time and travel constraints as well as response rates from targeted organizations. ▪ AML/CFT Compliance Processes Scope: Process scope excluded the full customer relationship management (CRM) lifecycle, which would have involved a much larger business context. ▪ AML/CFT Risks were not in focus: The research focused on the internal processes and innovations of financial service providers without looking at the associated risks.
Limitations	<ul style="list-style-type: none"> ▪ Statistical limitations: The research did not involve a fully statistical approach and did not include a control group or statistical sampling due to the limited number of organizations and KYC professionals available. ▪ Statistical relevance: The total number of responses while large, may not yield statistically significant results within sub-geographies. ▪ Difficult to reach target audience: There are limited numbers of individuals with deep expertise in KYC and risk management within financial services providers in developing countries. ▪ Diversity: The research was limited by the diversity in products covered as well as the types of individuals interviewed as many of the target organizations have an existing relationship with CGAP or Accenture. ▪ Research challenges based on extrapolating on AML/CFT compliance trends and patterns in light of very diverse products, types of financial service providers and national regulations - however, marginal value of research gathered outweighed these potential challenges

Context of the Research across the AML/CFT Compliance Operational Processes

The research targeted identification and categorization of leading practices, supporting processes that allow financial services providers to achieve minimum AML/CFT compliance, while enabling financial inclusion. The practices in focus are categorized along the AML/CFT operational processes used by most major financial institutions globally (as expressed through their relevant policies¹).

The basic requirements for achieving AML/CFT compliance, based on such policies, are focused in the following key areas: *Ascertainment of customer identity, Establishment of purpose of business relationship, Client account monitoring, Reporting of suspicious circumstances/transactions, Anti Money Laundering controls, Anti Money Laundering Risk Analysis, Embargo Requirements.*

These specific requirements can be categorized along the following “high level” areas of AML/CFT operational compliance, across the customer management processes lifecycle:



Description of the process steps of the AML/CFT Compliance Operational Practices:

- **Identification:** Pertains to the customer attempting to authenticate himself/herself without any verifying details displayed as yet
- **Verification:** Refers to the act of validating a customer identity based on independent source data, documents provided by the customer (e.g. national ID card, mobile phone number, voter registration card, etc.), followed potentially against an available government or 3rd party database
- **Monitoring:** Is the surveillance and monitoring of customer transactions, typically based on a customer profile and specific details relating to that customer
- **Sanctions and reporting:** Involves the screening of customer transactions against designated (national or international) black lists and recognized sanctioned entities and individuals, as well as the reporting of suspicious activities to national authorities
- **Ongoing management:** Is the continued monitoring and management of customers identified against potential suspicious activity until potential discontinuation and exiting of the customer business relationship
- **The above definitions and categorization may not be based on FATF definitional criterion, does seek to interpret the FATF standards and what is considered compliant according to FATF standards. The authors also do not make any judgment on provider level compliance with national legal frameworks and international standards.**

Methodology

Preliminary Research and Survey

- Country regulatory and general market landscape
- **Industry background** for financial services, mobile operators, MFIs and government
- **Identification of key market players** (banks, mobile operators, technology providers, regulators, and industry experts) to conduct survey and interview whilst in country
- Preparation and testing of **online survey**
- Survey distribution and results collation and analysis

Interviews and Supporting Research

- Develop **interview guide** for telephone and in-person interviews
- Review survey results and contact participants for interviews
- Conduct interviews (completed **33 face to face and 34 telephone interviews**) to establish a view of the current market, issues and innovations, and understand the potential impact of these innovations on the industry
- Follow up by email or phone for additional validation of findings

Analyze Research and Develop Report

- Analyze research results and identify key findings
- Develop overview report of findings and analysis
- **Create case-studies** highlighting innovative organizations
- Develop database of contact details of target organizations
- Compile interview notes for CGAP reference
- Publish findings via CGAP website through the research paper and blogs

Contents

- Executive Summary
- Background

- **Survey Overview**

1. Survey Overview
2. Survey Geographic Coverage

- Research Findings, Key Themes and Analysis
- AML/CFT Compliance Operational Processes Innovations
- Case Studies
- Research Observations
- Appendices

Survey Overview

Emails were sent to a targeted group of financial service providers, requesting the completion of an online survey consisting of 13-questions. The survey was accessed through a link provided in the email, with follow up reminders sent periodically to encourage the response rate.

The research was conducted from June 8th to August 10th, 2014. The survey findings were followed up by telephone and in-person interviews with Banks, MNO's, MFI's, regulators and other industry stakeholders, focused on providing products/services geared towards low-income consumers.*

Survey Focus:

- AML/CFT Compliance Innovative Operational Processes
- AML/CFT Compliance Operational Challenges
- Costs of AML/CFT Compliance
- MIS Systems and Data Management

Results: The full results of the survey only responses and their analysis by questions can be seen in the Appendices

Illustrative view of online survey**

The screenshot shows a survey interface with the following sections:

- CGAP and Survey Background:** Includes a note that the survey should take about 10 minutes to complete and a brief description of CGAP's mission to advance financial access for the world's poor.
- 2. What is your Role / Primary Responsibility? (Select one that applies best):** Radio button options include Senior Management Leadership, Senior Management, Banking, Technology, Customer Service, Compliance Officer, and Compliance.
- 3. What is your Do?:** Radio button options include None, Banking, Customer / Non-bank, Customer Services, Technology, Strategy / Product, and Other (please specify).
- 4. What is your Pri:** Radio button options include Banking, Customer / Non-bank, Customer Services, Technology, Strategy / Product, and Other (please specify).
- 5. How are you Currently Serving Low-income Customers (Defined as those below poverty line)? (Select one that applies best):** Radio button options include Low-income customers currently represent an average of 10% of total customers, High/medium income Low-income customers represent between 10% and 25% of total customers, High/medium income Low-income customers represent more than 25% of total customers, Medium/low income share identified low-income as a high target group, and Low income priority increasingly serving in the, to increasing.
- 6. What is your Company Strategy in Offering Services to Low-income Customers? Is this a Focus for your Business? (Choose all that apply):** Checkable options include Providing services to low-income customers is a priority for our company, Our company actively offers specialized services for low-income customers, Being low-income customers is required by national regulation and does not offer a service and benefit of providing with regulation, Serving low-income customers will help expand our a customer's relationship in our market, Our company does not intend specialized services for low-income customers but serving the segment is important for market penetration and brand awareness, Our company does not plan to serve low-income customers due to being market saturated, and Our company does not plan to serve low-income customers due to credit associated with the segment.
- 7. What Financial Products have you Developed that are Specifically Targeted to Low-income Customers? (Select all that apply):** Checkable options include Savings, Loans, Insurance, and Other (please specify).

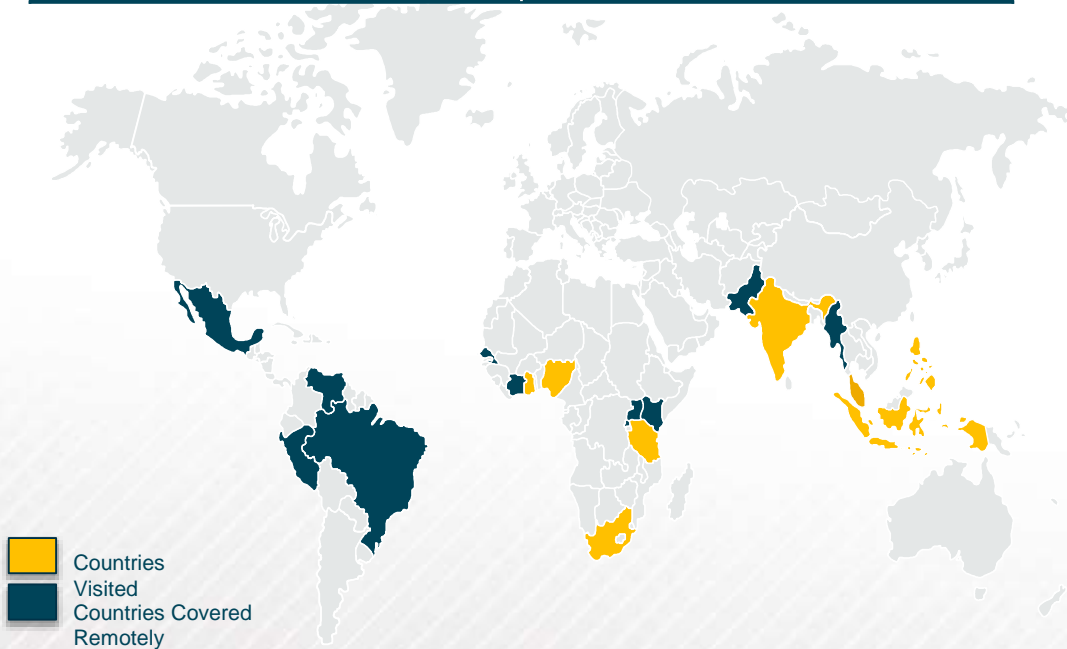
The research was conducted in 24 countries, with 122 survey responses and 67 interviews

Over 120+ survey respondents CGAP (40%) and Accenture (60%) contacts

24 Countries across Africa, Asia, & LATAM

Total Survey Requests	364
Survey Responses	122
Phone Interviews	34
In-person Interviews	33

Region	Country	Surveys	Interviews
Africa	Benin	1	0
	Burkina Faso	1	0
	Cote d'Ivoire	3	1
	Ghana	5	2
	Kenya	3	2
	Nigeria	2	5
	Papua New Guinea	1	0
	Rwanda	2	1
	Senegal	2	2
	South Africa	2	2
	Tanzania	30	15
Uganda	2	1	
Asia	Bangladesh	4	0
	Cambodia	2	1
	India	6	7
	Indonesia	12	11
	Malaysia	2	2
	Myanmar	1	0
	Pakistan	10	5
Philippines	5	4	
LATAM	Brazil	8	1
	Colombia	11	2
	Mexico	6	2
	Peru	1	1



■ Countries Visited
■ Countries Covered Remotely

Contents

- Executive Summary
- Background
- Survey Overview

• Research Findings, Key Themes and Analysis

1. Partnerships
2. Regulations
3. Data
4. Cost
5. Product
 - Product Overview
 - Saving
 - Loan
 - Payment

- AML/CFT Compliance Operational Processes Innovations
- Case Studies
- Research Observations
- Appendices

Key themes from this research indicate that innovations in AML/CFT compliance management processes and customer onboarding are mainly driven by commercial growth rather than for regulatory compliance

Key Research Finding Themes

Current Status

- Three quarters (75%) of the world's poor don't have a bank account *
- Key drivers behind change in AML/CFT compliance activity affecting financial inclusion, are:
 - Regulatory **compulsion**
 - **Competition** for LI customer segment
 - Support for effective **business growth**

Trends

- Reaching the unbanked is key to growth, as the traditional customer base of the banks is saturated. **Scaling up** and acquiring the unbanked customer is the driver rather than effectiveness of the AML/CFT compliance operational processes
- Regulatory compulsion has had limited affect as businesses only do the minimum to comply

Challenges

- **The regulatory environment** around KYC - identification and verification can be limiting product development
- **Overall ecosystem**, including national infrastructure of identification and connectivity to support money movement between available channels and operators has significant gaps
- **Lack of market coordination**, often channels to agree on a common approach on critical issues affecting all players are not available

On-boarding and AML/CFT Compliance

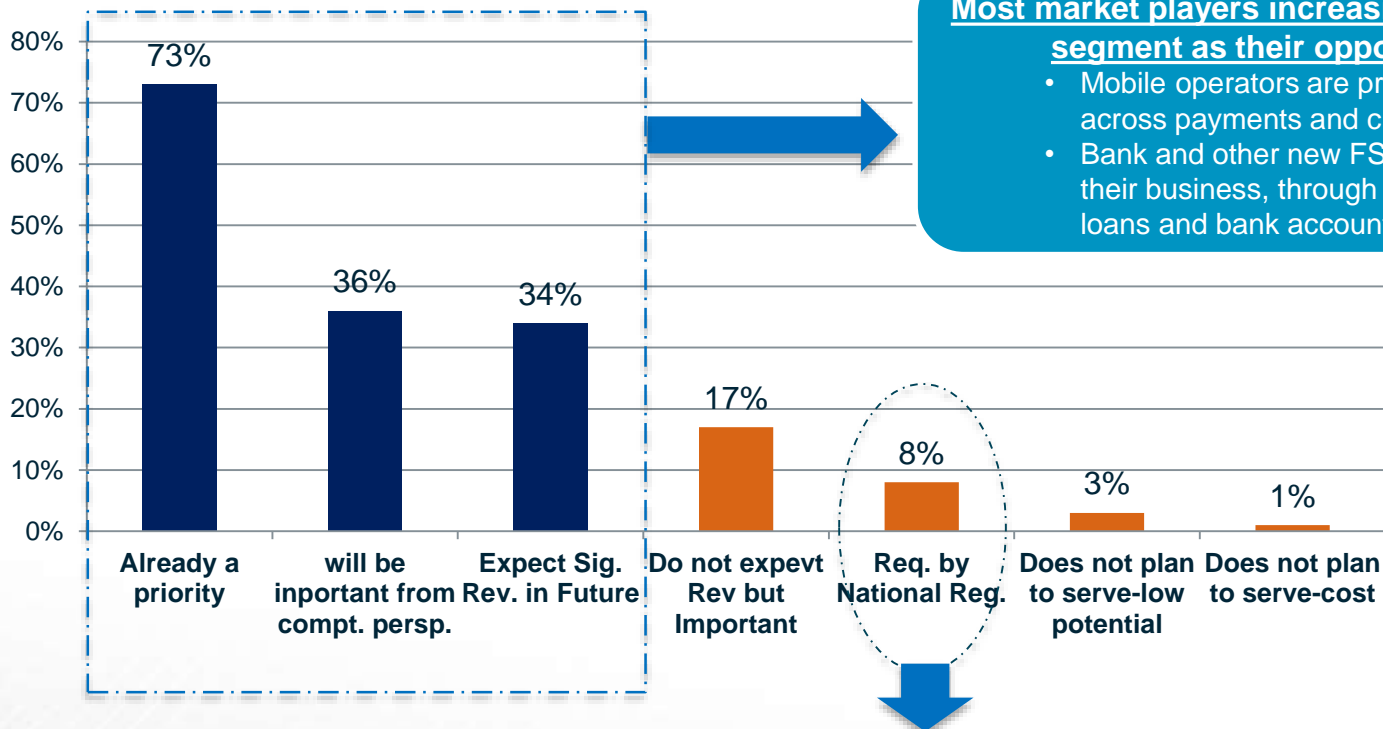
- Governments, regulators, and market participants have developed a clear understanding of the requirement for **change in AML/CFT regulations**, particularly around KYC for the unbanked population
- The processes of KYC identification and verification remain **predominantly paper based**, particularly for the banks

- Innovative FS providers are focusing on the **simplifications of identification and verification of LI customers**. This is critical in supporting their customer base growth
- Innovation in other AML/CFT compliance operational processes i.e. on going customer monitoring, **remains limited** and focused on achieving minimum regulatory compliance

- Stringent requirements for **proof of identity and address** are often still in place, making these **processes costly** to administer or not relevant to low-income customers, with **limited access to official documents**
- Although there is increase in commercial partnerships, **coordination** in developing market consensus on AML/CFT regulatory change is insufficient
- Access to **independent sources of information** for verifications is limited

Low-income customers are considered critical for growth by organizations participating in the survey, as their existing customer base of mid/high incomes is often saturated

Strategy drivers in offering services to Low-Income



Most market players increasingly see the low-income segment as their opportunity for growth

- Mobile operators are providing financial products across payments and credit
- Bank and other new FS market players can scale their business, through innovation e.g. short term loans and bank accounts

- Regulatory compulsion is often dealt with through a tick box approach by affected organizations. Countries like India, have had regulatory driven financial inclusion targets for many years with limited effect to date.
- By contrast, the Central Bank of Tanzania has just announced* that they met their financial inclusion targets (75% of the population in 5 years) driven by mobile financial services product innovation.

AML/CFT regulatory changes, on the other hand, have played a key role in enabling recent innovations in financial inclusion, although significant gaps still exist

Key Research Finding Themes

Current Status

- Regulatory **change is on-going**, driven by the need to enable FI and react to market changes
- Regulation has enabled **innovation** in most regions, **particularly in branchless banking**
- **Gaps** in regulation and guidance exist across **new products and services**

Innovations

- **Tiered KYC** is simplifying the identification and verification processes for low value products, and no frills bank accounts
- **Mobile money** is enabling access to an increasing number of FS products through mobile phones
- eKYC, acceptance of electronic documentation such as IDs and signature for identification /verification is being enabled
- Data sharing, for KYC and credit risk assessment is emerging

Challenges

- **Balance between FI and risk management**, regulators have to take a balanced approach in managing overall market risk, while enabling innovations
- **Capacity and knowledge**, analyzing the impact of introducing new products within a market requires a high level of experience and knowledge that is often not available

On-boarding and AML/CFT Compliance

- **Mobile wallet for payment products**, for low amount transactions, with no cash out, have been enabled in most countries with no or limited KYC identification and verification requirements
- Bank account access is also available in certain areas with reduced identification requirements

- Identification rules have eased off in many jurisdictions by **simplifying the acceptable ID documents** such as in India and Pakistan (national ID)
- **Proof of address** requirements have been simplified to accommodate migrant workers e.g. India
- **Paperless verification** through only electronic means (NADRA, Aadhaar) has been allowed
- **Customer verification by BCs** is possible (India)

- Regulations normally impose **daily and monthly transactional limits**, as per risk assessment, which helps for example control for suspicious activity and on going monitoring of transactions
- Regulators are **reluctant to introduce rapid change** due to their lack of experience and/or evidence to the support the impact assessment of enabling new products, channels, and services in relation to managing AML/CFT compliance to global standards

Partnerships between banks, MNOs, MFIs, and 3rd party service providers are emerging rapidly, offering opportunities for AML/CFT compliance operational processes innovations, but are not fully realized

Key Research Finding Themes

Current Status

- Strong competition between banks and mobile operators is coupled with **partnerships** borne out of necessity that enable the **required ecosystem for branchless banking**
- Mobile operators entered the FS market in most countries through mobile wallets and other e-money services and products

Innovations

- Operators are establishing and **maintaining growing networks of BCs/Agents**
- Utilizing credit risk scoring and outsourced SMEs that support up/cross-sell credit products and support training of BCs on on-boarding, respectively
- Establishment of processes that support providing complimentary services such as loan and bank accounts

Challenges

- **Interoperability**, MNO to bank, and MNO to MNO connectivity and ability to transfer funds is often not present due to competition or a lack of infrastructure (refer to slide 4)
- **Market coordination**, driving interoperability or regulatory clarity on product innovation has often no owner, without government policy drivers
- **Fierce competition** between MNOs and Banks for low-income market makes partnerships tenuous

On-boarding and AML/CFT Compliance

- The on-boarding of customers for mobile wallets is **owned by the mobile operators**. When **additional services like savings** are required, **the bank owns** the customer and the AML/CFT compliance processes
- **Other 3rd party partners** offering outsource services such as training for BCs have emerged
- Offering on-boarding **access point through a BC network** is becoming increasingly critical

- BCs (non-bank employees) can perform customer identification **on behalf of the bank** in some cases
- Utilize **mobile phone operator registration** as initial KYC for verification, to provide basic bank account
- Use of **mobile phone number and PIN code** as identification for performing transactions and on going monitoring of customer activity

- Infrastructure and market coordination that would enable the creation of **credit bureaus**, daily reconciliation of transactions between banks, and **no fee** use of mobile and bank channel access, has not yet taken off in most places
- Competition between mobile phone operators and banks for customer ownership when offering financial services has not allowed for further development of shared single **AML/CFT processes beyond identification** in most cases

Data is a critical enabler of innovation across the AML/CFT compliance operational processes; innovations have been slow and face complexities due to privacy laws and due to a lack of required market infrastructure in most countries

Key Research Finding Themes

Current Status

- The **establishment of national ID systems** supported by basic ID (unique identifier, name, date of birth, address) and biometric data has **allowed for full electronic KYC identification and verification** in some cases but tends to be lacking in most of the countries researched

Innovations

- National ID systems **enable unique identification** and provide opportunity to better maintain and utilize customer data through a centralized database (Aadhaar, NADRA)
- Biometric data (mainly finger prints) is becoming part of the ID data in some jurisdictions
- Sharing of customer data to drive **credit scoring and client behavior analysis** for offering loans
- **Digitalizing customer information** gathered through physical forms by centralized teams

Challenges

- **Data privacy**, legislation prohibits data sharing of individuals
- **Lack of 3rd party data sources**, availability and/or integration of additional data sources that can support the identification and verification of customer information
- **Unsophisticated maintenance and management of client data** to enable effective servicing

On-boarding and AML/CFT

Compliance

- **Typically**, BCs cannot complete verification on behalf of a bank, though this was recently enabled in India
- Identification and verification is completed through the collection and analysis of **own customer data** by banks, requiring dedicated bank officers and verification teams, usually centralized in a hub/ HQ location

