

EFInA Innovation Forum

Challenges of Building and Operating Mobile Money Services in Nigeria

Susie Lonie : 15th May 2012

Mobile Money or Mobile Banking?

Mobile Banking

- Customer has a conventional bank account
- His money is held in his bank account
- He can choose to use his phone as a channel to make payments from his account...
- ...or he can use other channels eg bank teller, ATM, in store POS device

Mobile Money

- Customer has no regular bank account - he has a MM account linked to his phone number
- His money is held in a pooled single account at a bank
- He uses his mobile phone to make payments from his account
- The MM system tracks ownership of the money in the pooled account

MM provides REAL TIME money movement

Mobile Money is a new industry

- 123 live mobile money deployments worldwide
- 90 more are in progress



Less than 10% of Mobile Money Services are successful so far

What are the industry challenges?

**Agent
management**

Business Case

**Inappropriate
regulation**

Banking culture

**Agent
Liquidity**

**Software
immaturity**

**Relationship
with Regulator**

Telecoms culture

**Shortage of
industry experts**

**Disruptive
technology**

**High
start up costs**

**Wrong
assumptions**

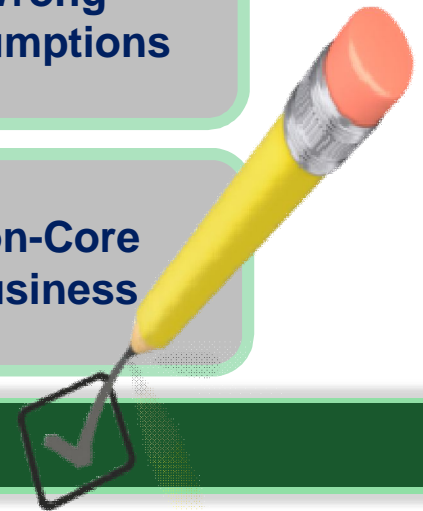
**Interoperability &
Interconnection**

**Consumer
education**

**M-PESA in
Kenya**

**Non-Core
Business**

MM is a new and immature industry



Pilot with a limited number of participants to ensure all the business processes work and everyone knows what to do

Ensure that any transaction can be reversed by an approved operator

**Make sure that every agent assistant knows what to do
– train, train again and visit regularly**

**Ensure that
reporting
is
working
properly
before
launch**

**Have full
escalation
and fault
resolution
processes in
place**

Monitor Agent e-float from day one

**Keep the customer offering
simple and clear**

Build for large scale

A core operating team who REALLY understands the system is essential

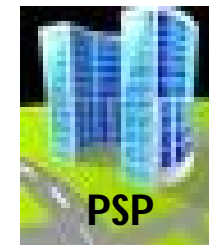
Company Assumptions – the first hurdle

This is
just an
extension of
my core
business

My people are
experts so
they will
know how
to do this

My organisation is
set up perfectly to
offer this kind of
service

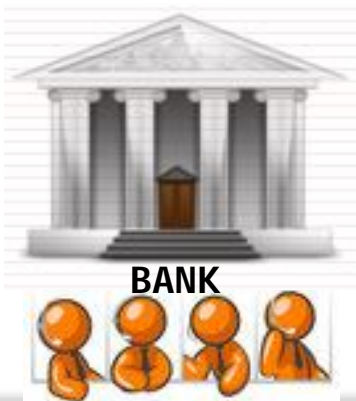
It's an easy win!
Just look at Kenya



Mobile Money is a new type of business and it is not easy

Company Culture – the second hurdle

- We are prudent and risk averse
- We will not upset our relationship with the financial regulator
- ...who is NCC?



- We are a young and innovative industry
- Let's get out there fast and learn as we go
- ...who is CBN?



Partnerships between Banks and Telcos are not without their problems

Challenges: Mobile Money Technology



Mobile Money technology is relatively new and there is not yet clear best practice for the design

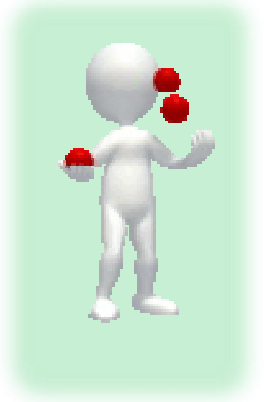
- **The customer experience varies by vendor and channel used**
- **The Agent structure and services available varies by vendor**
- **The back office functionality is not standardised**

Telco systems are of variable quality, capacity and availability

- **MM has many core Telco touch points**
- **The MM SLA need to be of a similar standard to the network SLA**

