



Mobile for
Development Impact

Research
M4D Service Case Studies

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About

GSMA Mobile for Development Impact supports the digital empowerment of people in emerging markets through its Mobile for Development resource. It is a central platform of data, analysis and insight used to inform investment and design decisions for mobile services. Our work is freely accessible through support from Omidyar Network and in partnership with The MasterCard Foundation at gsmaintelligence.com/m4d



Case study: BBC Janala

Peter McNally, M4D Impact

Product summary

Year Launched: 2008
Business Model: Donor, Government
Targeted Device: Basic phone
Primary Delivery Technology: IVR
Products & Services: Interactive content, push content (english lessons)
Markets Deployed In: Bangladesh
Estimated Total Number of Users: 28 million
Estimated Number of Active Users: 10 million

Mobile Education



BBC Janala is an adult-focused English teaching and learning programme designed for the Bangladeshi market. It is part of English in Action, a UK government-funded programme that works to raise standards of English learning in schools around the world. Operating with a multi-platform approach, it uses mobile technology and other media to connect its users with affordable, accessible, and culturally relevant English lessons in print, video and audio. Today, it reaches 28 million people across multiple regions and socioeconomic backgrounds, helping them to develop a standard of communicative English that will benefit them in the increasingly internationalised Bangladeshi economy. BBC Janala believes that, in doing so, they can boost individual incomes, bring about economic improvement across Bangladesh, and enhance the nation's international economic standing.

1 Background

In 2006, conversations between the UK and Bangladeshi governments began, focusing on the long-

identified gap in English teaching and learning in Bangladesh, the cause of which is tied inextricably to the nation's history.

The Bangladesh Liberation War of 1971, fought between Bangladesh (then East Pakistan) and West Pakistan was catalysed in part by the outlawing of the Bangla language. Post-independence, Bangladesh attached high importance to their national language, which led to the marginalisation of the teaching of English in the 1970s and 1980s. As a result, although recognition of the value of learning English has grown over the past 30 years, the current generation are progressing through a school system that isn't well-equipped to teach it.

The international economic statuses of neighbouring countries, principally India where English was ubiquitous, contributed to the Bangladeshi government's belief that improved and further-reaching English teaching would increase people's ability to work abroad, enable the country to leverage more foreign investment, and improve links with the global economy.

This led to the conversations with the UK government through which English in Action - of which BBC Janala makes up the adult-focused component - was born. The channels used for the service were determined according to the existing media landscape in Bangladesh. While both internet and radio were low (though growing), there was a fair degree of television penetration, and mobile was nearly ubiquitous - 97% of people had access to a mobile phone. In order for it to be as accessible as possible across Bangladeshi society, BBC Janala was therefore launched as a multi-platform service with particular focus on mobile as a method of delivering content.

◆ Objective

adults across socioeconomic groups to learn English on their own, at low cost, and in a way that breaks down existing barriers. The resulting improvement in Bangladeshis' English language skills will aid the economic development of the country.

◆ Results

- **10 million** highly-engaged users (**50%** increase in last 3 years) across platforms
 - **48%** of which say motivation to learn English is higher than 10 years ago
 - **42%** of which have demonstrated improved confidence
 - **56%** of which have shown competency increases
- **28 million** people have used the service on more than one platform
 - **80%** of which are rural
 - **80%** of which come from the lower 2 socioeconomic groups
 - **44 million** people aware
- **44 million** people aware
 - In a country of 160 million, **1/3 adults** have engaged with BBC Janala

Impact

BBC Janala has data that evidences a significant correlation between English language competency and income. The service estimates that their users experience a 20-25% increase in income as a result of attaining an intermediate level of spoken English, compared to someone who speaks no English at all.

2 Lessons Learned

- **A multi-platform approach** can increase the effectiveness of services like BBC Janala. People learn, experience and consume things differently. A multi-platform approach better caters to this and increases the service's exposure, as there are more ways for people to be made aware of it, which increases chances of adoption.
- **The brand is more than important** - it's vital. BBC Janala has achieved its current standing across Bangladesh thanks to its clear, coherent, respected and well-understood brand.
- **Content is king** - Even the best brand in the world can't make up for poor content. BBC Janala invest huge amounts of time in investigating and developing new content that is culturally sensitive and relevant to the everyday lives of Bangladeshis.

3 Approach

The service was developed through extensive formative research. In assessing potential uptake, people's motivations and barriers to accessing a mobile-based English learning service were identified. For example, in 2008, around 80% of adults expressed a desire to learn English. Primary motivations for doing so included finding better paid employment and helping their children to learn English. Despite the high penetration of mobile technology, most people were only using their phones to make calls. This was due in part to SMS usage being limited by the absence of a standardised way of writing Bangla in Roman script.

Following this, much piloting and pre-testing was required to solidify the service prior to launch. This included testing content 4-5 times to ensure that it was suitable and of consistent quality across modules. Significant throughout was a desire to teach communicative English: speaking and listening, as opposed to reading and writing. Combined with limitations on SMS usage, this led the team to selecting Interactive Voice Response (IVR) as the most suitable technology for the mobile components of their programme. This focus on communicative English also reinforced their intention to make the service relevant and culturally sensitive to Bangladeshis. For this reason, the service didn't adapt generic English teaching content, instead featuring only original content that had been exclusively designed for the Bangladeshi market.

After refining the programme, BBC Janala launched at scale in 2008 with a primary delivery mechanism of 3-minute audio lessons, along with occasional Dual-Tone Multi-Frequency-based quizzes. At the time, a new lesson that coincided with the content of the TV component would be launched every week. This was largely successful: by the end of 2011, they had 6 million active

users across platforms. However, further customer research highlighted areas of the service which could evolve to become more effective. For example, originally users would have to wait for a week between lessons. However, many users expressed a desire for something more structured through which they could work at their own pace. BBC Janala responded with progressive language courses from 2012 onwards. At present, users can phone at any time to receive sequential lessons, with the system bookmarking users' progress and allowing them to pick up from their last completed lesson at any point. Once a user completes the course, they can go online to receive a report recognising their completion of the course.

Another way in which the service has changed is the way in which it generates content. At first, BBC Janala was working closely with BBC Learning English, a longstanding part of the BBC World Service. BBC Janala benefited from their partner's pedagogical knowledge and experience in structuring English language learning to develop their initial content. However, over time this process has been done more in-house, owing in part to an evolving English teaching and learning sector in Bangladesh that is perfectly able to create tailored and relevant teaching content.

4 User Centric Attitudes

The service has a deliberate focus on targeting underserved people from lower socioeconomic groups. It has a demonstrably wide reach, with 80% of its users coming from rural areas - to whom such a service would have been inaccessible had it not been so thoroughly tailored for them. This was aided by BBC Janala's successful negotiations with MNOs to reduce the cost of using the service to approximately 25% of standard IVR services, making it more affordable. Additionally, a conscious effort was made to ensure that the service was attractive and accessible to women. As of 2014, more women are using the product than men. This is thought to be in part due to the inclusion of female voices and role models in their lessons, as well as featuring topics that are relevant to Bangladeshi women.

The 4 Core Personas of the BBC Janala Service	
Mainstream Youth	Approximately 6 million mobile phone users between the ages of 18 to 24 were identified who believed that English would help them to earn more money. This has remained a key target segment. 59% of these are in a socioeconomic group with monthly household income of 10,000 Taka (less than £3 per day), they are unable to afford to attend a coaching center.
Modern Housewives	Within this group there are approximately 2 million mobile phone owning young women with higher education levels/ They have tended to enter traditional marriages. Although their own ambitions are modest, they are determined to learn English in order to benefit their children.
Striving Lower Middle Classes	There are just over 2 million within this category, largely traders and workers in the technical sector. Hugely aspirational, 96% desire to learn English.
Busy Mid-level Merchants	These number just under 5 million. They adopt technology later than the other groups and tend to be slightly better educated. 1/3 are in socioeconomic group D (described above in terms of income implication)

Figure 1 - Personas most significant to the service

5 The Use and Value of Data

The collection of user data is a naturally occurring outcome of the BBC Janala service. Through people registering and using the service, BBC Janala collect phone numbers, location data and usage information. This data is then aggregated by a commercial partner. On a daily basis, this is fed into reports and dashboards which help the team to track and improve the service. For example, they can see points across the courses where users are slowing down or even dropping off entirely. Through observing these usage patterns, issues with the content can be identified - for example if one section is too difficult, or is experiencing technical issues. Visibility of the usage data allows them to target edits to the content where it is needed to increase its effectiveness and accessibility.

The contact information collected through the service allows them to hold real conversations with users regarding their experience of the service - particularly what they found most valuable, and what aspects could be improved. Alongside this, focus groups and large-scale surveys allow BBC Janala to collect feedback from users, as well as personal and economic information. This enables the service to build user profiles and better assess its impact across different socioeconomic groups.

6 Success and Scalability

BBC Janala measures its success using three key metrics. Firstly, it considers the number of highly-engaged users as an indicator of the reach and impact of the service. This currently stands at around 10 million, having increased by 50% over the last 3 years. The second of these is attitudinal change. This comes down to whether users' confidence and motivation are visibly increasing. This is measured through occasional representative surveys, 3 of which have been carried out to date. The last of these showed 48% of users expressing greater motivation to learn English. Finally, the team assess users' confidence and competency in using English. This is measured through language tests, as well as self-assessments in representative surveys. In the latest round of these surveys, 42% of users demonstrated increased confidence in using communicative English.

In terms of scaling the service, BBC Janala is currently satisfied with their levels of engagement and reach across Bangladesh: in a country of 160 million, 1 in every 3 adults is aware of the service. As a result, growing and expanding the service geographically is not currently a priority.

One area which could be developed is the range of available content. Up to now, the focus has always been on teaching basic and intermediate English. However, as the Bangladeshi economy becomes more internationalised with more foreign investment entering the country, there is a growing need for specialised courses such as English for business, English for tourism and English for manufacturing. An expansion into this area has the potential to bring back a number of people who have benefited from the basic English courses, as well as attracting new ones.

7 Partnerships

The BBC Janala service is reliant on a number of key partnerships - hundreds in total - which fall into three primary categories.

The first of these categories is MNOs (Mobile Network Operators). Given the nature of the service,

functional relationships with MNOs are crucial for BBC Janala. In establishing them, they were helped by the Bangladesh Telecommunication Regulatory Commission (BTRC) who facilitated meetings between BBC Janala and the 6 primary MNOs in Bangladesh. As a result, BBC Janala work with all of these 6 parties to circulate their service, resulting in a high number of customers to which they have access. The specific benefits of this have included a mutually agreed reduction of call costs to BBC Janala from 2 BDT per minute to 0.5 BDT. What's more, BBC Janala, the BTRC, and the 6 operators together negotiated a common short code that could be used to access the service across all operators.

Secondly, BBC Janala works closely with its content providers. It initially worked with BBC Learning English - part of BBC World Service - to generate and structure suitable material for their lessons. Over time, the service has become more capable of developing such content in-house. However, the guidance and contributions of BBC Learning English were vital to the initial development of the service. Its relationship with the BBC also influences its data and privacy policies, and they aim to work within the BBC's editorial guidelines.

Finally, BBC Janala currently relies on external funding from donors. Despite being a part of the BBC, it receives no money from the UK's Licence Fee. Rather, it is an independent charity that is funded primarily by lateral grants. Currently, the service is backed by the UK's Department for International Development. This arrangement began following the conception of the service after conversations between the UK and Bangladeshi governments.

