

Client Needs

Comparison of Product options

By Cost

Aggregator - Africataalking

SMS Short Code

SMS short codes are issued by the regulatory body TCRA. Once issued, it can be integrated with the respective mobile operator. This process can take 2 - 10 weeks to complete

Two-way SMS

Fixed cost		Total Fixed Cost
Application fee Administrative fee Integration fee Reverse billing for toll free short codes	\$2,050 \$700 \$2000 on Airtel and others are free (one off payment) TZS 150	\$4,900 if using airtel and \$2,900 if using other telcos
Recurring costs (Yearly)		Total Recurring cost
Maintenance fee Administrative fee	\$1,300 \$700	2,000

Bulk SMS

Telecommunication companies	Basic Plan \$0 - \$215.56 Allow for sms to 10,000	Plus Plan \$215.56 - \$1080 Allows for sms to 20,000	Max Plan \$1080+
Vodacom, Airtel, Zantel, Tigo, Halotel, TTCL	TZS 22 per session	TZS 20 per session	Contact Sales

1. USSD

Dedicated USSD Code

Fixed cost		Total Fixed Cost
Compulsory Deposit USSD acquisition/application Administrative fee Integration fee	\$150 \$2,050 \$700 \$300	\$3,200
Recurring costs		Total Recurring cost
Monthly maintenance fee Yearly Integration fee	\$150 \$2300 on airtel, Tigo and Vodacom free	\$2450 on Airtel \$150 on other networks

Price per session

A compulsory deposit of TZS 150000 is required for the session cost

Telecommunicati on companies	Basic Plan \$0 - \$215.56	Plus Plan \$215.56 - \$1080	Premium \$1080+	Max Plan \$4313.64+
Vodacom	TZS 107 per session	TZS 107 per session	TZS 107	TZS 100
Tigo	TZS 65	TZS 65	TZS 60	TZS 60
Airtel	TZS 20	TZS 20	TZS 20	TZS 20

<https://africastalking.com/pricing>

Aggregator - EngageSpark

Subscription Plans	Professional	Organization
Monthly Fee (pay annually - save up to 30%)	\$99	\$299
Monthly Fee (pay monthly)	\$125	\$399
Savings for paying annually	21%	25%
Contacts & Contact Interactions		
Monthly Active Contacts	10,000	50,000
Contact Interactions included*	unlimited	unlimited
Per additional 1,000 contacts	\$25	\$25
Features		
Campaigns: SMS, IVR, Drip	✓	✓
Virtual Phone Numbers	✓	✓
Airtime (prepaid mobile credit)		
Topups	✓	✓
Developer APIs	✓	✓
Multiple Users	✓	✓
WhatsApp & Telegram		
User Permission Management		
Data Retention		
Transaction/Reporting History	4 months	12 months
Inactive Campaigns	9 months	18 months
Support		
Email	✓	✓
Website Chat	✓	✓
Call		
Live Training & Campaign Review		
Dedicated Whatsapp/Viber group		

More information on this

https://docs.google.com/spreadsheets/d/1TrwuxAAc7jTjHJQ_8wwBjuiWb-yL8o50ie4kv5Fj5o0/edit#gid=357349527

Comparison Table

Metric	SMS	USSD	IVR
Cost Per Interaction	High	Low	Low
Cost to Customer	High	Low	Low
Ability to generate Data	Low	Medium	High
Ability to get Customer FeedBack	Low	Medium/High	Medium/High
Response Rate	Low	Medium	Medium
Ability to reflect customers true feelings	High	Medium	Medium
Cost Efficiency in short term	High	Medium	Low
Cost Efficiency in long term	Low	Medium	High

Pros and Cons

In order to do a detailed comparison of each channel stated it is necessary to review the pros and cons of each channel:

SMS PROS: reflects customers true feelings (implying respondents can adequately think of the correct response or in some cases an intentional attempt to mislead or deflect), small sample size but likely high accuracy, effective for short surveys, flexible/intuitive responses, no time limit to sessions,