- A **unique ID number** is assigned to an individual that can be used to **link customer activity** throughout the AML/CFT compliance ops processes – ongoing monitoring
- The use of **biometric data** (mainly finger prints) enables the accurate verification of customers
- **Customer data is digitalized** through 3rd party data entry and scanning, allowing faster KYC processes
- The use of **data validation** at point of collection with the use of electronic forms through relevant controls, improves data quality i.e. minimize data entry errors that affect KYC processes timing and increase cost
- Mobile operators and banks often do not established processes that would enable customer data sharing by obtaining **consent at registration for the purposes of completing KYC offered through partnerships**
- Data sharing has commercial and privacy considerations
- **External data sources** are either not available or not used in most case to aid the identification and verification of customer e.g. integration of ration card data or voting registers, if available

A more detailed view of the key data centric issues and innovations affecting or benefiting respectively, the ability to perform more effectively across the AML/CFT compliance operational processes is provided below

Basic identity data management that can enable to the AML/CFT compliance processes across the customer on-boarding and management processes is still a critical issue most firms have to deal with

	Identification	Verification	Monitoring	Sanctions and reporting	On going management / Exiting
Issues	<ul style="list-style-type: none"> Lack of reliable 3rd party verified ID data sources makes the process of collecting identification data manual and costly Lack of unique identifiers e.g. ID numbers that can link customer records to transactional activity Collection of data in physical forms (lack of digitization) impacting cost and speed to ID customers 	<ul style="list-style-type: none"> Where available, 3rd party ID data that can be used to verify new customer during identification and verification is not utilized in most cases. Lack of integration Lack of external credit reference history/scores, as FS operators do not share transaction history with a 3rd party body that to act as a credit agency 	<ul style="list-style-type: none"> Lack of collection and management of credit worthiness data changes Ability to capture and manage change to customer data e.g. address changes High transaction data volumes and lack of customer data quality make alerts more costly to manage 	<ul style="list-style-type: none"> Update of sanctions lists data and the screening against it is technically challenging Data collection and analysis for reporting to regulators is manual and labor intensive 	<ul style="list-style-type: none"> Linking data information across the lifecycle e.g. customer ID and transactions, to create a complete picture of potential suspicious activity
Innovations	<ul style="list-style-type: none"> National ID systems¹ with or without biometric data cards (e.g. Pakistan, South Africa) Access to alternative government data sources² e.g. ration card database (Axis bank, India) at the KYC data collection stage. The process also used to support verification Data validation within an online form for collection (BTPN, Indonesia) 	<ul style="list-style-type: none"> National ID systems providing verification support in batch or online¹ e.g. NADRA Pakistan, Aadhaar India Use of external data for credit scoring³ e.g. use of transactions data from mobile wallet, retail payments to establish and drive credit scoring algorithms for small, unsecure loans 	<ul style="list-style-type: none"> 'Back list' data information access for individuals with bad credit history e.g. data held by Bank of Indonesia and shared with the banks for verification for credit products Payment receipt data tracking for loans provided to farmers to monitor repayments 	<ul style="list-style-type: none"> Use of 3rd party providers for sanctions data maintenance Use and maintenance of in-house transactional monitoring systems. Analysis of alert data trend to manage volumes e.g. remittance business⁴ 	<ul style="list-style-type: none"> Use of social media and mobile operator partner data to predict default risk for credit products³

Cost management of AML/CFT compliance operational processes remains secondary to scaling up the business at the current of the market maturity

Key Research Theme Findings

Current Status

- The **cost of KYC is not measured separately** from overall operating cost, in most cases
- Instinctively most firms see **verification as more costly**, although they do not focus sufficiently on the impact of AML/CFT requirements on other AML/CFT processes
- The uptake of their products by LI customers and gaining market share is a priority for service providers, **managing cost through score**

Innovations

- Access to online or batch identification and verification (NADRA, Aadhaar) **reduces verifications cost per customer**
- Use of **reduced cost smart phones** and other hand held **biometric data devices** to capture data and utilize eKYC verification
- Tuning of in-house transactional monitoring systems to manage cost of alert management (e.g. UAE Exchange, Malaysia – See Innovations section)

Challenges

- **Industry standards**, industry definitions do not support standardized method of measuring cost
- **Market maturity**, need to scale up and capture market share does not lend to focusing on efficiencies and cost savings
- **Change levels**, improving effectiveness of existing AML/CFT processes is not a focus due to fast pace of change

On-boarding and AML/CFT Compliance

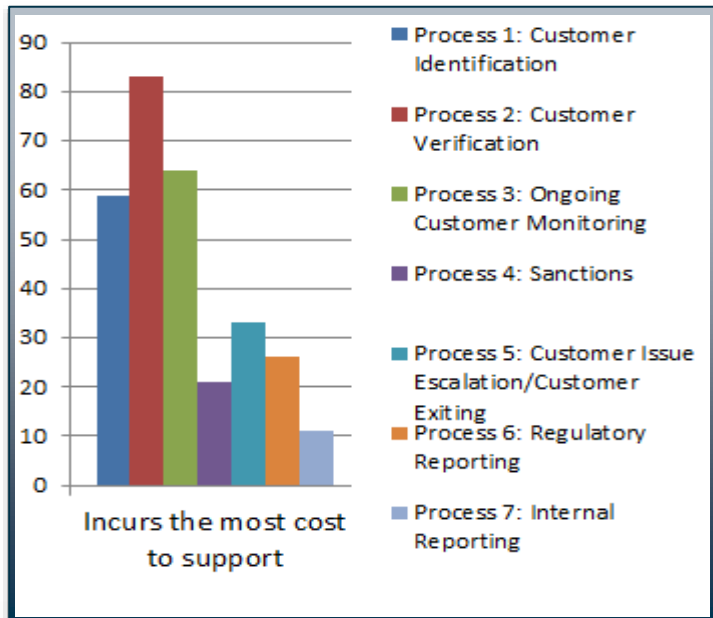
- The current focus of activities for improving on-boarding are driven by improved **customer services and bringing the right product** to the LI customers, **rather than reducing the cost** of specific AML/CFT compliance operational processes
- The AML/CFT cost is normally part of the **aggregate cost of on-boarding and customer management g**

- NADRA (Pakistan) identification and verifications process **transaction cost**: 35PKR (\$0.34) in the branch, 45-48PKR (\$0.44-0.47)online, 15PKR (\$0.15) for bulk, Aadhaar (India): currently virtually fee free
- Lower cost **smart phones** and identification/verification **devices** reduce the cost and time of registration of new customers, e.g. investment for Aadhaar verification tablet type devices by agent is small enough to encourage investment by BC. Also provides support through investment program for BCs to buy equipment

- Measurement of cost for AML/CFT processes is **not standardized** across any market internationally—there is limited experience in doing so even in major financial services markets
- Cost reduction for performing identification and verification as well as ongoing monitoring **requires mature and established AML/CFT processes**, that are currently not available as the market and regulation develop

Most surveyed organizations do not measure AML/CFT compliance processes - specific costs, but they consider customer verification as the most costly process step in managing low-income customers

Break down of AML/CFT processes' cost impact



AML/CFT operational processes cost break down

This is an **example of the break down of AML/CFT compliance operational costs** of a major mobile phone operator that partners with banks and other MFIs to offer a wide range of financial services products*. These costs are not measured routinely and are not a separate focus for the business.

- **Total Cost:** 7% of the total acquisition cost
- **Verification**, including document transit, is 61% of the total cost
- **On going management and monitoring** for Indexing, Storage and Stationery cost is 6% of the total cost
- **On going management and monitoring:** Retrieval for audit is 33% of the total

- Most firms believe that customer verification carries the highest cost, particularly when field agents or business correspondents are involved in remote rural areas
- Access to online or batch verification through national ID systems, like in the case of NADRA in Pakistan, have significantly reduced the cost of verification and thus the ability to offer products to the low-income segment
- Some credit products incur even higher costs for ongoing Customer Management mainly due to the additional burden of collateral verification through site visits and repayments collection.

Product as well as channel innovations have driven many of the improvements in on-boarding and relevant AML/CFT operational processes for supporting the low-income customer segment

Key Research Finding Themes

Current Status

- Most of the standard FS products are available in various forms to low-income customers. **Credit and loans, savings, payments** are the more available and relevant than most
- Remittances have transformed the delivery channels in some countries through **mobile wallet services**

Innovations

- Mobile money can be a major driver for growth and inclusion of the low-income segments, giving **branchless access to a range of products**
- Providing basic suite of products* such as no frills savings accounts, low value loans, and mobile wallet channel access
- Tiered KYC requirements allow providers to offer basic savings and credit products

Challenges

- **KYC requirements**, being able to meet identification requirements. Lack of basic ID
- **Regulatory framework**, allowing mobile operators to provide full FS services (banking license)
- **Product design**, meeting the actual need of the poor through appropriate delivery channels
- **Financial literacy affecting up take**, including cultural tendencies of mistrust towards FS

On-boarding and AML/CFT Compliance

- The introduction of **mobile wallet services** by a number of mobile phone providers (in partnership with banks or not) has enabled the development of services with reduced AML/CFT compliance processes for identification and verification – Tiered KYC
- No frills accounts have also allowed the **reduction of complexity** particularly of verification

- Mobile wallet products with reduced access to cash out as well as amounts being transferred are available with none to **minimum identification, verification, and monitoring**
- Access to credit is available through small loans **approved based on algorithms** utilizing existing identification and transaction behavioral information

- Clarity on the **role of the mobile phone operators** in offering financial services is often require. This could translate in them owning the whole AML/CFT compliance operational processes lifecycle, including verification of customer identify, effectively becoming banks
- Further new product development is impacted by the **lack of specific regulatory guidance, particularly around eKYC acceptance**

A more detailed product view of the AML/CFT compliance operational processes innovation trends and demonstrates the impact of these changes

In comparing the AML/CFT compliance operational processes lifecycle across product offerings to the LI customers, differences were noted in only three of the phases as Sanctions/reporting and ongoing monitoring was relatively identical across the key product :

- **Identification:** The identification process was generally similar across savings and credit products. However, there were fewer KYC requirements for making payments as compared to opening a bank account (basic KYC vs. tiered or full KYC)
- **Verification:** Credit products tended to have more stringent requirements, requiring some form of income and/or address verification. However verification was subject to different levels of scrutiny contingent on level of KYC tier
- **Monitoring:** The three products are all subject to different levels of transaction monitoring--Savings and payment products require a similar type of monitoring, while credit products require additional monitoring associated with loan repayments and management of defaults.



For illustration only

Savings Account typical process flow



Credit Product typical process flow

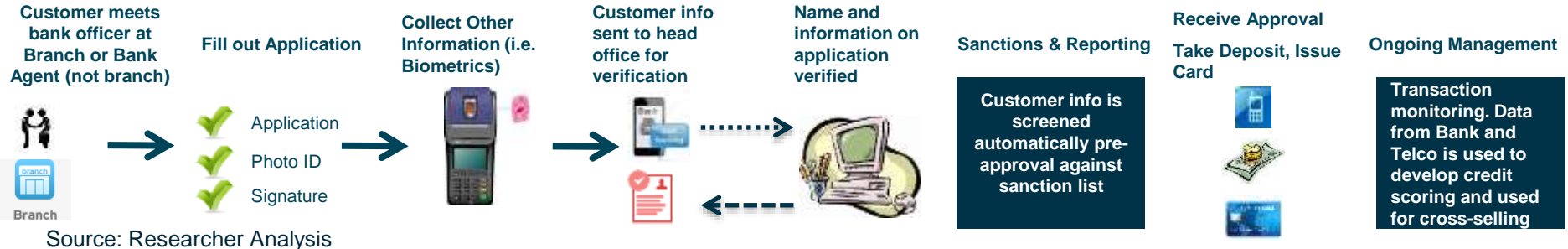


Payment Product typical process flow



Products Specific Findings: Savings Accounts

Savings Account *typical process flow*



Trends

- **Eased KYC**, Banks are working with regulators to reduce requirements of documentation/verification needed to sign up low-income customers so that banks can more easily offer savings accounts
- **MNO Partnerships**, Banks and MNO's, who cannot take deposits, are partnering to offer savings through mobile wallet
- **More Technology**, increased use of mobile phones/tablets and handheld devices to capture customer info, biometrics, photos

Innovations

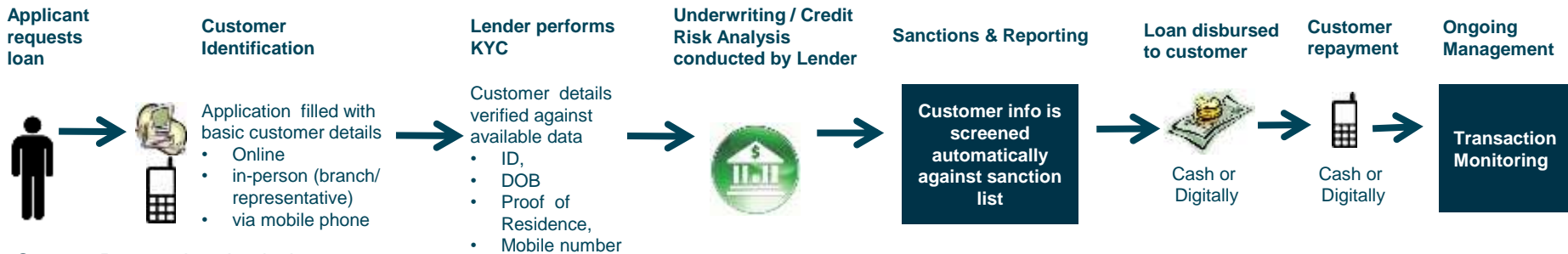
- **Instant Account Opening without Branch**, leveraging mobile phone technology and eased KYC, Bank field officers are able to open account anywhere instantly (BCs not legally permitted to do so).
- **Partner Outlet Account Opening**, agents or business correspondents collect physical application form and open account, verification and account activation is done once branch agent verifies KYC
- **Mobile Savings Account**, customers can apply for bank account via mobile wallet

Challenges

- **Poor Infrastructure**, the lack of a national ID and biometric data can make it difficult to verify customers identity and to establish contact with the customer
- **No Risk Based KYC**, countries requiring the same KYC for all make it difficult for unbanked to become banked
- **Unable to Outsource Verification**, inability to outsource customer verification is a costly detriment to increasing financial inclusion through scale (legally required to be performed by bank officer only).

Products Specific Findings: Credit / Loans

Credit Product *typical process flow*



Source: Researcher Analysis

Trends

- **Low-income customers are increasingly able to get access to instant cash**
- **Partnerships between Telco/Bank's** to provide credit products geared to low-income users
- **Using technology to capture customer data at point of contact**, field-agents are being utilized to do KYC for rural customers
- **Micro loans disbursed to mobile wallets** whereby larger loans through traditional MFI's

Innovations

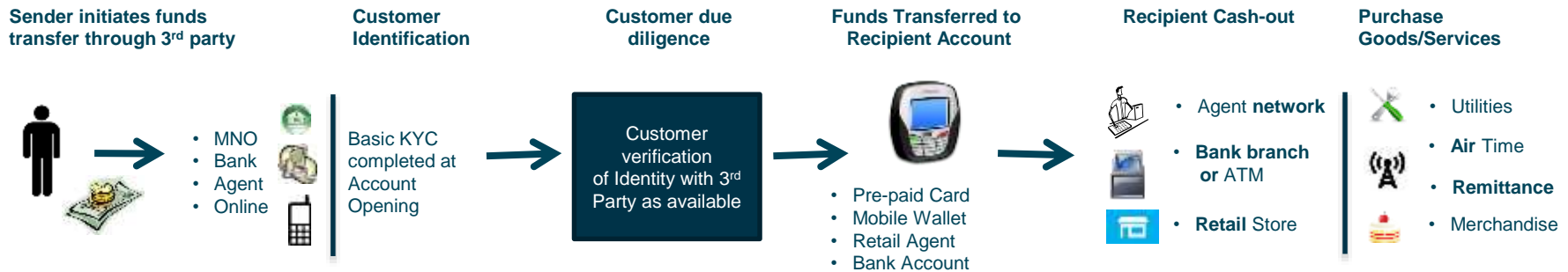
- **Money disbursed through** digital and alternative channels (i.e. mobile banking, cashless ATM's)
- **Leveraging SIM card registration for KYC**, such as M-Shwari in Kenya with low transactional limits
- **Customer Risk Rating using Mobile Operator and Social media Data** to generate credit score or recommended loan amount (i.e. BanKo, First Access).

Challenges

- **Lack of financial literacy**, Customer don't understand the mechanism of how loans work and/or the associated terms, leading to higher default rates and ultimately a higher cost of credit to consumers
- **Address verification is difficult and costly for lenders**, creating a barrier for customers to provide proof of residence
- **Regulatory bias**: The regulatory environment for mobile operators and banks are not always aligned, as banks are facing more stringent KYC requirements than the Telco's

Products Specific Findings: Payments

Payment Product typical process flow



Trends

- **Growth of mobile remittances** through partnerships with Mobile Operators
- **Expansion/growth of Agent network** and field agents to service rural customers
- **Low transparency and high fees and costs** due to underdeveloped financial infrastructure in some countries

Innovations

- **Electronic channels** make it easier to conduct due diligence on the bank account of the remitter and the recipient
- **Further development of mobile money, pre-paid cards, and online services (social network)** to remit funds
- **KYC due diligence conducted on the sender, not recipient**

Challenges

















- **Lack of National ID**, The challenge for many remittance services is that many users do not own an official identification necessary to meet KYC requirements.
- **Growing regulatory requirements** are increasing cost for service providers
- **Limited access points in rural areas**; which are still largely unbanked and customers do not have access to bank accounts

Contents

- Executive Summary
- Background
- Survey Overview
- Research Findings, Key Themes and Analysis
- AML/CFT Compliance Operational Processes Innovations
 - 1. Innovation Examples across Product, Process, Channel and Service Model
 - 1. Product Innovations
 - 2. Process Innovations
 - 3. Channel Innovations
 - 4. Service Model Innovations
 - 2. Innovation Examples across KYC Lifecycle
 - 3. Technology Innovation – Biometrics
 - 4. Case Studies
- Research Observations
- Appendices

A number of innovations across Product, Process, Channel, and Service Models* were identified during this research across the AML/CFT compliance operational processes in scope

Through our research and interviews we discovered the following innovations in the market:

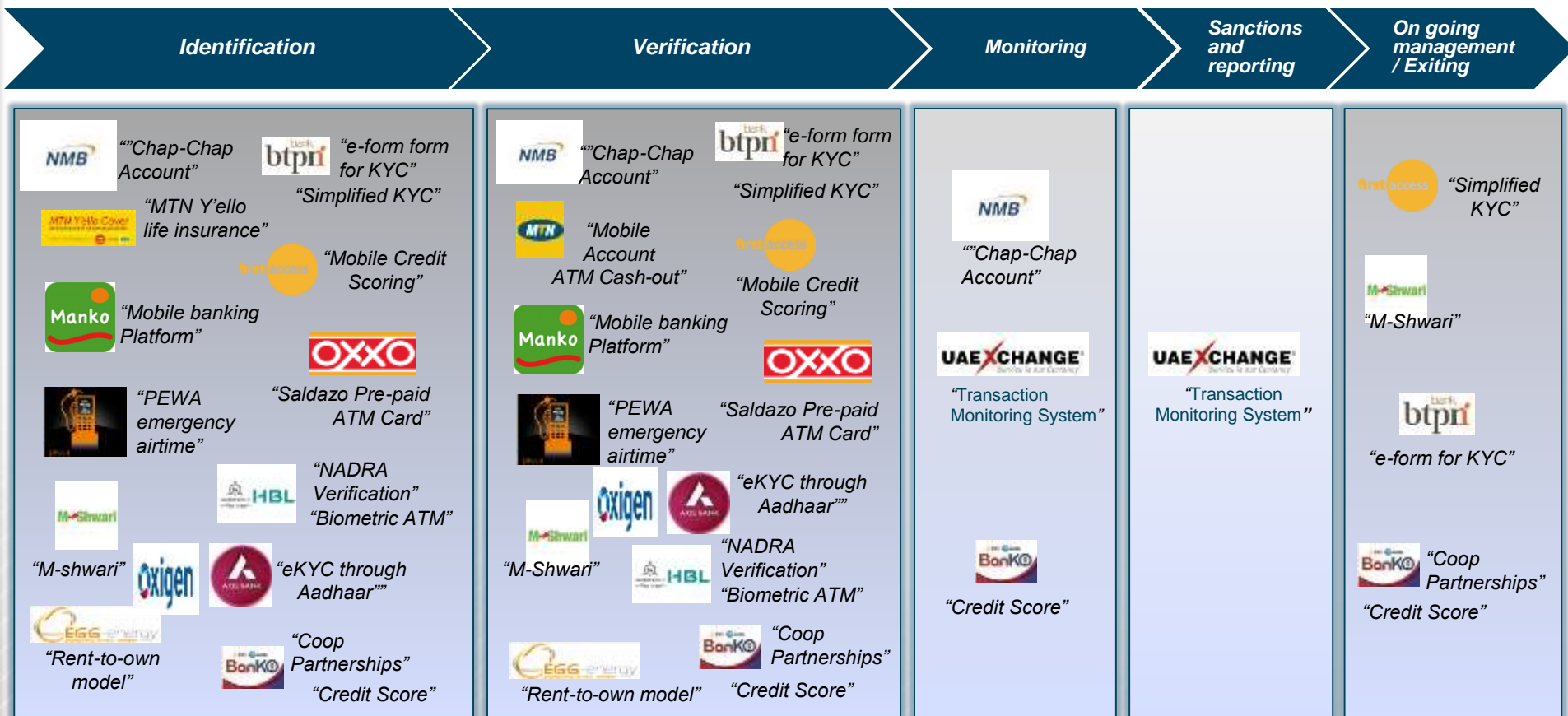
<p>Product innovation</p>	<p>NMB  "Chap-Chap Account"</p>	<p>First Access  "Mobile Credit Scoring"</p>	<p>Safaricom \ CBA  "M-shwari"</p>	<p>Orange Kenya  "PEWA emergency airtime"</p>
<p>Process innovation</p>	<p>Axis Bank  "eKYC through Aadhaar"</p>	<p>HBL  "NADRA Verification"</p>	<p>BTPN  "e-form for KYC"</p>	<p>Banko  "Credit Score"</p>
<p>Channel innovation</p>	<p>Banko  "Coop Partnerships"</p>	<p>HBL  "Biometric ATM"</p>	<p>OXXO  "Saldazo Pre-paid ATM Card"</p>	<p>MTN Mansard  "MTN Y'ello life insurance"</p>
<p>Service model innovations</p>	<p>First Access  "Simplified KYC"</p>	<p>Egg Energy  "Rent-to-own model"</p>	<p>MTN Uganda  "Mobile Account ATM Cash-out"</p>	<p>Manko Sengal  "Mobile banking Platform"</p>

Note: For the purposes of this study, it has not confirmed that these examples are all 100% compliant with respective domestic legal and regulatory requirements, as this is not the focus of our study.



