Enhancing Sustainability of Water and Sanitation Facilities

Through Mobile Phone Technology

Technology Solution from SkyFox in Partnership with IRC and Community Water and Sanitation Agency (CWSA)

SkyFox Ltd
Fast And Secure Transactions

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Problem

- Challenge in Monitoring and Evaluation
  - tracking functionality status of water facilities at regular intervals
- Limited access to Spare Parts by communities –
  - up to 70km away from supply outlets for some communities
- Poor access to Banking services in rural areas
  - community fund management for hand pump repair a major challenge

Our Services

1) Mobile Monitoring of community hand pumps
   - Community members report functionality status of hand pumps routinely via USSD
   - Data captured for reporting

2) Full fledge mobile based e-commerce

- Community access spare parts for hand pump repair via mobile phones
   - Check price via USSD
   - Order and pay for spare part via mobile money





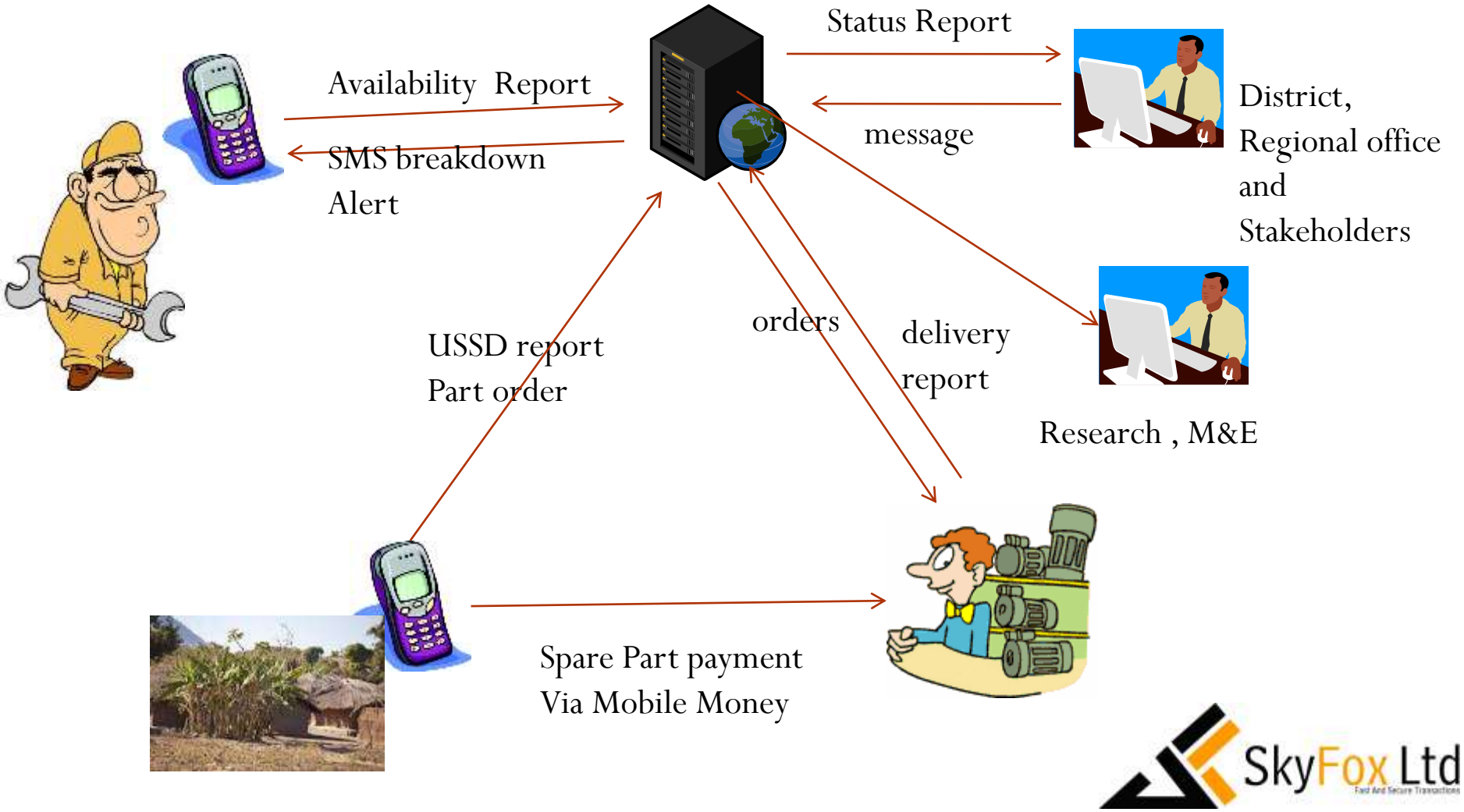
Our Services - 2

3) Community Mobile Banking through Mobile Money

- Requires multi-person authentication, similar to joint signatory to a bank account



System Architecture



Integration with Telecos

- Critically necessary for success of our e-commerce model (Not p2p)
- Integration at two levels:
  - ***Mobile Money*** directly with all three providers in Ghana (MTN, Tigo and Airtel)
  - ***USSD*** (Through third party for MTN and Airtel, directly with Tigo)
- Process took between 6 – 12 months to complete for different telecos

Key Lessons – Community level

- About 500 communities enrolled on system and trained – Constant follow-up required for consistent use of the system in first 6 months
- Accessing mobile money agents still a challenge for many rural communities - SkyFox facilitating the recruitment of Agents in rural areas
- USSD more user friendly to communities than SMS

Key Lessons - Telecos

- Negotiations process for integration with telecos
  - Acceptance – Some telecos enthusiastic, others less so due to poor judgment of business potential
  - Major enhancements in systems of telecos required to meet our needs –Multiple authentication (for community fund management), additional fields
  - Different departments handling different business units slows process– Mobile Money, USSD etc

Key Lessons - Telecos

- Success Factors
  - Demonstrate a convincing business case, potentially attractive to telecos
  - Dedicate persons with clear understanding of the business, plus other with sufficient technical skills to engage telecos
  - Be consistent in follow-ups and be proactive in prompting next steps