



Critical Factors in the Success or Failure of SMS Technology for Tracking Stock

Presented for the 2nd Annual
Mobile Health Summit

Cape Town, South Africa
May 31, 2012

Why use mobile phones for tracking stock?

Simpler data collection
and entry



Actionable in real-time



Three different efforts to accomplish this

- PSI/India STARS project



- PSI/Tanzania Scratch Card project



- SMS for Life





Sales Tracking and Reporting System (STARS)

- Internal system for sales reporting
- Operational in 6 states and 1 territory
- Data input via phone, PDA or computer
- Third party system provider
- Fixed costs ~ \$72,000 per year




Sales Tracking and Reporting System (STARS)

Strengths

- Reduced errors and time to submission in some states
- Provided real-time data

Weaknesses

- Had to be done in addition to a donor system – seen as a burden
- Slow server speed limited utility
- Inconsistent confirmations
- Low capacity staff struggled with SMS syntax
- Inconsistent support (MIS support staff, supervision)
- Not a priority for all sales managers



Ongea Zaidi na Salama – Talk More with Salama

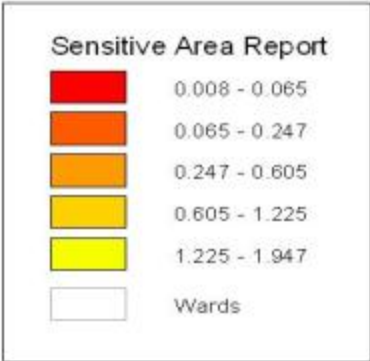
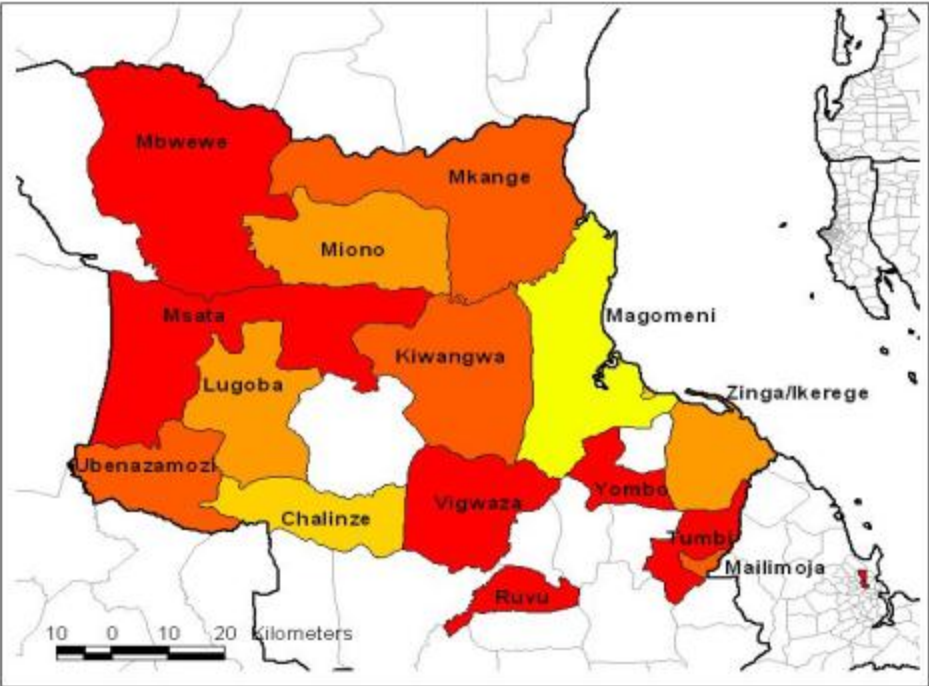
- System for tracking sales to the retailer level
- Designed to identify where condoms are accessible in real time and target retailers who are not stocking
- Working with all major mobile phone companies
- Retailers redeem scratch card found in dispenser for airtime
- Plan to correlate sales with population and HIV prevalence rates over time
- Fixed costs \$66,000 per year to service provider, scratch cards and SMS fees on top of this