NON EXHAUSTIVE

These innovations have been mapped across the AML/CFT compliance operational processes to highlight their relative impact


The organizations that have shown innovations across product, process, channel and service model that were encountered during our research have been mapped below to illustrate in which phase of the AML/CFT compliance operational lifecycle the innovation was uncovered.






Product Innovations (1/2)

Product Name	Product Description	AML/KYC Innovation	Value proposition to customers	Value proposition to the business
<p>“Chap-Chap Savings Account”</p>  <p>See case studies 47-48</p>	<p>Savings account tied to mobile wallet</p> <p>Simplified process of opening an entry level mobile saving account tied to an ATM card,</p> <p>Source: NMB Launches Chap Chap Account, offering instant access to finance for millions of unbanked Tanzanians</p>	<p>Identification and verification process conducted on site by field agents using a POS device and collecting biometric data (finger prints) used for transaction verification and customer monitoring</p>	<ul style="list-style-type: none"> • 10-minute account opening with minimal KYC identification documentation requirements • No minimum balance or maintenance fees • No need to visit bank branch 	<ul style="list-style-type: none"> • Increased access to deposit base from the unbanked population • Potential for future upsell opportunities of other products for new customers
<p>“First Access”</p> 	<p>Mobile based access, 3rd part identification and verification service and credit scoring system. Geographic, demographic, financial and social data used to reliably predict credit risk for borrowers in informal markets. Lenders are provided a borrower loan limit.</p> <p>Source: “First Access and Vodacom Tanzania Ink Financial Inclusion Deal”</p> <p>Source: Researcher Analysis</p>	<p>Instant customer identification, verification conducted at any location through an Agents mobile device by inputting customer's mobile phone number. The mobile phone number is the unique identifier used to access the identification / verification data of the customer</p>	<ul style="list-style-type: none"> • Access to credit through credit history, created by analysis based on financial and social media data • Reduced cost and increased for borrower with the appropriate credit history 	<ul style="list-style-type: none"> • Lenders are provided a borrower loan limit, reducing time and efforts and cost around underwriting. • Reduced cost of borrowing by managing default levels through better lending decisions.




Product Innovations (2/2)

Product Name	Product Description	AML/KYC Innovation	Value proposition to customers	Value proposition to the business
<p>“M-Shwari”</p>  <p><i>See case studies 49-50</i></p>	<p>Paperless banking service—Mobile account offered to M-Pesa users</p> <p>Partnership between Safaricom and CBA. M-Shwari services include bank deposits and withdrawals and loans.</p> <p><i>Source: “Case Study: Extending Financial Inclusion Integrated savings and loans CBA & M-Pesa launch M-Shwari”</i></p>	<p>Customer’s savings account identification and verification of account opening leverages initial KYC registration with Safaricom, eliminating the need to visit a bank branch. Integration of mobile phone registration and KYC identification and verification</p>	<ul style="list-style-type: none"> • No transaction charges • Interest earning mobile account • Ability to move money in and out of a customers M-Pesa account • Remote Account opening • Access to microloans 	<ul style="list-style-type: none"> • Access to deposit base • Expansion of service offering and related revenue growth • Reduced cost of verification
<p>“PEWA”</p> 	<p>Pewa is an Orange service which enables its mobile pre-paid and wireless customers to receive emergency air time credit</p> <p><i>Source: “PEWA Emergency Credit with Orange”</i></p>	<p>Leverages Orange SIM registration for verification and identification of customer, for what is effectively a credit product. Integration of the processes between the two partners</p>	<ul style="list-style-type: none"> • Emergency top-up accessed through mobile phone of up to Ksh 50 • No transaction fee if payable within 24 hours 	<ul style="list-style-type: none"> • Revenue growth from fees attributed to emergency top-up usage • Minimal cost for potential revenue gains



Process Innovations (1/2)

Product Name	Product Description	AML/KYC Innovation	Value proposition to customers	Value proposition to the business
<p>“eKYC through Aadhaar”</p>  <p>See case studies 56-57</p>	<p>eKYC customer verification completed using MicroATM and Aadhaar eKYC in India</p> <p>Source: Axis Bank introduces eKYC, MicroATM facility</p>	<p>Access to customer ID data through integration to the Aadhaar database. Paperless, instantaneous and secure customer identification and verifications through biometric data. ID data can be used to pre-populate the application forms and improve data quality</p>	<ul style="list-style-type: none"> • 1-day opening , convenient and seamless on-boarding • Ability to open an account by providing a unique ID number and scanning their fingerprints • No requirement for additional identification documents 	<ul style="list-style-type: none"> • KYC cost savings from verification paperless model (near zero transaction cost currently) • Reduced manual data entry by BCs and bank officers • Immediate enablement of revenue generating services
<p>“NADRA Verification” “Fee Innovation”</p> 	<p>-Online Verification using CNIC ID in Pakistan -HBL allows customers to access its mobile wallet and banking with a single annual fee.</p>	<p>Ability to verify customer identity Online via Verisys (NADRA online Platform). Batch verification requests capability at a different cost to the FS service provider</p>	<ul style="list-style-type: none"> • Individuals can open an HBL branchless bank accounts at agent locations or when they sign up for smart ID card at NADRA locations. • Cost savings for customers 	<ul style="list-style-type: none"> • Cost savings by low cost KYC identification and verification. Also reduced requirements for compliance verification staff • Reduced time for activation of product
<p>“Transaction Monitoring System”</p> 	<p>Transaction monitoring and sanctions screening system</p> <p>Source: Researcher Analysis</p>	<p>Sophisticated in-house transaction monitoring \ sanctions screening system with alert management, rules tuning, and dedicated IT staff</p>	<ul style="list-style-type: none"> • Reduced costs to monitoring transactions can be passed down for cheaper remittance service to the customer 	<ul style="list-style-type: none"> • Cost savings for the business associated with alert management • Reduced dependency and risk associated with outside vendors




Process Innovations (2/2)

Product Name	Product Description	AML/KYC Innovation	Value proposition to customers	Value proposition to the business
<p>“e-Form for KYC”</p> <p>“3rd Party Agent training”</p> 	<p>E-form app on mobile phone captures photo of ID, signature, and other customer info that satisfy KYC requirements</p>	<p>- Digitized, short, “e-form” for KYC identifications and verification data collection by BCs that enables them to send customer data direct to the bank server after collecting on mobile phone (including biometric). -3rd party run BC network KYC training, management</p>	<ul style="list-style-type: none"> • Faster access to opening a bank account • Fees cost savings for customers as technology allows reduced cost for processing KYC identification and verification 	<ul style="list-style-type: none"> • Reduced time and cost to process KYC verification • Increased customer satisfaction • Overcoming financial literacy issues in rural and remote areas of Indonesia
<p>“Credit Score ”</p>  <p><i>See case studies 51-53</i></p>	<p>Credit score algorithm used to determine micro-loan amount limit for a customer</p>	<p>Mobile phone operator, Lenddo social media, and BanKo data used to identify and verify a customer and generate credit score for automatic, online approval of credit products. Enables the automatic credit assessment as part of the verification</p>	<ul style="list-style-type: none"> • Credit score allows BanKo to issue unsecured micro-loans at favorable interest rates • Access to credit for low-income customers 	<ul style="list-style-type: none"> • Enhanced credit risk management • Decreased default rates, increased profit margin • Support new credit product design and offering
<p>Oxygen (Non-Bank) performing Verification using POS Terminal and Aadhaar</p> 	<p>Customer identification and verification completed using Aadhaar number and biometric of customer by Oxygen.</p>	<p>Oxygen Point of Sale Terminal (M3000) is used to collect customer Aadhaar ID number and biometrics and perform verification by 3rd party instantly.</p> <ul style="list-style-type: none"> • Verification completed by non-bank agent. 	<ul style="list-style-type: none"> • Instant access to bank account on mobile platform from non-bank agent. • PoS terminal can be used to perform remittances, cash-in/cash-out, payments, and mobile wallet cash loading 	<ul style="list-style-type: none"> • Reduced time and cost to process KYC verification • Paperless process is cheaper and faster • Costs reduced to 20-25% of existing costs



Channel Innovations (1/2)

Product Name	Product Description	AML/KYC Innovation	Value proposition to customers	Value proposition to the business
<p data-bbox="73 358 320 425">“BanKo Partner Outlets”</p> 	<p data-bbox="388 358 745 468">Micro-savings and Micro-loan products on mobile platform</p>	<p data-bbox="803 358 1126 694">Identification done by partner outlets (Coops', BC's, Field Agents). Physical form mailed to BanKo branch for verification to reduce burden BC time for performing identification activities</p>	<ul data-bbox="1166 358 1470 619" style="list-style-type: none"> • Customers have access to banking services in rural branchless areas • Field agents cover regions using BanKo vans 	<ul data-bbox="1534 358 1856 544" style="list-style-type: none"> • Reduced time and cost to process KYC verification • Increased customer satisfaction
<p data-bbox="73 815 320 843">“Biometric ATM”</p> 	<p data-bbox="388 815 745 925">ATM access requiring biometric fingerprint verification</p> <p data-bbox="388 968 745 1048"><u>Source: HBL to set up 200 biometric ATMs to promote cardless banking</u></p>	<p data-bbox="803 815 1126 1149">ATM system requires thumb impressions of customers matched and verified with NADRA records from ATMs. Transaction monitoring is accurate and consistent</p>	<ul data-bbox="1166 815 1470 1001" style="list-style-type: none"> • Creates a card less banking option for customers • Additional account security 	<ul data-bbox="1534 815 1856 1001" style="list-style-type: none"> • Reduced time and cost to process KYC verification • Increased customer satisfaction

Channel Innovations (2/2)



Product Name	Product Description	AML/KYC Innovation	Value proposition to customers	Value proposition to the business
<p>“Saldazo”</p>  	<p>Banamex, Oxxo and Visa partnered prepaid ATM Card</p> <p>Prepaid card tied to Banamex mobile saving account offered at OXXO retail stores, allowing for withdrawals, deposits and purchases</p> <p><small>Source: Banamex and Oxxo launch debit card Saldazo</small></p>	<p>Customer identification and verification is performed at the Oxxo retail site and requires only an official ID</p>	<ul style="list-style-type: none"> • Mobile payments, transfers, balance inquiry, withdrawals, and airtime purchase connected through Banamex/Telcel • Transfer works through (SMS) texting messages • Savings/withdrawal at Oxxo retailer or Banamex branch 	<ul style="list-style-type: none"> • Access to deposit base • Potential to upsell customers in the future • Revenue growth
<p>“MTN Y’ello”</p> 	<p>MTN and Mansard partnered Life insurance policy offered directly through mobile phones</p> <p><small>Source: MTN Y'ello Life in collaboration with Mansard</small></p>	<p>Leverages initial SIM card registration, covering customer identification and verification, to offer life insurance by Mansard on MTN’s mobile platform, payments are made using air time.</p>	<ul style="list-style-type: none"> • Airtime-based life insurance paid daily rather than upfront • Simplifies paperwork associated with signing up for insurance • For N15 daily, subscribers get N350K life insurance coverage 	<ul style="list-style-type: none"> • Diversified product offering for MNO • Additional outlet for sales for insurance company • Revenue growth

Service Model Innovations (1/2)

Product Name	Product Description	AML/KYC Innovation	Value proposition to customers	Value proposition to the business
“First Access” 	Mobile credit scoring system with <i>SMS based customer verification</i>	Identification and verification completed by field agent by inputting customers mobile phone number into a mobile application to receive an instant customer credit score (as a max loan amount). The customer data is then used for ongoing monitoring.	<ul style="list-style-type: none"> Instantaneous credit limit decision accessed through a lenders mobile phone Application can be used anywhere there is connectivity 	<ul style="list-style-type: none"> Business model driven on the scalability of the technology platform
“Egg Energy” 	Sustainable energy provider Rent-to-own financing of solar energy systems using SIM based technology for service delivery.	Customer personal data along with a picture to identify the customer. Verification of address is completed by agents and geotagged using SIM technology	<ul style="list-style-type: none"> Financing model creates an affordable energy solution Partnership with MNO’s allows for payment through mobile money 	<ul style="list-style-type: none"> Increases plausible customer base Revenue growth

Source: EGG-energy provides energy solutions that improve lives.

Service Model Innovations (2/2)

Product Name	Product Description	AML/KYC Innovation	Value proposition to customers	Value proposition to the business
<p>“MTN Mobile Money”</p> 	<p>MTN mobile money Account, which allows users to cash-out at ATMs</p> <p>MTN Uganda partnership with Crane Bank and Inter-switch allows customers to withdraw funds from their mobile accounts at partner ATMs</p>	<p>Customer identification completed on mobile phone and can access cash through an ATM machine using a 4 digit TIN # that is generated by customer via their mobile phone. Customer verification at ATM is done using the TIN#.</p>	<ul style="list-style-type: none"> • Card less technology using mobile phone • Increased convenience and access to funds across rural areas 	<ul style="list-style-type: none"> • Increased access to Bank ATM network for MNO • Potential future upsell opportunities for the bank
<p>“Mobile Banking Platform”</p> 	<p>Mobile bank (1-branch) offering banking with Societe Generale products such as savings and microloans</p> <p><small>Source: Manko, banque 100% mobile de Société Générale</small></p>	<p>Identification and verification done by bank officers who travel to meet clients at any location</p>	<ul style="list-style-type: none"> • Branchless banking with convenience of traveling bank representatives • SMS based transactions • Mainstream bank products offered at lower fees 	<ul style="list-style-type: none"> • Business model— reduced cost associated with minimal brick-and-mortar branch locations

Biometric data is a key technology innovation that is supporting improvements in customer identification and verification



What is Biometrics?

Biometric identifiers are distinctive characteristics used to describe individuals. They may include fingerprint, palm veins, face recognition, DNA, palm print, hand geometry, iris/retina scan.

How is it used?

- Banks have begun to collect biometrics (fingerprints) when customer signs up for new account. Banks use this biometric data for customer verification.
- Countries with national ID's are linking biometrics to individual ID #'s allowing for verification of customer photo and demographic using biometrics.

Key Findings and Challenges

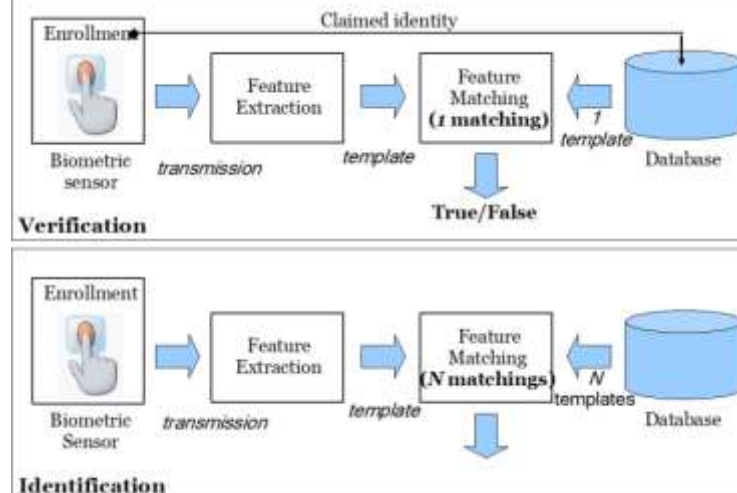
Findings

- Biometric recognition can alleviate issues around customer identification, verification, and monitoring
- While helpful, biometrics require a significant investment in infrastructure—cost can be prohibitive for individual organizations, and seem to be more effective with government/industry involvement

Challenges

- Verification success rates can vary due to technology infrastructure (~92% best case for Aadhaar)
- Privacy concerns around data management are a growing issue
 - *Aadhaar in India was asked to provide the police records for a criminal case in Goa and Aadhaar took this to the High Court as they were not able to share biometric data for the purposes of a criminal case*

Biometric Verification Example



Examples of Biometric Implementation

- **Bank Danamon in Indonesia** attempted to implement biometrics for identification and found the process to be complicated and too expensive, and are replacing this with chip and PIN technology
- **NADRA in Pakistan** is a sophisticated version of this with availability of data against a national ID and online and batch verification of individuals against a central repository.
- **Central Bank of Nigeria** has required all new accounts be given a BVN (Bank Verification Number), which includes capturing customer biometrics in a shared repository that can be accessed by all banks to identify a customer

Contents

- Executive Summary
- Background
- Survey Overview
- Research Findings, Key Themes and Analysis
- AML/CFT Compliance Operational Processes Innovations

• Case Studies

1. Overview
2. NMB Tanzania – Chap Chap
3. Safaricom/CBA Kenya - M–Shwari
4. BPI/Globe Philippines – BanKo
5. UBL Pakistan – Omni
6. Airtel/Axis India – Super Account
7. Aadhaar India – National Smart ID

- Research Observations
- Appendices

Case studies provide representation across model, level of experience, stage in AML/CFT operational processes life cycle, and geography

	Company	Product	Innovation	Stage in AML/CFT Life Cycle	Country/ Region	Rationale for case study
1	NMB Chap Chap	Mobile Savings	Product	Identification Verification	Tanzania	<ul style="list-style-type: none"> “Chap Chap” Account is a branch-less banking effort to target the low-income customers using on-the-ground agents Capturing biometric data that is stored centrally and potentially used for customer identification and transaction authorization
2	Safaricom CBA M-Shwari	Mobile Savings & Loans	Product Partnership	Verification	Kenya	<ul style="list-style-type: none"> Data sharing between Telco & Bank Mobile savings and credit product
3	BPI Globe BanKo	Mobile Savings	Partnerships Service Model	Identification	Philippines	<ul style="list-style-type: none"> Collaborate to provide e-money products Data sharing to credit score and provide loans
4	UBL - Omni	Savings and Biometrics	Product	Identification Verification	Pakistan	<ul style="list-style-type: none"> Onboarding/identification process using NADRA. Online Biometrics used to disburse govt. payments
5	Airtel Axis Super Account	Bank Account	Product Partnership	Identification Verification	India	<ul style="list-style-type: none"> Collaborate to provide credit and savings products Identification data shared between the Telco and bank
6	AADHAAR	National Smart ID	Biometrics Unique Smart ID	Identification Verification On going monitoring	India	<ul style="list-style-type: none"> Implementation of eKYC Effective Identification enablement Cost reduction of identification & verification

1 Case Study – NMB Bank

Overview of the model

- **Legal issuer:** NMB Bank
- **Partner:** N/A
- **Receiving country:** Tanzania
- **Product:** Savings Account

Features:

- Instant Account Opening and ATM Card in 10 minutes
- Customer doesn't have to visit branch to open account

NMB has created an entry level account intended to reach the vast unbanked (80%) community in Tanzania, promoting financial inclusion on a large scale.

Chap Chap account holders can instantly begin banking without having to visit an NMB branch. Additionally, interoperability between Mobile wallet and savings account enhances customers ability to transact.