APIs are available but the data carried may be different to bank expectations

A high level of on-going project management is needed



There are two kinds of Mobile money interoperability

1. Interconnection with other Financial Systems

- APIs Allowing financial transactions to be processed in the same way as from a regular bank account
- Bill payments/ ATM integration/ Bank to MM/ MM to Bank/ POS integration
- Each vendor offers some form of integration, most need development

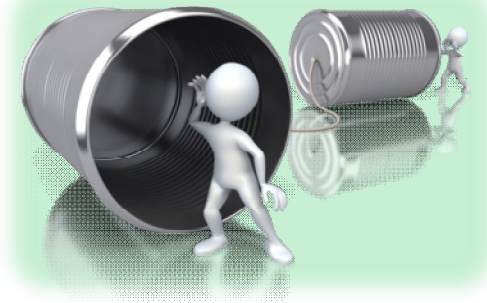
2. Interconnection between Mobile Money systems

Mobile Money systems are currently closed loop & do not operate on the four party model

- There are no scheme rules governing how they should operate in real time
- There are no financial rules governing how interoperability should be charged
- The business case for Mobile Money interoperability is not clear

The former can be done: the latter is not yet commercially feasible

Challenges: Connectivity



Mobile technology provides several channels for you to communicate with your customers

	SIM Toolkit / SMS	USSD Gateway	Voice Prompt (IVR)	Mobile Internet
STRENGTH	<ul style="list-style-type: none"> ❖ FRIENDLY USER INTERFACE ❖ INSTRUCTIONS ENCRYPTED SMS 	<ul style="list-style-type: none"> ❖ AVAILABLE ON ANY MNO SIM ❖ MENU UPDATED ON GATEWAY 	<ul style="list-style-type: none"> ❖ AVAILABLE ON ANY MNO SIM ❖ READING SKILLS NOT REQUIRED 	<ul style="list-style-type: none"> ❖ FRIENDLY USER INTERFACE ❖ SECURE & ENCRYPTED
WEAKNESS	<ul style="list-style-type: none"> ❖ TECHNICAL ACCESS TO SIM ❖ SIM SWAP MAY BE NEEDED 	<ul style="list-style-type: none"> ❖ LESS INTUITIVE USER INTERFACE ❖ INSTRUCTIONS NOT ENCRYPTED 	<ul style="list-style-type: none"> ❖ SMS REPLIES ARE WRITTEN ❖ INSTRUCTIONS NOT ENCRYPTED 	<ul style="list-style-type: none"> ❖ NEED SMART PHONE TO USE ❖ NEED DATA COVERAGE

Choosing your channel is a blend of cost/ availability/ user experience

Challenges: The Agents

- Agents need to deposit their own cash to get e-money float
- In the first years there are few customers and few transactions
 - Many agents make little return from this float at first
 - Running out of float is common leading to poor customer service
- Plus they need vetting and training and cash float...

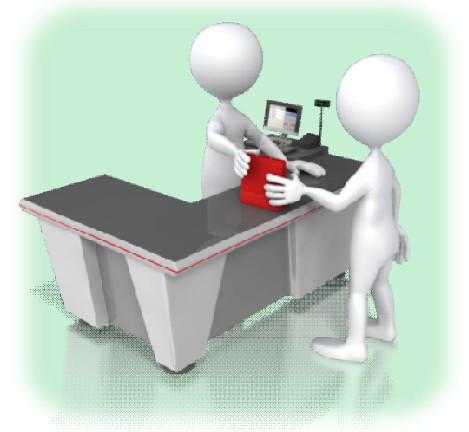


Strategies are needed to keep agents engaged and investing

- *Reward registration of ACTIVE customers well*
 - *Reasonable commission for transactions*
 - *Bonuses for good performance*
 - *Super-Agent network for fast cash/ e-money turnaround*
- ...and penalties for poor performance and *inappropriate practices*

You need the Agents much more than they need you

Challenges: Agent Assistants



The Agent Assistant is your first point of customer contact

Agent transactions must be a happy experience for all

- ❖ Inspiring confidence in the customer that their money is safe
- ❖ Inspiring confidence in the assistant that they can do the job

The assistant is your strongest marketing resource

- ✓ An ambassador for MM within their community
- ✓ An unofficial (and free) trainer to your customers
- ✓ Providing unofficial “first line” customer care

Agent Assistants need excellent training

Challenges: Consumer Proposition

The customer proposition defines **WHO you are targeting**

Rural unbanked/ small traders/ diaspora/ low paid workers...

And **WHY** they will want to use the service

To send money home

To pay their bills easily

To store money safely

To pay their staff salaries and expenses

To support their kids

For emergencies

For airtime

The customer proposition needs to be **clear and single-minded**

KEEP IT SIMPLE !

Communication needs to be “hands on” with a lot of BTL



Who is your customer and what problem are you solving for him?

