



Self Assessment Risk Management Toolkit – Summary

Objectives of Toolkit

Self Assessment Risk Management



Mobile Money
for the Unbanked

The objectives of the Risk Toolkit are:

- Helps Risk Managers identify and mitigate the risks in their organisation's Mobile Money service.
- Extensible to enable new risks to be added, assessed and managed as they are identified.
- Enables Mobile Money Operators to evaluate their current security controls.
- Provides business with better visibility of those areas where action is needed.

Mobile Money Toolkit Scope

Basic Services



Mobile Money
for the Unbanked

This version of the toolkit covers risks and controls for the following functionality:

- Scheme and technology provided by a single Operator
- Customers provisioned with a stored value e-money account
- Trust account management resides with an external Bank partner
- Transactions are e-money account to e-money account
- Cash-in & Cash-out is through an Agent network
- Customer care can perform transactions on behalf of customers (e.g. reversals)

Other functions (e.g. multi-operator schemes, retail payments, etc) are out of scope for this version of the toolkit.

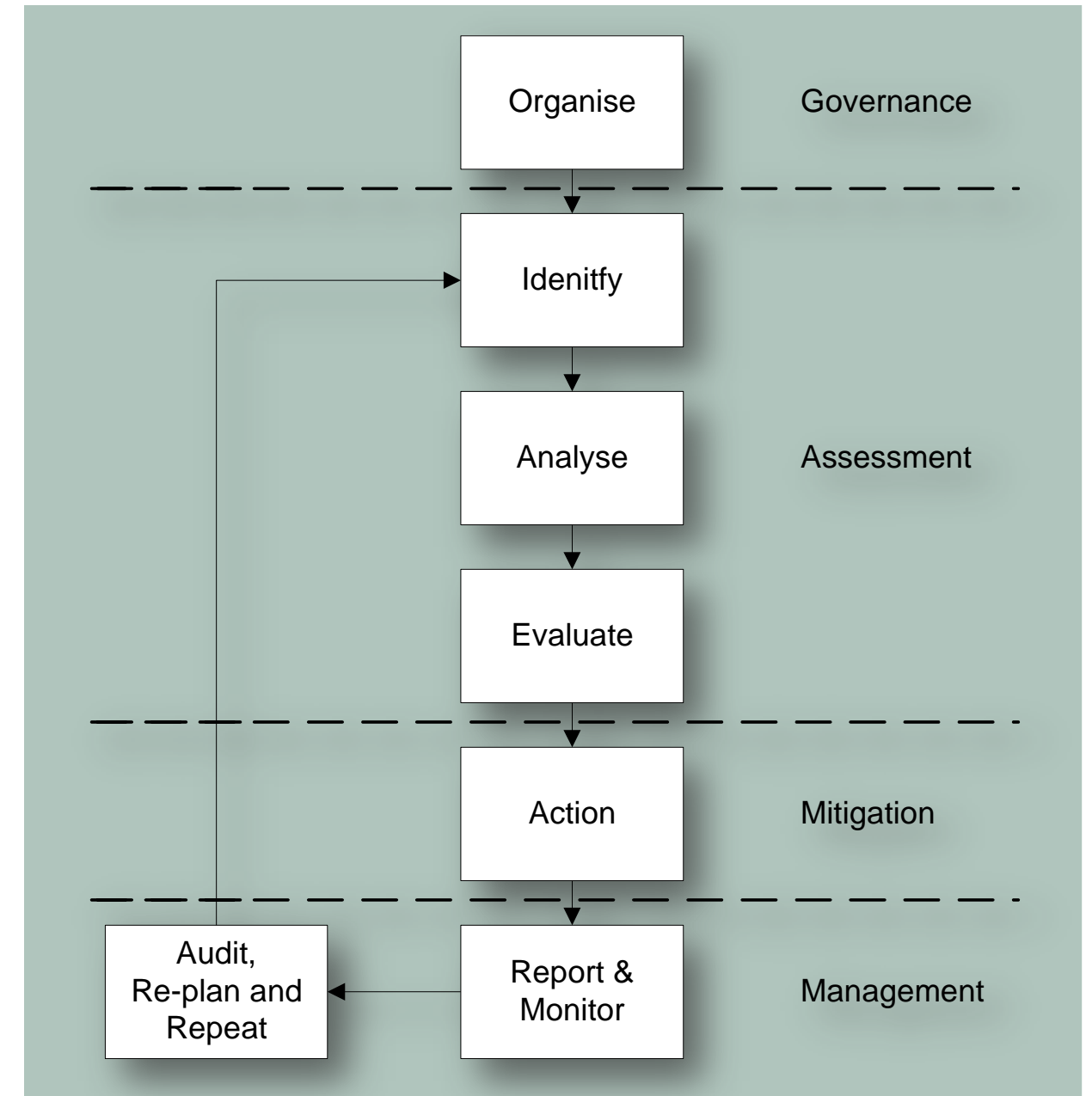
Workflow

Where the Toolkit fits

- Risk management aims for the correct identification and treatment of risk.
- A typical risk management process flow is illustrated in the chart opposite.
- This toolkit can be used during all stages of the risk assessment process, to aid risk mitigation and as an aid to on-going management.