How it works



1 Agent with Backpack approaches customer in the field



2 Customer completes application form



3 Customer photo, and photo of ID and signature captured by Agent's mobile phone and sent to home office



4 Agents takes Biometric fingerprint using handheld device and issues ATM card



5 Head office receives customer details and instantly verifies and approves the account opening



6 Customer can access money through a NMB ATM or mobile wallet

Case Study – NMB Bank



Innovations

- **Identification:** Agents equipped with smartphone & Point of Sale devices (POS) allows travel to remote areas
- **Verification:** 10-minute account opening with a “soft” KYC approach requiring minimal documentation, with the requirement that NMB captures individual biometrics
 - **Monitoring:** Moving forward the bank strategy is to use the Customer fingerprint to verify identity and transactions
 - **Other:** Interoperability with Mobile Money without cost

- Service model innovation
- Channel innovation
- Product innovation

Issues / Challenges

- **Identification/Verification:** lack of national ID and proof of residence
- **Mobile operators are completing with the established banking network** through a wide-reaching agent based network
- Service model is based on “soft” KYC, **future changes to strength regulatory requirements** will impact the ability to open accounts
- Service and account processing is **reliant upon mobile connectivity**

Impact

- **Service model innovation** allows 500-600 account openings a day
- **On-the-ground agents help to over come psychological barriers** of the poor who are hesitant to enter bank branches, as well as reduce traffic in retail branches



Case Study – Safaricom M-Shwari

Overview of the model

- **Legal Issuer:** Commercial Bank of Africa
- **Partner:** Safaricom
- **Receiving country:** Kenya
- **Products:** Savings Account and Instant Loans

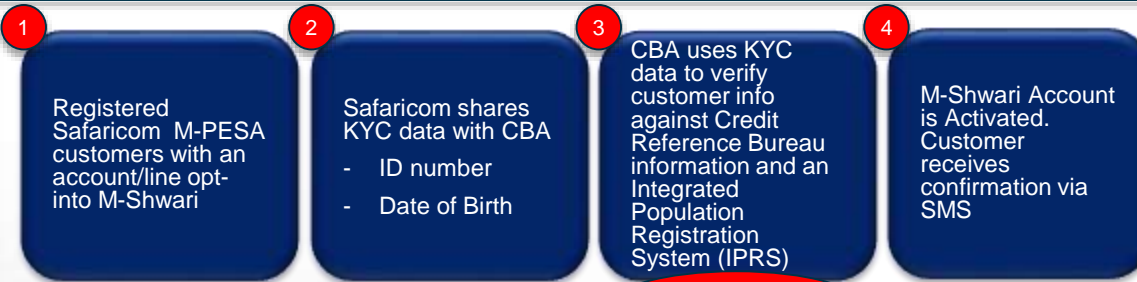
In 2012 Safaricom partnered with the Commercial Bank of Africa (CBA) to launch M-Shwari, which is a paperless banking service linked to the M-PESA e-wallet that offers customers savings with interest and instant micro-loans.

Features:

- Savings Account on M-PESA via mobile phone, 2% to 5% interest.
- Micro-loans ranging from Ksh100 to Ksh20,000 (30 day, 7.5% facility) and receive loan instantly via M-PESA.

The Bank/MNO partnership along with the tiered KYC system allows M-shwari customers to open and operate an M-Shwari bank account entirely through their mobile phone, via M-PESA, without having to visit banks or fill out any forms.

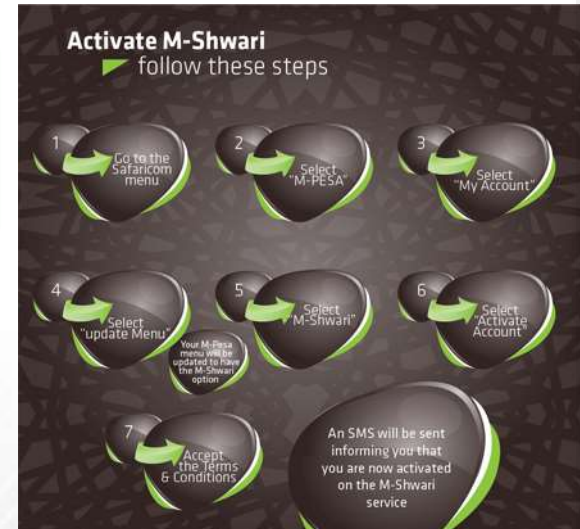
How it works



Covers up to Level 2 KYC

Central Bank KYC Limits

Level 1 KYC	Level 2	Level 3
140K Ksh limit	250K Ksh limit	500K Ksh limit
Valid ID & Application	Verify M-Pesa registration info against Govt. Registry	requires original ID be brought to Safaricom shop



Case Study – Safaricom M-Shwari



Identification

Verification

Monitoring

Sanctions and reporting

On going management / Exiting

Innovations

- **Identification & Data Sharing:** between Telco and Bank allows for single KYC processing. Safaricom customers registered to M-Pesa can opt. for M-Shwari savings account via mobile phone.
- **Regulation and Partnership:** Tiered KYC allows CBA to offer M-Shawri via M-Pesa. Customer only needs a valid ID and to fill out basic application form. No paper form is required and no bank is required.
- **On going management - Credit Scoring** based on customer activity in Telco and bank is used to determine loan amount

Service model innovation

Channel innovation

Product innovation

Regulatory innovation

Issues / Challenges

- **Identification/Verification:** lack of national ID and proof of residence
- Customers using **account as a short term savings rather than long term mechanism for saving**, or just to qualify for micro-loans which requires customers to hold account for 6 months.

Impact

- Successful example of **Tiered KYC**, M-Shwari only has approx. 3% default rate on loans to date¹
- **Branchless banking model** allows for easy access to savings and loans via M-PESA
- **Partnership between Safaricom and CBA** is a leading practice of authorized data sharing that results in direct benefit to customer.

Overview of the model

- **Legal Issuer:** BPI Globe Banko
- **Partners:** Bank of Philippines Islands, Globe Telecom, Ayala Corporation
- **Receiving country:** Philippines
- **Products:** Micro-Savings Account and Micro-Loans on mobile wallet

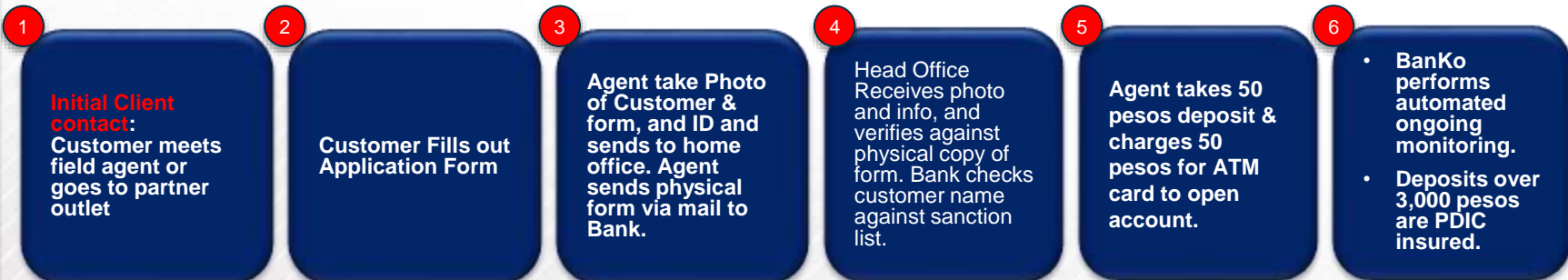
Features

- Savings Account with 3% interest (PDIC insured) & Micro-Loans at low interest rates
- Partnership leveraged to create credit scoring capability

BPI Globe Banko is the first mobile-based microfinance savings bank in the Philippines.

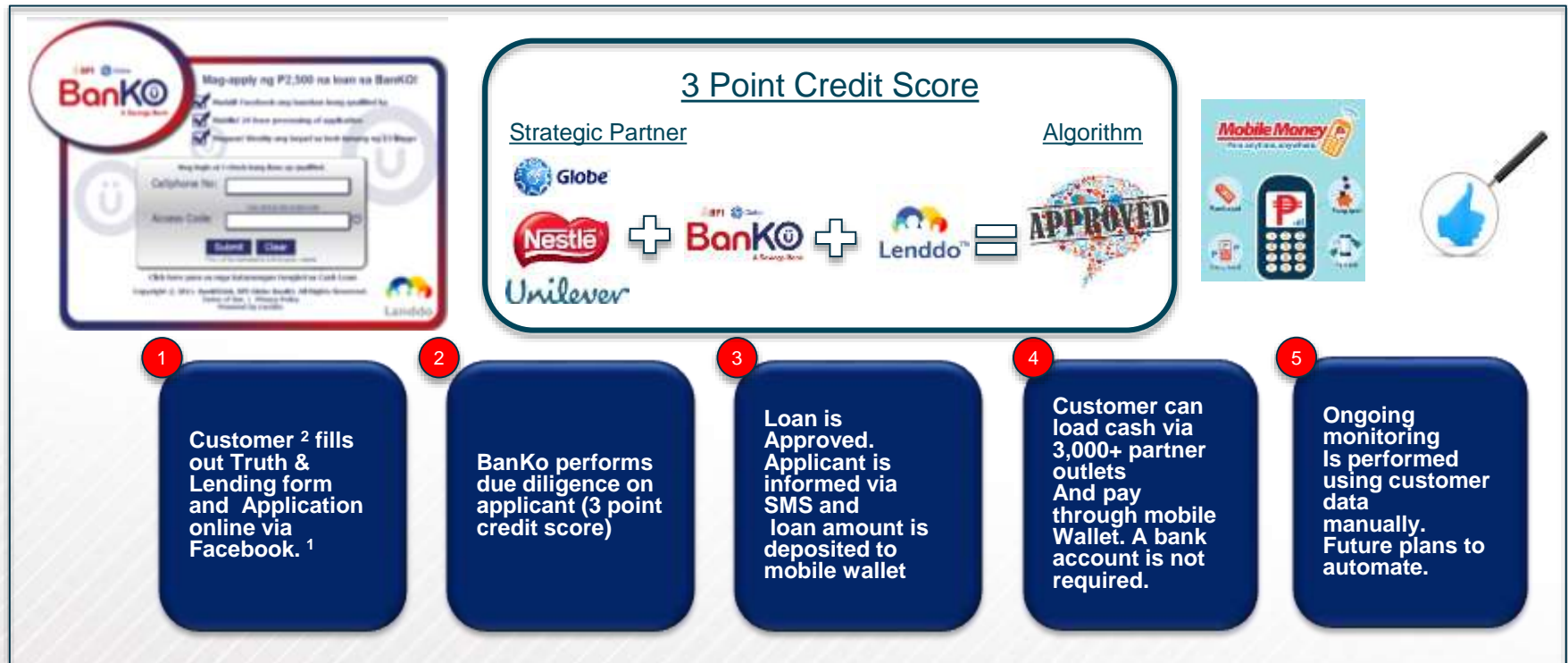
Banko offers retail financial services such as micro-savings, micro-insurance and microloans, giving the unbanked a viable option to safeguard their savings and to access affordable financial services.

How it works: Micro-Savings



How it works: Micro-Loans

“As the “Banko ng Bayan”, we are guided by one vision, and that is to promote financial inclusion and to create ways for our customers to have easy and immediate access to financial services whenever they need it, wherever they may be.” - John Rubio, President and CEO of Banko ³





Innovations

- **Identification and Access:** Field Agents in vans and 3,000 partner outlets allows for access point that allow customers to open savings accounts and other services such as cash-in, cash-out, bill payments, government payments, loan repayments.
- **Verification:** Agents send images via mobile phones of forms and customer ID so that KYC can be performed by bank officer at physical location.
 - **On Going Monitoring** - customer data used for ongoing monitoring but also to cross sell and upsell and develop products that are more intelligent and provide better options to those in need. Banko using Globe Telco data, Partners (Nestle, etc.) customer data of saba saba shops, and Lenddo social media data to develop credit scoring capability.

Service model innovation

Channel innovation

Product innovation

Regulation innovation

Issues / Challenges

- **Sanctions and reporting:** *FATCA regulations are “burdensome” and do not make sense for Banko customers. Required to change data capture to identify US citizens
- **Partner Outlets** are more incentivized to perform remittance services due to higher commission rather than open savings accounts.

Impact

- **Partnership Outlet model** has allowed Banko to grow rapidly and target 1 million accounts by 2014.

Overview of the model

- **Legal Issuer:** UBL Omni Bank
- **Partner:** United Bank Limited
- **Receiving country:** Pakistan
- **Products:** No Frills Savings Account

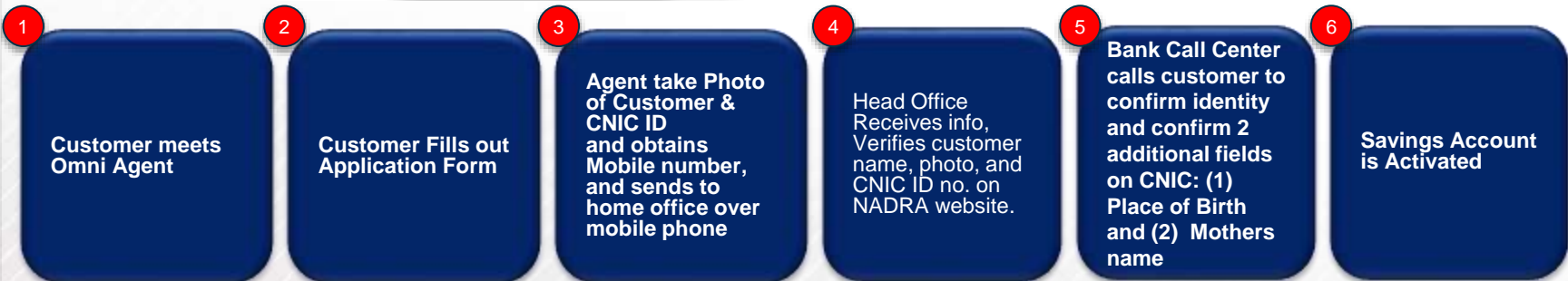
Features

- Savings Account: zero interest account on mobile wallet and ATM card.
- Instant verification online via NADRA (35 rupees)
- Successful deployment of Biometrics & Square products

UBL Customers across Pakistan can open a basic UBL Omni bank account at any UBL Omni “Dukaan” (outlet) of their choice, whether close to their home or place of work.

Customers only need to provide their CNIC number and mobile phone number; their mobile phone number will effectively become their bank account number irrespective of which service provider they use.

How it works



Case Study – UBL Pakistan



Innovations

Savings

Other

- **Identification:** Omni ‘dukaan’ agents can register and open bank accounts for customers
- **Verification:** NADRA verification (cost 35 rupees) is performed by bank agent to check ID no., Name, Photo. Upon completion call center speaks to customer to confirm identity.
 - **Biometrics** : For IDP program (Internally Displaced due to war) UBL is **using NADRA biometrics to disburse aid payments.**
 - **Biometrics ATMs:** UBL has 4-5 ATMs setup that have fingerprint capability in the northern region for the IDP segment. Customer is required to enter ID card # and scan thumb print.
 - **Square:** Branchless locations carry Square (device cost \$8) to **process field officer salary payments.** Employees are issued magnetic strip ID cards which are swiped on Square to get paid.

- Service model innovation
- Channel innovation
- Product innovation
- Regulation innovation

Issues / Challenges

- **Tiered KYC requirements for domestic remittances encourages** use of remittances rather than opening savings accounts, which have standard KYC
- Low volume of customers have opened and maintained savings accounts. (50-60k).

Impact

- **Regulation:** Onboarding/identification process using NADRA immediately online or as a batch are reducing the cost of transactions.

Overview of the model

- **Legal Issuer:** Axis Bank
- **Partners:** Bharti Airtel, Infosys
- **Receiving country:** India
- **Product:** 1. No Frills Savings Account on Airtel platform – paper process. 2. Bank account using Aadhaar eKYC

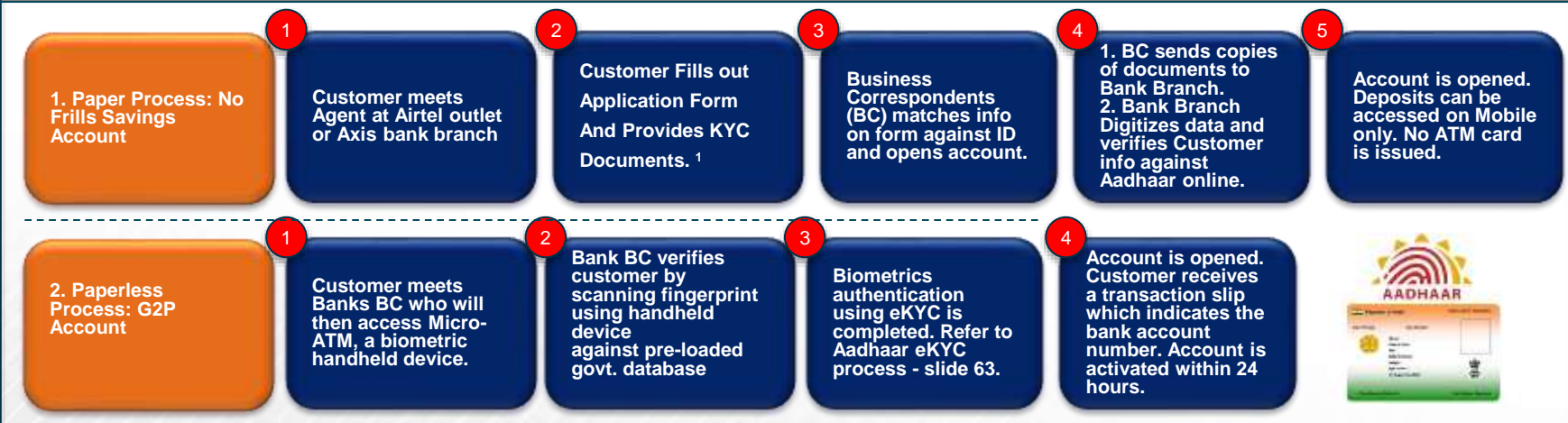
Features

- Paperless process to open small Bank accounts*
- Offering customers banking transactions including cash deposit, money transfer and withdrawal

Airtel money Super Account powered by Axis Bank is a no-frills savings account on Airtel money platform.

These accounts provide convenient, safe and secure savings avenue to Financial Inclusion customers' paying them savings account interest and also enabling them to make remittances.*

How it works



**No Frills savings account is a small savings account (10K rupee transaction limit, 50K rupee max balance) with access to only through mobile, no ATM card.

*<http://www.airtel.in/about-bharti/media-centre/bharti-airtel-news/mobile/bharti-airtel-and-axis-bank-announce-strategic-alliance-for-financial-inclusion>

Case Study – Bharti Airtel and Axis Bank



Innovations

- Identification & Verification:** Piloting eKYC using Micro-ATMs and AADHAAR to process account openings for **G2P enrollment and disbursements**.
- Technology:** Swadhaar (MFI) has introduced documentation scanning system – by digitizing documents this is reducing time and cost to complete KYC.
- Partnerships:** Swadhaar (a partner MFI) is educating customers about financial services and helping customers open bank accounts and mobile wallets so they can make payments using phones.

- Service model innovation
- Channel innovation
- Product innovation

Issues / Challenges

- Verification:** AADHAAR is still being implemented so eKYC is not widespread. Axis eKYC account is only for G2P payments and withdrawals, not a full bank account.
- The infrastructure is not in place. Training for eKYC will results in high costs. There are not many places where have AADHAART on both sides of the transaction.

Impact

- Axis Bank partnership with Airtel** is a leading example how to create products for low-income customers that ease the requirements of KYC. Although eKYC is still being implemented, it will totally eliminate paper in the KYC process. By connecting a biometric device to a PoS terminal developed, one can access the data server of UID and authenticate the biometric signature and which serves a eKYC for opening bank accounts, cash out, for any other KYC requirement



Overview of the model

- **Issuer** : Unique Identification Authority of India
- **Partnership**: N/A
- **Receiving country**: India
- **Products**: Aadhaar national ID with eKYC

Features

- Government ownership
- 12 digit unique ID with fingerprint Biometrics
- eKYC Capability with no fees to verify customer identity.

Aadhaar is the a unique identity system that will work by establishing one's identity using the AADHAR code, and any combination of biometric identification, such as fingerprint or retina scans.

With a unique identity number assigned to each citizen, establishing and authenticating the identity of any individual will become much easier.

How it works: The Process Banks follow to adapt Aadhaar eKYC

1

Sign KYC User Agency (KUA) agreement with UIDAI¹

2

Deploy hardware and software for deployment of eKYC service across various delivery channels.

- Certified Biometric Scanners at branches, ATMs, BC points

3

Develop a software application to enable use of eKYC across various Customer Service Points (CSP) (including bank branch, BCs etc.)

4

Obtain customer authorization to UIDAI for sharing eKYC data with the bank

Issues / Challenges

• Rollout

- **600 Million** ID's have been used thus far, out of 1.2 Billion
- **Organization Infrastructure (Banks, MFI's, etc.)** is not in place to implement AADHAAR KYC verification
- Ruling by Supreme Court prohibited making AADHAAR ID mandatory for all, this has been a barrier to complete rollout.