Challenges: Training

Everyone must learn the customer, agent & merchant “user experience” plus...



INTERNAL

- **Operations** – account creation and editing
- **Customer Services** – agent and consumer account & transaction queries
- **Finance** – especially e-money vs bank account reconciliation
- **Product & testing teams** – system functional architecture and usage
- **Technical** – system and interfaces to other services & their limitations

EXTERNAL

To train agents, merchants **and assistants** a field training team is necessary

- **The assistants need to be trained in store - not in a classroom**

Then the customers need to be taught to use the service...

Dedicated internal & external training resource is needed

Challenges: Operations

The scheme operator has many complex tasks to perform

- Recruit and set up agents
- On-going agent management
- Manage customer registration procedures
- Financial operations – control account cash in and out
- Control account reconciliation
- AML monitoring and Regulatory reports
- Customer Services
- Technical operations



Agent Set Up

Agent
document
collection

Agent
vetting

Sign
contracts

Create
agent on
MM system

Train
managers

Train
assistants

Deliver
handsets &
POS

Agent
go live

Full detailed Business Processes NEED TO BE USED



The MM Finance team needs additional resource

- Reconciling e-money vs “real” money in bank
- Creating e-money when an agent deposits float at a bank
- Removing e-money when an agent requests float withdrawal
- Reconciliation & payment of agent commission
- Transfer of bill payment principal to PSPs and utilities
- Reversing mistaken transactions
- Performing reconciliations for sms, airtime sales, ussd etc

Processes are needed to minimise the sign-off process

Structure the business to minimise the number of bank transfers

A Legal Business Structure must be agreed

- And contracts between the parties signed

Then contracts need to be created for

- Customers
- Agents
- Agent Aggregators

**THESE MUST BE
SHORT AND SIMPLE**

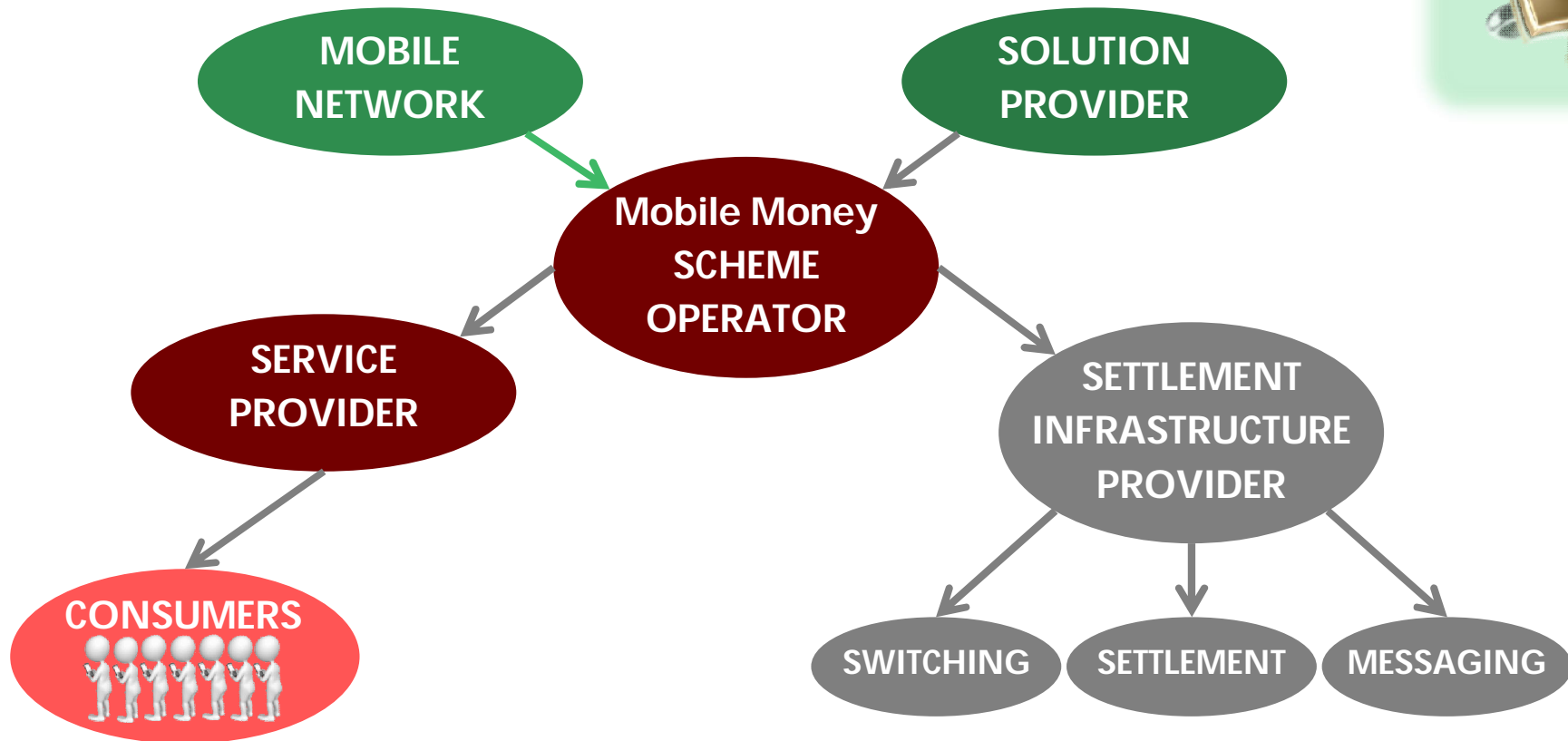
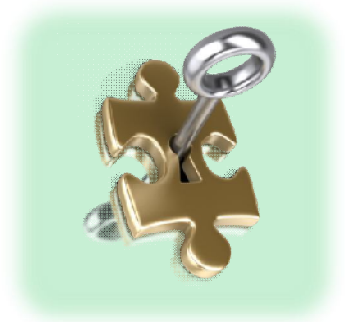
(Expect the Agent contracts to require negotiation and amendment)