Mobile Money
for the Unbanked



Risk Register

By Stakeholder



Mobile Money
for the Unbanked

- Risk registers are organised by the stakeholder (an individual or organisation)

bearing the risk:

- **Customers**
 - **Agents**
 - **Operators** (i.e. account providers)
 - **Trust Bank**
- For each stakeholder risks are recorded, controls assessed and actions tracked.

category	Risk	Risk Causes	Relevant Controls
Financial Fraud	Customer is charged unauthorized fees by agent (e.g. double dipping) Impact: Financial loss to the customer.	<ul style="list-style-type: none">• Agent may overcharge or have a side transaction fee that is not authorized that they impose on the consumer.• Customers may not understand the complexity of the contract signed, making it possible for them to face additional fees/services without being aware of it.• Lack of clarity of contract could be further exacerbated by language barriers or illiteracy.• Additional government charges, such as VAT, may complicate the disclosure of true costs and tariffs. <p>Example: Double dipping: Agent asks customer to transfer mobile money plus a cash-out fee to agent mobile, agent then offers cash in return bypassing normal platform cash-out process. In this case the customer pays the transfer fee twice, first to move mobile money to recipient and second to move mobile money to agent.</p>	<ul style="list-style-type: none">• Agent commission disclosure• Agent due diligence process• watch list screening - s• Agent commission structure• Clear contracts that fu• Disclosures reasona• groups (i.e. major lang• pictograms)• Penalties for offendin• Service charges clear• Transaction monitorin
Operational	Customer cannot access cash from mobile money account due to lack of agent availability. Impact: Lack of service for the customer.	Insufficient numbers/availability of mobile money and/or bank correspondent agents in a given geography results in consumers not being able to access cash or incurring excessive travel costs and inconvenience.	<ul style="list-style-type: none">• Disclose agent covera• Ensure sufficient cover
Operational	Agent unwilling to perform transaction for customer. Impact: Lack of service for the customer.	<ul style="list-style-type: none">• The agent may be unwilling to perform a transaction because of liquidity management concerns.• Agent may wish to conserve cash by restricting large transactions to more profitably service a larger number of smaller transactions.• Agent is unwilling to serve customer due to discrimination (race, tribe, religion, sex, etc).• Agent is instructed by super agent not to perform transactions during specific hours of the day due to cash	<ul style="list-style-type: none">• Agent commission disclosure• Agent monitoring to e• Agent commission structure• misbehaviour.• Adoption of payment s• optimization of agent a• distribution, cash pick• Penalties for offendin• T&Cs for agents har

Severity

Analysing Impact & Likelihood



Mobile Money for the Unbanked

The current **impact** and **likelihood** is assessed, based on the existing controls.

						Legal / regulatory	Reputation	Financial	Operational	
						<i>Regulatory or legal breach that could lead to disciplinary action, fines, or cessation of service.</i>	<i>Damage to the image of a stakeholder, or the mobile money service itself, or a specific mobile money product .</i>	<i>Financial loss for the stakeholder group, per year. [The % gives a value of financial loss in comparison to the value of the trust fund]</i>	<i>Loss or reduction of operational service for the stakeholder, or increased management effort to maintain the service, because of issues with processes, people, technical systems or external events.</i>	
						Impact				
						5	Forced cessation of service due to regulatory breach or serious legal action	Major, long-lasting national reputational damage	More than 10%	Frequent major breach of SLA with significant downtime.
						4	Incident leading to significant fine by regulator or serious legal action	Significant national reputational impact.	Between 1% and 10%	Occasional major breach of SLA, with significant downtime.
						3	Incident leading to disciplinary action by regulator or minor legal action	Moderate national reputational impact.	Between 0.1% and 1%	Occasional SLA breaches.
						2	Significant breach of internal policy, but not leading to action by	Moderate regional reputational impact.	Between 0.01% and 0.1%	Frequent unplanned outages but within SLA.
						1	Breach of internal policy, not leading to action by regulator.	Localized negative and short-lived reputation impact.	Less than 0.01%	Occasional unplanned outages (within SLA).
Likelihood	1	2	3	4	5					
Probability of occurrence within one year with a material frequency.	Risk is highly unlikely to materialize, or will materialize with negligible frequency	Risk is unlikely to materialize, or will materialize with low frequency	Risk could materialize at some point or will materialize with a moderate frequency	Risk is likely to materialize at some point or will materialize with a high frequency	Risk is highly likely to materialize at some point or will materialize with a very high frequency					
	0-20%	20-40%	40-60%	60-80%	80-100%					

Evaluate & Action

Tolerate or Treat



Mobile Money
for the Unbanked

- Each risk is evaluated to determine whether it:
 - Can be tolerated,
 - Needs to be treated with mitigating actions,
 - Can be transferred to another risk or
 - Should be terminated by removing a process that leads to the risk.
- If action is required, and particularly for high-severity risks, specific activities should be identified for the owners of each risk for improving the controls.
 - The aim is to reduce the severity score.