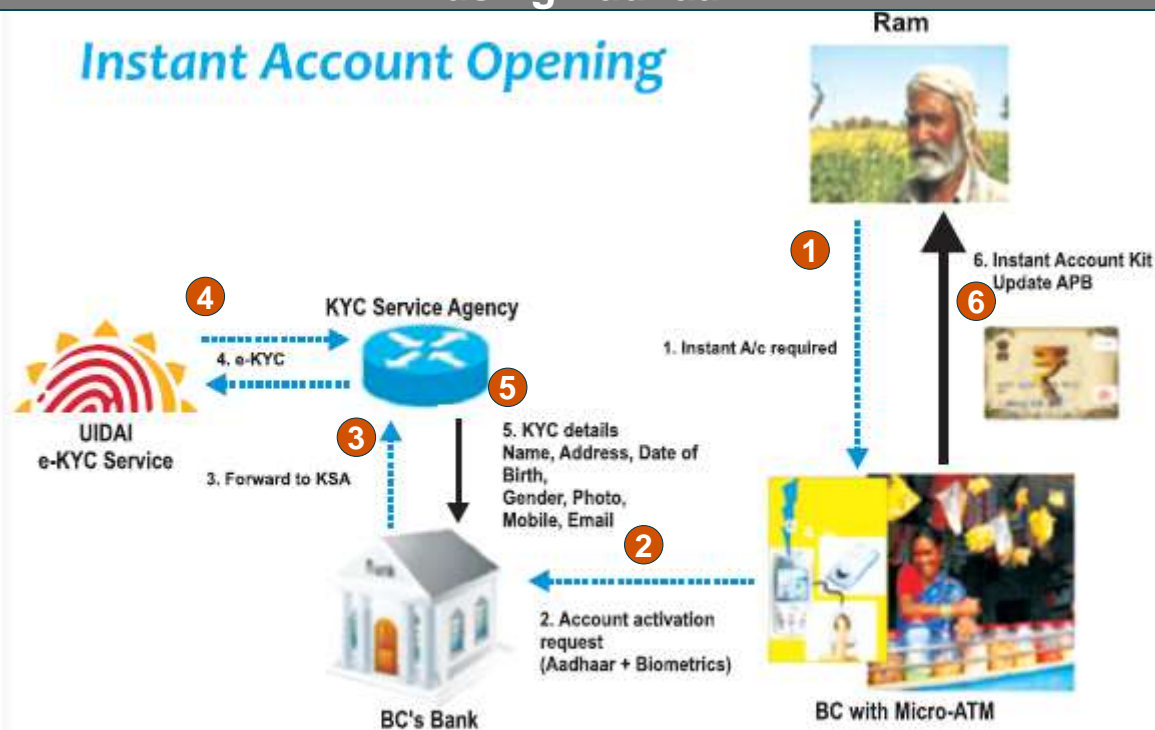
Case Study - AADHAAR INDIA

Adopting eKYC through and Advanced Identity System



Process customer follows to open bank account using Aadhaar

Instant Account Opening



An instant account can be activated at any manned customer service point. Electronic Know your customer data is provided instantaneously by UIDAI. Instant Account Kit with card is handed over to customer, who can operate the account at any customer point or through a mobile phone.

- 1 Customer walks into CSP of a bank with 12-digit Aadhaar number & requests to open a bank account
- 2
 - a. Bank rep. enters Aadhaar number into bank's eKYC application software.
 - b. The customer inputs biometrics via a UIDAI compliant biometric reader.
- 3 Application captures the Aadhaar number along with biometric data, encrypts data and sends it to UIDAI's Central Identities Data Repository.
- 4 eKYC service authenticates customer data. No match returns error.
- 5
 - a. Aadhaar number match returns customer info (name, DOB, gender, address, phone, email, and photo and this info is captured by bank's eKYC application.
 - b. Bank server auto populates data and photo and Photo and customer info can be seen on screen or handheld device.
- 6 The customer can open bank account subject to any additional requirements.

Pakistan NADRA vs. India AADHAAR National ID

	NADRA	AADHAAR
Country	Pakistan	India
Maturity	<p><u>Nearly 100% Implemented</u></p> <ul style="list-style-type: none"> Full Coverage Used by Financial Institutions (Banks, MFI's) 	<p><u>2 – 3 Years from Full Deployment</u></p> <ul style="list-style-type: none"> Partial Coverage: ID issuance approx. 50% complete Many banks not using AADHAAR (have not built infrastructure to implement AADHAAR)
Features	<ul style="list-style-type: none"> NADRA is an independent and autonomous agency under Ministry of Interior, Pakistan Online Verification on 'Verisys' Biometrics and demographic data stored on smart card 	<ul style="list-style-type: none"> UIDAI is an agency of Govt. of India. Online Verification – eKYC Biometrics and demographic data stored on central server, not card – to prevent forgery
Fees	<ul style="list-style-type: none"> Bulk Verification: 15 rupees In Branch: 35 rupees Verisys real time: 45 rupees 	<ul style="list-style-type: none"> Zero Fees for verification service
Cost	<ul style="list-style-type: none"> NADRA is well integrated among all major institutions in Pakistan 	<ul style="list-style-type: none"> Significant Cost: Financial institutions need to make significant capital and infrastructure investment to integrate AADHAAR verification
Impact	NADRA fees too high for MFI's. Yet, it has had a significant impact on Banks ability to offer banking products and services to low-income market by making KYC less costly	AADHAAR has issued 600 Million ² ID's and has some way to go to build the coverage and also become accessible to the relevant organisations, low fee model should facilitate financial inclusion

Source: Researcher Interview with Rajesh Bansal, Azfar Jamal, HBL, Khurram Rezvi, UBL

¹ <http://uidai.gov.in/>

² Economic Times – 'Aadhaar enrolment procedure suffers setback, agencies halt the process'

<http://www.samachar.com/aadhaar-enrolment-procedure-suffers-setback-agencies-halt-the-process-ogjgK3gehba.html>

Contents

- Executive Summary
- Background
- Survey Overview
- Research Findings, Key Themes and Analysis
- AML/CFT Compliance Operational Processes Innovations
- Case Studies
- **Research Observations**
- Appendices

Key challenges identified hold true across many of the countries, pointing to some major themes, across national borders (1 of 3)

Summary of challenges and opportunities

Area

Supporting detail

Regulation

Regulations can be often unclear and slow to develop compared to market developments. The lack of clarity on regulatory guidance on how to complete customer identification, verification, and monitoring for innovative channels such as mobile¹ for example, have been affecting the ability to introduce product innovation that can support financial inclusion. Also, regulators can be conservative and slow to react or may not have the capacity to perform the required impact assessment quickly, due to concerns of managing AML/CFT national and international compliance.

- *Bank of Indonesia (BI) issued the **mobile banking rules** for a pilot previously (2013). The pilot has been successful and the market was awaiting the **introduction of further guidance** to introduce additional mobile banking products in the market. The **split of the regulators between BI and OJK** delayed the issuance of the guidance in mobile banking which is still to be issued by OJK (expected by the end of 2014) – Indonesia*
- *Similarly, the **acceptance and implementation of eKYC** based on fully paperless identification and verification of customer has been slowing down developments of the BC ability to offer more products as they cannot perform verification or are limited by the requirement to provide paper based evidence of their activity, which increases the cost of providing services as well as time to activate them.*

Product Design

Many of the product offerings are **riding on the technological innovations of mobile phones access**, through mobile wallets, and payment products. Little is being done to actually **understand the needs of the low-income customers** and to design products that cater to these needs. That reflects on the pace of change of AML/CFT compliance operational processes. Standardizing identification and verification across the market and various products offerings still remain a major issue that affects the cost of operation for low-income customers.

- *Mobile wallet products for payments services have had a great success in some countries driven particularly by support for remittance services or payment services, more relevant to higher income levels e.g. retail purchases. This type of products **remain out of reach for much of the low-income population**, as requirements for identification often do not reflect their **limited ability to provide official documents for identification***
- *The **low-income need** is focused on providing additional **services such savings and credit** that can enable the aspirations of a people in growing economies for improving their lives. Customer identification processes for providing such products to people like farmers for example remain cumbersome and costly.*

Key challenges identified hold true across many of the countries, pointing to some major themes, across national borders (2 of 3)

Summary of challenges and opportunities

Area

Supporting detail

Data Management

Data privacy as well as the nature of the competition in the market **do not allow the effective sharing of data** between partnering organizations and across industry e.g. for credit scoring verification necessary for loan approvals and eKYC identification and verification. Progress on this front has been limited.

- *Data sharing can **prevent duplication of KYC** between MNO's and banks at the identification and verification stage of AML/CFT life cycle (i.e. M-Shwari savings account basic KYC is performed by MNO who collects customer information, and larger accounts are verified by CBA (bank)). The implementation of such processes is limited due to concerns about customer ownership between MNOs and banks as well as, **lack of processes to obtain customer consent** at the identification data collection stage to overcome data privacy limitations*
- *Use of a **unique identification number** across the data flow of customer information in identification, verification, transactional monitoring, and on-going customer management would enable improved **understanding of suspicious activity**. This kind of facility is absent, except where a national ID system has been introduced e.g. Pakistan and India. The effectiveness of such a tool also **requires focus on the on-going management of the quality of customer data**, through internal data standards, data quality measurements and reporting, across the processes related to the AML/CFT compliance operational processes lifecycle, which are also currently not in focus.*

Nature of competition in the market

Although partnerships are becoming more prominent, much of the **activity is driven by the need to enable the overall financial ecosystem** e.g. mobile operators providing connectivity to the banks and banks providing the facility for money depositing, storing, and movement. Overall **customer ownership is an issue** that prevents AML/CFT customer identification and verification processes integration. There is often wide spread mistrust even between partnering organizations due to concerns on long term customer ownership when offering products jointly.

- **Bank and an MNO:** *Often **these partnerships are formed out of necessity**, so that Banks can reach a wider audience and concurrently MNOs can offer a deposit account to their customers. Also, lack of direct money storing capability by MNOs prevents further development on mobile products, as there is no cash in and out capacity*
- **Bank and BC:** *The BC acts as an agent of the bank and provides services such as account opening and acts as cash in/out access point. These partnerships are proving to be reliable and successful so far, however **BCs focus is on their core commercial activities or higher margin services such as remittances, rather than collecting customer information for bank account opening**. The identification and verification of a customer becomes more costly and time-consuming, impacting the overall timescales for activating the relevant services.*

Key challenges identified hold true across many of the countries, pointing to some major themes, across national borders (3 of 3)

Summary of challenges and opportunities

Area

Supporting detail

Ecosystem

There are significant **gaps in the infrastructure** required to support a complete ecosystem of providing financial services access at the level of connectivity between operators and other industry wide required enablers. This ecosystem is also critical to effective AML/CFT compliance operational processes.

These gaps include:

- *national infrastructure issues with systems to support identification and verification. In many countries the **identification system provided by national and local government has significant gaps**. In many cases, the controls around the issuance of personal identification documents are not robust opening them up to fraud. In other cases, there is complete lack of standard national identification system. Customer identification and verification relies on a number of **other types of official documents**, increasing the complexity in regulatory rules, the and processing of the required information, as low-income people may not have access to these type of documents*
- *interoperability between banks and MNO's. Customer identification and verification for mobile wallet products is **specific to the operator**, so when a customer changes their mobile phone they **cannot transfer their service**. Customer identification and verification has to be repeated separately. Also, having access to any mobile wallet service provider from a mobile phone, is critical for verification and on going monitoring of transactions, and*
- *business correspondents / agents **exclusivity rules** prevent them from offering customer identification services on behalf of more than one providers, limiting the reach of products to the low-income population.*

Lack of 3rd party data sources

There is little progress in the **availability and/or integration of additional data sources** that can support the AML/CFT compliance operational lifecycle processes through use of independent data sources and analytics. Such sources could be national databases with information on voter registration, government payment support schemes information, credit bureaus, that can support **automation of access to data** for the independent identification and verification of customer information.

- *The existence of local 3rd party providers in most jurisdictions, like Experian, Equifax, D&B, similarly to the more mature financial markets, is **close to none**. These type of organizations provide outsourced data management services that support customer identification and verifications that could play a key role to reducing cost and complexity of managing the burden of these processes.*
- *Existing data sources that could play a key role e.g. the **KPS (Social Protection card) database¹ in Indonesia**, are not currently utilized in order to support customer identification and verification*
- ***Credit bureaus** are not available in many countries. These could normally provide KYC data services.*

1. The Social Assistance Card (KPS) is a card issued by the government to poor households which has information about a significant part of the population by is not currently accepted as an effective KYC identification document

Key innovative practices with impact on financial inclusion have been identified across many of the countries (1 of 3)

Summary of best practices and success factors

Innovative Practice

Close cooperation between industry and regulators

Supporting details

Where regulators work closely with industry participants, they have been able to understand the low-income population product need. This has lent to making a faster **assessments on the market risk** of introducing new regulation or making amendments to existing that enable innovation in the AML/CFT compliance operational lifecycle processes. Guidance on allowing new products for the low-income needs is **critical enabler of financial inclusion**.

- *In the Philippines the Central Bank was able to rapidly respond to the impact of the typhoon Yolanda by lowering the requirements for KYC identification in 2013, working with the banks to provide quick fund dispersion*
- *In Pakistan, banks have a committee that regularly meets with Central Bank of Pakistan; one key initiative of this group currently is an effort to bring down the cost of CNIC verification (NADRA) down to 10 rupees.*
- *In India, the Reserve Bank is rapidly moving towards easing KYC complexity by simplifying the requirements for proof of ID and new regulations that support the further development of eKYC through Aadhaar.*

Success factor: Leveraging open industry forums, with representation from all parts of the market, including regulators and government can play a critical role in focusing on the appropriate directions for developing regulatory guidance for AML/CFT compliance and operational processes that support it

Getting Product design right

Innovative and agile organizations such as mobile operators and branchless banking focused banks, have had a big impact on parts of the market. They have focused on offering products that **cater to low-income customers through the mobile channel, and partnerships**. Such products address the need of the low-income population at the appropriate level, as they often require **lower levels of KYC** verification and identification.

Some of these products and services include:

- **Mobile wallets** available over USSD networks on basic mobile phones and smartphones (*Safaricom – Kenya, UBL – Pakistan, Airtel – India*) that require often no KYC for low amount transactions
- **No frills bank accounts** based on reduced KYC identification and verification requirements across a number of countries and through partnerships between mobile operators and banks (*see Case Study 1 – NMB Bank*)
- *Designing a simplified, one page form to capture KYC identification data to make savings' products accessible to low literacy customers (BTPN Indonesia)*

Success factor: Making AML/CFT identification and verification processes efficient and open to people of low literacy, through simplification of processes and technology increases relevance of these products

Key innovative practices with impact on financial inclusion have been identified across many of the countries (2 of 3)

Summary of best practices and success factors

Innovative Practice

Supporting details

Establishing effective Partnerships

Increasingly the banks are working with mobile operators, data providers, credit reference agencies (where available), MFI's, retailers, training providers, to enable the complete end to end system supporting the provision of financial products. These partnerships have created new ways of completing AML/CFT operational processes, particularly identification. Partnerships have often provided the efficiency and effectiveness of process and cost that enable successful financial inclusion as follows (See Case Studies section: 2, 3, 4, and 5):

- **Banks and Financial Co's:** Banks' work with other financial institutions such as Coop banks and MFI's to offer branchless banking services, by offering KYC on-boarding identification processes in rural and remote areas
- **Banks and BCs:** BCs, agents, and super agents (mid-size to large franchises) also enable the banks to expand their points of sale for financial products, by completing identification and verification processes at reduced cost
- **Banks and MNOs:** Banks partner with Telco's to offer mobile wallets and use Telco outlets as access points for cash in/cash out. Increasingly telecoms are able to offer also core banking products such as savings and credit by integrating aspects of the KYC identification processes and more recently verification in some cases like India where regulations allow it (See Process Innovations section – Oxigen)
- **Banks and Other:** Banks work with government agencies and private retailers to verify customers identity and credit worthiness (national database, voter registration database, credit bureau, retailers. See Case studies 4 and 6)
- HBL partners with NADRA to Stretch its branchless banking reach by enabling access to its mobile wallet as part of the NADRA registration. BTPN has outsource KYC training and support of their BC network (See Process Innovations)

Success factor: Integrating service provision between mobile operators and banks, as well as sharing customer data to enable single customer identification, verification, and monitoring

Managing data as a competitive advantage

Really innovative organizations are increasingly focusing on making **use of their own data**, as well as any other available source to **drive a better understanding of their customer**.

- Use existing data sources to **automated and control the data quality** of customers are identification particularly through credit risk and behavioral analysis. Axis bank in India utilizes the government social fund disbursement data to pre-populate the customer information on their system for identification
- Use **social media data, mobile phones data, and bank transaction data** to create and support credit risk algorithm for approval of small loans. This service allows small loans to be authorized online.
- Utilize analytics using a relevant vendor to do support compliance on BC and avoid fraud – monitoring

Success factor: Focus on effective management of customer data across the AML/CFT compliance operational processes to minimize duplication of effort due to data quality issues

Key innovative practices with impact on financial inclusion have been identified across many of the countries (3 of 3)

Summary of best practices and success factors

Innovative Practice

Enabling the required ecosystem

Supporting details

Government driven initiatives around national identification systems can support KYC identification and verifications. Market initiatives to consensus to share connectivity of points of sales without exclusivity and fees as well as well as are also critical. Technological and policy changes are critical success factors for any market. There are significant examples of success in several countries, such as:

- ***The use of national ID infrastructure, including biometric data, for identification, verification, and monitoring of transactions of customer***
 - *Aadhaar (India) and NADRA (Pakistan) national ID systems both provide a unique identifier per person plus the use of fingerprint data stored centrally used to perform identification and verification. A financial services provider can integrate their systems and access the customer data through a PC or handheld device, making online or batch calls to the central (See Case study 6)*
 - *Aadhaar access costs for financial services providers to identification and verification data is currently almost zero, supporting the provision of products are a reduced cost to the low-income segment.*
- ***Connectivity between banks, ATM's, and MNO's is key***
 - *The Philippines do not have a real time cross settlement system for interbank transactions, thus transactions between banks or mobile to bank are not enabled. ATM withdrawals between banks are possible. A current initiative to introduce a real time settlement system driven by the government will enable FS providers to reduce cost of transactional monitoring by simplifying the process of capturing and processing transactions through their AML/CFT systems on a daily basis., in a standardized fashion. That could potentially enable the providers to pass on the savings to the low-income customers, making products more relevant to them*
 - *"Our main challenge is customer convenience. If there is an interoperability requirement imposed by regulator, if any customer can use other outlets, it can make a difference." Financial Institution, Pakistan*
 - *ATMs in Indonesia allow access to a wide range of possible payments services, increasing access to performing transactions.*

Success factor : Government, regulators, and/or industry bodies need to enforce and drive key initiatives that enable the ecosystem that supports the provision of products to the lower income population through streamlined AML/CFT compliance operational processes. Savings on identification, verification and transaction monitoring made due to the effective infrastructure can be passed on through reduction or elimination of fees for the low-income customers

Contents

- Executive Summary
- Background
- Survey Overview
- Research Findings, Key Themes and Analysis
- AML/CFT Compliance Operational Processes Innovations
- Case Studies
- Research Observations
- **Appendices – Survey Questions and Results**

CGAP Survey Questions (Questions 1, 2, 3, 4)

Instructions

Please answer the questions below with answers that reflect your overall organization's perspective. The questions are not technical and do not require significant analysis.

1. Please indicate the following:

Name:

Organization:

Country:

Email:

2. What is your Role / Primary Responsibility? (Select one that applies best):

- Senior Management / Leadership
- Sales / Account Manager
- Marketing
- Technologist
- Customer Service
- Compliance Officer
- Consultant
- Other (please specify)

3. What is your Department? (Select all that apply):

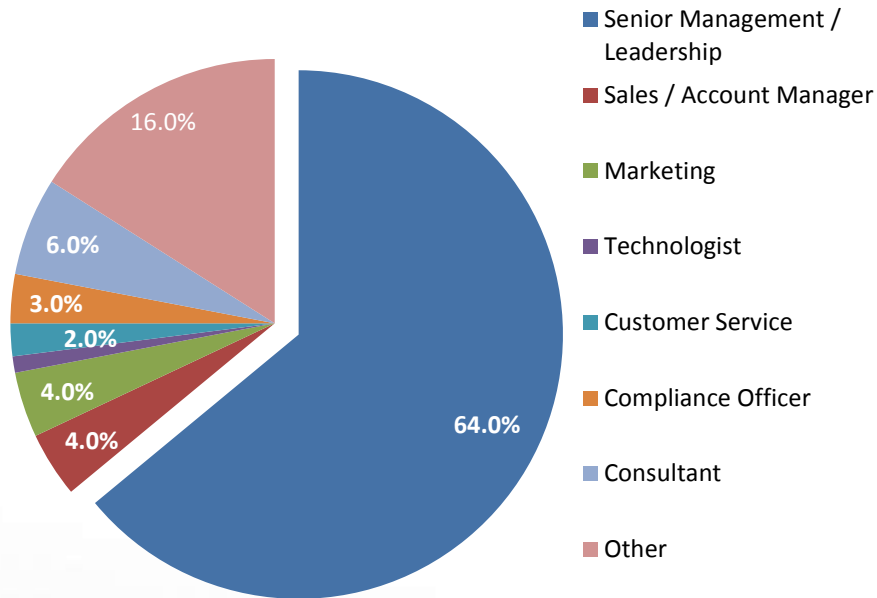
- Sales
- Marketing
- Compliance / Risk Management
- Customer Relations
- Technology
- Strategy / Process
- Other (please specify)

4. What is your Primary Industry? (Select one that applies best):

- Banking
- Microfinance
- Insurance
- Mobile telephony
- Retail
- Other (please specify)

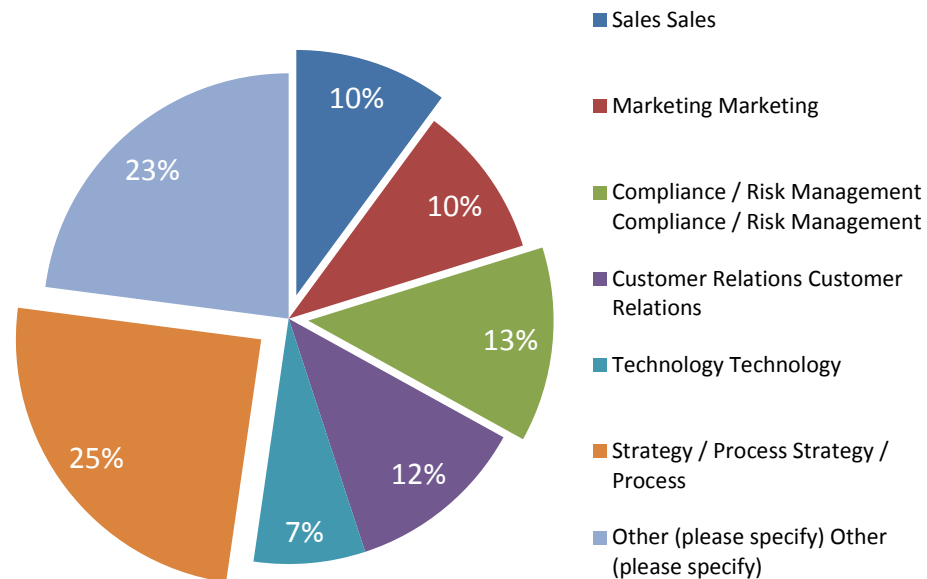
Interview respondents include significant number of senior industry leaders*, representing a wide-range of business functions