- Merchants, Utilities, PSPs (for C2B payments)
- Employers (for B2C payments)
- Switch providers
- Telecoms service providers



Legal Support requirements are significant

Challenges: Regulation



Who “owns” the customer? What does “own” mean?



How can EFInA help you to overcome these challenges?

- ❖ Sharing **best practices** from successful mobile money services
- ❖ Creating a **working group** for tackling shared issues with one voice
- ❖ **Initiating/ funding projects** to serve all Nigerian mobile money schemes

Best Practice: Organisational Structure

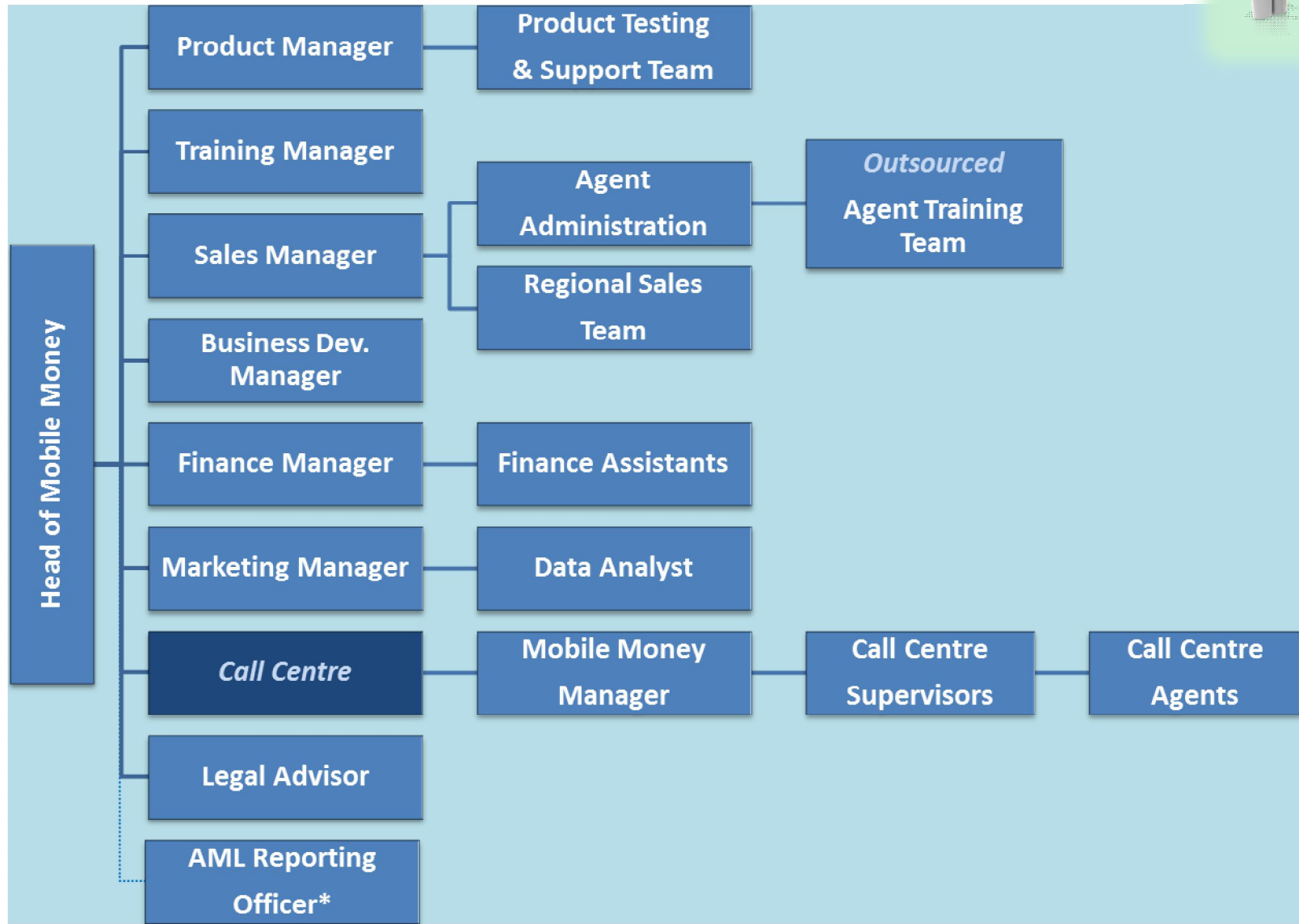


1. A core team of specialists from key disciplines seconded to Mobile Money and supported by other specialist departments
2. Small team of “service owners” with everything else devolved to specialist departments
3. A new division with dedicated resource from all disciplines

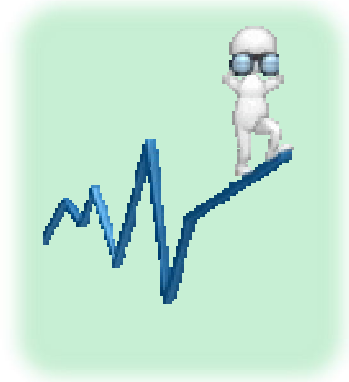


Dedicated resource in each area is needed whatever the structure

Best Practice: Dedicated Staff for Start-up



Best Practice: Reporting and KPIs



Reliable reports must be available from the day you launch

- ❖ **For regulatory compliance**
- ❖ **For competent business administration**
- **Daily reports are needed for e-money vs bank balance reconciliation**
- **Monthly reports on standard AML measures**
- **Business administration reports**

Key revenue generation variables are:

number of active customers

txns per customer per month

registration commission

No of active agents

airtime discount

gross/ net revenue

transaction split by type

agent transaction commission

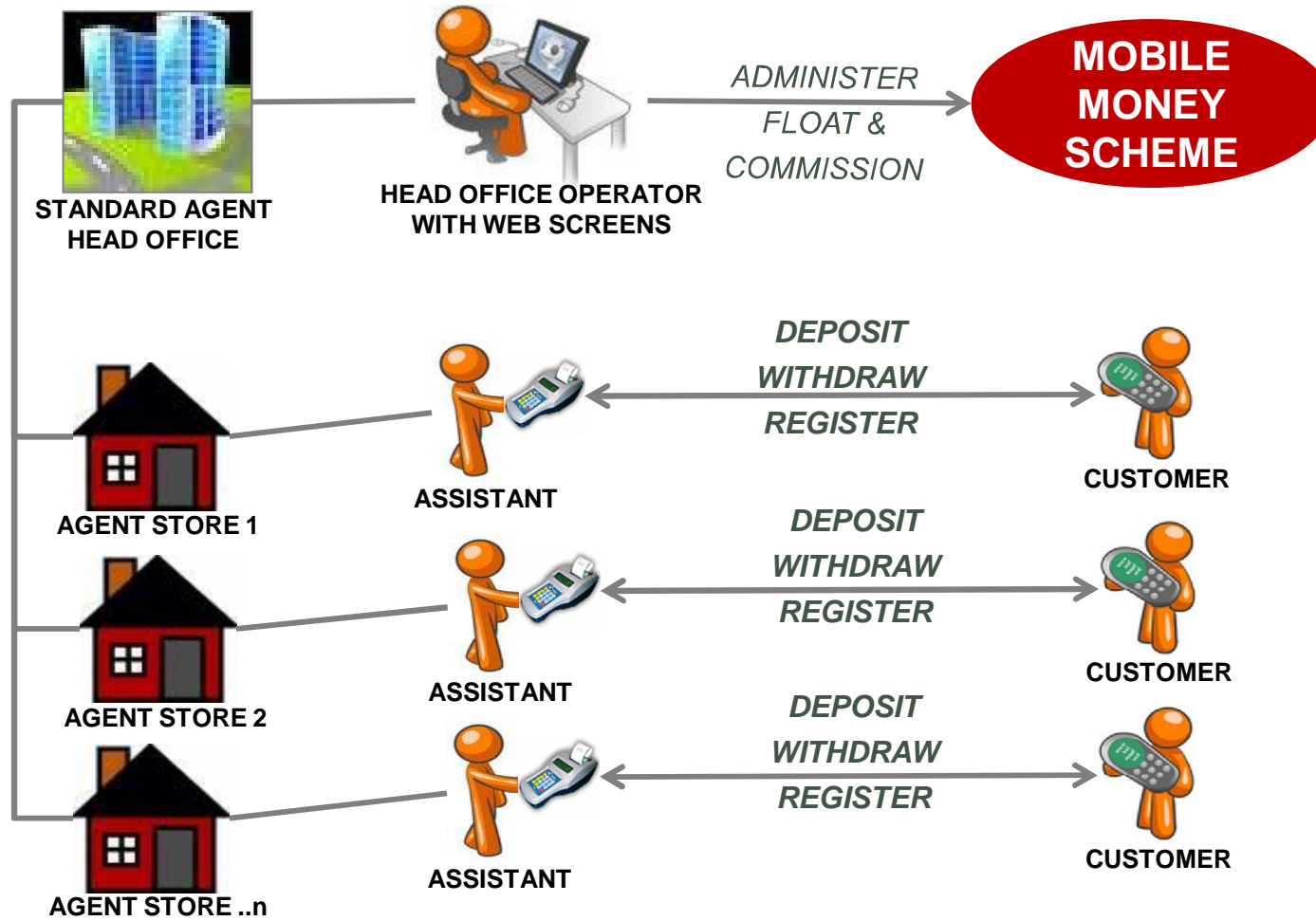
Agent quality of service

size of control account

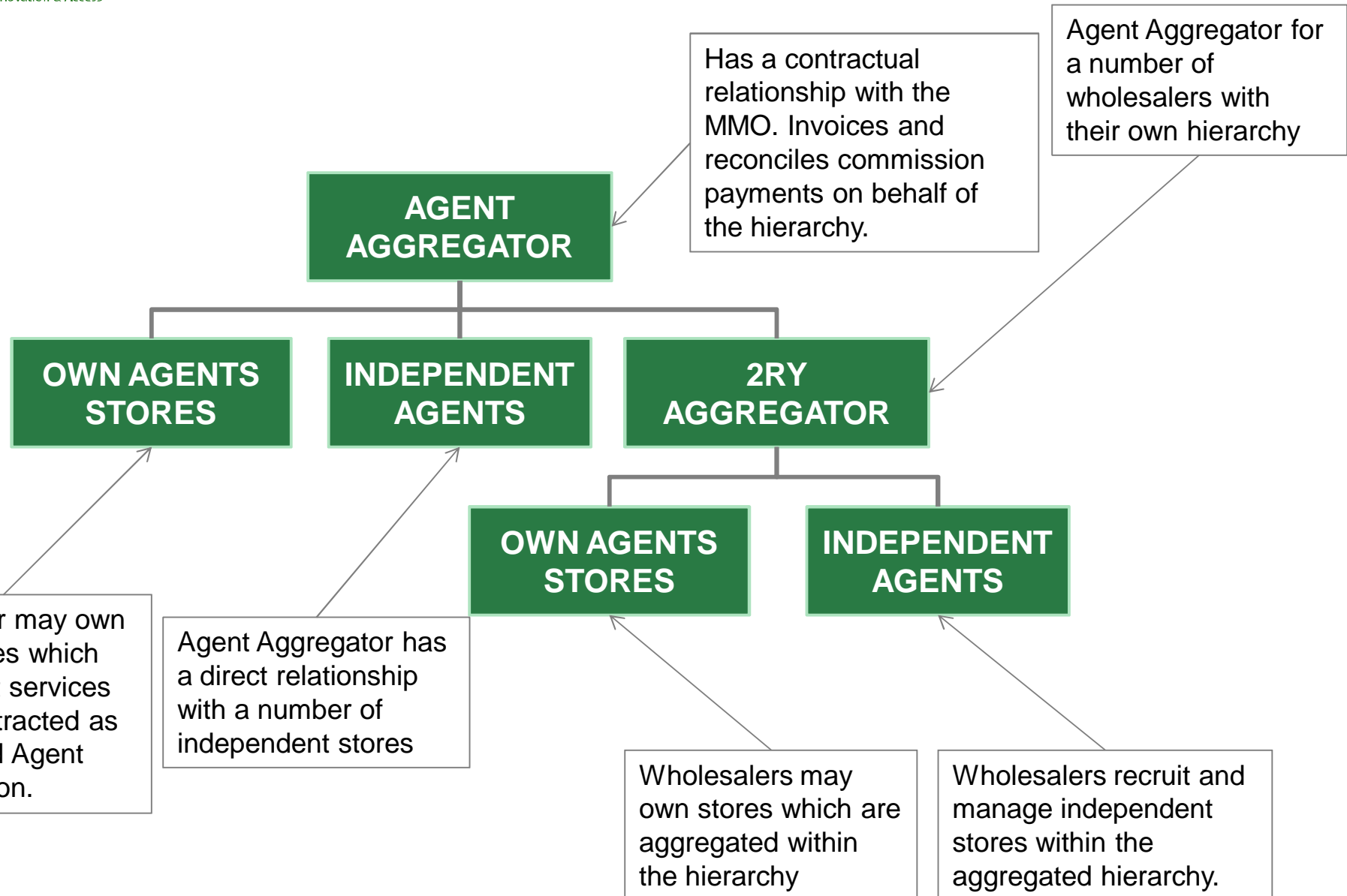
Ensuring a common understanding of minimum requirements

