Vodafone’s IoT Solutions

Improving lives through connectivity
• Smart Cities and beyond: Smart Communities
• M-Pesa as the base for Innovation
23.4m
Active customers (30 day)

3.4bn
Transaction processed in FY 14/15

18%
Year-on-year customer growth

273k
M-Pesa active outlets
Facilitating access to Maternal Health, Tanzania

**The Facts**

430% Increase in annual surgeries

3,000+ Fistula surgeries performed

**COMMUNICATIONS**

**HEALTH INFORMATION**

**FUNDS FOR TRANSPORTATION TO HOSPITAL**

Patient

Community Health Workers/Hospital

Patient

Community Health Workers/Hospital
mVacciNation in Mozambique

Mobile patient registration:
- ID assigned
- Vaccination record created

Local health facility:
- Digitalises records
- SMS communication with patient
- SMS appointments
- Supply chain management

Central Administration:
- Analytics
- SDG monitoring
- Supply Chain Management

Aggregate health:
- Statistics
- Supply Chain Management
- SDG monitoring
- Targeted financial assistance

Confidentiality Level - C2 Vodafone Restricted
## Improving Management: Connected Farmer

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Value created</th>
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<tbody>
<tr>
<td><strong>Farmer Registration</strong></td>
<td>Mobile account and farm details are recorded, creating a valuable database of farm suppliers</td>
<td>• <strong>Improved workforce management</strong> and reduced risks through better oversight of the value chain</td>
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<td>• Enables targeted communication based on location</td>
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<td><strong>Farmer Communication</strong></td>
<td>SMS for farmers to alert them to a range of topics, including efficient practices, weather, training and important customer information, or collect farmer responses</td>
<td>• <strong>Greater engagement of farmers and training</strong> enabling enhancement of crop quality and productivity</td>
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<td>• <strong>Higher productivity</strong> driven by data supplied by farms</td>
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<td><strong>Payments and receipts</strong></td>
<td>Mobile good receiving with weight, quality, price and payment schedule. Use of mobile money to pay farmers,</td>
<td>• Transparency and trust</td>
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<tr>
<td></td>
<td></td>
<td>• Decreased risk of fraud</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reduced costs by removing cash handling</td>
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<td></td>
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<td>• Record history to help access to credit</td>
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<tr>
<td><strong>Loan Management</strong></td>
<td>Disbursement and repayment of agribusiness loan capital through M-Pesa</td>
<td>• <strong>Access to finance for smallholders</strong> enabling scale</td>
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<td>• Easier administration and tracking of loan repayment</td>
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<td><strong>Traceability</strong></td>
<td>Track produce from buying/aggregation centres and remedy quality issues with individual farmers</td>
<td>• <strong>Improving quality via identifying farmers with lower yield and identifying non compliance</strong></td>
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<td>• Building trust</td>
</tr>
</tbody>
</table>
Increased or protected income via:
- Reduced opportunity for fraud
- More accurate weight measurement
- Visibility of market prices reduces risk of selling to opportunist middlemen
- Better access to information to increase productivity
- Electronic records to build access to future capital
- Greater security of electronic money versus cash
- Reduced travel time (where applicable) to repay loans
- Reduced calls to extension officers
- Increased agriculture income leads to more productive use of assets, e.g. paying school fees
Private sector can play a role in improving social service delivery, investing in infrastructure, R&D, early-stage technology deployment & best practices for technology diffusion to low-income settings.