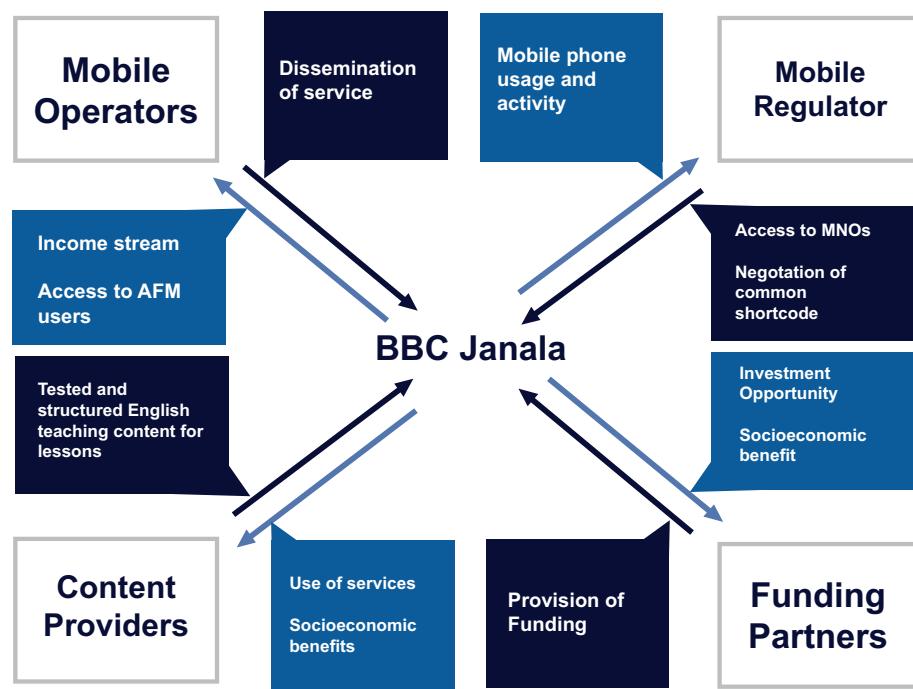


Figure 2 - Partnerships diagram

When it comes to establishing new partnerships, BBC Janala has certain standards to ensure that these are functional and successful. Firstly, it believes it is important to maintain regular communication between parties, both at the outset and throughout the operation of the project. If the person-to-person relationships are working smoothly, then the organisation-to-organisation relationships are easier and more fruitful. Additionally, it is important that expectations are clear and documented from the start. This way, there will be no confusion over responsibilities or misalignment of objectives.

8 Challenges

Measuring success is an ongoing challenge for BBC Janala. Though a useful indicator of reach, getting people engaging with the service is not enough. Similarly, while changes in motivation and confidence are important, they do not tell the whole story. Fundamentally, the project needs to demonstrate that those accessing the services were improving their English language ability. Doing so objectively has been a challenge as testing English levels of adults, outside of a classroom environment, is not widespread practice in the English language teaching industry. The project therefore developed its own, bespoke English testing tools specifically designed to be administered in dispersed settings with its target audience, in order to measure competence changes amongst service users.

Additionally, operating in Bangladesh has presented its own challenges. The country suffers from high levels of volatility and political instability. This has required a flexibility and perseverance on BBC Janala's part, particularly in terms of planning interactions with users in the field.

9 Future Plans

Based on user feedback and insights gained from the past six years of the service, BBC Janala has plans to expand its offering into higher-level language focusing on specific industry sectors. Funding for this expansion, however, is currently uncertain.

Sustaining the learning content and services already created by the programme is currently a key focus. In the future, BBC Janala would like to see the service being taken over and operated commercially. The service appears to be commercially sustainable, and there are already discussions underway about moving part of the existing service to a self-sustaining model in the next few months. The most expensive aspect of the current operation is the generation of new quality content. Care would need to be taken that this quality is maintained by any future leaders of the service - something that the industry in Bangladesh is currently not fully equipped to do.

Case study: Zonna

Peter McNally, M4D Impact

Product summary

Year Launched: 2008

Business Model: Consumer-led, B2B

Targeted Device: Basic phone

Primary Delivery Technology: SMS, USSD, Web

Products & Services: Money Transfers, Supplier Payments, Airtime, Bill Payments, Working Capital Financing, Business Management Tools

Markets Deployed In: Zambia, Malawi

Estimated Total Number of Users: 650+ Zonna Entrepreneurs

Estimated Number of Registered End Users: 600,000+

Mobile Financial Services



Zonna - pronounced 'Z-oh-na' and meaning 'it's real' - is the leading mobile money provider in Zambia. The company's core product is a mobile-based Zonna Account. Transactions are processed through a network of Zonna Entrepreneurs, enabling them to process money transfers, pay suppliers, and access working capital financing. These Zonna Entrepreneurs provide members of the public - the service's end users - with a quick and safe money transfer service, along with third-party cash-in/cash-out services. Additionally, the company offers a supplier payment service in partnership with major Fast-Moving Consumer Goods companies such as Zambian Breweries, a subsidiary of SABMiller. The Zonna back and middle office teams are based in Cape Town, with operations teams working in Zambia and Malawi. The company plans to expand into several new markets in the coming years.

1 Background

Zambia has an agriculture-heavy and primarily cash-based economy, with over 60% of the population without access to basic financial services. This reliance on cash transactions brings inefficiencies and insecurities that act as obstacles to economic activity. For example, the Zonna team speak of having observed agricultural payments being made using trucks of cash accompanied by armed security guards. One company alone transferred over \$30 million dollars in cash to pay 150,000 farmers in a year. When M-Pesa, the preeminent mobile money service in Africa, was beginning to thrive in Kenya in 2008, Zonna's founders were inspired to set up a mobile money transfer service beginning in Zambia that could help to overcome the above challenges and stimulate economic growth.

Objectives

Zonna holds a vision of a 'cashless Africa'. In pursuit of this, the company aims to support small businesses by allowing entrepreneurs to transact through their mobile money product, providing them with capital and giving them tools to manage their businesses.

Results

As of August 2014:

- Number of Zonna Entrepreneurs (customers/agents facilitating the service): 650+
- Unique active end users (members of the public who transfer money once every 90 days): 600,000+
- Combined monthly average volume: \$25,000,000+

Impact

Zonna offers money-making opportunities and valuable business support to small businesses and entrepreneurs, whom the company believes to be the drivers of the economy. The Zonna Entrepreneurs earn an average of \$500 per month in commission per outlet, bringing them increased financial security. The service also removes the inefficiencies and insecurities of cash payments for people and businesses.

2 Lessons Learned

- **Get the right staff and processes in place early on.**
 - These are the foundations for growth and scale - without them, a high quality product and/or strategy will not be sufficient.
 - Although minimising the number of staff during the start-up phase may be tempting to keep costs down, hiring effective team members early on can save money and add value in the long run.
- **Always focus on your customer.** Start with customers' specific needs and work from there; use robust data analysis to investigate customer behaviour and engagement, and provide evidence for service improvements.
- **Ensure that partnerships are based on common interest and don't deviate from your vision.** Much value can be gained through establishing mutually beneficial partnerships. However, it is important to retain a degree of flexibility that allows for continued pursuit of your own objectives, and to ensure that certain key values are shared between organisations.

3 Approach

Zoona's primary customers are the Zoona Entrepreneurs, the company's agents on the ground. These entrepreneurs have one of three different types of businesses. They may be a franchise, providing the core cash in/cash out services from booths across the country. They may be retailers, providing this service as a value addition to general goods services. Or finally, they may be distributors, who use B2B payments to transfer money to their suppliers.

These Zoona Entrepreneurs can be found near post offices (the traditional channel for transferring money), in urban markets, at border posts, and in rural areas far from bank branches. Crucially, end users are not required to sign up to their own mobile wallet. Instead, users can conveniently transfer money across the mobile platform via their local Zoona Entrepreneurs: the money is transferred between Entrepreneurs' mobile wallets, to then be collected by the intended end recipient.



Figure 1 - Zoonamobile model

Zoona identified an opportunity to move into B2B payments when the team realised that the money transfer service could be adapted to a supplier payment service. They started working with the SABMiller distribution channel in Zambia, which had previously operated almost entirely in cash. The move into the B2B market had considerable potential to increase efficiencies for Zambian businesses.

Zoona undertakes analysis of their entrepreneurs' behaviour and performance through the substantial amounts of data that they collect. Using this to create median performance rates, they can identify how an entrepreneur is performing compared to their regional expectations. They can then feed this through to the Zambia team who react accordingly, whether through corrective action or further incentives.

At the time of Zoona's launch in Zambia, it anticipated that the country's mobile money space would soon be taken over by mobile network operators (MNOs). They therefore hoped to use the money transfer product as a short-term way of bringing money into the business. Then, when large MNOs came in with their own mobile money transfer services, Zoona could act as an interoperable agent that would facilitate cash going in and out of mobile wallets. It would then shift focus more on corporates, seeing this as an opportunity to diversify in the B2B space. However, whilst larger MNOs did introduce their own mobile money services, there has still been plenty of room for Zoona to compete in the market. As a result, Zoona continued to roll out and grow its service, partnering with MNOs as an independent service provider where appropriate.

4 User Centric Attitudes

The Zoona service was not initially based on customer research. Rather, a gap in the landscape was identified and a money transfer product, and later a supplier payment product, were created to fill it. Nowadays, the company focuses more closely on designing for customer needs. The company has an iterative approach to design, which it terms "traction by action". The team have an idea, experiment with it and learn from it, thereby evolving the service. This demonstrates Zoona's dynamic working culture, which encourages and cultivates agility, organisation, innovation and entrepreneurship.

5 The Use and Value of Data

Transactions made through Zoona generate large amounts of data. Every time the service is used, Zoona receives the user's name, ID number, phone number, origin of transfer, collection of transfer, and its value. As such, Zoona has swathes of valuable end user data at its disposal, which can be used to monitor and inform the direction of the service. For this reason, Zoona is working towards increasing the sophistication and effectiveness of data analysis within the company.

Its first move in doing so was to implement the business intelligence tool, Qlikview, into which all Zoona transactions are now fed. This allows them to produce dynamic dashboards, reports and data visualisations. Through these, the team are able to understand much more about end users' behaviour and interaction with the service. For example, they recently used Qlikview to identify their top 500 users as of January 2013 and map out what had been happening to them over the past 18 months, supplementing this with phone calls to individual users where necessary. They used this information to collect an understanding of users' activity in order to identify key acquisition and drop-

off points, and to segment their user base.



Figure 2 - Zoona dashboard snapshot

Data collection and analysis have also proved useful in Zoona's financing of entrepreneurs. The company has developed an algorithm that can offer more favourable financing to customers according to how much they transact through Zoona - essentially allowing the company to build a credit scoring model. The majority of these customers will not have had any formal credit before, as no banks will lend them money and microfinance is too expensive. Data analysis therefore supports the company in providing an effective financing service for small entrepreneurs and enabling it to identify and realise an opportunity that may otherwise have been missed.

6 Success and Scalability

Zoona has three key metrics for measuring short-term commercial success. The first of these is the number of customers (meaning Zoona entrepreneurs) currently standing at over 650 - and the number of unique end users who transact at least once every 90 days, of which there are currently over 600,000. Secondly, they measure the revenue that their services are generating, focusing on driving revenue growth as quickly as possible. Finally, Zoona's own revenue is seen as a key indicator of its success as well as its capacity for continued success.

These short-term metrics are framed by Zoona's key long-term strategic goals. One of these is to maintain its position as the number one mobile money operator in Zambia in terms of value transacted. The economy remains primarily cash-based, and Zoona believes that it has an ideal model to fit into the ecosystem as it develops. On top of this, it wants to eventually become the top mobile money brand in Africa. Currently, this honour belongs to M-Pesa. However, Zoona hopes to emulate the number of markets in which M-Pesa operates in the coming years. Finally, it aims to become the top employer in Africa, attracting more entrepreneurs through its positive working culture, which features strong focus on professional and personal development.

Alongside these metrics and goals, Zoona has a clear vision for growth through both internal development and external expansion.

Internally, Zoona's current capacity is constrained somewhat by its ability to scale its systems in

house. This essentially comes down to how quickly the team can find and hire good people. To overcome this challenge it is strengthening its branding team in order to implement actionable steps towards becoming the top mobile money brand across the continent, which Zonna hopes will attract new, capable talent. It is also increasing its capacity to leverage data by building a data analytics team, in order to more strategically target areas for scale.

Externally, Zonna plans to expand into a number of different markets over the next 5 years. Beyond Zambia, the most immediately suitable market for Zonna is neighbouring Malawi. It is immature in terms of mobile money and has similar market conditions and a shared language with Zambia. As a result, Zonna launched its service in Malawi in September 2014.

Beyond this, Zonna is also exploring expansion into Tanzania, DRC, and Mozambique. Tanzania in particular will be something of a test case; given the market's relative maturity in terms of mobile money, it is unclear how well their service will fit into the landscape. The existence of three large mobile networks gives Zonna the chance to position itself as an interoperable agent, building a shared agent network. Here, a key task for Zonna will be to use this test case to understand how it can fit into a more advanced mobile money ecosystem. The outcome will steer Zonna's future direction in terms of market expansion.

Sandra

In June 2010, 19-year-old Sandra graduated from high school. With no income and parents who could not afford her tertiary education costs, she found herself unemployed.