Best Practice: Standard Agents

The Agent Organisation owns several stores

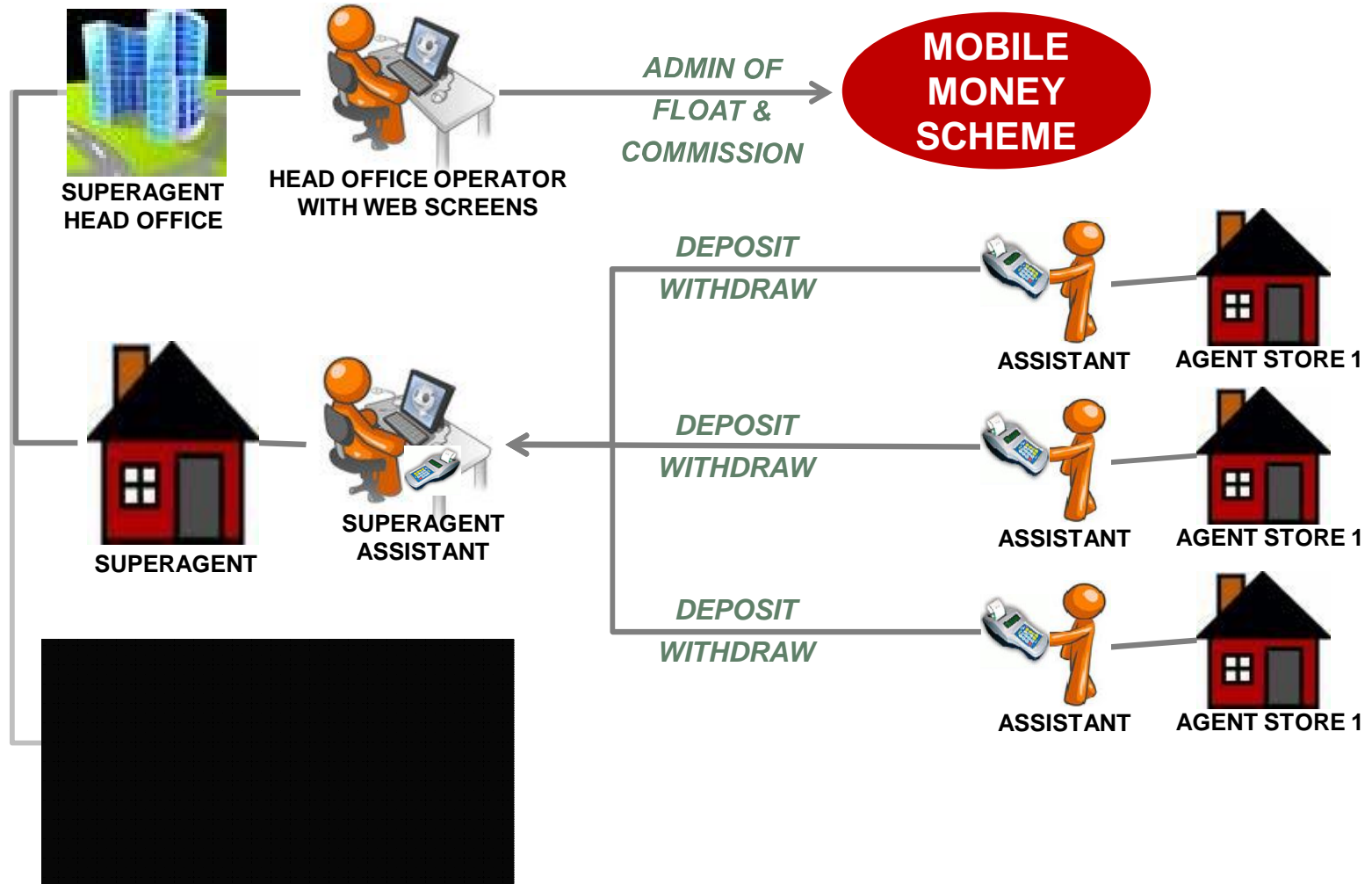


Best Practice: Agent Aggregators



Best Practice: SuperAgents

SuperAgents act as Agents to other Agents to assist with float management
- they may also act as agents to customers if they wish