2 Respondents profile by Role



Other: Vice President, New Markets, Products , Project Manager Operations, Senior Manager Money Laundering Reporting

3 Respondents profile by Business Function



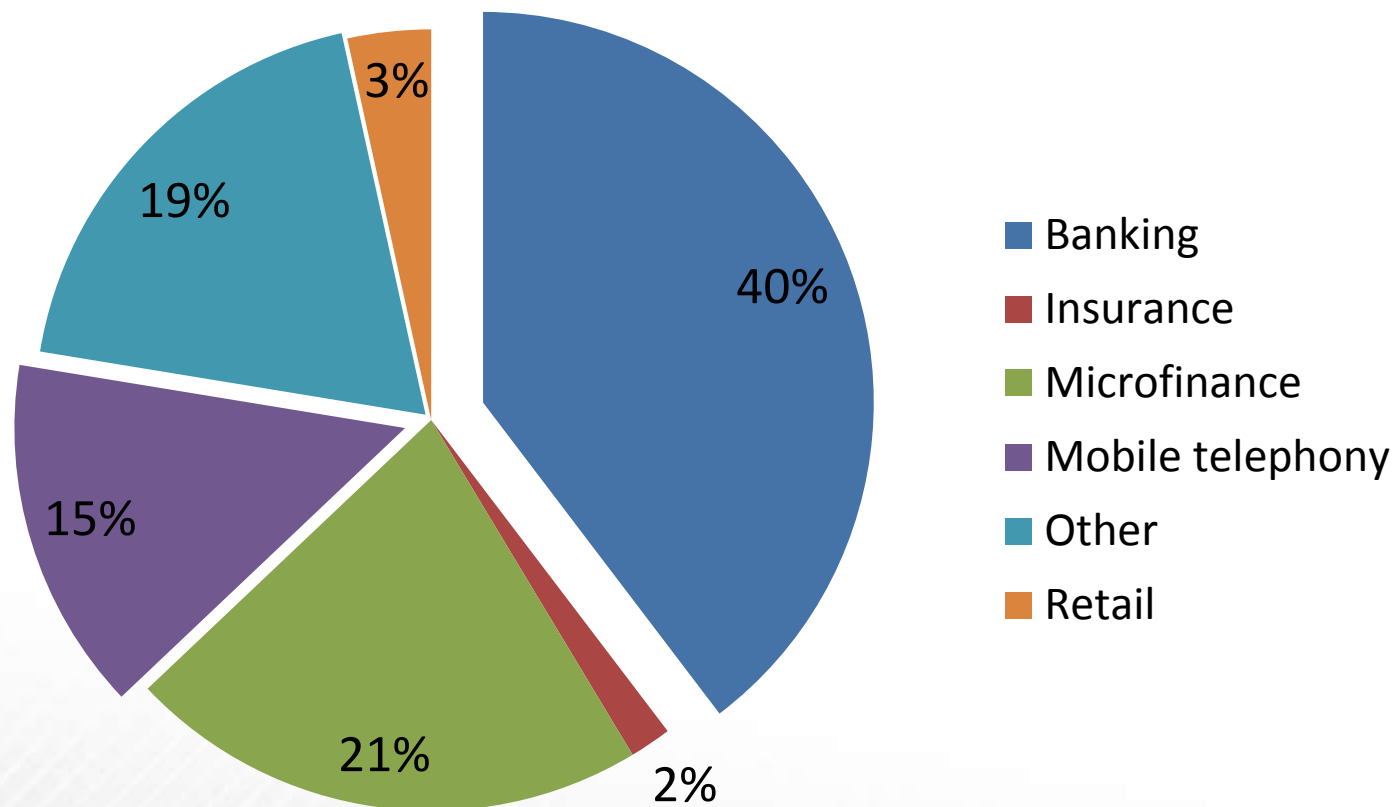
Other: Bank Operations, Business Development, Finance, Mobile Money, Policy Advisor, Research and Regulation department, Branchless Banking

- The significant participation of senior management in the survey has ensured that the findings support a clear, strategic view on the priorities of the market in relation to on-boarding and KYC processes management. The significant input by SMEs and practitioners on the other hand has been critical for getting a clear view of the challenges and opportunities on the ground

Industry participation in the research was relatively balanced across sectors

4

Respondent's Primary Industry



CGAP Survey Questions (Questions 5, 6, 7)

5. How are you Currently Serving Low-income Customers [Defined as those below poverty line]? (Select one that applies best):

- Low-income customers currently represent our primary customer base (greater than 50% of customers/revenue)
- Currently serve Low-income customers (represent between 10% and 50% of current customers)
- High future priority (have specific plans and targets to reach this group)
- Medium future priority (have identified low-income as a future target group, working on details)
- Low future priority (not currently working on this, but monitoring)

Comments (Optional)

6. What is your Company Strategy in Offering Services to Low-income Customers? Is this a Focus for your Business? (Choose all that apply):

- Providing services to low-income customers is already a priority for our company
- Our company expects significant revenues in the future from low-income customers
- Serving low-income customers is required by national regulations and plans to offers services are focused on complying with regulation
- Serving low-income customers will be important from a competitive perspective in our industry
- Our company does not expect significant revenue from low-income customers, but serving this segment is important for market perception and fairness reasons
- Our company does not plan to serve low-income customers due to limited market potential
- Our company does not plan to serve low-income customers due to costs associated with this segment

Comments (Optional)

7. What Financial Products have you Developed that are Specifically Targeted to Low-income Customers? (Select all that apply):

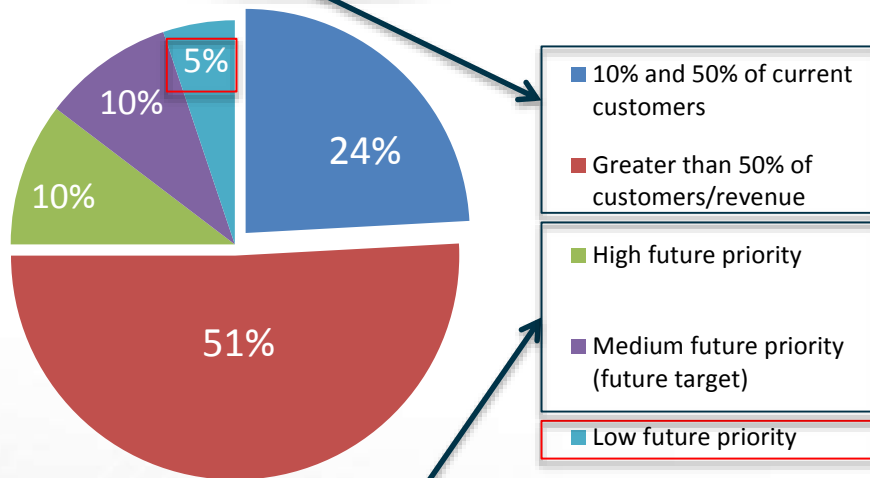
- Savings
- Payment (for goods or service) / Remittance / Money transfer
- Credit
- Insurance
- Financial Information (e.g. commodity market prices, logistics rates, interest rates, etc.)
- Other (Please specify):

Survey participants were heavily focused on serving low-income customers and most offered payment, savings and credit products

5

Currently Serving Low-income Customers

75% of respondents already have significant revenue from the low-income segment**

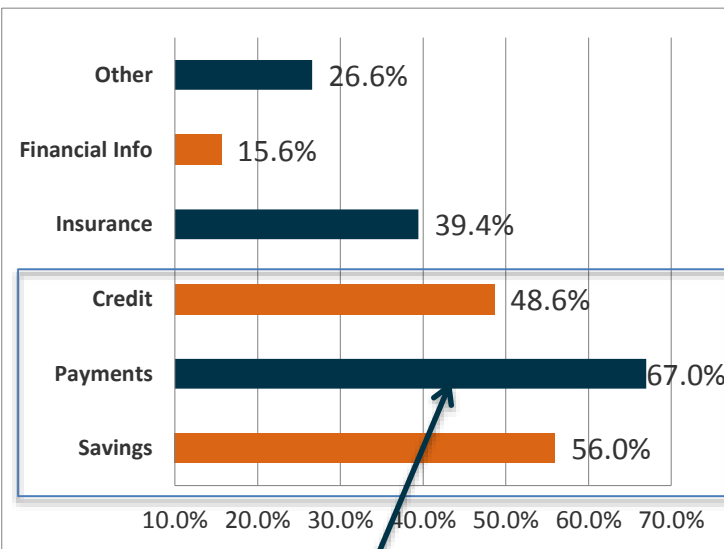


Most of the remaining organizations see low-income customers as a priority towards growth

Only 5% see low-income customers as a low priority

7

Available FS products for Low-income customers



67% of the respondents offer payment products, with savings and credit following at around 50%

Availability of other products is much lower

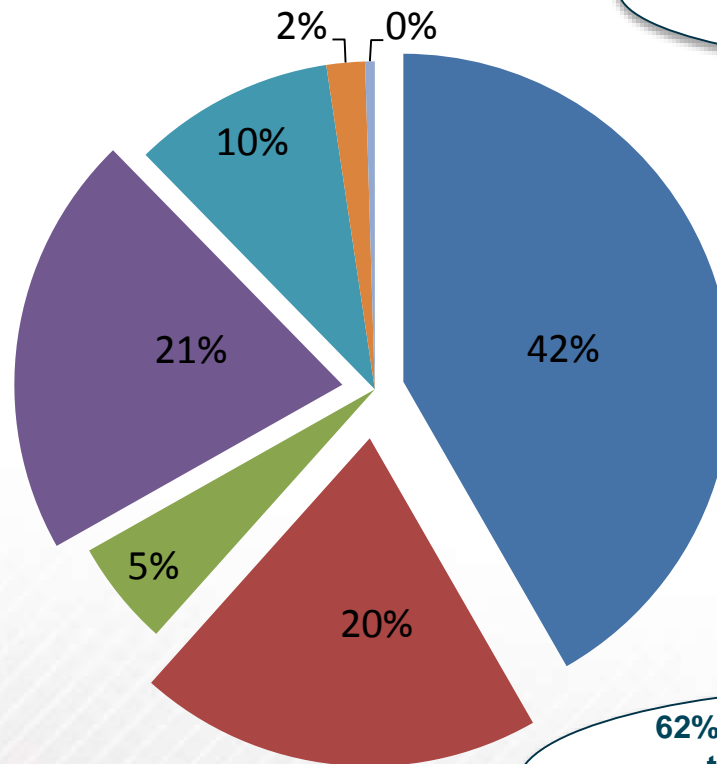
Most offer multiple products, including bundles

Survey respondents place a high priority on servicing low-income customers, mainly focused on commercial opportunities

6

What is your Company Strategy in Offering Services to Low-income Customers? Is this a Focus for your Business? (Choose all that apply):

Strategy on Serving Low-income Customers



Only 1 respondents saw cost as a barrier to servicing low income customers

21% of respondents consider the low income customer segment as an area that will provide them with an advantage towards their competitors

- Low Income already priority
- Expect Significant Revnuen in Future
- Required by National Regulations
- It will an important from competative perspespective
- Do not expect Revenue but Important to us
- Does not plan to serve low-income due to low potential
- Does not plan to serve due to costs

62% of respondents already see the low income customer segment as important and have revenue streams from it

CGAP Survey Questions (Questions 8, 9)

8. Current Issues/Challenges with KYC Processes for the Identification, Verification and Ongoing Monitoring of Low-income Customers.

Please rate each of these potential issues/challenges on a 1 to 5 scale on level of difficulty or relevance to your organization

1 - Strongly Disagree 2 - Disagree 3 - Neither Disagree Nor Agree 4 - Agree 5 - Strongly Agree

	1 - Strongly Disagree	2 - Disagree	3 - Neither Disagree Nor Agree	4 - Agree	5 - Strongly Agree
National infrastructure is not sufficiently comprehensive to allow us to effectively serve low-income customers (e.g. no national ID, no physical address system)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low-income customers are difficult to handle within KYC processes due to their lack of financial integration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low-income customers are difficult to handle within KYC processes due to lack of literacy and numeracy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low-income customers require unique KYC processes and tools compared to other customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regulatory requirements are not sufficiently defined to address challenges of low-income customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regulatory requirements do not account for low-income customers, leading to strict requirements which may not accurately address the issues of low-income customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industry-standard tools and processes for KYC are not effective for low-income customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costs to manage KYC for low-income customers limits the ability to offer services to this segment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Optional Comment (Please provide any additional issues/challenges that you find important.)

9. What is Your Current Interest or Activity in Cross-sector Partnerships to Target Low-income Customers? (Select one that applies best):

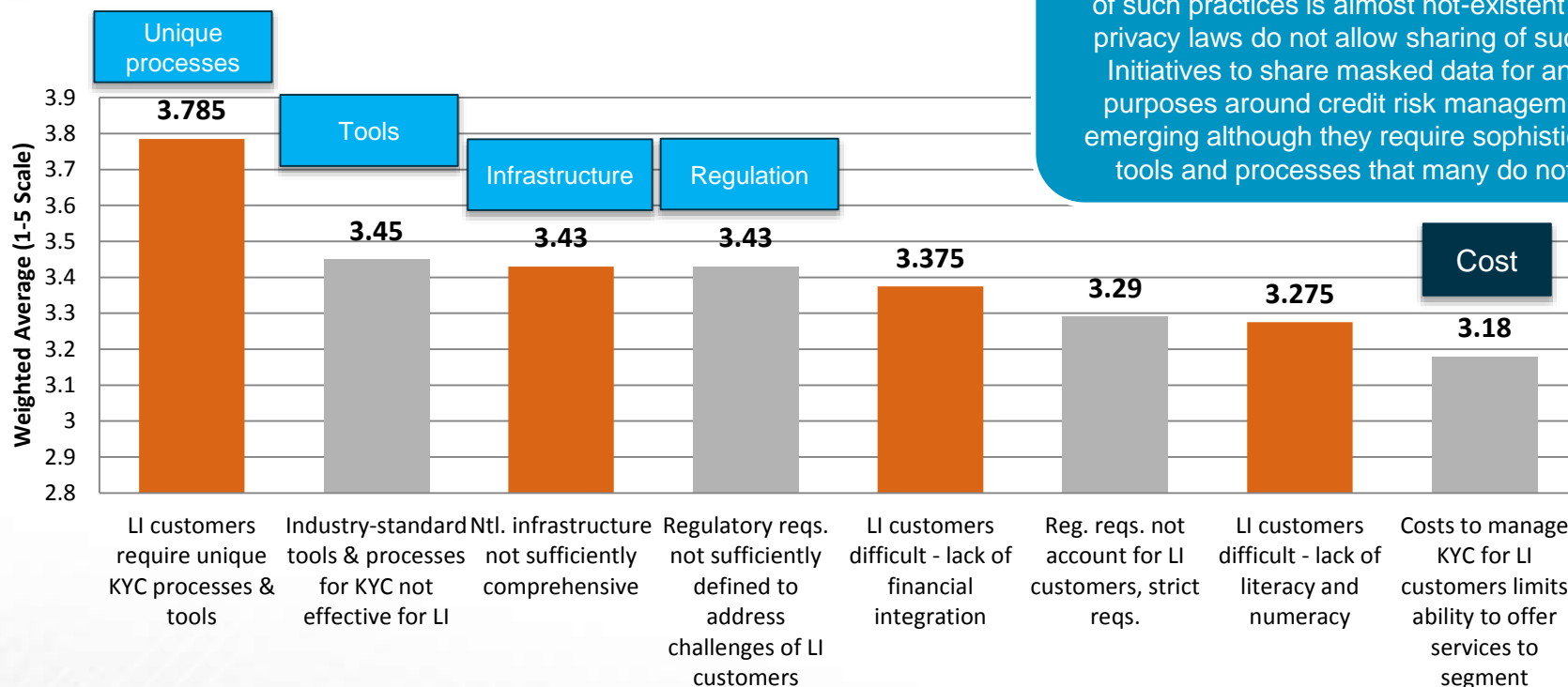
- Currently engaged in at least one partnership serving low-income customers
- Currently working with partners to develop products to serve low-income customers
- Currently in discussions with partners on options to serve low-income customers
- Currently considering partnerships as one option for serving low-income customers
- Not considering partnerships due to difficulty in developing products with partners
- Not considering partnerships due to limited market opportunities with low-income customers

Comments (Optional)

Respondents believe primary KYC issues and challenges are associated with processes and tools rather than cost management

8

Current Issues/Challenges with KYC Processes



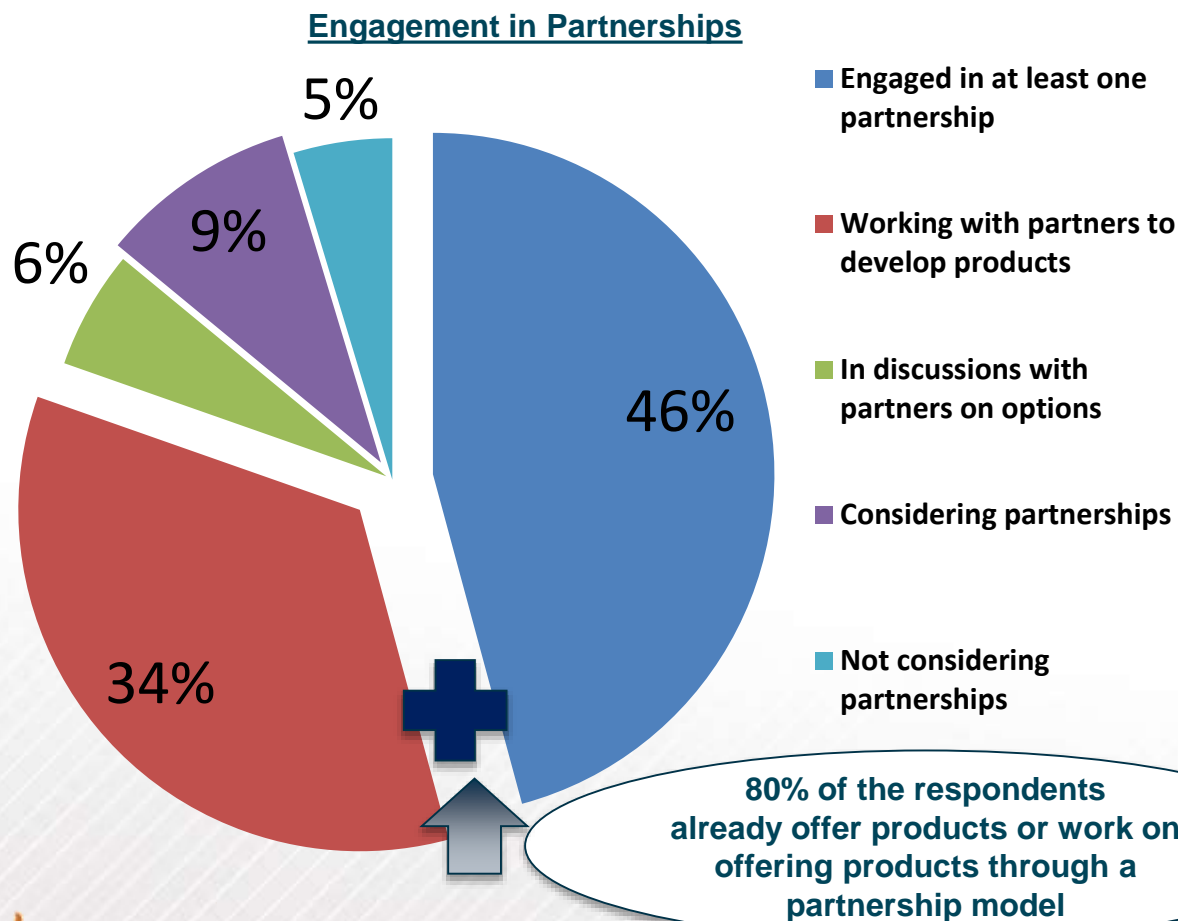
Data sharing between partnering organization could be key to effective KYC. The development of such practices is almost not-existent as data privacy laws do not allow sharing of such data. Initiatives to share masked data for analytics purposes around credit risk management are emerging although they require sophistication of tools and processes that many do not have

- The requirement for unique KYC processes and tools is closely associated with the need to address regulatory gaps . For example, opening up further the mobile phone channel to banking products e.g. bank accounts requires significant input and enablement by the relevant regulations in country
- The majority of the respondents do not view cost to manage KYC as a barrier to offering services to low-income customers, as they are driven by scaling up their business

Partnerships were identified by respondents as playing a key role in serving low-income customers

9

What is Your Current Interest or Activity in Cross-sector Partnerships to Target Low-income Customers? (Select one that applies best):



The partnership model has played a key role to providing innovative products. They have changed the face of FI in many countries e.g. Tanzania and Kenya through collaboration between mobiles phone operators and banks in particular. Elsewhere nevertheless e.g. Indonesia and Pakistan progress has been slower due to competition. In Pakistan mobile phone operators prefer to work with MFIs to protect their market share and banks are building their own capability

CGAP Survey Questions (Questions 10, 11)

10. Leading KYC Practices for Identification, Verification and Ongoing Monitoring of Low-income Customers.

Please indicate your level of agreement (1-5 scale) with the potential impact of each of the leading practices listed below in regards to improving cost and effectiveness of KYC processes

	1 - Strongly Disagree	2 - Disagree	3 - Neither Disagree Nor Agree	4 - Agree	5 - Strongly Agree
Leading firms develop unique KYC processes for serving low-income customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leading firms are able to measure the cost of KYC processes for low-income customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leading firms have learned how to reduce the cost of KYC processes for low-income customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leading firms use different identity management data sources across different customer income groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leading firms develop customized training programs for their employees to improve their ability to manage KYC requirements specifically for low-income customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Promising Innovations for Identification, Verification and Ongoing Monitoring of Low-income Customers.