Extract Reports

Extensible

- Contains three prepared reports:
 - Report 1 extracts high & extreme risks
 - Report 2 extracts risks with outstanding actions
 - Report 3 re-groups risk by user-defined tags
- Uses standard Excel functionality without advanced macro programming.
- Additional reports can be added by local users.



Mobile Money
for the Unbanked

Microsoft Excel - PRJ1420 Risk Management Toolkit v0.2b DRAFT 20140131

SELF ASSESSMENT RISK MANAGEMENT TOOLKIT

By default, this sheet lists the risks assessed as having the highest severity.
To generate the report, hit the 'Report' button to the right.
The report uses the 'Advanced Filter' function. If this is not available, a report will not be generated.
Result range must start at B12 and there must not be blank column headings. The report is sorted on the first three columns.

Generate Report

Mobile Money for the Unbanked

Run on: 31 Jan 2014 11:51 am

Severity	Business Owner ID of Risk	Risk	Action	Actions for improvement	Last Review
Extreme	B-03	The reputation of the financial institution which holds the trust account for the mobile financial account provider is damaged due to its association with an account provider whose payment system is poorly run.	Tolerate		
Extreme	C-01	Customer is charged unauthorized fees by agent (e.g. double dipping).	Tolerate		
High	A-07	Agent loses balance due to failure of a bank holding trust fund, or trust fund is compromised. Impact: Financial loss to the customer.	Tolerate		
High	C-17	Merchant customers are unable to easily convert mobile money into cash, limiting their flexibility to run their business / store. Impact: • Lack of service for the merchant customer. • Merchant uptake of mobile money is restricted.	Treat		
High	O-09	Identity fraud / false accounts: Employee uses their system access to fraudulently create accounts, bypassing identity, credit and watchlist checks, potentially in collusion with fraudsters. These accounts could enable money laundering or terrorist financing. Impact: Financial loss and brand impact to the operator.	Tolerate		

Microsoft Excel - PRJ1420 Risk Management Toolkit v0.2b DRAFT 20140131

SELF ASSESSMENT RISK MANAGEMENT TOOLKIT

By default, this sheet lists the risks identified as having actions outstanding.
To generate the report, hit the 'Report' button to the right.
The report uses the 'Advanced Filter' function. If this is not available, a report will not be generated.
Result range must start at B12 and there must not be blank column headings. The report is sorted on the first three columns.

Generate Report

Mobile Money for the Unbanked

Run on: 31 Jan 2014 04:36 pm

Business Owner ID of Risk	Last Review	ID	Risk	Severity	Actions for improvement	Action	Actions for improvement
		C-17	Merchant customers are unable to easily convert mobile money into cash, limiting their flexibility to run their business / store. Impact: • Lack of service for the merchant customer. • Merchant uptake of mobile money is restricted.	High		Treat	
		O-22	Mobile Money system cannot perform transactions due to lack of system availability. Customer Support cannot access account details to provide support to customers and agents. Impact: • Financial loss and brand impact to the operator • Regulatory fines for serious systemic failings	Negligible	Update controls.	Treat	Update controls.

Risk Assessment Assurance

Verifying Assessments



Mobile Money
for the Unbanked

- Senior managers need to be confident that the risk assessment has correctly identified, evaluated and actioned the most key risks.
- Reports to senior managers in the organisation, business owners of risks and, if required, external parties such group or regulators are likely to be required.
- Part of a risk manager role is to monitor, on an on-going basis, key metrics from the business (Key Risk Indicators (KRIs)) that can inform whether risk are materialised.
- The specification of KRIs is currently outside the scope of this toolkit edition. However, the assurance information required to verify that controls are in place and working is the basis of a set of suitable indicators. This may be addressed in future versions of the toolkit.

When and What

Timescales and Resource



Mobile Money
for the Unbanked

- **How Often** - a full audit is recommended on an annual basis. Individual risks with specific actions need to be monitored to ensure actions are completed.
- **How Long** - a full risk management process can be done in two to three weeks (with appropriate commitment from the business)
- **Resources** - completing the toolkit is a manual exercise through document review and interviews. Confirming that controls are implemented requires access to assurance information. Changes to systems or additional reporting may be needed to generate the required assurance information.



Mobile Money
for the Unbanked

End

BILL & MELINDA
GATES *foundation*



ON
OMIDYAR NETWORK™