In July 2010, Sandra became a Zonna Entrepreneur. By January 2014, she had her business into 9 different locations throughout Zambia. Now 23, she employs 15 tellers to manage her Zonna booths. Her current monthly income averages \$9000, which affords her a tertiary education.

Currently in her second year at university, she is now enabling 4 of her tellers to become business owners under her umbrella through the Zonna Entrepreneur Project.



Figure 3 - Zonna entrepreneur spotlight

7 Partnerships

Since their launch in 2008, Zonna have benefitted from a number of key partnerships.

Investor partnerships have been crucial in Zonna's evolution from a family-run business to an incorporated company. It has sold equity to the likes of the Omidyar Network, Accion and Sarona. These partnerships have given Zonna credibility and investment from which to scale. The Omidyar Network also offered Zonna tailored business support, courtesy of the network's Human Capital Development Team. The team, made up of ex-PayPal and eBay employees in Silicon Valley, has provided Zonna with pro bono executive coaching, brand development training and management

training, all of which have proved fundamental to the way in which Zonna does business.

Various commercial partnerships have been important in Zonna's growth. For example, SABMiller used Zonna to move towards efficient cashless payments in its Zambian distribution channels. Zonna is now working with Zambian Breweries (SABMiller's subsidiary in Zambia) - with the help of a group of Oxford MBA students - to carry out a thorough cost-of-cash analysis of their usage of Zonna's service. Zonna instigated this project to quantify the value that its service brings to Zambian Breweries, as well as to understand more about its costs.

Relationships with mobile network operators have achieved varying degrees of success. MNOs bring benefits such as marketing weight, which can raise the company's profile - especially with other operators who could become future partners. However, the goals and administrative processes of large MNOs can be at odds with the more nimble culture of the start-up. Therefore, to support its goal of positioning itself as an interoperable agent across networks, Zonna now aims to work with operators as an independent service provider in place of formal partnerships.

Zonna has also enjoyed a number of NGO partnerships over the years. For example, it received seed capital from the USAID project PROFIT, which was extremely valuable in establishing the business early on. Additionally in 2010, Zonna partnered with the World Food Programme on a subsidy voucher programme in Zambia, Zimbabwe and Mozambique that has since spilled over to smallholder farmer subsidy vouchers in Zambia and Malawi. To date, Zonna has processed \$17.5 million worth of subsidy e-voucher transactions.

In identifying potential successful partnerships, Zonna's experience has taught them that aligning 'on paper' is necessary but not sufficient in itself. These relationships also require a shared vision to be held by a number of individuals inside both organisations. As a result, Zonna has found that the flexibility that comes with positioning themselves as an independent service provider across an industry can bring greater benefits than exclusive partnerships.

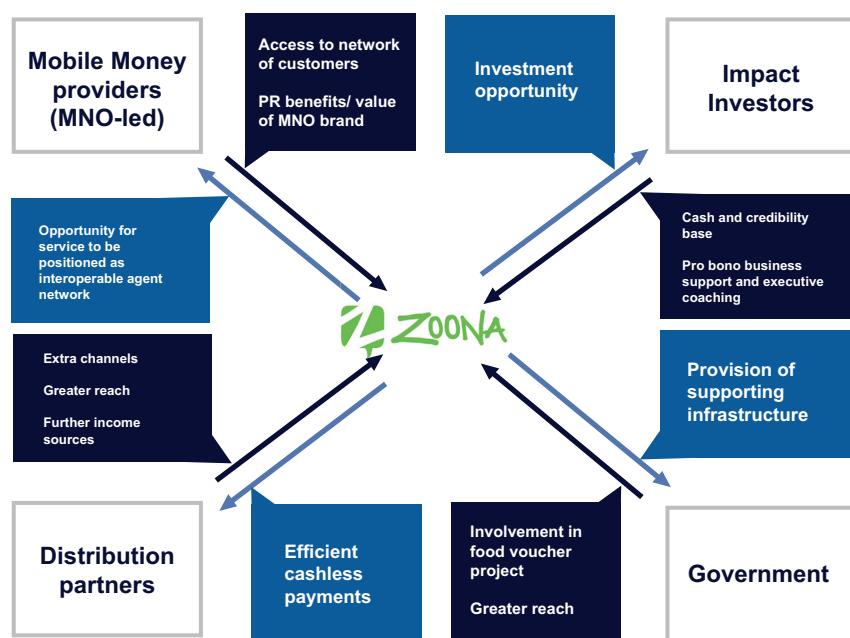


Figure 3 - Partnerships diagram

8 Challenges

Initially, Zonna's main challenge was cash flow. However, a successful investment round in 2012 solved this problem. Subsequently, the team were able to begin thinking more about long-term strategy as opposed to short-term sustainability, allowing them to shore up the business' foundations and structures.

In the beginning, activities were focused on putting in place rigid systems, processes and legal procedures, which were the foundations from which future growth and scale would come. For example, Zonna realised how challenging it was to find the right people to join the team and get them into place efficiently. However, this process has been refined over the years, thanks largely to the aforementioned structures and procedures.

9 Future Plans

Looking forward, the big change that Zonna hopes to see a year from now is activity in an additional 3 or 4 countries, starting with Malawi and Tanzania. Whilst their brand within Zambia is strong, the step-up to having a recognisable regional brand is a significant one. Building this brand therefore represents an important challenge for them. Zonna also hopes to develop its role as an interoperable agent network, working with and adding value for MNOs.

Zonna believes that they're building the right kind of business, ones with effective and suitable models, and desirable aims. In raising the Zonna brand and profile in these ways, it can continue to spread and develop the impact that it is already having in Zambia. For these reasons, the Zonna team are very excited for the future.

Case study: Reuters Market Light

Peter McNally, M4D Impact

Product summary

Year Launched: 2007

Business Model: Consumer

Targeted Device: Basic phone

Primary Delivery Technology: SMS

Products & Services: interactive content, push content, P2P content

Markets Deployed In: India

Estimated Total Number of Users: 1.3 million

Mobile Agriculture



Reuters Market Light



Reuters Market Light Information Services Pvt. Ltd (RML) is a mobile-based provider of technical and financial advice to farmers in India. Initially operating under the international media organisation Thomson Reuters, the service works with content partners to provide personalised information on farming techniques, crop recommendations, weather forecasts, and various other pieces of agricultural information across 17 states in 9 different languages. It also features Krishidoot, a component that acts as a platform for farmers, enterprises and agricultural stakeholders to interact and transact. Through Krishidoot, these parties can buy and sell agricultural produce and supplies at published prices without operating through middlemen and agents. Through these methods, RML contributes to increases in productivity and financial security for farmers across India.

1 Background

The idea behind RML originated in 2006 after detailed research and market surveys carried out by Thomson Reuters proved the need for an agricultural information service for farmers in India. The

result of the research revealed that farmers across India were suffering as a result of the inaccessibility and asymmetry of market information. Farmers tend to work with local traders and middlemen to act as distributors of their produce, who often offer less favourable rates than the market would otherwise dictate, in order to earn extra commission for themselves. Given the involvement of so many middlemen along the supply chain, farmers had no way of knowing the actual value of their crops. This meant that they were often undercharging for their produce and suffering financially as a result. In the developed world, farmers tend to receive 40-50% of their produce's final value. However, this situation resulted in Indian farmers receiving only 20-25%.

There was a clear gap in the market for a service that could overcome this problem. It was with this in mind that RML was conceived as a way to provide Indian farmers with agricultural information that was unbiased, actionable, accurate, and timely. Mobile is among the most accessible and widely-used forms of media in rural India, and also allows for more customisation of information and delivery style than other channels such as radio or television. For these reasons, it was decided that the service would be most effective if delivered through mobile.

◆ Objective

The overarching objective of RML is to become the preeminent platform for the engagement and interaction of farmers and agricultural communities. Through this, they ensure access to relevant information and the ability to transact with one another directly, thereby providing maximum efficiency and value for farmers buying and selling farm produce and related products.

◆ Results

- RML has 1.3 million registered unique users. Independent research shows that users tend to share information with another 5-6 farmers over the course of year. This suggests that between 6 and 8 million farmers have already been impacted by the service.
- The income of farmers using the service has increased by 15-25%.
- Younger farmers selling directly to traders are able to increase their price realisation by 9% as a result of using the RML service.

◆ Impact

As a result of customised advice, based on market and technical information from a number of reliable sources, combined with a platform through which to buy and sell at market prices, farmers' productivity and cost-efficiency is greatly increased.

2 Lessons Learned

- **Keep your ear to the ground.** These services should be based on users' needs, and should be designed and updated accordingly - you cannot simply roll something out and expect it to stand up on its own. RML recognises that their perspectives from 3-5 years ago are unlikely to remain relevant in the future. The service is therefore continually improved and new features regularly added.
- **Focus on content before acquiring customers.** Services operating in the same market as RML have fallen foul of this. It is vital to build a strong foundation of useful, meaningful and actionable content before turning your focus to marketing and customer acquisition.
- **Create a vibrant ecosystem of partners.** There is value in having a number of reliable partners operating across different functions such as content creation, distribution, and finance in order to keep your service efficient and effective.
- **Dependence on donor funding can only take you so far.** Reliance solely on donor funding runs the risk of preventing the service from becoming self-sustaining. Instead, it is advisable to adopt a self-sustaining business model as soon as possible - if not right from the start.

3 Approach

The development of the RML service has been continuously informed by market research, customer surveys, and pilots. From the beginning, it was designed to be simple, easily accessible, and able to fit into a farmer's daily routine. The team avoided overloading farmers with information that was irrelevant or too generalised. This eventually led to the formation of the basic SMS service that provides individual farmers with personalised information about the market prices of the crops they grow, as well as weather information according to location, and tailored professional advice. The service is very easy to activate, requiring a farmer simply to buy a prepaid card and call their local RML representative. RML's income is generated through paid subscriptions from farmers and through sponsorship.

This initial iteration of the service has since evolved in response to further market research and customer feedback. RML responded to increased smartphone penetration in India by creating an app that could provide similar value. Furthermore, accurate market knowledge does not solve the problem of finding interested buyers. In order to address this, RML created Krishidoot, its market linkages service. Here a farmer can advertise what they want to sell or buy and link with any enterprises who wished to transact with them. RML sees the development of this service as an on-going process, and intend to evolve accordingly in the future.

4 User Centric Attitudes

As the evolution of RML's approach demonstrates, the service's design is very customer-centric. In addition to the market research carried out prior to the establishment of the service, on-going customer feedback guides its development. RML has a team dedicated to acquiring customer

feedback, and customers are provided with an easy first port of call in the form of RML's call centres. Such open dialogue has contributed to past additions and alterations to the service, namely the discussed establishment of the Krishidoot platform.



Figure 1 - Reasons for buying RML subscription

5 The Use and Value of Data

RML regularly uses data to refine and improve the service. Large amounts of data are generated organically such as user location, language, crops grown (and variety thereof), type of fertiliser used, irrigation system (if any), sowing dates, and a number of other indicators. One primary use of this data is that it allows RML to build profiles for individual farmers. This enables RML to ensure that the advisory information they provide is consistently relevant and specific to particular locations, dates, and land types.

The information collected is also studied by the data analytics team in order to maximise the user experience, develop new features, and solve any issues that may have arisen. This has resulted in a number of valuable insights on various elements of the operation. For example, when trying to find ways to improve customer retention, RML discovered that retention levels in some geographical pockets were 3 times as high as elsewhere. As a result, RML could effectively identify drivers of success in those areas and subsequently replicate them elsewhere. In addition, RML could determine which areas were deserving of more focus.

There is an appreciation across RML of the value of data analytics as a provider of insights into what customers and the market need. However, despite having an existing data analytics programme, this is an area in which RML sees more potential. Indeed, in order for the service to grow, RML must navigate a landscape consisting of known unknowns (areas which RML has identified but is yet to properly explore) and unknown unknowns (various undefined gaps with which RML is not yet familiar). The latter will only be discovered and filled once RML becomes more mature in its data analytics.

6

Success and Scalability

In measuring the success of the service, RML concentrates primarily on the raw figures of how many farmers are being reached. Rates of adoption act as strong indicators of the value that farmers are extracting from the service. There are approximately 1.3 million unique registered users of the service. RML aims to reach 30 million farmers in the near future both directly and indirectly. With regards to Krishidoot, performance of the service is measured against the wider objective of transforming it into the preeminent and most accessible platform of its kind across India. Currently the service is active in 17 of the 28 Indian states and can also be accessed online. In addition to these, various other metrics are being developed that will be more relevant for RML's growing array of services. These will be focused on visible on-the-ground impact on farmers and other stakeholders in agricultural value chains.