Please indicate your level of agreement (1-5 scale) on whether each of these potential innovations can significantly impact cost and effectiveness of KYC processes

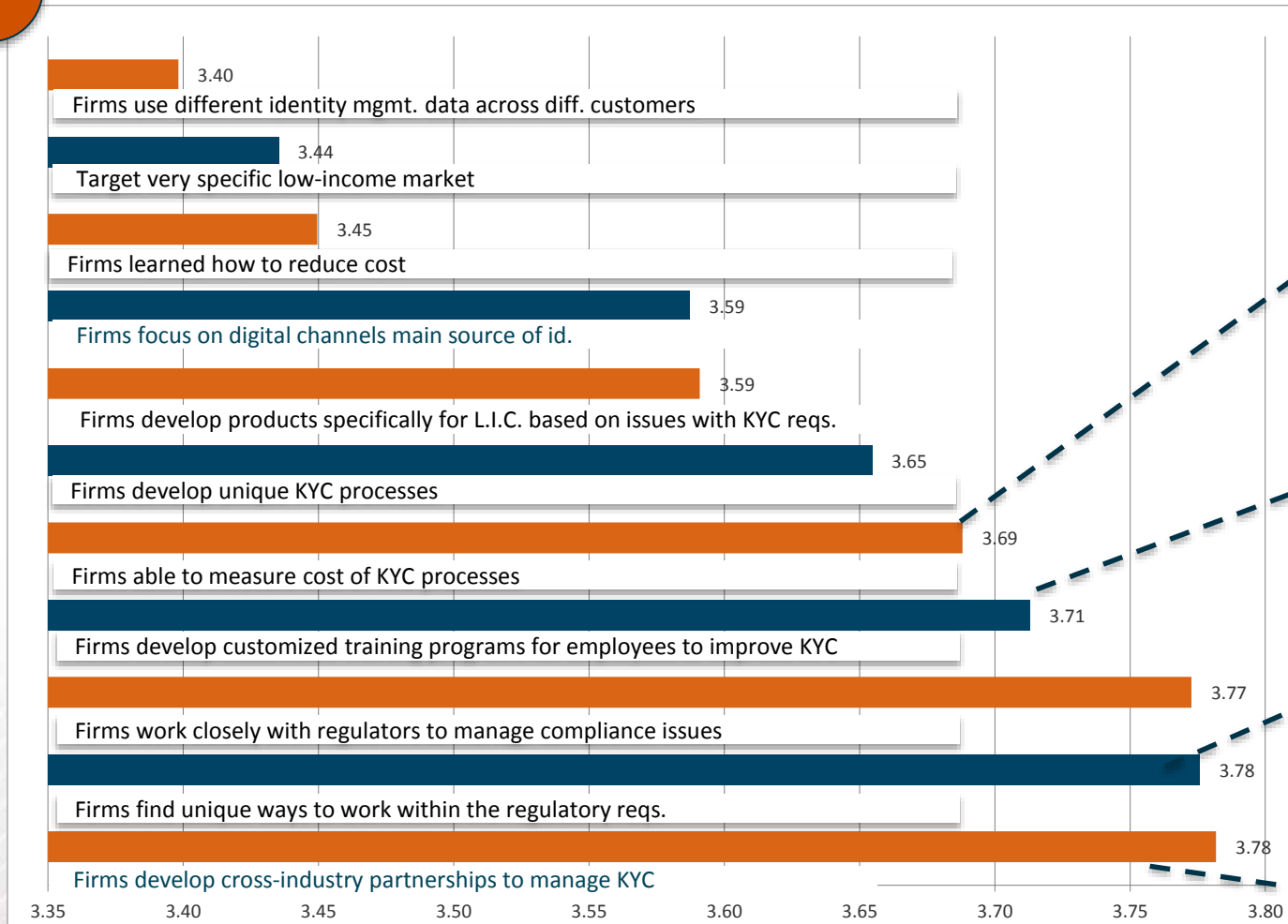
	1 - Strongly Disagree	2 - Disagree	3 - Neither Disagree Nor Agree	4 - Agree	5 - Strongly Agree
Software tools designed to work effectively with low-income customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Process innovation (processes defined to work effectively for low-income customers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regulatory innovations (enabling and focused guidelines from national authority / supervisor)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Location data (e.g. Geo tagging of customer locations and financial activity)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mapping solutions (Leveraging GPS-based mapping for customer data)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biometrics (use of finger prints, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training programs for staff that are particularly efficient or cost-effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collaboration across firms on customer data (MNO's and banks, for example)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
International collaboration on regulatory frameworks and information sharing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Others (please provide any other innovations you feel are promising)

Survey respondents believe examples of leading KYC practices are mainly in the areas of partnerships, regulatory compliance, training programs and measuring costs

10

Leading KYC Practices for Identification, Verification and Ongoing Monitoring



Examples

Banks negotiating with NADRA to reduce verification costs from 45 to 10 Rupees

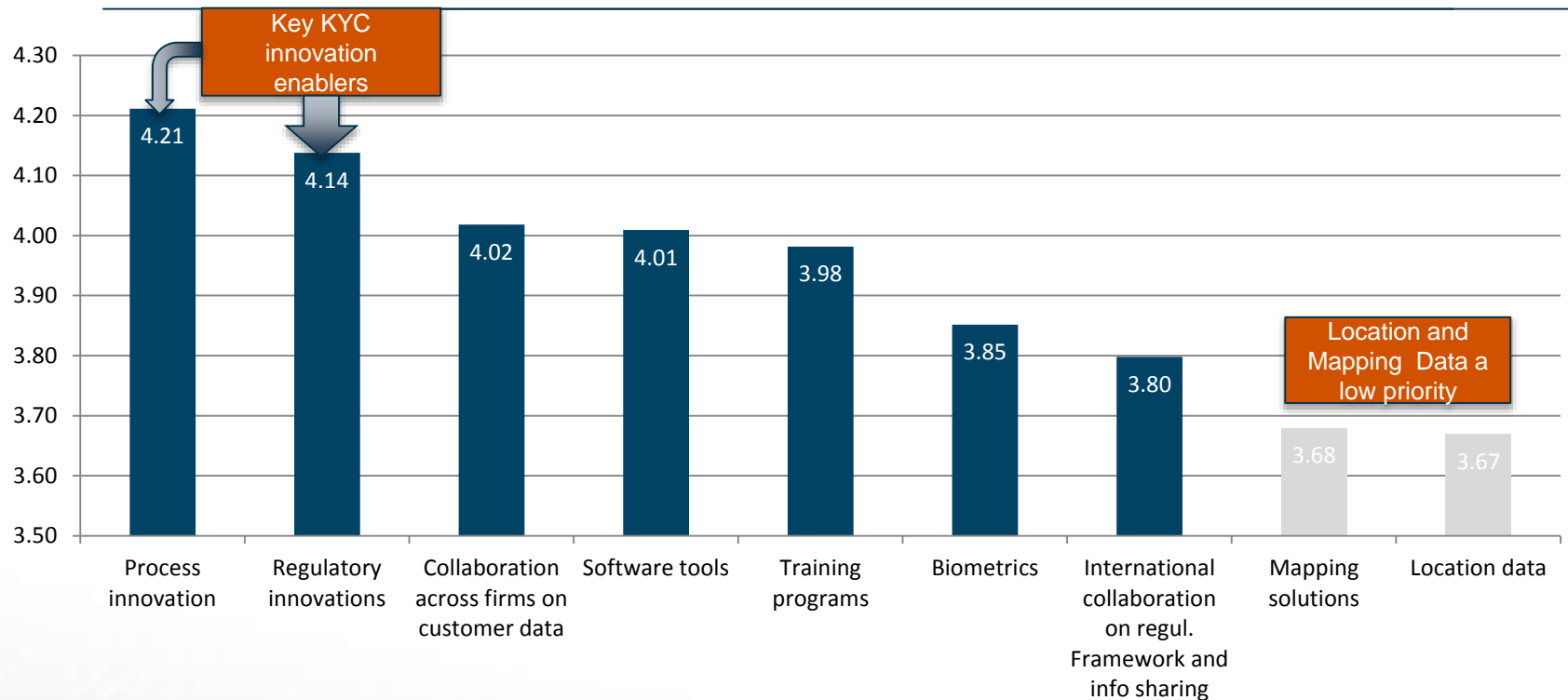
Malaysia – Committee of CEO's working closely with regulators

NMB in Tanzania permitted soft KYC thanks to live finger print onboarding

Partnership – CBA | Safaricom MSHWARI

Respondents believe key innovations in KYC processes are associated with process and regulatory compliance

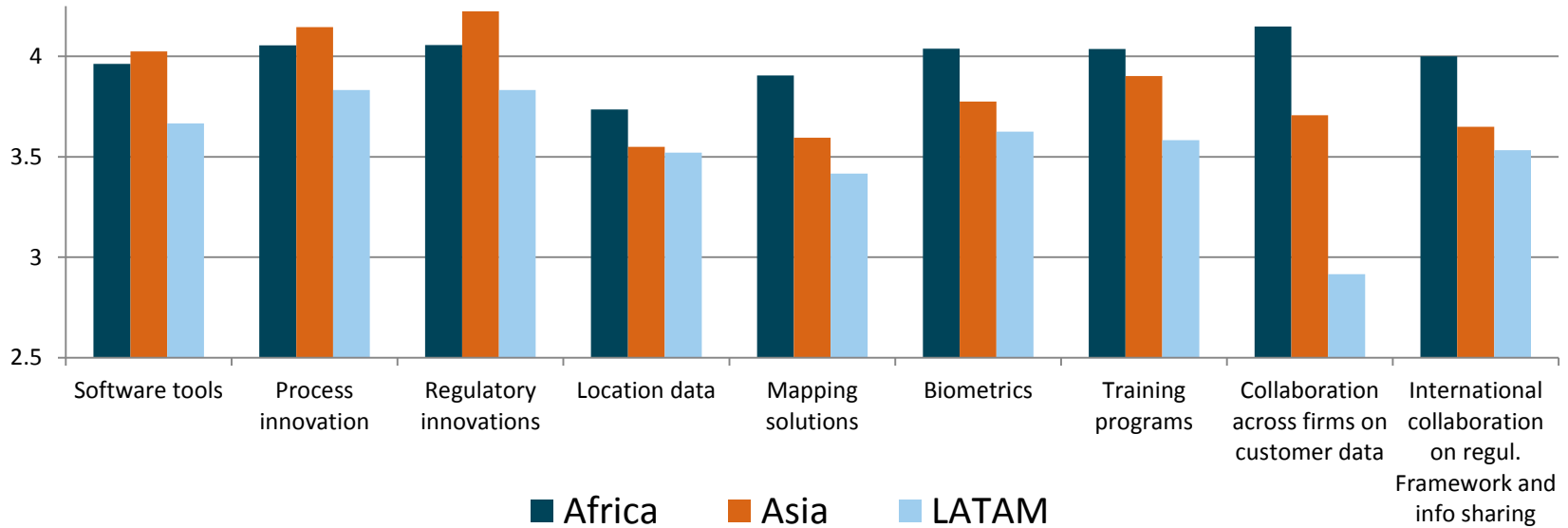
Promising Innovations in KYC management



- Process and regulatory innovations are the key opportunities for KYC innovation according to the survey respondents
- The use of location data and biometric to a lesser extent have been graded as a lower priority due to the requirements for costly infrastructure that can support it use

Regional prioritization of promising innovations in KYC processes indicate significant differences between Africa, Asia and Latin America

Promising Innovations in KYC management – Regional view



Introduce innovation via digitalization. i.e. SWADHAR, MFI/India - collects paper, scans all documents & stores soft copy

Location and GPS data more of a concern for countries in Africa due to geographic and infrastructure constraints

Use of biometrics differ even within regions. Infrastructure is critical and unless a government initiative drives it is difficult to implement

Collection of biometrics data carries a high cost. But with introduction of cheap smartphones and equipment that is changing

Source: CGAP Survey Results

Biometrics refers to finger prints in most cases. Very few organizations that are doing Iris scans. Biometrics have been tried in the past. An example is in India with Citibank and Swadhaar (MFI) and the technology at the time did not meet expectations as farmers and people who do hard labor, their fingerprints would change and ATM was unable to identify them.

CGAP Survey Questions (Questions 12 and 13)

12. Process Steps for Managing KYC.

For this question, we would like your input on each of the main KYC processes, as listed below:

Process 1: Customer Identification

Process 2: Customer Verification

Process 3: Ongoing Customer Monitoring

Process 4: Sanctions

Process 5: Customer Issue Escalation/ Customer Exiting

Process 6: Regulatory Reporting

Process 7: Internal Reporting

For each of the questions below, please prioritize the top 3 KYC processes based on impact for cost, difficulty etc:

	Process 1: Customer Identification	Process 2: Customer Verification	Process 3: Ongoing Customer Monitoring	Process 4: Sanctions	Process 5: Customer Issue Escalation/ Customer Exiting	Process 6: Regulatory Reporting	Process 7: Internal Reporting
1. Which processes incur the most cost to support? (only select top 3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Which processes require the most training? (only select top 3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Which processes require customized tools and data? (only select top 3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Which processes are most in need of improvement? (only select top 3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Which processes would you be interested most in learning about leading practices? (only select top 3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide any additional processes that you would add to this list (optional)

13. Effective Management of Costs of KYC Activities.

Please select the options below that describe your ability to manage KYC costs for low-income customers

- My organization can measure costs associated with KYC for low-income customers
- My organization can measure costs associated with KYC, but only in aggregate across all customer segments
- My organization places a high-priority on measuring KYC costs and is currently working to develop this capability
- My organization does not currently measure costs for KYC processes separately
- My organization does not currently measure costs to serve low-income customers separately

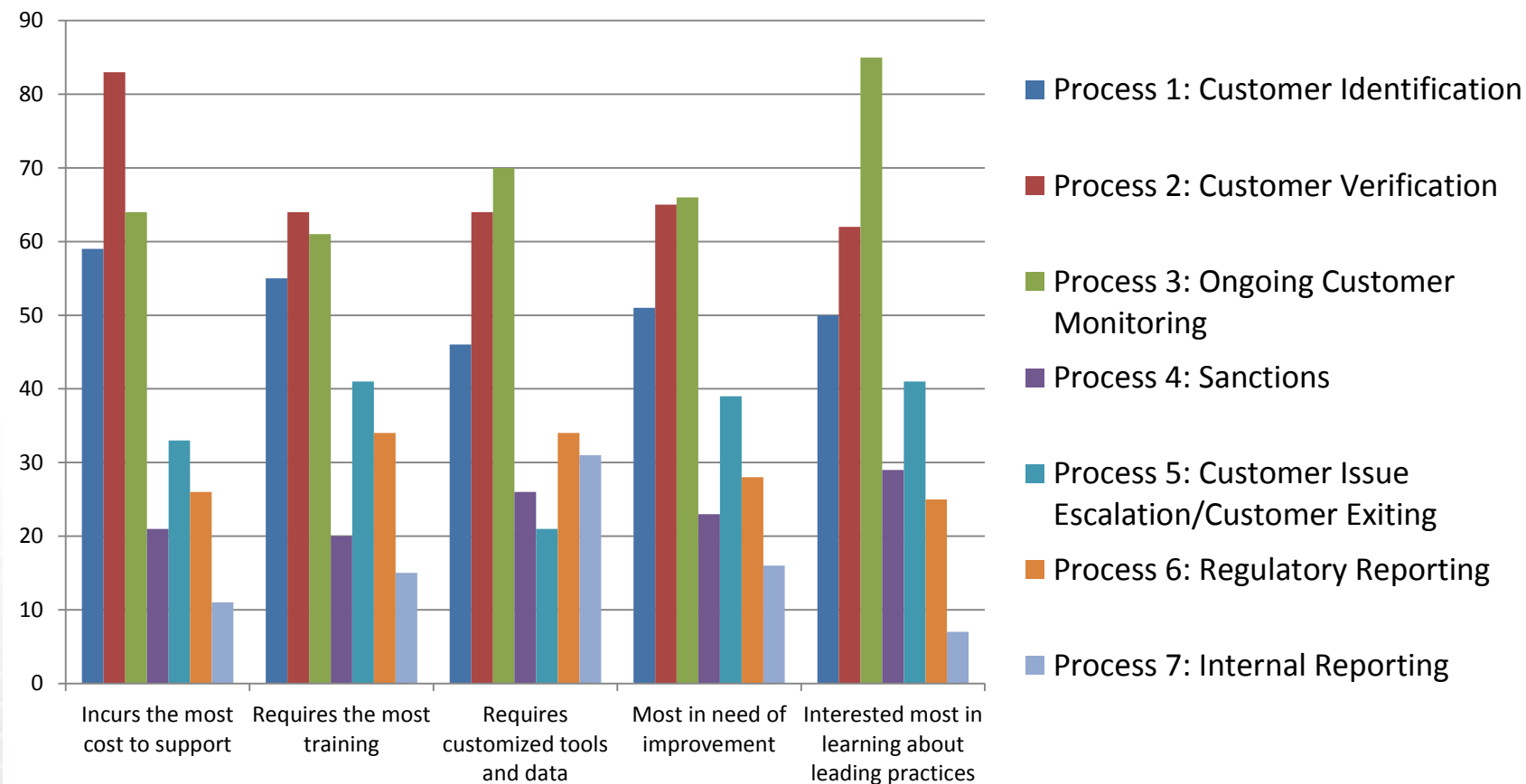
Optional (please provide any additional comments on your experience/capability for managing costs)

Survey participants believe customer verification is the KYC process requiring the most support cost and training

12

Process Steps for Managing KYC. For this question, we would like your input on each of the main KYC processes, as listed below:

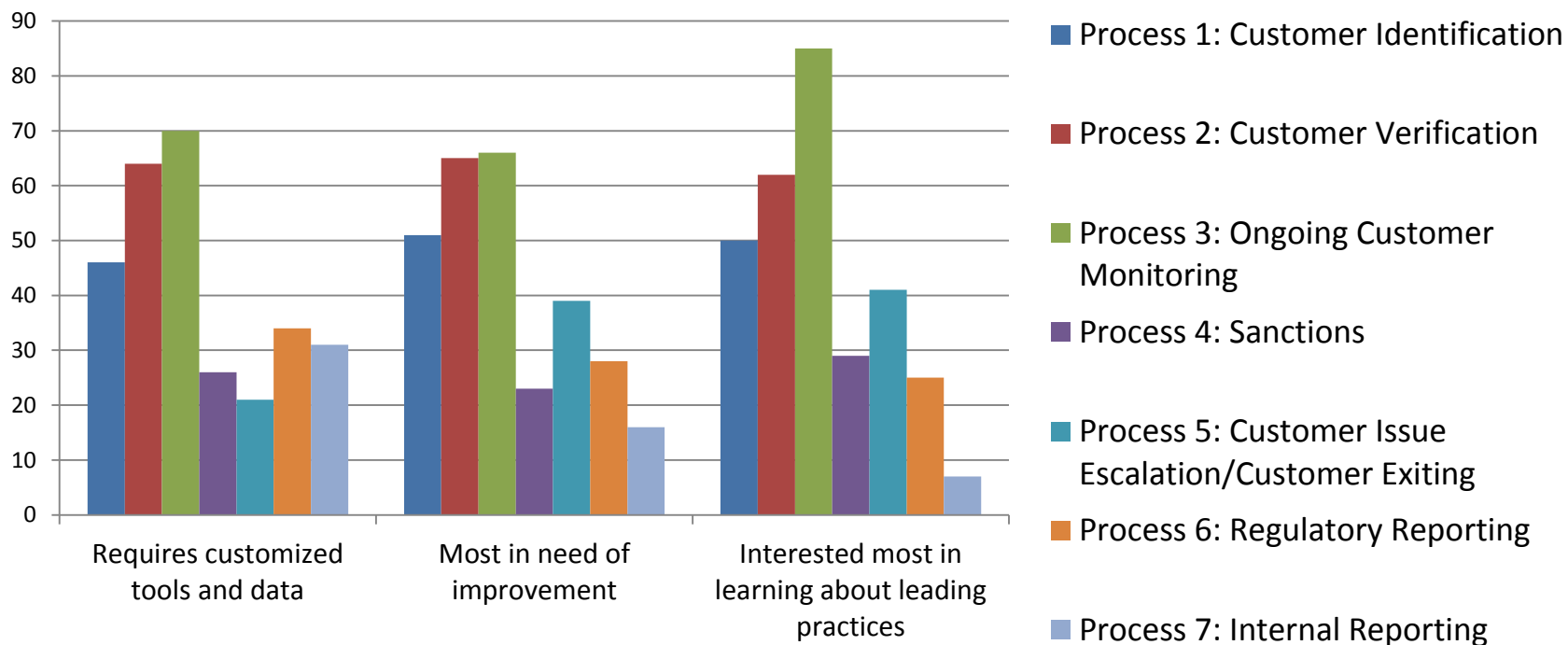
Process 1: Customer Identification, Process 2: Customer Verification, Process 3: Ongoing Customer Monitoring, Process 4: Sanctions, Process 5: Customer Issue Escalation/Customer Exiting Process 6: Regulatory Reporting, Process 7: Internal Reporting. For each of the questions below, please prioritize the top 3 KYC processes based on impact for cost, difficulty etc.:



