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%)
South Africa remains the most costly G20 country to send remittances from, with an average of 18.00, followed by...
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
<table>
<thead>
<tr>
<th>Firm</th>
<th>Product</th>
<th>Fee</th>
<th>Exchange Rate Margin (%)</th>
<th>Total Cost Percent (%)</th>
<th>Total Cost (ZAR)</th>
<th>Transfer Speed</th>
<th>Network Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mama Money</strong></td>
<td></td>
<td>68.50</td>
<td>-0.04</td>
<td>4.96</td>
<td>67.95</td>
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<td></td>
</tr>
<tr>
<td><strong>First National Bank of South Africa</strong></td>
<td></td>
<td>70.00</td>
<td>1.62</td>
<td>6.73</td>
<td>92.20</td>
<td>3-5</td>
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<tr>
<td><strong>MoneyGram</strong></td>
<td></td>
<td>151.64</td>
<td>0.27</td>
<td>11.34</td>
<td>155.36</td>
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<tr>
<td><strong>ABSA</strong></td>
<td></td>
<td>199.50</td>
<td>1.41</td>
<td>15.97</td>
<td>218.79</td>
<td>3-5</td>
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<tr>
<td><strong>Western Union</strong></td>
<td></td>
<td>179.64</td>
<td>2.87</td>
<td>15.98</td>
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<tr>
<td><strong>Standard Bank</strong></td>
<td></td>
<td>240.00</td>
<td>0.80</td>
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<tr>
<td><strong>Nedbank</strong></td>
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<td>229.00</td>
<td>1.63</td>
<td></td>
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Thank you – Any Questions?

We’re hiring for winter vac!

careers@electrum.co.za