Example Report

Availability of condoms per head of population living with HIV

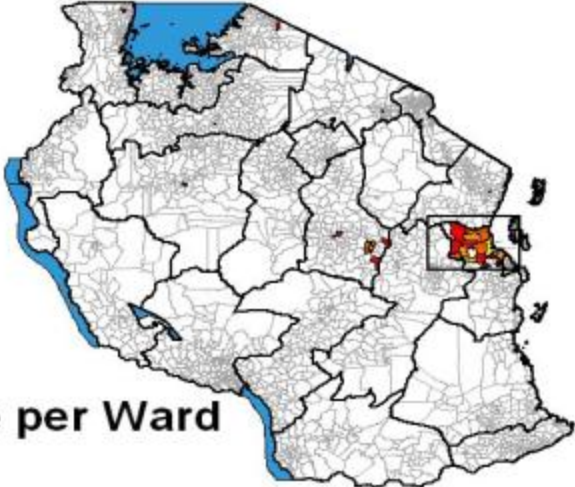
Results from Pilot Activity in Bagamoyo,

Nov 2009 to Jan 2010



Sensitivity Score per Ward

DRAFT - February 2010



To enroll:

To enroll, SMS the following string
Enroll*ward*district*type of outlet SMS code

Type of outlet SMS codes:

- Type 1 for kiosk
- Type 2 shop (duka)
- Type 3 bar/guesthouse
- Type 4 drugstore (duka la dawa)
- Type 5 pharmacy
- Type 6 NGO/Institution



Send  to 15077

Enroll

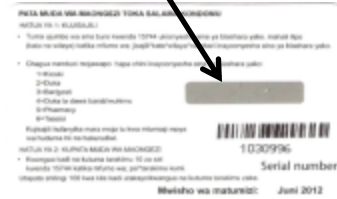
Scratch

Reward

To submit a scratch card



Purchase dispenser of condoms; find scratch card inside; scratch off foil to reveal unique 10 digit number



To submit scratch card, SMS the following:
psi*1234567890


Send  to 15077

Enroll

Scratch

Reward





Ongea Zaidi na Salama – Scratch Card System

Strengths

- Initial promotions yielded high registration ~ 36% of retailers registered
- 24% of registered retailers sent in cards more than 10 times
- Unique code validates data is accurate

Weaknesses

- Registration too complex
 - Low literacy and capacity of retailers (and * key too hard to find!)
 - Visibility of card was poor
- Delayed incentive payment
- Benefit was not clearly communicated and too low
- Weak capacity of local aggregator



SMS for Life

- A Roll Back Malaria Partnership Initiative led by the National Malaria Control Programme, Novartis and the Malaria Medicines Venture (MMV) with the support and collaboration of PSI, Swiss Development Corporation and Vodacom
- Designed to reduce stock outs of malaria medicine at district health level through real-time inventory tracking
- Piloted in 130 facilities in 3 districts, now successfully scaled up to >5,000 facilities in 133 districts



SMS for Life

Strengths

- Project owned by the government
- Stock outs reduced by more than 50%
- Response rate from 95% (pilot) to 80% (scale up)
- Participants knew and saw clear benefits of their reporting
- Weekly requests and reminders
- District manager support and follow-up
- Training and registration support
- Incentive payments for successfully sending data on time

Weaknesses

- Need to increase buy-in at lower government levels (below minister)
- Can only help alleviate stock outs where stock has been poorly distributed
- Difficult to validate data after scale-up
- Payments never 100% accurate
- Inconsistent use of data at district level

What are the lessons for future success of similar efforts?



Lessons learned



- Keep SMS syntax simple
- Server location and capacity are critical
- Make sure start-up training and ongoing support is available, particularly for low capacity users
- Provide notifications of submission and errors
- Allocate responsibility for supervision and follow-up

Lessons learned



- Facilitate timely payment of incentives
- Clearly communicate and share the benefits of participation
- Encourage and enable supervisors to identify and follow-up on errors and tardiness
- Create an incentive for reporting
- Understand impact on current workload
- Create local level support system and buy-in

Lessons learned



- Seek stakeholder buy-in at national AND local levels
- Communicate clear benefits of the system (societal and user)
- Provide reminders and regular notifications
- Point of use reminders on how to use (e.g. posters or stickers)



Thank you!

Jennifer Christian
Global Social Marketing Advisor
Population Services International
jchristian@psi.org