Survey participants believe ongoing customer monitoring requires the most improvement and is where they are most interested in learning about leading practices

12

Process Steps for Managing KYC

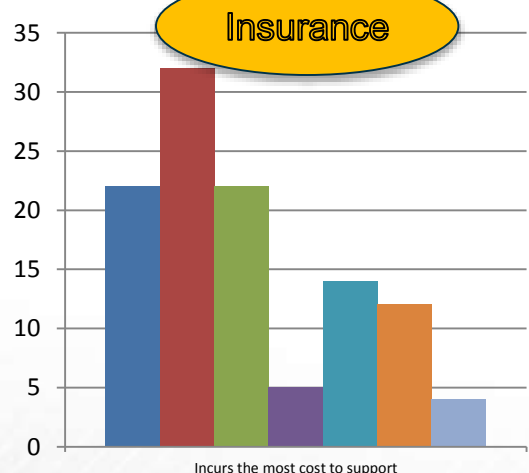
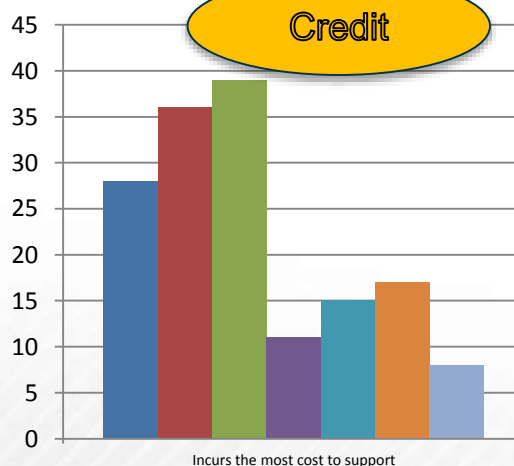
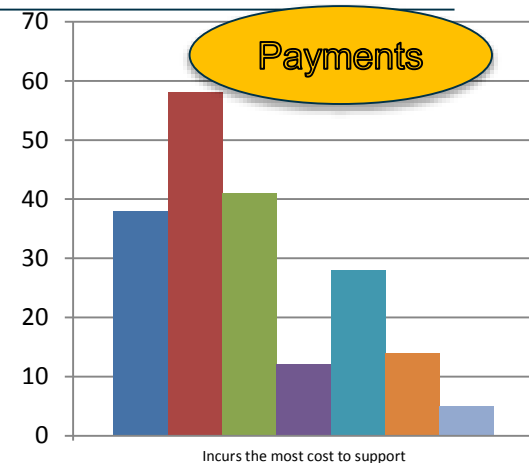
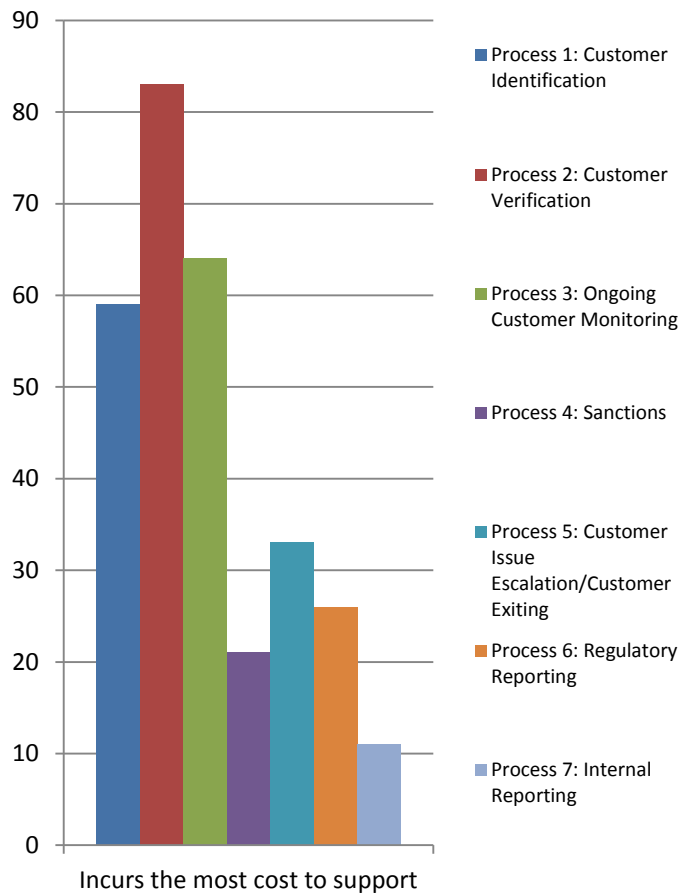


- Most firms have in-house and customizable monitoring systems that are costly to develop and maintain
- Firms require qualified people to manage the system and data, or in the absence of sophisticated systems firms employ larger human resources which is also very expensive.
- Firms express interest in learning more about ongoing customer monitoring, as they lack sophistication

Process support cost, when viewed by product, indicate that credit products involve more monitoring cost compared to savings, payments and insurance

12

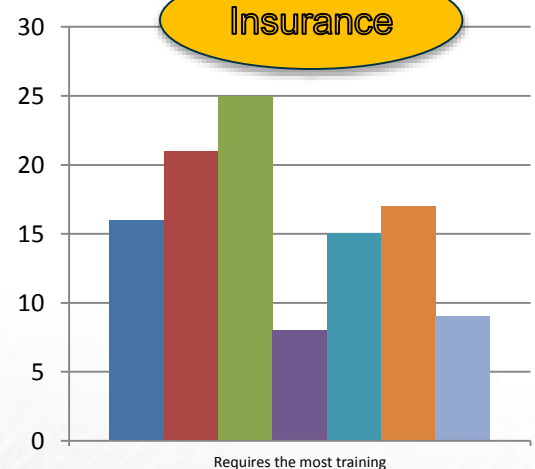
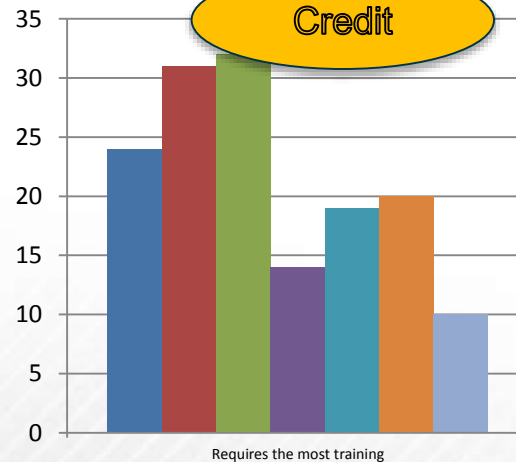
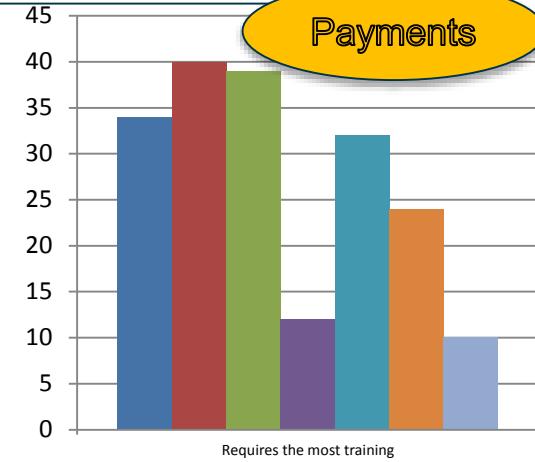
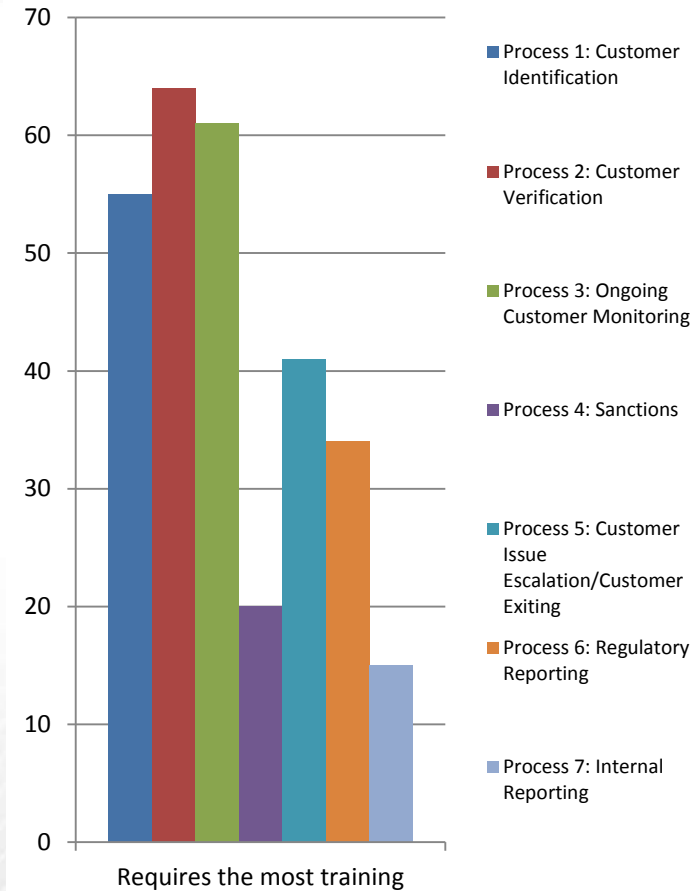
Process Steps for Managing KYC



Training required, when viewed by product, indicates that credit and insurance products require more customer monitoring training compared to savings and payments

12

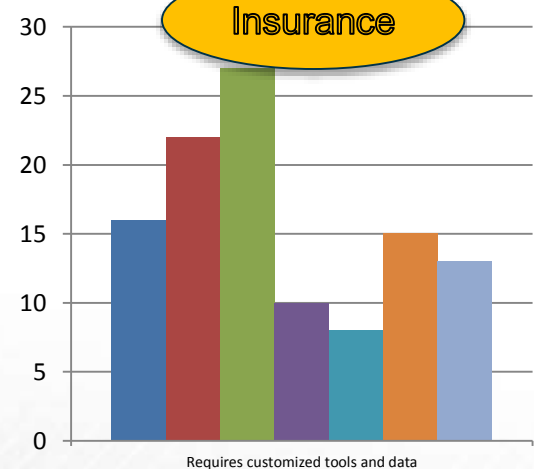
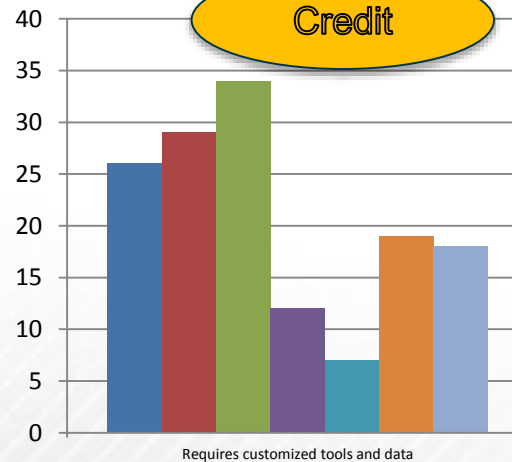
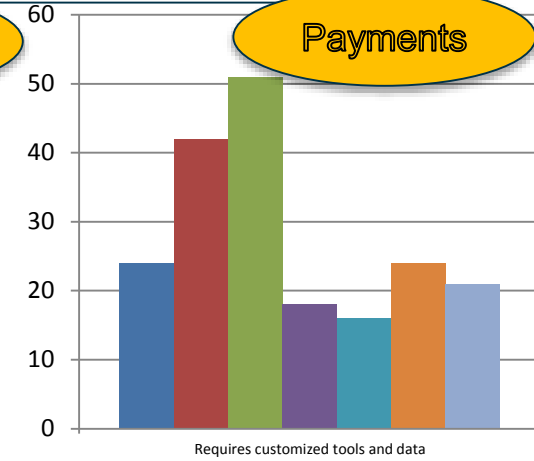
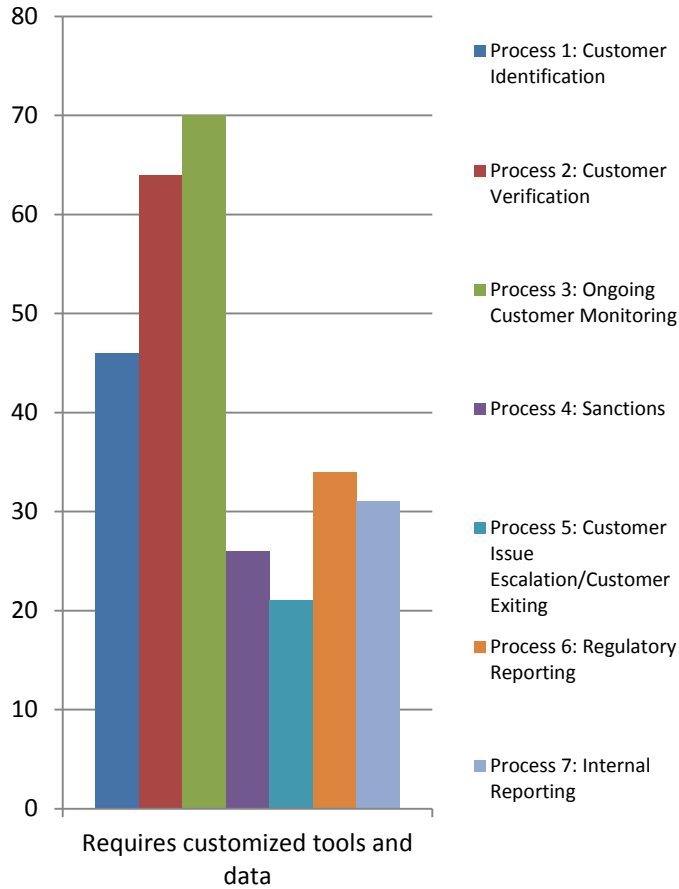
Process Steps for Managing KYC



The need for customized tools and data, when viewed by product, indicates that ongoing monitoring is the primary process step across all product categories

12

Process Steps for Managing KYC



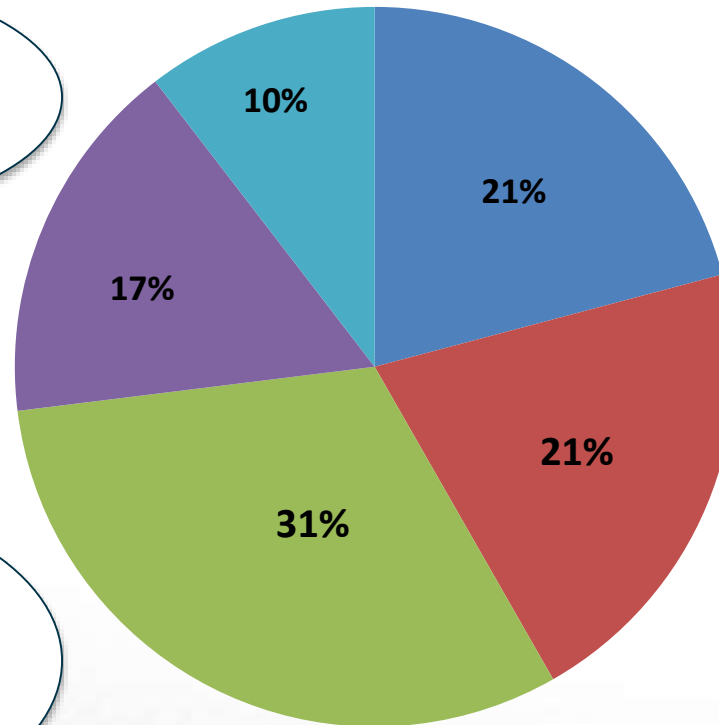
Measurement of KYC costs is not a current capability or priority of most surveyed organizations

13

Measuring the cost of KYC

Most firms do not measure the cost of KYC although they acknowledge the importance of doing so in the future

The majority of those that responded that they can, were unable to demonstrate that. They considered aggregate measurements when responding in most cases



- Can measure costs associated with KYC for low-income customers
- Can measure costs associated with KYC, only in aggregate
- Does not currently measure costs for KYC processes separately
- Does not currently measure costs to serve low-income customers separately
- High-priority on measuring KYC costs. Currently working to develop this capability

Reducing fees/incentives for 3rd BC as well as fees to customer transactions is a key area of focus. Currently such fees and incentives can range from 1-8% making saving product offering unprofitable or driving interest rate up for credit ones

Interview tracker – 67 interviews were conducted across an array of deployments

	Country	Organization Type	Title
1	Brazil	Advocacy	Planning and New Business Development
2	Cambodia	Bank	CEO
3	Colombia	Bank	Directora Nacional de Proyectos
4	Colombia	Digital Finance	Directora Comercial y de Negocio
5	Cote d'Ivoire	Bank	Manager of multi-channel services
6	Ghana	Bank	Specialist in Digital Finance
7	Ghana	Bank	Director
8	Ghana	MNO	Business Transformation Manager
9	Ghana	NGO	EPAME Evaluation
10	India	Bank	Managing Director
11	India	Bank	Deputy Vice President
12	India	Digital Finance	Assistant Director General
13	India	Foundation	Chair of IFMR Finance Foundation / Policy Research Analyst
14	India	MFI	Assistant Manager - Marketing & Strategy
15	India	Payments	President, Corporate Strategy
16	Indonesia	Advocacy	Regional Credit Initiation Head
17	Indonesia	Advocacy	Mobile Money Policy Advisor
18	Indonesia	Bank	National Advisor for Green Economy
19	Indonesia	Bank	Head of Sales
20	Indonesia	MFI	Managing Director
21	Indonesia	MFI	Comptroller
22	Indonesia	MNO	Assistant Director

Interview tracker – 67 interviews were conducted across an array of deployments

	Country	Organization Type	Title
23	Indonesia	MNO	Head of Payments
24	Indonesia	NGO	Senior Program Manager
25	Indonesia	NGO	Chief of Party - USAID
26	Indonesia	NGO	Senior Financial Sector Specialist
27	Indonesia	Technology	Head of Government Engagement
28	Kenya	MNO	Head of Orange Money
29	Kenya	MNO	Fraud protection/RM rep
30	Malaysia	Bank	Managing Director
31	Malaysia	Bank	Managing Director
32	Mexico	Bank	Director Inclusión Financiera y Canales Móviles
33	Mexico	Retailer	Commercial Executive
34	Nigeria	Advocacy	Policy & Innovation Fund Manager
35	Nigeria	Bank	Group Managing Director
36	Nigeria	Insurance	Risk Policy Officer
37	Nigeria	MNO	Head of Risk Control and Compliance / COO
38	Nigeria	MNO	Project Manager Mobile Money
39	Pakistan	Bank	Head of Branchless Banking
40	Pakistan	Bank	Product Associate
41	Pakistan	Bank	CEO / Head of Compliance
42	Pakistan	Bank	Product Management & Solution Delivery
43	Pakistan	MFI	Head of Operations
44	Peru	Bank	Development and Innovation Manager

Interview tracker – 67 interviews were conducted across an array of deployments

	Country	Organization Type	Title
45	Philippines	Financial Research	President and CEO
46	Philippines	MNO	Compliance Officer
47	Philippines	MNO	Head of e-Money and Payments
48	Rwanda	Bank	CEO
49	Senegal	Bank	Regional Head Cards and Electronic Banking
50	Senegal	Bank	Directeur Général
51	South Africa	Bank	Regulatory Head and Specialist Advisor
52	South Africa	Bank	Deputy CEO
53	Tanzania	Advocacy	Country Manager
54	Tanzania	Advocacy	Manager
55	Tanzania	Advocacy	Management
56	Tanzania	Bank	Branchless Banking Project Manager
57	Tanzania	Bank	Citi Mobile Partnerships
58	Tanzania	Bank	Assistant Compliance Manager
59	Tanzania	Bank	Specialist Advisor: Digital and Alternative Banking
60	Tanzania	Bank	COO
61	Tanzania	Bank	Sales Manager
62	Tanzania	Energy	Financing Manager
63	Tanzania	Financial Research	Researcher- Financial Inclusion
64	Tanzania	Financial Services	Country Director - Tanzania
65	Tanzania	NGO	Agent Network Coordinator
66	Tanzania	Payments	Head of Business Development, Platform
67	Uganda	MNO	Project Manager