SMS CONS: becomes less effective for longer surveys, requires a level of literacy, less interactive of three channels, maybe charged whether message is read or not, high drop off rates, character limits (160), high cost,

USSD PROS: Intuitive, inexpensive to customers, interactive, unintrusive

USSD CONS: inflexible, may not be self initiating, character limits (140), sessions are timed,

IVR PROS: can generate large amounts of data, interactive, if localised not dependent on literacy

IVR CONS: can be intrusive, prone to false responses as respondent is under pressure to respond or may be under inconvenient conditions,

Adoption Drivers

1. **Incentives:** Afya Pamoja may use incentives to drive adoption for patients as well as encourage doctors to stand as ambassadors/evangelists. Some incentives identified include: cash and other finance related incentives, pre-negotiated discounts on medication and treatment, free airtime to name a few.
2. **Domain / Non-Domain Influencers:** In seeking to drive wider adoption it may be relevant to work with domain specific influencers in order to drive home the relevance of the Afya Pamoja mission to improving outcomes for the patient. These influencers are known in their local communities, can communicate with them and help ease some of their skepticism and initial reluctance. Working with non-domain

influencers may also be possible but may prove more expensive, hence, this consideration has to be given further deeper review.

3. **Marketing Campaigns:** Marketing campaigns have proven to have significant impact in driving adoption for technology in rural or low literate households (as in urban centers) as our case review will show. These campaigns include: stickers and digital advertisement on public transport channels, radio jingles, strategic partnerships with events organisers, billboards and signs to name a few.
4. **Experiential Campaigns:** Integrating marketing campaigns to the patient experience may be one way to enter the patient's consciousness. These experiential campaigns may include such efforts as interactive screens, functional souvenirs, gamified touch based surveys using smart devices to name a few. This option requires further consideration.
5. **Bulk SMS campaigns** is an intuitive means of calling patients to action. For all its flaws as a feedback tool it is a proven customer acquisition and adoption tool which will require serious consideration.
In executing an SMS adoption strategy, Afya Pamoja will need a database of patients and people generally irrespective of industry. I will suggest partnering with Health facilities, Pharmacies, Telecoms companies and anyone with a database in order to reach as many people during the campaign.

Case Review: GTB 737 Campaign

Guaranty Trust Bank introduced the 737 USSD mobile banking technology for their customers in 2016 and built one of the most successful customer adoption campaigns with a mix of simplified technology, strategic marketing like ads, radio jingles and displays on public transport vehicles. They also strategically encouraged the use of the service by promoting its use in the company sponsored GTB food and drink fairs as well as the GTB fashion week. These efforts did not only drive adoption but brought new customers who were keen on taking advantage of the benefits of displaying their wares at these events that they had no problem opening GTB accounts which was one of their key requirements by the bank. This proved to be one of the greatest market adoption coups that had other banks struggling to follow in the banks shadow.

Despite Afya Pamoja being social impact focused, I believe this will stand as a great example in guiding thought and strategy to achieving wider customer adoption. Moreover, it is very important to note that all the aforementioned ideas to drive adoption of this health service will incur additional costs to implement.

MVP Recommendations

Key Insights from Market Research

While SMS and IVR exchanged extremes when comparing between long and short term cost efficiency of each channel (SMS efficient in 70 percentile with IVR lies around the 35-40 percentile and reverse is the case for longer term considerations), USSD showed a balance regardless of whether the survey was long or short staying around the 50 percentile range. This shows it offers the organization some level of flexibility in terms of determining the length of surveys being taken at every point in time. Due to the extreme nature of SMS and IVR there might be limitations in adjusting survey lengths without significant trade offs. USSD has the problem of not being self-initiating requiring the customer to take action to initiate the survey thus meaning adoption will be greatly dependent on incentives and drivers chosen in the roll out of such a product.