Despite these ambitions, however, there are some ways in which RML's current capacity limits it from doing everything that it would like to do. The most significant of these is the ability to increase awareness of the service and driving registrations thereafter. RML currently sees this as the most pressing bottleneck with regards to adoption. One way in which this is currently being tackled is by giving potential users access to trial versions in order to help more farmers find out about what the service is without having to pay beforehand - the hope being that this will enable them to see the value of the service and subsequently adopt it for themselves. This remains an area that could benefit from increased access to the rural population and the capacity to further drive registrations through marketing and an expanded trialling process.

7

Partnerships

A number of key partnerships have helped RML to grow and sustain its service since its initial launch.

The first of these may not be considered a partnership in the traditional sense: RML's relationship with Thomson Reuters. The project was initially born out of Thomson Reuters' pre-existing operations in India, and was incubated there in its earlier years. For RML, this brought stability, funding and an infrastructure. In 2013, RML was hived off as an independent, private equity funded, entity in order to establish an optimum governance structure for the rapid growth of an entrepreneurial venture. Thomson Reuters remains a minority stakeholder in the project.

RML partners with a number of organisations who act as content providers for their agricultural and market information. These partners include centres of agricultural knowledge such as universities and the Indian government's Ministry of Agriculture. Such partnerships are integral to the running of RML, as they provide the foundation of content on which the programme is based. Through these partnerships, RML is provided with specialised technical information to relay to farmers. RML also benefits from these organisations' wider reach across rural India.

The project also partners with the public sector in order to increase the accessibility of the service. The Indian Government's Ministry of Agriculture and other public sector agencies (along with some private sector groups) sponsor RML to provide the service free of charge to farmers in certain targeted areas. This brings two main advantages - first, small and marginalised farmers who may not be able to afford the service are able to reap the benefits. And second, temporary subsidised usage of the service can be used to educate farmers on RML's benefits, in the hope that they will see

it as a valuable investment to later pay for themselves. This partnership represents a recognition by these parties of the positive impact brought to Indian farmers, and the nation as a whole, by RML.

Finally, RML has partnered with a small number of MNOs in the past. These have never taken the form of exclusive partnerships, instead acting more as temporary measures for increasing the reach of the RML service. These have operated on a number of different models. For example, RML worked with one MNO to further spread their provision of agricultural information by distributing prepaid scratch cards through the partner's distribution network. Additionally, RML has experimented with positioning themselves as a value-added service on a network; this brings further reach to RML, and the possibility of increased access to more customers for the MNO involved.

While partnerships have their benefits, a misalignment of objectives can result in them becoming counterproductive and short-lived. For example, MNOs naturally have their own objectives and priorities, of which the delivery of agricultural information to farmers does not tend to be a primary one. Rather, this is seen more as a means to the end goal of acquiring more customers. As a result, the two parties' areas of focus can differ, leading to an inefficient working relationship. However, as the mobile landscape in India changes, MNOs' focus is perceived to be moving away from aggressive customer acquisition, and increasingly focusing on the services accessed by customers. This means that, in the future, MNO partners are likely to recognise the importance of agricultural information and similar services. RML is therefore becoming more encouraged by the possibility of specific partnerships with MNOs.

RML does have criteria in place for identifying potential partners. Firstly, it has learned that it should only partner with organisations who have a strong reach and presence in rural areas. In doing so, it can ensure that all partnerships contribute in some way towards an overarching objective of increasing penetration of less accessible rural markets. Secondly, it has learned that the involved parties' objectives must be deeply aligned and/or interlinked in order to maintain the direction of the relationship. As discussed in the context of partnerships with MNOs, misalignment here can lead to unproductive and dysfunctional relationships. Should these criteria be met, RML is open to any partnerships which can bring value to its service.

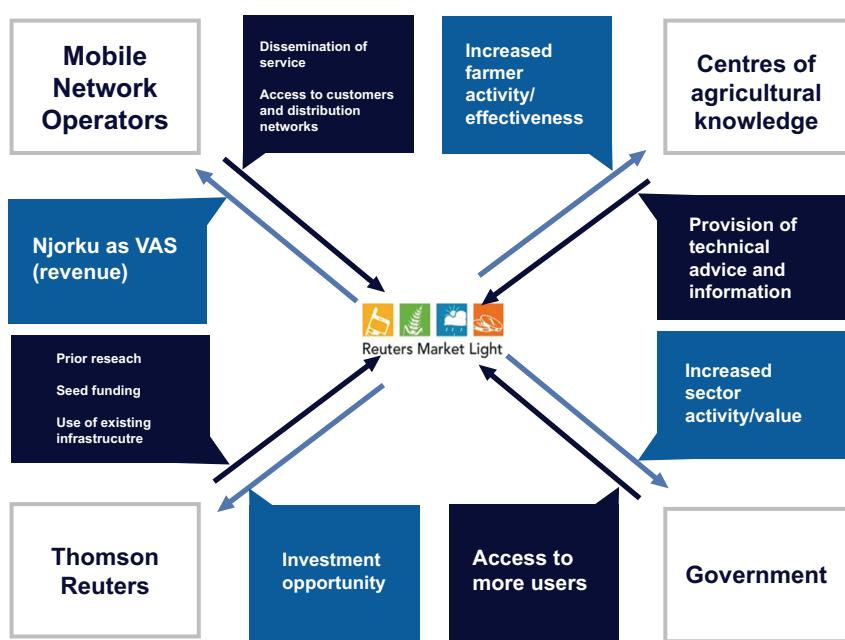


Figure 3 - Partnerships diagram

8 Challenges

Ironically for an employment service, one of the main challenges which Njorku has faced since its launch is finding the right staff to join its small team to further build its operations. Particularly during the service's earlier days, Njorku found it difficult to attract people with the very specific skill sets that it was seeking. This is somewhat easier now that the organisation has reached a certain prominence and has improved networks, including its own website, to spread word of vacancies and attract people working elsewhere in the sector. However, it remains a challenge for many organisations in Africa, and one which Njorku aims to help overcome.

The second key challenge that Njorku has faced is access to capital. As a relatively new company, Njorku require continuous outside investment in order to have sufficient capital to cover operational expenses and further develop the service. The organisation must therefore dedicate staff time to attracting such investment. This is made more difficult by the fact that Njorku is a social enterprise that explicitly prioritises impact over profit, and expects investors to respect this. The process of securing capital has therefore been a significant challenge over the years. Nonetheless, this has become easier for the organisation for two main reasons: the service has gained higher profile and is therefore a more attractive investment opportunity, and investors generally are seeing Africa as a rich source of future return on their investments. This is especially true for investors who see the value in long-term impact and sustainability over short-term profit. As a result, Njorku now has a small number of minor donors and investors which enable the company to better sustain itself and seek further expansion.

9 Future Plans

Njorku plans to expand its service and enhance its impact, reach, and accessibility as wide as possible through new partnerships and continuous service development. In particular, a formalised partnership with MTN Cameroon could bring great value, as well as paving the way for future relationships with MNOs; such relationships have the ability to bring the Njorku service to many millions more jobseekers.

Njorku continues to assess and trial new ways to bring its service to the jobseekers in the 350 million Africans aged 15-35 in Africa, as well as many others around the world. Among other things, this will involve expansion into other African countries where Njorku could bring positive benefits for recruiters, employers, jobseekers, and for the wider population.

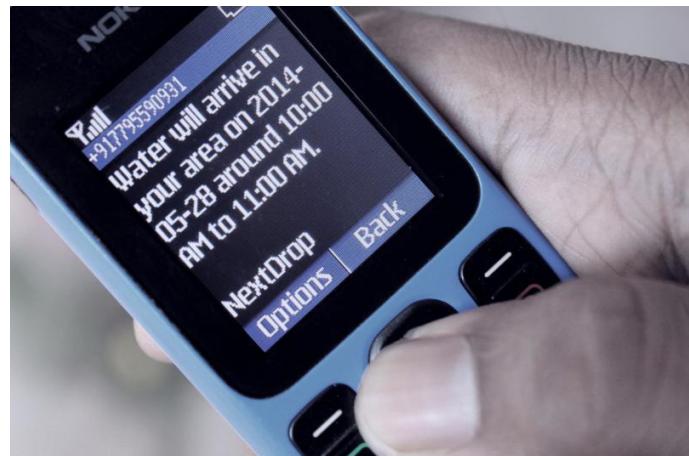
Case study: Nextdrop

Finn Richardson, M4D Impact

Product summary

Year Launched: 2009
Targeted Device: Basic phone
Business Model: B2C & B2B, donor (early stage)
Primary Delivery Technology: SMS, Interactive Voice Response (IVR)
Products & Services: Push content, interactive content, data collection
Markets Deployed in: India
Estimated total number of Users: 35,000 Households

Mobile Utilities



NextDrop leverages the recent proliferation of mobile phones in India to provide households with accurate and timely information via SMS about the intermittent supply of local main-line water in Indian secondary cities. This reduces waiting time for water and enables better planning and rationing of stored water supplies. In order to monitor and improve the operations of the water utility companies with whom it works in partnership, Nextdrop also provides a mobile reporting system for the water utility workforce and utilises customer feedback on the quality of water supply received. This provides unprecedented real-time visibility on the functioning of the system, which improves decision making towards the delivery of a better water service.

1 Background

In many cities in India, particularly Tier 2 Cities, the water supply is intermittent and water utility customers only receive a main-line water supply once every 2-10 days, for roughly 2 hours at a

time. Often, it is difficult to predict when the water supply will be available in a certain area, and if customers miss the water supply window then the opportunity has passed for the next 2-10 days. This can be a major problem for people with minimal water storage capacity. While on most occasions this is just an inconvenience, it can sometimes be life threatening depending on the social standing of the customer and their capacity for resilience. The initial concept that inspired NextDrop was for a service that informs all the residents of a city 30 minutes in advance of when the water service will be switched on in their respective supply areas of the utility network, so that they can be prepared to collect and store the water.

Nishesh Mehta, co-founder and Vice President of NextDrop, has extensive experience working with energy and water utility companies and realised that there was a very limited amount of information on which the utility companies could base their decisions to improve their operations and the water supply. NextDrop was built with the utility companies in mind, in order to assist them in improving their efficiency and to provide a better service to various parts of the city. It achieved this by crowdsourcing the information required from the utility company's workforce, and from the end-user customers receiving the water supply in their own homes.

Objectives

NextDrop's objective is to improve the performance of water supply in India's secondary cities, for the benefit of both the supplier and the consumer. NextDrop seeks to generate the data-driven operational visibility required to make the most effective improvements to the water supply networks and service. NextDrop also seeks to help the citizens of India's secondary cities to make the most of the intermittent supply they receive, by communicating information on supply schedule and by gaining feedback on the quality of supply received.

Results

- NextDrop first launched in Bangalore, and now also operates in nearby twin-cities Hubli and Dharwad, but continues to expand in Bangalore. NextDrop covers 70-90% or more of the occupants of the areas it serves in each city using its service to receive information about water supply.
- Though many users are receiving information from NextDrop about their water supply, the active user base providing solicited or unsolicited feedback is roughly 10%, but varies city to city. However, many more citizens - more or less the whole city - benefit from overall improvements to the water supply delivered because of NextDrop's work on the utility networks without ever becoming a registered user of the service.
- Nextdrop have become a key partner with the utility companies within their operational cities, and are increasingly becoming an indispensable part of the service delivery by providing the visibility and analytical insights required to provide the best possible service within the limitations of the infrastructure.
- The community bond between the workforce and their customers has become stronger through recognition and appreciation, which leads to a better quality of service for the customers and

more consistent, higher quality data for the utility company, on which to improve the service.



Impact

Residents can use their time more efficiently, having gained time through knowing exactly when water will be available. Historically, the risks associated with intermittent water supply in these regions were avoided through the ubiquitous practice of at least one person from each household staying home at all times to be able to collect water when it became available. One user, a housewife, told NextDrop "You've set me free." She now runs errands and sees friends without worry or guilt over risking her family's water security.

More residents are receiving water supply more regularly than before and utility staff are experiencing increased feelings of empowerment in their jobs. When Hubli-Dharwad's water utility used NextDrop's monitoring tools across a three-month period, over 17,500 families got water when they otherwise would not have done. These families were at the end of their area's supply cycle and would not receive sufficient water if the system lacked proper pressure. By engaging 'valvemen' (ground level staff) to report water pressure when they turned water on, and relaying this to the utility engineers, responsible for decision-making about those areas, NextDrop provided the visibility with which to make real-time adjustments to ensure equitable supply. After this, the ability and willingness of the utility workforce to make decisions was changed because they knew their decisions could lead to improvements.