Best Practice: Business Case



There are 3 ways to earn direct income from Mobile Money

**TRANSACTION
COMMISSION**

**AIRTIME
DISCOUNT**

***INTEREST ON
E-FLOAT ACCOUNT**

And 3 indirect ways

**CUSTOMER
ACQUISITION**

***CHURN
REDUCTION**

***INFRASTRUCTURE
OVERHEAD**

Typically a successful deployment takes at least 2 years to break-even (direct)

The business case must be built from the bottom up

Best Practice: Consumer Tariff Guidelines*



REGISTRATION

- FREE

DEPOSIT

- FREE

AIRTIME TOP UP

- FREE (NO MARK UP)

WITHDRAW (UNREG)

- FREE (SENDER PAYS)

SEND P2P (REG)

- FLAT FEE

SEND P2P (UNREG)

- STEPPED REG CHARGE
(P2P + WITHDRAW) x 1.4

WITHDRAW (REG)

- STEPPED BY VALUE

ATM WITHDRAW

- 10 - 15% >AGENT W/D

PAY BILL (C2B)

- SAME AS P2P +/-
- WHO PAYS ?

BULK PAY (B2C)

- SAME AS P2P +/-
- BUSINESS PAYS

MM TO BANK

- SAME AS P2P +/-
- SENDER PAYS

BANK TO MM

- FREE TO MM
- BANK CHARGES

Charged transactions must cover agent cost of deposit

* Based on current successful services

Common Forum: Regulatory Framework



The regulatory framework is very clear on some points but interpretation is required on others

- ❖ **EFInA could work with CBN to create industry guidelines based upon the mobile payments framework for example**
 - ❖ Customer registration requirements for each tier
 - ❖ Implement agent banking guidelines
 - ❖ Agent recruitment and qualification requirements
 - ❖ Transaction receipts and their content
 - ❖ Interoperability between mobile money schemes
- ❖ **EFInA could work with NCC to ensure better collaboration between scheme operators and MNOs**

Ensuring a common understanding of minimum requirements

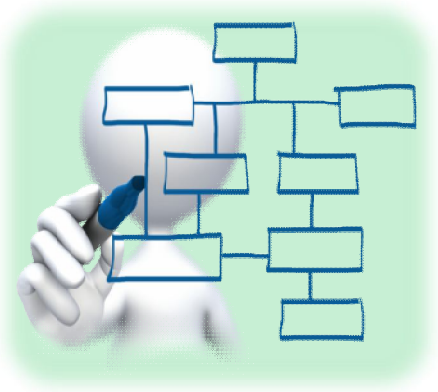


There are a number of shared training challenges

- ❖ **Jargon-busting – creating a common language for mobile money**
- ❖ **Best practice training materials templates for consumers and assistants**
- ❖ **Standardised AML training for agents and assistants**
- ❖ **High level training on telecoms infrastructure and connectivity**
- ❖ **High level training on financial switching infrastructure and connectivity**
- ❖ **Workshops on specific topics –business processes, agent structures etc**

Education is essential for mobile money to thrive

Initiating Projects: Agent Management



Agent liquidity needs to be tackled, for example by:

- ❖ **Creation of low/no interest Agent Float Loan schemes**
- ❖ **Promoting Super Agent services to accelerate e-money recirculation**
- ❖ **Creating a cooperative shared agent recruitment scheme?**

What are your major challenges?

Initiating Projects: Agent Management

Thank you!



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Proposed EFInA Actions



1. Create best practices documentation / workshops

- ❖ Jargon-busting – lets agree to a common language for Mobile Money
- ❖ KPIs and reports – what needs to be measured to run a successful business
- ❖ Standardised AML training – for agents / assistants
- ❖ Key topic reviews – agent management, tariffing, organisation structure, telecoms / banking infrastructure, business process evolution
- ❖ Training materials – white labelled for you to customise

2. Create a working group for tackling shared issues with one voice

- ❖ Industry guidelines for all operational areas
- ❖ Determining HOW interoperability is supposed to work
- ❖ Collaboration with telcos via NCC

3. Initiating/ funding projects

- ❖ Shared agent recruitment via aggregators
- ❖ SuperAgent engagement