When using cost considerations SMS has the lowest short term (fixed) cost when comparing all three channels but the variable costs make it more expensive in the long term. We compared two aggregator platforms Africa's Talking and EngageSpark; this result remains the same. USSD while not as affordable in the short term becomes more so when you consider the longer term variable cost making it more efficient than SMS in this regard.

Recommendations:

USSD will be very effective for feedback collection. Afya Pamoja will be able to enjoy flexibility of guiding the kind of information received and the simplicity it possesses for the users is an added advantage. With USSD, once the user starts the process, the interactive nature motivates the user to complete the session. Its suitability in long and short surveys makes it one of the most effective channels and our recommended channel for the planned pilot. We believe it will set the stage for further future considerations. It has some limitations in its lack of self initiation as well as relative challenge among less educated users but these issues are surmountable using strategically chosen user education and adoption strategies. A five to six question USSD survey will likely cost \$ 0.3 (ref.4)

Additional notes:

IVR is one to consider in future iterations based on its interactive nature and use for less literate users.

A case of SMS survey use in Africa

The most prominent experimenter with text messaging surveys in developing countries is a private company called JANA (formerly known as Text Eagle) which claims to be able to survey more than 2 billion mobile subscribers in their system. These users will answer survey questions in exchange for a small amount of airtime (calling credit). The vast majority of mobile users in developing countries pay for their mobile use with pay-as-you-go fees, which makes transfer of such phone credit an effective payment form. JANA's approach can also be used at the national scale and does not require much more than a so-called SMS gateway or software for sending large volumes of SMSs. There are several free and cheap platforms for this. In 2011, the UN Global Pulse leveraged JANA's global SMS reach to assess the impact of the global financial crisis on households across the world. A set of questions about well-being were translated into 15 languages and sent directly to mobile phone users in more than 30 countries, collecting more than 90,000 (UN Global Pulse, 2011).

- **USSD survey examples**
- **Infobip.com makes a case for USSD surveys**
- <https://www.infobip.com/blog/how-to-make-polling-easier-with-ussd-solutions>
- **Geopoll is a large organization that uses SMS and IVR surveys to conduct surveys in Sub-Saharan Africa. SMS is used over USSD because of cited added advantages**
- <https://odihpn.org/magazine/not-a-rolls-royce-but-it-gets-you-there-remote-mobile-food-security-monitoring-during-the-ebola-crisis/>
- **MTN has a dedicated USSD survey platform where it conducts a 7 question long surveys with airtime incentives and analysis of results for**

registered users. However, I have been unable to find any example of organizations that have used this service successfully

- <https://www.brandcrunch.com.ng/2018/12/11/mtn-partners-cmrg-mtn-smart-survey/>

My tentative response to that is tending towards conducting other viable surveys using other channels such as calls, one on one interviews, google surveys or paper surveys to correlate the information from our digital (USSD) feedback system



5:48

what do you think sir

Hmm this is a good question

5:58

I think your ideas are good

5:59

A couple questions in the survey were about hospital wait times and stuff like that, I wonder if it would be possible to ask hospitals if they have any aggregated data on that stuff that they could share. You can cross-reference the two datasets to compare and see if the survey results were generally accurate or not

5:59

But I'm not sure if a) hospitals or medical centers collect that information and b) if they would provide it

6:00

But mainly I think the ideas you listed could work



https://docs.google.com/presentation/d/1Fy4i4WvYRR1RWJd9YuIVCs1SVv8Ca7IrdLNwVJU7uc/edit#slide=id.g95b86ccad7_0_0

I have a link to a google slide i worked on, perhaps the user persona or so can be helpful
<https://docs.google.com/forms/d/1DtrzDZ8ALb8tT5g6IXZ9G80jLiqoHNpCVU9XcpD8jFk/edit?gxids=7628>

1:57

from responses to questions so far from my survey , a lot of people are unaware of digital feedback systems but close to a 100% will share honest feedbacks if enabled



References

Some of our references:

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