2 Lessons Learned

- **Donor partnerships are a crucial early part of the project's life cycle, but should not be relied upon long-term.** Though NextDrop ultimately seeks to become funded by and integrated into the operations of its utility partners, donor funding is still accepted as a necessary part of the life cycle for expansion into new cities. Donor partnerships are required for initial installation and early operational costs in each new city until the value of the service has been proven sufficiently to attract long-term and self-sustaining local utility partnerships. The cycle of how to interest the utility companies and how to use this interest to get them on board takes anything between 6 and 9 months depending on the landscape.
- **Keep the design process lean and base it on fast-paced customer feedback.** NextDrop is committed to lean-thinking and user-centricity in its design process and ensures it includes in the end-product only the information or functionality that has been proven through rigorous active iteration to be of the greatest importance to the end-user. In the case of NextDrop's customer-facing product, feedback on iterative tests was typically gained within a week.
- **Language is not always a barrier.** Language compatibility challenges that NextDrop faced were partially solved by using the vernacular that is most universally understood by users, but which importantly is also the most widely compatible with users' handsets. However, the main solution to this problem was simply to assist customers through the learning process to understand how the service works. The simplicity of the service minimises language barriers once a basic level of understanding is reached.

- **There are better incentives than money.** Social incentives such as strengthening the community bond between the workforce and their customers, and professional incentives like performance recognition became much bigger factors for improved workforce performance than financial gain alone. These specially designed incentive programmes were crucial in improving the quality and consistency of data gained by the field-based utility workforce on whom NextDrop relies.

3 Approach

NextDrop created an interactive voice response (IVR) system for the water network ‘valvemen’ - the manual labourers who go into various areas of the utility network opening and closing the water supply valves to different parts of the city. Every time they would go into a new area the valvemen would call the IVR system to confirm which particular valve for which area of the network they were opening. On receiving this command, NextDrop sends all the citizens of that supply an SMS informing them that their water supply will shortly become active. It therefore becomes a lot easier for the people receiving the water to make the necessary arrangements for water storage.

The design of NextDrop includes a system whereby the citizens can provide their own feedback on the quality of the supply in terms of water pressure, the condition of the water and the length of supply received. This provides a near real-time system for both the supply and demand side of the water utility service. It also provides insights into the operations of the infrastructure itself and helps to identify any inefficiencies that exist or any problems that need to be resolved immediately. This information is all supplied to the water provider so they can make decisions based on this information to improve the water supply.

The water networks in many Indian secondary cities are very old and are in need of repair in many places, and as a result have numerous inefficiencies. Furthermore, the supply of electricity is in itself highly unpredictable and intermittent. The water supply depends entirely on the electrical supply required to power the water pumps. Finally, there is a simple factor of water scarcity. The water demand is roughly twice the available supply in real terms, and due to network problems and the inefficiencies of the system, the water utility companies are unable to supply even that proportion with any kind of efficiency. All these factors combined spell a very complex problem.

In terms of resources, the utility companies are commonly consumed with addressing the series of immediate problems and constantly fighting to keep them at bay just to keep the system operational, with little resource for planning ahead and making operational changes to improve the system in the long run. It is also hard to address these issues without solid information on which to base decisions, and there is limited technical capacity within the utility companies to think up technological solutions in order to gain this information. The founders of NextDrop saw that as an outsider one can see the whole system externally and more easily identify the problems without having to address them personally, and thereby begin to propose broader and more innovative solutions. This is where the external input of NextDrop has really been instrumental in proposing the use of mobile phones in the delivery of the water service.

4

User Centric Attitudes

NextDrop have two kinds of products - the customer-facing service delivering supply information, and the utilities management product informing the delivery of the service. The design process for both is based on a 'lean thinking' approach for iterations, and is almost entirely based on client feedback around what kind of information they need, rather than on any unproven product design hypotheses.

The customer product is slightly smaller in scope. Initially the project started out giving customers information on the timing of their water supply. However, it began receiving a lot of feedback from customers experiencing difficulties because the timing information provided was not precise enough. The project began utilising this culture of feedback to create iterations, such as adjusting an SMS notification, and then to test them by gaining further feedback. The customer feedback cycle was very quick, typically seeking to gain feedback within a week and using this to inform immediate and longer-term decision making. Eventually, a product iteration was reached where customers would be given a range of times that water would be available, and would also be informed of any delays or breakages in the supply, because they were the two pieces of information they had learned the customers cared most about. In terms of gaining feedback from customers, there were some behavioural barriers to overcome. At first, the system relied on customers providing feedback by SMS in return to the text about their water supply, but in reality customers would more commonly make a voice call to the number. In response to this the project designed a binary missed call system whereby a customer dials one number to respond with the binary information 'yes' and another number for 'no'. This system can be limited in terms of the range of detail that can be derived from the feedback, but it also considerably improves things for the customer because it doesn't cost anything to generate a missed call, and there is no bias resulting from having a single number meaning 'yes' and inferring all non-responses as a 'no', or vice versa.

Initially, the data that NextDrop generated was provided to the utility companies in the form of spreadsheet datasets, which were unappealing and rarely used. Maintaining its user feedback based design process, NextDrop engaged the utility companies, who requested a mapping interface for the data. NextDrop responded to this by building a mapping model with the functionality of being able to click through an area and see what the historical trends are, or which engineer is responsible for a certain area. Figure 1 (below) gives an example of this interface.

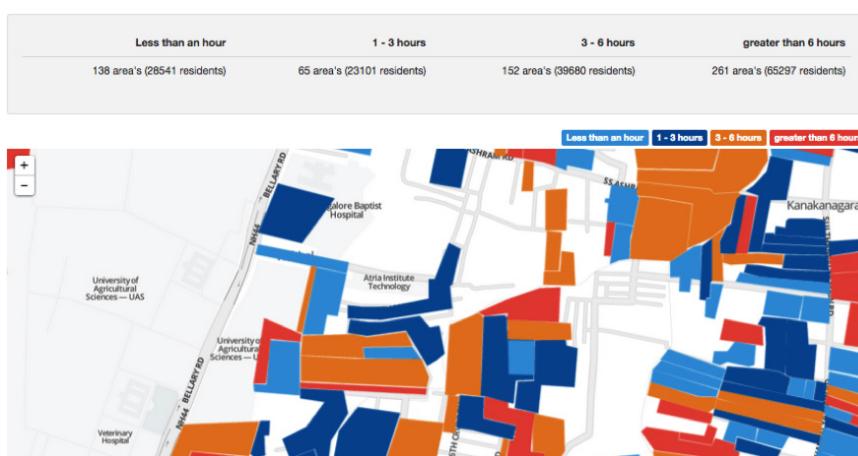


Figure 1 - Snapshot of Nextdrop Interface

5 The Use and Value of Data

NextDrop already generates a lot of data points that have been instrumental in its design and its impact on the utility companies and supply networks with which it works. However, there are many more data points that the project seeks to collect, particularly in relation to the supply infrastructure and network operations. Every location and every piece of machinery that are used in the networks can benefit from an information system - for example the pumps that are being used, when and how long they are in operation and how much electricity they are using, the water levels of the various storage tanks that the systems use, the hierarchy of the valves and the elevation of the pipes. Visibility on this type of information enables data-driven decision-making regarding the water supply in terms of the condition of the system in any given moment of real-time monitoring. Nextdrop are also currently developing a predictive system based on this kind of data, which has the potential to hugely impact the quality of service. A lot of this data is gained from field visits; the NextDrop team are in the field most days mapping new areas to inform these models. A lot of this data also exists within the collective knowledge of the utility companies, but has not yet been aggregated and organised into the intelligent system that NextDrop has in mind. As this system becomes increasingly rich in information and this information gets augmented by customer and engineer feedback, and by previous lessons and historical trends, it will become increasingly effective and will enable the network to surpass its current efficiency levels of 60-80 per cent.

In terms of customer data, the entire design and implementation of the system relies heavily on user feedback data. However, NextDrop are still a long way from being able to build customer profiles that incorporate vital statistics such as income, level of mobile education, and being able to link information about a customer's location and water supply with their existing feedback activities. NextDrop identifies that it would need its customers to be a lot more responsive in order to build these kind of profiles and to make them more broad and dynamic. The project has done some preliminary work on this, and currently this kind of data is gained via the utility workers who deliver water service bills to every household and who therefore connect personally with every customer at least once a month.

6 Success and Scalability

For the customer-facing product, there are three main metrics that NextDrop looks to in order to measure success. The first is the penetration rate of users within a city's population; the number of people receiving information from NextDrop about their water supply, which currently stands at around 70-80%. The second metric is the percentage of this penetration rate providing feedback, both solicited and unsolicited, which currently stands at about 10% but varies city-to-city and month-to-month. The third success metric, which is projected for the future, is to switch as many customers as possible away from an SMS only service to an app. The NextDrop app is still under development but will be able to provide a far richer experience for users and generate richer feedback data.

For the utility-facing operations, the first measure of success is the number of people on the utility network workforce providing information. NextDrop asserts that the incentive systems in place are effective at maximising the amount of information they receive from the workforce, which is the second success metric that NextDrop seeks to apply. The third success metric is to reach the stage at which the utility management and supervisors start making performance improving data-driven

decisions based on the information that NextDrop provides. It has started to see success along this metric with engineers using the NextDrop data to make real-time decisions.

The final and overall success metric for NextDrop is to ultimately become embedded within the utility companies' institutional behaviours such that they make big operational changes for improvement that affect the bottom and the top line based on the visibility that NextDrop provides.

NextDrop intends to expand to further cities using a 'cookie cutter' model for replication and expansion based on the first three cities. However, since the project is still gaining scale and has not yet reached its full potential, utility companies in other cities may be unwilling to pay for the initial installation of the NextDrop system and the first year of operations, or to provide the resources by which to integrate NextDrop into the utility company's operations. There are also challenges in gaining the trust of these partners for them to overcome perceived risks, and to convince them that the project will be sufficiently lengthy to make valuable changes in the system. It took about 9 months for NextDrop to get the first utility company to see the value of the project and to take them board on as a partner. Initially this partnership was a non-payment partnership, meaning the utility company did not financially support NextDrop's operations, which instead relied on customer generated revenue for a paid service.

At first, Nextdrop started out charging its customers about 200 rupees (\$0.10 USD) per month for the service in order to cover operational costs. However, once the system was implemented and the results started to be proven the utility companies became willing to pay for the service because of the valuable information that NextDrop provides. At this stage, NextDrop can become a free customer service for which the customers are only used as a source of feedback rather than revenue. Reaching this stage requires funding for initial installation and early operational costs, and therefore NextDrop has thus far relied upon, and will continue to rely on donor funding for the early stages of implementation in each new city it reaches. This may limit sustainability and scalability to some extent, but it is accepted as a necessary part of NextDrop's life cycle for expansion and is therefore built into the business model, which is designed with scaling in mind. The cycle of how to interest the utility companies and how to use this interest to get them on board, takes anything between 6 and 9 months depending on the landscape.



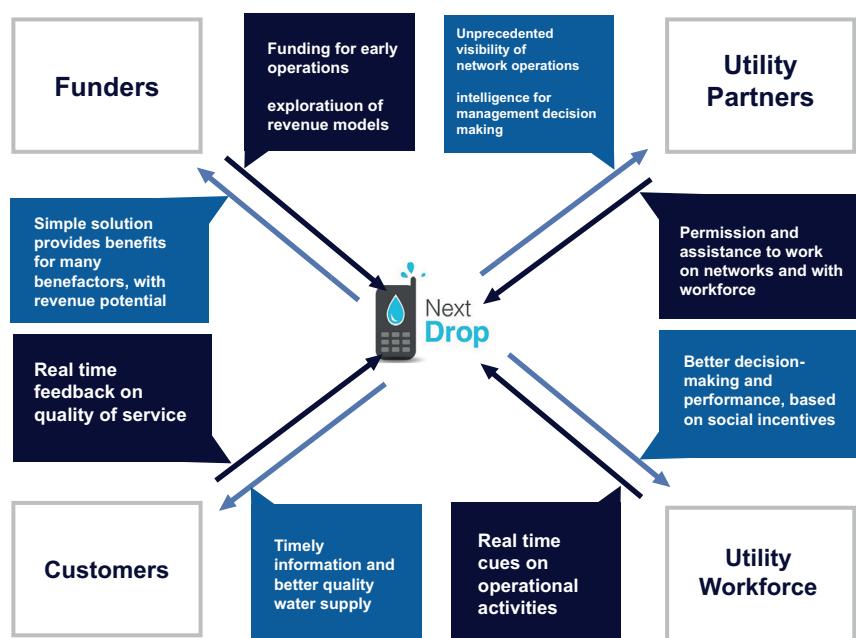
Figure 2 - Predicted lifecycle for expansion

Within its current operations in Bangalore, Hubli and Dharwad, NextDrop has achieved phase I and is currently in Phase II, predicting completion of Phase III by 2017.

