

*elec*trum

**MamaMoney**

UCT 7<sup>th</sup> May 2015

Custom Software + Innovative Products + Expert Consulting

ACCEPT  
PAYMENTS

SELL  
PRODUCTS

DELIVER  
SERVICES

2014

ONE BILLION

TRANSACTIONS

ZERO

DOWNTIME



# Zimbabweans in RSA

- 1 – 5 Million (1.8m)
- Looking for work
- Have family in Zimbabwe
- Want to send money home



# Money in Zimbabwe

- ±19 Banks
- Bank Accounts and Cards
- Increasing use of Mobile Wallets
- Dollarization



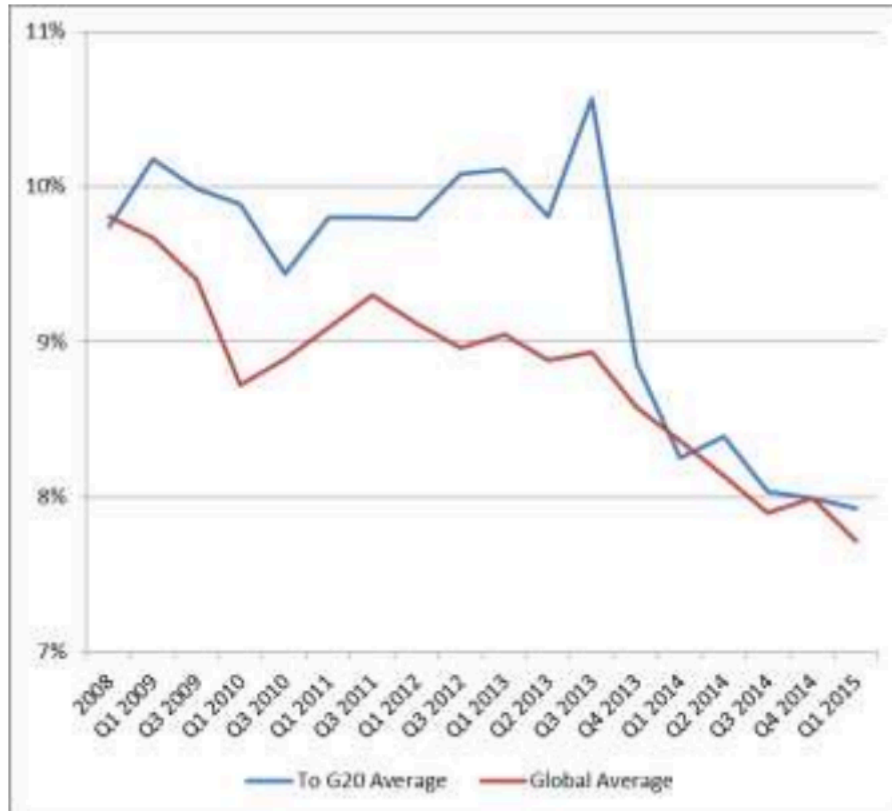
# Cross Border Payments

- Informal
  - Friends and Family
  - Taxi's and Buses (10 – 20%)
- Networks
  - VISA / MasterCard (1-5%)
  - SWIFT (\$20 + 1.5%)
  - MoneyGram / Western Union (12 – 20%)



# Cross Border Payments

Figure 6 Average cost of sending USD 200 to G20 countries



South Africa remains the most costly G20 country to send remittances from, with an average of 18.00,





Goal

5%

# How to be cheap

- Build for scale (API's, automation...)
- Avoid UI work - Outsource to the pro's
- Keep it simple (simple products, simple reporting, scope creep)
- Pilot quickly (Beta release)
- Help customers to help themselves
- Not too many integrations...



# Integrations

- Outgoing
  - SOAP XML to Clickatell SMS
  - SOAP XML to Zim Banks
  - XML Blobs to Reserve Bank South Africa
- Incoming
  - RESTful API for web interfaces (x3!)
  - SOAP XML for Bank Notifications
  - SOAP XML for Clickatell USSD / SMS



# How money *actually* moves

Only Banks get to touch the green stuff

1. Create Obligation (not real money)
2. Do Settlement (real money)



# USSD Overview

- USSD Overview
  - Message Structure
  - Sequence of steps
- Problems
  - Flow
  - Sessions
  - Input Validation
- Solution
  - State Machine

