



WR, SWIFT, Musoni case and PAYaaS

How do they all hang together...

Ruud JM van der Horst

- I. WR (and SWIFT)
- II. Musoni case
- III. BOSaaS and (q)PAYaaS

Workers' Remittances

Money-flows from migrants to the home-base.

In Swift words: Cross-border, person-to-person payments of relatively low-value.

The Swift words exclude the in-country flows

Problems to solve for effective handling of WR

- In-payments
- Safe transfer
- Out-payments

In other words: collection, transfer and distribution, all with their specific problems.

Serious money

Source Eurostat (ec.europa.eu/eurostat)

In million €:

- 2009 Outflow from Romania: 174 of which In-EU 85 and Out-EU 89
- 2009 Inflow to Romania: 3.026 of which In-EU 2.668 and Out-EU 358

Dominant players

- MoneyGram
- Western Union
- Hawala (see a.o. [//en.wikipedia.org/wiki/Hawala](http://en.wikipedia.org/wiki/Hawala))

Problems solved by current players

MoneyGram and Western Union are dominant players in the safe transfer of money and are often being used by the small financial institutes (MFI's).

Hawala has a “complete ECO-system” (collection, transfer and distribution), is fully based on trust and is not regulated.

SWIFT and WR

SWIFT has entered the “WR market” in order to offer an alternative to MoneyGram and WesternUnion. (And to be honest, practice shows that everywhere where alternatives are offered, costs for transfers go down)

BIS supports, with its qPay, the SWIFT solution.

“Open” problems

- Collection
 - SWIFT is the messaging system from and for the Banking world. WR are small payments from (illegal?) migrants. Banks have to open accounts before being able to make the related transfers. Accessibility?
- Transfer
 - Investments are needed in the infra of Banks.
- Distribution
 - Money flows are often intended for the more rural areas of a country. Even in overbanked countries, outlets are limited in rural areas. And realize that going through Correspondent banking has (relatively) high handling costs.

Potential solutions for “Open” problems

- **Collection**

- Has to be accessible:
 - Can retail chains be used as “Point of Collection”?
 - Can voucher or card systems be used to build “credit”?
 - What role can the mobile phone play?

- **Transfer**

- A trusted party is highly likely necessary for “Clearing and Settlement”, but is it necessary to have (potentially) multiple banks involved in a small transfer? Could one trusted party support an “Eco-system” for WR?

- **Distribution**

- Has to be accessible:
 - Can retail chains be used as “Point of Distribution”?
 - What role can vouchers or debit cards play to distribute the “collected credit”?
 - What role can the mobile phone play?

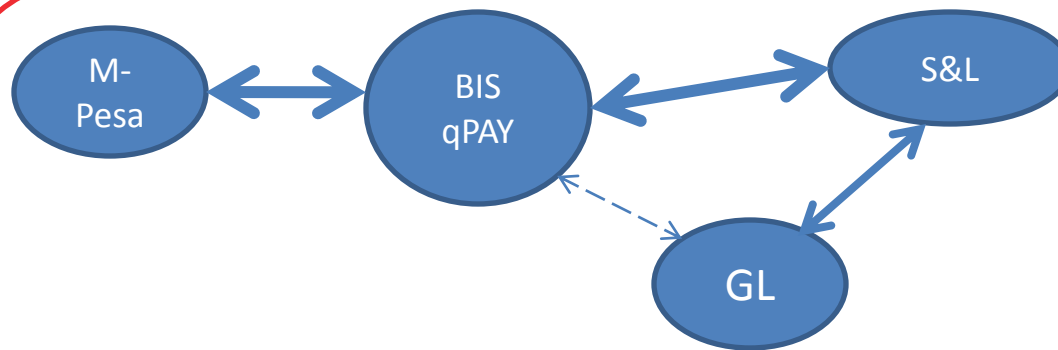
Musoni (musoni.eu)

- Privately funded Dutch/English initiative with HQ in Amsterdam.
- Wants to exploit MFI's in Kenya, Tanzania and Uganda plus....
- Wants to distinguish itself from other MFI's by:
 - going 100% mobile
 - superior MIS (instead of “traditional xls”)
 - a central services concept (Back Office Support as a Service, BOSaaS)
- Has the high interest (also by way of financing) of a big bank which has many operations which could benefit from a successful Musoni BOSaaS.
- First branch in Kenya open and launch first 100 customers: second half of April 2010
- October, 2010: 2000 active customers, 2nd branch operational, target for year end: 5000 active customers.
- Currently only M-Pesa is used and all customer transactions are handled through M-Pesa.

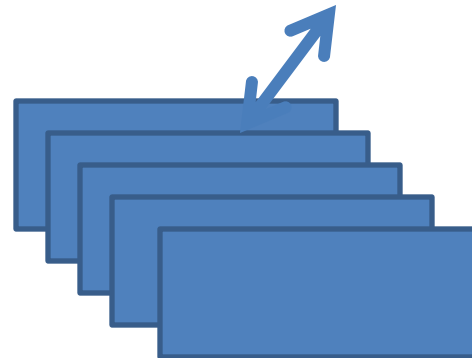
M-Pesa a.o.

- Built in a joint effort with Vodaphone.
- Most successful mobile payment platform (Zain tries to copy..)
- Over 6.5 million users.
- Max transfer amount KS 35000 (€350), max holdings on account KS 50000
- All outlets of Safaricom (parent company M-Pesa) can act to facilitate the switch from mobile money to common money and vice versa.

Musoni architecture (WIP)



BOSaaS in
Amsterdam



Operations in
Kenya

Control processes in Musoni BOSaaS

- Operations in Kenya, money flows from Amsterdam
- Amsterdam computers fully hosted
 - VPN
 - Strict firewalls
 - Strict separation between test, acceptance and production
 - Data consistency checks
 - Daily back-up of pre and post EOD
- Kenya computers
 - Can be fully controlled from Amsterdam
 - Four eye principle
 - Stripped from all unnecessary software
 - “Chastity belts”
 - Only mail and internet access through central computers
 - No local IT staff

- For BOSaaS, Musoni uses qPAY as an Enterprise Service Bus, so has extended the functionality beyond payments only.
- In a more limited use of qPay, so for payments only and without the full backoffice support of BOSaaS, qPAY can also be used “as a Service”

- BOS gives back-office services in addition to what basic PAY services are implemented
- Using payment hosted services needs special care on security (like encryption for hosted files) as it runs in the (semi) public domain

IF we could “marry” the Musoni approach with the WR collection and distribution problems....

.... We already have a (technical) bridge: qPay