7 Partnerships

The crucial role that donor funding plays in NextDrop's expansion lifecycle highlights the importance of donor-partnerships. During the inception of the company, NextDrop was awarded a seed grant through Knight Foundation's Knight News Challenge. NextDrop has also received equity investment from Social + Capital Partnership, and in 2014 received a seed grant from the GSMA Mobile Enable Community Services (MECS) Programme's Innovation Fund.

NextDrop's primary partners are the Bangalore Water Supply and Sewerage Board (BWSSB) and respective water boards in Hubli and Dharwad. NextDrop is looking forward to strengthening these partnerships and seeing yet more positive results come out of them. Operations are expanding rapidly in the city and providing a lot of data to every level of the organisation. NextDrop asserts that even small changes in the decision making process at the operational level can have a large systemic effect, and is encouraging the water utility companies to start using the data generated by the system data to make better decisions.



*arrows represent direction of value-add

Figure 3 - Partnerships diagram

8 Challenges

The project experienced language compatibility problems because many of its customers use cheaper Chinese handsets that don't recognise vernacular text, meaning that those pieces of text do not show up in the SMS from Nextdrop. English language has been used, but a lot of NextDrop's customers still don't speak English and so cannot read the contents of the SMS. In this instance, customers would typically recognise the name of the sender as NextDrop, and then would assume that the contents of the SMS were announcing that their water supply would be provided shortly. However, it could also be a notification about delays or cancellation to their supply, or any of a

number of possible reasons for receiving a text from NextDrop. The project has managed to partially solve the problems with language compatibility by using the most widely compatible vernacular for both users and their handsets, but the main solution to this problem was simply to get the customers through the learning process of how the service works. The simplicity of the service minimises language barriers once a basic level of understanding is reached.

Another problem that NextDrop faced was gaining consistent and accurate information from the utility company workforce in the field, who often required training on how to use a mobile phone, how to use an IVR system, and how to be consistent in their information.. In response to this NextDrop built an entire incentive programme by which users earn points for participation and can then redeem those points for mobile airtime or other prizes. A further layer of incentive to this is achieved through a direct interface between these workers and their superior officers, who monitor progress and performance using the NextDrop system. Gaining recognition for good performance became a much bigger incentive than solely for financial gain. NextDrop then added a social incentive scheme, whereby the workers are specifically portrayed as local heroes for providing the citizens of their district with precious water. The community bond between the servicemen and their customers becomes stronger through recognition and appreciation, which leads to a better quality of service for the customers and more consistent, higher quality data for the utility company, on which to base improvements to the service. Many of the manual labourers on the utility networks don't have a very high social stance, but NextDrop has striven to change this because these workers are doing a valuable public service, often for relatively little money. The social implications of providing utilities to the people, and providing information to the utility companies gives them a greater sense of pride in their work and leads to improvements for all parties.

9 Future Plans

Gaining richer feedback from customers is sought to enable more insightful analytics and greater operational clarity. Though the value of the basic SMS platform is valuable in terms of accessibility within the Indian market, Nextdrop is developing an app that can provide a far richer end-user experience while also gaining richer feedback data, and hopes to switch many of their customers towards this and away from a pure SMS product. The company preliminarily predicts the data-enabled smartphone penetration rate to be around 12-15% in the Tier 2 Cities of Hubli and Dharwad, and intends to test the viability of delivering the service over data networks by conducting a trial using WhatsApp.

NextDrop sees value in the replacement of hand-delivered bills with mobile bills, since the former is much more time consuming and cumbersome, and can pose problems if people are not home to receive their bills. Nonetheless, it remains important to NextDrop to maintain some personal interface with its customers, though these visits could be more targeted and personalised to challenging supply zones or customers who are experiencing problems and require help, making customers feel more valued.

NextDrop is extremely keen to see key decision makers within the utility companies begin making big operational changes based on data-driven decisions informed by NextDrop. Once decisions like this are made because of NextDrop's implementation, then the system would become embedded within the network. The customer service system and the utility management system could be based on NextDrop, and then the whole water utility system will have changed for the better. This is the vision that NextDrop's founders foresee for the service, and believe that once this behaviour becomes

embedded, then it could become influential in beginning a movement to tackle other problematic public services such as energy and transportation. By using the model for the stages required for solving one systemic problem like water utilities, the learnings will certainly have applications in other areas.. These operational institutions and citizens alike could benefit from systems such as NextDrop to provide them with unprecedented visibility within the system and enable improvements throughout.

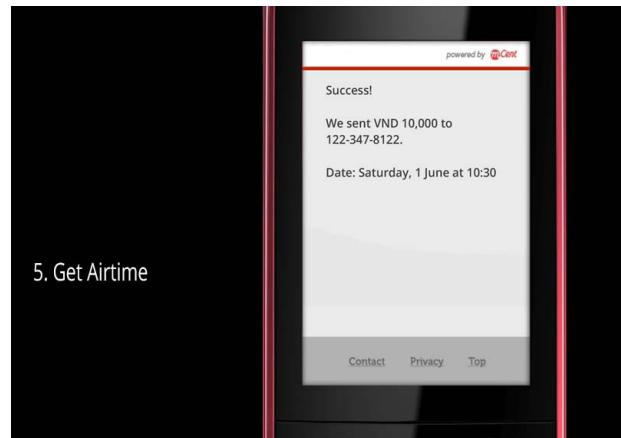
Case study: Jana

Ryan Webb, M4D Impact

Product summary

- Year Launched:** 2009 (txtEagle, became Jana in 2011)
- Business Model:** B2B (i.e. brands pay, not mobile users)
- Targeted Device:** Smartphones with Android OS (previously: 'feature phone/basic phone')
- Primary Delivery Technology:** Mobile web, (mCent App Android OS - launched 2014)
- Products & Services:** Data collection
- Markets Deployed In:** 102 countries
- Estimated Total Number of Users:** +10 million
- Estimated Number of User Actions:** +100 million user actions on mCent since 2013

Digital Inclusion



Jana is a mobile platform that connects global brands with emerging market consumers through reciprocal advertising. Jana's platform creates a two-way conversation between brands and consumers. These conversations deliver insights to the brand through mobile-based ad campaigns and drive consumer action by incentivizing members with free airtime on their mobile phones. This exchange takes place on the company's opt-in consumer facing platform, mCent. Through its partnerships with 237 mobile operators, Jana aims to redirect the USD \$200 billion spent on traditional advertising into consumers' pockets and focus brands' marketing efforts on a more relevant, data-driven advertising stream. Jana is headquartered in Boston, Massachusetts and has raised \$25M from Spark Capital and the Publicis Groupe. Maurice Lévy, Chairman and CEO of Publicis Groupe sits on Jana's Board of Directors. Clients who are using Jana to drive action include: CNN, Microsoft, Johnson & Johnson, Nestlé, Unilever, P&G, Danone, Google, and General Mills.

1 Background

Emerging market consumers represent the largest consumer base in the world. It is estimated that over 200 billion US dollars a year is spent on advertisements directed at developing countries. This figure grows by 15% a year, making it the fastest growing advertising market in the world. However, because many people in emerging economies are living on less than two US dollars a day and lack sources of media outlets that most developed countries have, it is hard for global brands to reach these individuals. Despite poverty levels, more people in emerging markets have mobile phones than ever before. Jana figures that mobile users in these developing markets spend 10% of their average day's wage on airtime. With this in mind, Jana targets the emerging middle class of mobile customers in emerging markets who are starting to see more and more discretionary spending power. These are the consumers who are suddenly buying the low cost Android powered devices and coming online.

Objectives

The social dimension of Jana's objective is to efficiently reroute the \$200 billion US dollars spent on traditional advertising to the consumers in emerging markets and more specifically, the emerging middle class in developing markets. Lower income is a relative term, but Jana's typical audience still makes less than 10 USD per day. The consumers they are targeting are precisely those who have just entered the emerging middle class, and gaining access to the internet for the first time.

Results

- Jana has partnered with 237 mobile operators in 102 countries
- There are over 2000 brands using mCent to reach emerging market consumers
- Over 10 million mCent members in emerging markets have produced over 100 million actions on the mCent platform since 2013

Impact

Jana's platform has enabled advertisers to funnel money away from those who own television channels, radio channels, billboards and other traditional media channels, allowing the advertisers to redirect money back into the pockets of the consumers that they want to reach. This also allows brands to target more specific customer segments and give a clearer picture of their return on investment through user engagement.

2 Lessons Learned

- **Don't underestimate the emerging market consumer.** Through data collected via the mCent Platform, Jana has learned that emerging market consumers are using more sophisticated technologies than originally thought, in particular, they are seeing greater smartphone use than originally anticipated and are doing more research in this area.

3 Approach

Jana's compensation-based platform, mCent, has enabled them to facilitate a direct connection, and cultivate a two-way dialog between brands and the next billion consumers that are emerging into the middle class. Jana engages this middle class of consumers using its mCent platform. Here brands connect with mCent users and provide them with offers that mainly include downloadable apps and other mobile content.

Jana built a platform that lets them instantly compensate pre-paid subscribers in denominations as low as \$0.10, and they are set up to do that for 3.5 billion active mobile phone numbers.

Jana recently wrapped up a campaign with Magzter, the world's largest digital cross-platform newsstand and magazine store accessible from internet-connected devices. Magzter approached Jana in 2014 with hopes to scale their app installs and usage in India. Jana sent push notifications to mCent subscribers and Magzter immediately saw results encouraging them to expand to other larger developing markets. Magzter's results using Jana's platform were very positive. Daily app installs tripled during the campaign resulting in 60,000 downloads in 10 countries—Argentina, Brazil, Colombia, India, Indonesia, Malaysia, Mexico, Vietnam, Thailand and the Philippines. Jana gives people small denominations of airtime for taking these types of actions and creating the two-way conversation with the brand. If Magzter wanted to do this without paying people airtime to reimburse data used to download their app, Jana figure this is equivalent to taking money out of these sixty thousand people's pockets. These users are on pay-as-you-go plans and pay for every byte that they consume, and every bit that they upload.

More recently Jana has been focusing on App Marketing which, through the mCent platform connects advertisers, affiliates, and developers with Android smartphone users in emerging markets so they can download, open, and then try out new apps on their devices. Fundamentally, Jana actually reimburses users for cost of the data they used to download apps.

4 User Centric Attitudes

Since Jana's team primarily consists of data-scientists and software engineers one of their most critical activities is building models for personalized experiences for each mCent mobile user, enabling Jana to specifically target its mCent members with opportunities that are unique to their preferences. Jana wants to give its users a very personalized experience, and there is a lot of tech in required to build this. In particular, this is necessary for the reinforcement learning to understand what individual mCent members like and serving them with content according to their interests and past behaviour.

In early June, Jana soft-launched a beta version of the mCent app in the Google Play Store. Within a few weeks it had over 13,000 downloads exclusively through word of mouth referrals. Over 80% of

traffic was from returning members. Members used the app longer, more frequently, and were able to discover more content than they previously did on the mobile website. In the first 3 months of soft-launch, Jana recorded over 2.5 million events that took place on the app. The mCent app provides members with a faster and easier user experience for mCent members at no cost.

5 The Use and Value of Data

The value and usage of data is fundamental to Jana and its business model. Jana was founded on the belief that personal data belongs to the consumer and is therefore personal property. If the consumer chooses to disclose their personal data with Jana's clients then they should be compensated. When users agree to disclose their data on the mCent platform, the following is collected: name, phone number, device type, phone OS (if smartphone user), offers completed and mCent member history. User data captured has given Jana a better understanding of their primary users. For example, user data captured from India showed that 90% of their Indian consumers were using Android Version 4.0 or better. This reassured Jana that there is an appetite for smartphone content in emerging markets. User data has helped improved Jana's understanding of what users want, what Jana can provide, and the best way to go about doing this.