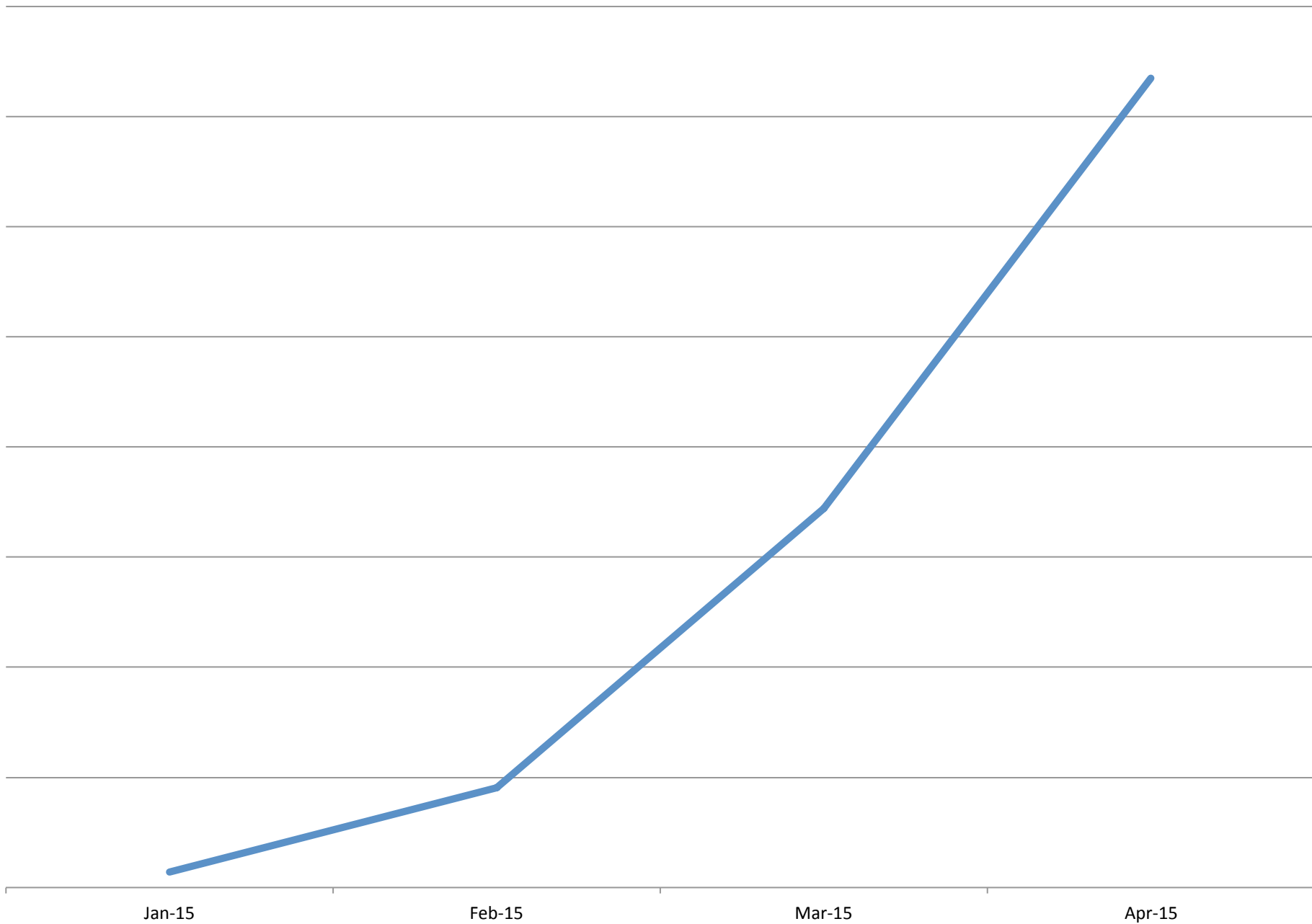


**1,370.00 ZAR**

3,410.00 ZAR

Firm	Product	Fee	Exchange Rate Margin (%)	Total Cost Percent (%)	Total Cost (ZAR)	Transfer Speed	Network Coverage
<a href="#">Mama Money</a>		68.50	-0.04	4.96	67.95		
<a href="#">First National Bank of South Africa</a>		70.00	1.62	6.73	92.20		
<a href="#">MoneyGram</a>		151.64	0.27	11.34	155.36		
<a href="#">ABSA</a>		199.50	1.41	15.97	218.79		
<a href="#">Western Union</a>		179.64	2.87	15.98			
<a href="#">Standard Bank</a>		240.00	0.80	32			
<a href="#">Nedbank</a>		229.00	1.63				





**electrum**

**Thank you – Any Questions?**

We're hiring for winter vac!

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