6 Success and Scalability

Jana represents something disruptive to the advertising industry. In this sphere Jana has gained the attention of high level executives at large brands. Maurice Lévy, for example, has joined Jana's board and controls a large fraction of that \$200 billion dollar spend toward the developing world.

As Jana see it, market research options for developing countries before a system like theirs was to fly people out to do face-to-face surveys, or at best use call centres. Previously, that would cost anything between \$30 and \$50 to complete per survey. Jana's offering is an order of magnitude less money, and the information can be turned around much faster than with other methods. Jana's key costs are around the mCent platform itself and airtime purchase from Mobile Network Operators (to be distributed as airtime rewards to mobile subscribers as compensation for certain actions on their phone). Jana does not spend much time on marketing to either brands or mobile consumers. A large portion of mobile customers find the platform purely through referrals. Jana gets new emerging market consumers signing up every month because their friends tell them about all of the benefits they can receive through the platform - in this respect the value proposition is inherently viral. In practice, this viral activity is often focused around a specific campaign, where the mCent platform has an airtime reward offer that spreads through a market via referrals.

Jana has already achieved an impressive reach in terms of countries, Mobile Network Operator (MNO) integrations, and the 10 million plus users on the mCent platform. However, one of the real stories around scale is the success of viral user-to-user referrals on the mCent platform itself. Take for example, the Magzter campaign mentioned above that racked up 60,000 downloads. For each mCent user who saw the push notification and elected to download the Magzter app, they had an option to forward it to friends and family. Jana's feedback showed that most mCent users that tried Magzter were pleased and elected to recommend it to friends and family. More specifically, in Indonesia and Vietnam each referring member invited at least 11 friends or family members to try Magzter. The viral nature of this approach has allowed Jana to continually achieve scale reaching large amounts of people in short amounts of time. As another example, in 2013 CNN International

was able to gather 20,000 people's opinions on an African potentially being elected pope from 11 African countries within 24 hours through Jana's mCent platform. Otherwise, CNN International would have used on the ground journalists and polls which would not have produced nearly as many results in the same time.

7 Partnerships

There are a range of different mechanisms to top-up a handset, which allows the mCent system to work across a range of operators. For example, Unilever are one of Jana's clients who want to engage every subscriber in India regardless of the MNO. This meant that Jana had to create a lot of different relationships with MNOs, with VAS providers, with aggregators, and so on. Their aim is to be able to credit airtime at a 99% rate of reliability, so they've built a technology that sails over from one channel to another channel, removing the middleman.

The original mobile operator partnerships arose from Nathan Eagle's work in emerging markets while a professor at MIT. Here his work centred around Call Data Record (CDR) analytics, providing him access to the backend billing systems of dozens of mobile operators. MNOs in developing countries in particular have been quickly inundated with large amounts of data and sometimes lack the computational power or human resources to fully utilise the petabytes of data being generated. No matter if the operators were in Latin America, South Africa, or South East Asia, these MNOs were all interested in increasing Average Revenue Per User (ARPU). In this light, Jana appeared as an alternative revenue source, and a way to ultimately increase ARPU. In many instances, MNOs just think of Jana as another airtime reseller. The average subscriber in emerging markets spends 10% of their days wage on airtime, which is generally thought by Jana as the upper bound. Jana's pitch was to create the further revenue not from the subscribers themselves, but from the global brands with an interest in reaching them, and in exchange for simple actions that the subscribers could take.

In terms of other partners, Jana also works a lot of the major ad agencies. These players are key to craft the campaigns with the clients that leverage Jana's technology. Thus, Jana have the standard revenue share agreement with the ad agencies, because they don't do anything on the creative side.

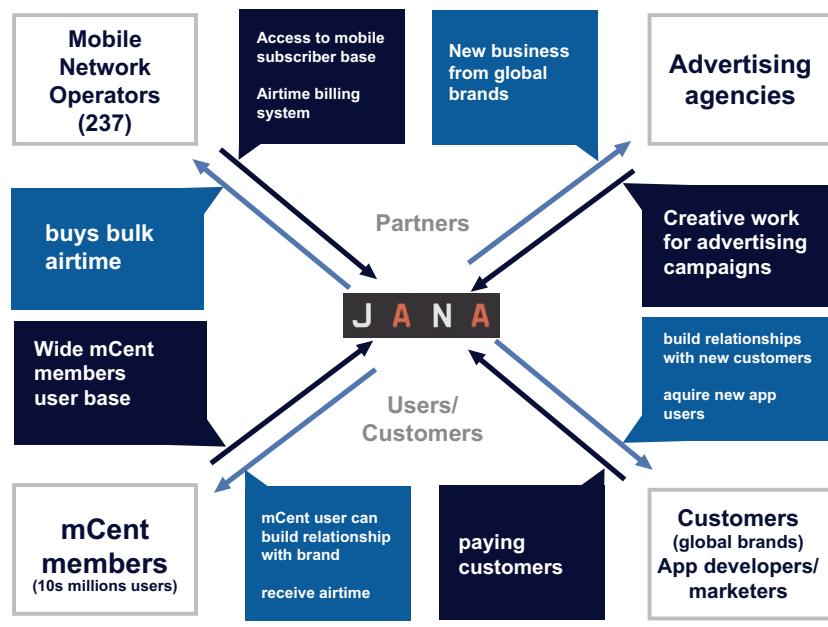


Figure 2 - Partnerships diagram

*arrows represent direction of value-add

8 Challenges

Jana has faced some notable challenges since the inception of the business. Initially there was scepticism surrounding mobile technology in emerging markets. Many people did not feel that emerging markets would progress beyond bulky GSM phones and SMS. Jana overcame this perception and believes trends in emerging market mobile technology, including the falling cost of smartphones and data, and the improving coverage of 3G and 4G. Jana anticipates these trends to bring hundreds of millions of consumers online each year in emerging markets.

In efforts to adapt to the kind of mobile users they see emerging in developing markets, Jana has stopped using SMS and USSD delivery channels. Instead they have opted to be purely over the top, and understand that they need to engage with consumers who have access to the internet. Originally, starting out in 2009-2010, Jana was serving a small minority of consumers in emerging markets in this mobile web segment, but it has since grown rapidly. The upside is that Jana gets to really ride the wave of low-cost devices and the explosion of data services in these markets.

9 Future Plans

Within the next few years Jana's plan is to continue work on its creation of a data marketplace where individuals can unlock the value of their own personal data. Jana plans to reach its goal of redirecting half of the \$200 billion US dollars spent on advertising in developing markets to the consumers that their clients want to reach. Jana believes the ability to achieve this vision is an important measure of their future success and continues to make them unique.

Case study: Agri-Fin Mobile

Peter McNally, M4D Impact

Product summary

Year Launched: 2012

Business Model: Consumer-led, P2B, B2P, donor

Targeted Device: Basic phone, PC/laptop

Primary Delivery Technology: SMS, USSD, Mobile web

Products & Services: Information access, financial services

Markets Deployed In: Indonesia, Uganda, Zimbabwe

Estimated Number of Registered Users: 65,000

Estimated Number of Active Users: 25,000 paying users in August 2014

Mobile Agriculture



The Mercy Corps Agri-Fin Mobile Programme works to provide market information and financial support to smallholder farmers and small businesses in Indonesia, Uganda and Zimbabwe. The primary method through which this is achieved is a suite of bundled services, including: the provision of regular, current agricultural and agronomic information, including up-to-date crop prices; and, financial support and services that inspire and maintain the economic activity and inclusion of their customers. Through doing so, Agri-Fin believes that it can bring about economic improvement and increased food security for individuals and organisations across the agricultural sectors of these 3 countries.

1

Background

Agri-Fin launched in June 2012 fully aware that the political, economic and mobile money landscapes across the three countries in which it would be operating varied considerably. However, there were certain commonalities which led to their being selected as targets, namely their significant agriculture

sectors and relatively immature commercial financial services for smallholder farmers.

The project was inspired by a realisation that many mobile-for-development (M4D) projects across the world were working in and around the agricultural sector and mobile agriculture, but were not supplementing this work with financial support and advice. Should a service be launched that combined these components, it would be possible to help users of mobile agriculture projects to ensure that they are also safely and effectively managing their finances.

In response to this, Agri-Fin was launched simultaneously across Indonesia, Uganda and Zimbabwe with the explicit aim of combining financial support with agricultural services. From this point onwards, the team sought to realise their vision of a world where farmers in traditionally underserved communities are helped to escape poverty through improved technical knowledge and financial literacy.

◆ Objective

Agri-Fin seeks to empower smallholder farmers to make better-informed technical and business decisions - and to ensure that they have enough information to do so. This brings improvements in farmers' productivity and stabilisation of their incomes, which in turn contribute to increased food security.

◆ Results

1. Since the programme's launch in mid-2012, 285,000 farmers have been reached.
2. Currently, there are 16,720 farmers registered in Uganda, 18,900 in Indonesia, and 29,330 in Zimbabwe
3. In June 2014, 231,000 Zimbabwean farmers received Agri-Fin's agricultural information services, and 1,600 received financial services

◆ Impact

Agri-Fin's vast reach allows them to bring greater financial inclusion and higher levels of financial literacy to those working in agriculture across Indonesia, Uganda and Zimbabwe. This, in turn, increases both financial and food security.

2 Lessons Learned

- **Stay on top of your partnerships:**
 - **Ensure that objectives are aligned.** All parties working on a project's different components must be fulfilling their roles with the same goals in mind, and this must fit into what your service practically needs.
 - **Monitor the behaviour of your partners.** It's important to retain a degree of awareness of this in order to ensure that partners are performing to an expected standard and are still bringing value to your service.
- **Be flexible.** Initial assumptions can sometimes become a hindrance. It's therefore important to be willing to adapt and evolve as the service grows.
- **Don't force change.** In acquiring new users, Agri-Fin has found that pushing farmers to change their SIM cards is often ineffective. Instead, the best action to take was to provide a starter package through the MNO, improve promotional materials, and include training activities to increase farmers' loyalty. This lesson now informs how Agri-Fin goes about seeking new users.

3 Approach

A combination of market research with information regarding political and economic landscapes helps Agri-Fin to create distinct services across the three countries in which they operate. What remains consistent throughout, though, is the medium for delivery of these services. This is achieved through the distribution of four services in the form of a bundle, delivered in four stages: agri advice, financial advice, agri payments, and credit facilitation. The service creates content with the help of local and specialist partners, before distributing information directly to farmers through mobile technology. In doing so, Agri-Fin can counter the inaccessibility of technical and market information, as well as a lack of knowledge around what can be done with this information.

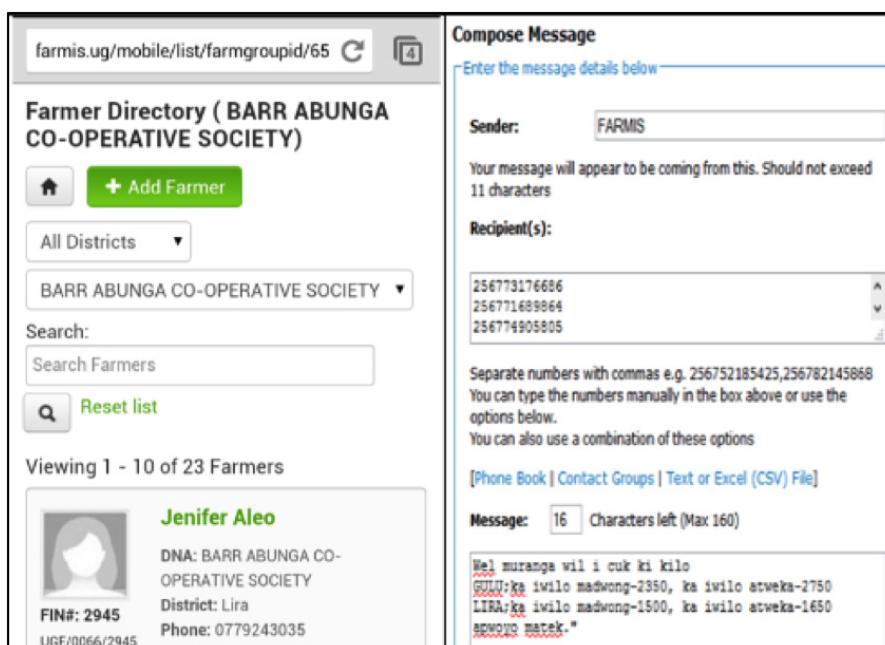


Figure 1 - Screenshot of application user interface

The models through which the services operate vary slightly across countries. In Uganda, Agri-Fin operates a subscription model through mobile payment for agricultural information. Here, customers are allowed a trial period in order to understand the benefits of subscribing. This has resulted in over 1,000 trialists signing up for the full service, or showing a willingness to do so. In contrast, the Indonesian programme's business model is based on usage fees for financial services. Agri-Fin and its partner Bank Andara earn commission on customers sending remittances, collecting savings and paying loan instalments through the AndaraLink mobile platform.



Figure 2 - The farming cycle with associated product/service value propositions

4 User Centric Attitudes

The design of Agri-Fin's approach was borne out of extensive market research that helped the team to understand precisely what could benefit target customers across the three countries. For example, this led to the discovery that farmers were generally more receptive to financial advice rather than only being given capital. Another insight was the slight differences found between operations in the three countries. When combined with information regarding political and economic landscapes, this research helped Agri-Fin to create distinct services, each offering some combination of the following: market information, learning and advisory services, weather information, and financial services and support.



Margaret Elok is a lone carer for her grandchildren in Barr, Lira District. Due to low harvests and the amount of her produce consumed at home, she would previously sell what surplus she had at low prices in order to guarantee sale. However, through AFM, she started receiving information about other crops that grew in the area and could be sold for much. She then started growing sorghum, millet and sunflower for the market, in addition to agwede beans and maize for home. Extra income from this has helped towards her food and healthcare bills.

Figure 3 - A farmer's story using the Agri Fin mobile service

5 The Use and Value of Data

Agri-Fin recognises the importance of user data in informing and shaping their services. In order to ensure that their services are benefitting individual customers, they collect such information as: place of origin, their number of children, the value of their crops, their income levels, yield levels, what kind of financing they have, and what kind of information they access. This information allows Agri-Fin to create a poverty index to map the statuses of their farmers, and to better understand the experiences of farmers - including their level of access to technical and financial services.

Additionally, Agri-Fin collects transactional and post-transactional behaviour data. This can then be used for trend analysis, for example to mark any land that is experiencing particularly high yields. Agri-Fin can then utilise the findings from this analysis to help farmers to benefit themselves and their produce, in this case by ensuring that they know the correct value of their crops.

In spite of this, the Agri-Fin team doesn't contain an individual who leads on data analysis as such. However, partners and content providers contribute considerably. For example, the Ugandan programme works with the FIT Uganda's FARMIS platform to generate aggregated dashboards, updated in real time with such information as: the number of farmers profiled and receiving information, the percentage of male-female farmers profiled, the number of messages pushed and pulled, and the number of farmer associations and cooperatives contacted. The Indonesia programme uses 8Villages' LISA platform for similar purposes. In Zimbabwe the MNO partner, Econet, generates a lot of agricultural data for the Agri-Fin service to collect.

However, this data is not currently utilised to its fullest potential. Due to funding and capacity limitations, the analysis conducted is not as extensive as it could be. This remains the case in spite of a programme-wide recognition that further utilisation of data would enhance the solutions that they are able to provide to farmers. That said, Agri-Fin is planning on undertaking some data analysis for the purposes of monitoring and evaluation with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) later this year.

6 Success and Scalability

Agri-Fin currently has two key metrics in place for measuring their success. The first of these is the number of farmers who have been reached by their service. This was decided upon as a useful metric due to the direct visible benefits that it brings, particularly through the provision of agricultural information. 285,000 farmers have been reached across Indonesia, Uganda and Zimbabwe.

The second key metric is the number of farmers trained by the service in financial literacy. This was chosen as it represents a distinguishing component of the Agri-Fin service through its supplementation of market information with the necessary knowledge and support to control and plan one's finances. Recently, there has been a focus on delivering this especially to female farmers, who commonly lack the same access as men to this kind of information. In that vein, the Indonesia programme is currently delivering financial literacy training to 10,000 female farmers across three districts.

These shorter-term metrics feed into the overall direction of Agri-Fin, which helps the programme to crystallise their plans regarding the scaling of the service. Its income streams are now allowing it to move away from and relying on donor money. Instead, they can turn their efforts toward other areas in which they may be able to replicate the service. In searching for possible areas of expansion, Agri-Fin considers the area's economic situation (including the weight of the agricultural sector), MNO coverage, the number of legally recognised farmer organisations, and the frequency of microfinance institutions available to partner with commercial banks to develop mobile financial services. Whilst Agri-Fin has no concrete plans for geographical expansion at this stage, the team are open to the idea of developing the service in areas that meet these criteria.

7 Partnerships

Certain key partnerships have played vital roles in Agri-Fin's success to this point, and will continue to do so in the future. Indeed, the 'bundled' nature of Agri-Fin's service reflects the importance this model. Unlike those of typical NGO programmes, Agri-Fin's services are essentially commercial offerings from its content providers to its end users. This financial element makes partnerships more sustainable, as it provides incentive to the partners' continued involvement with the service.

Agri-Fin's partnerships can be separated into three categories. The first of these is financial content and services partnerships. These are important for because they provide valuable financial information and they facilitate Agri-Fin's financial services. In Indonesia Agri-Fin works with Bank Andara - a commercial bank which partners with microfinance institutions and is able to provide mobile payment services through their AndaraLink platform. Relationships with such organisations are necessary if Agri-Fin is to properly meet their objective of combining agricultural and financial information and delivering it to customers. The second of these partnerships is with local agriculture experts, community organisations and farmer unions. These groups increase the access that Agri-Fin has to farmers, many of whom are located in quite remote areas. In Uganda their partner AgriNet is a transparent broker of agricultural commodities and services. And, in Zimbabwe, the Farmers' Union provides valuable information on the ground as well as acting as a channel through which Agri-Fin can reach the union's members. The third, type of partnership is with MNOs, who support dissemination of services. Such as Econet in Zimbabwe, whom Agri-Fin identified as a suitable partner due to their position as having the furthest-reaching network in the country and therefore poised to develop new far-reaching products and services. Econet's widest subscriber base is in rural areas of Zimbabwe. These are the geographic areas where the services are most vital to the population. Broadly speaking, the provision of Agri-Fin services across Indonesia, Uganda and Zimbabwe has consistently relied on - and benefitted from - functional working partnerships with one or more MNOs.

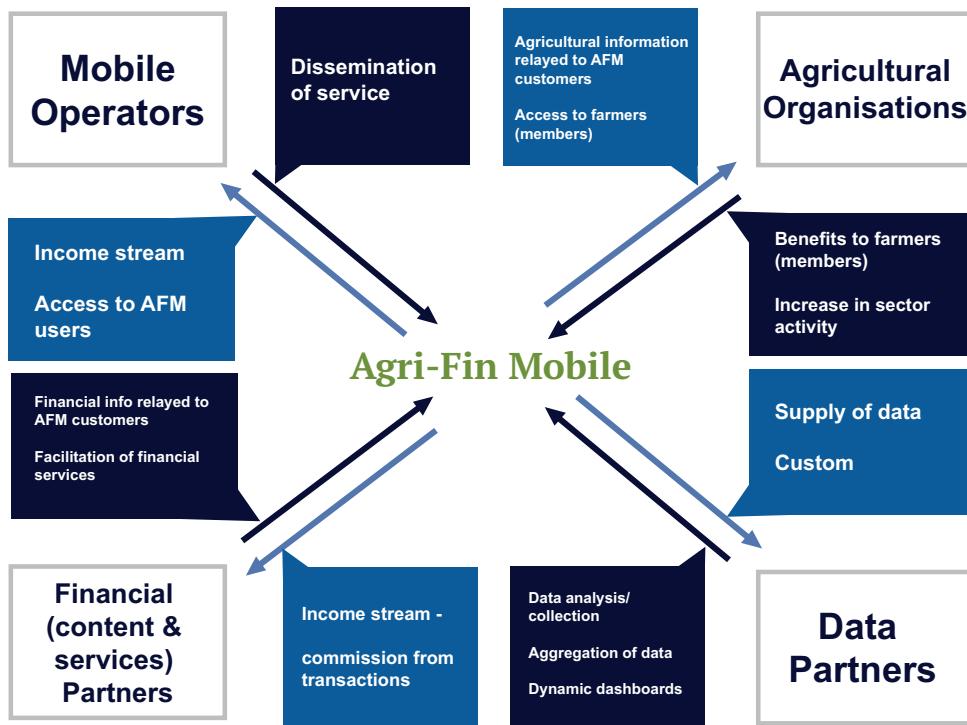


Figure 4 - Partnerships diagram

8 Challenges

In terms of running and sustaining the service, Agri-Fin initially relied on donor funding for its continued survival. Whilst this was the initial enabler, it also has its limitations. For example, extension of the data analysis practices is dependent on external donations. Today, sufficient resources to do this is not available. Indeed, the actual time required to identify and secure funding for this is a further barrier. At the same time, the income arriving through usage and subscription fees is transforming their models into ones that are self-sustaining, meaning that problems originating from a reliance on donor funding are likely to diminish.

A further challenge that has been faced by Agri-Fin is the levels of mobile literacy in their areas of operation. Despite high levels of access to mobile phones in these countries, Agri-Fin found that people's actual ability to make use of the technology was often limited to making and receiving calls. In light of this, Agri-Fin are now including mobile literacy training in their programmes. These are carried out across a number of channels, the most intense being when agents meet in person with customers. Although their current capacity limits how much training they are able to offer, this nevertheless represents a valuable addition to Agri-Fin's services.

9 Future Plans

In the coming months, Agri-Fin will be working with the Swiss Agency for Development and Cooperation on a programme review, and with GIZ on data analysis for the purpose of monitoring and evaluation. In addition, the organisation will be pursuing opportunities for further partnerships. As such, there are many exciting prospects afoot for the near future, which will enable the enhancement and expansion

of the Agri-Fin service.

Looking forward, Agri-Fin has a positive outlook for the coming years. Amongst the team, there is demonstrable excitement around learning more valuable lessons establishing more valuable partnerships, both of which will contribute to the continued growth and increased impact of their services.

Case study: Medic Mobile

Peter McNally, M4D Impact

Product summary

Year Launched: 2009

Business Model: Donor, B2B

Targeted Device: Basic phone, Feature phone, Smartphone, Tablet, PC/Laptop

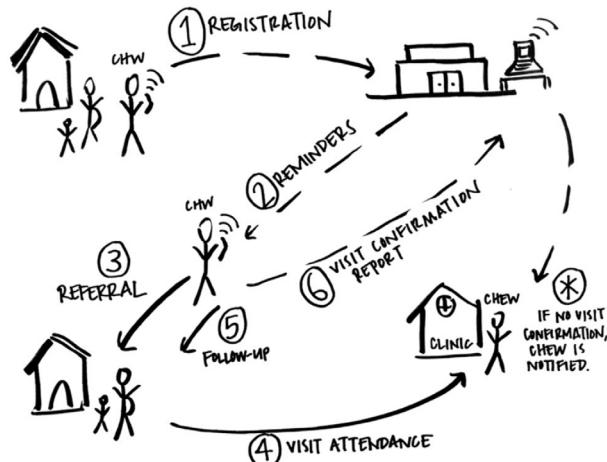
Primary Delivery Technology: SMS

Products & Services: Data collection, Interactive content

Markets Deployed In: 21 countries across Africa, Asia, Latin America and the Caribbean

Estimated Total Number of Users: 9,000+ CHWs supported (serving 5 million end users)

Mobile Health



Medic Mobile believes in using technology to improve health equity. It is guided by a mission to support community health workers and families using mobile and web tools. In order to achieve this, Medic Mobile provides community health workers (CHWs) and those involved in others aspects of healthcare with a mutually accessible platform for storing and sharing important and up-to-date information such as pregnancies, disease outbreaks, essential medicine stocks, and updates about emergencies. Today, this impacts the healthcare of more than 5 million people in 21 countries across Africa, Asia, Latin America and the Caribbean.

1 Background

The idea for Medic Mobile was conceived when Co-Founder Josh Nesbit was a pre-medical undergraduate student. Whilst working for a summer at a rural hospital in Malawi, he observed patients walking up to 100 miles to see the hospital's single doctor, and community health workers walking over 30 miles to deliver reports by hand. Alongside this, he observed the strength of mobile

reception in these rural areas of Malawi, highlighting the potential impact of mobile communication in an mHealth context. These observations lead him to found the mobile-based healthcare project, Mobiles in Malawi.

In 2008, Mobiles in Malawi merged with a service named MobilizeMRS - which focused on electronic medical records and data collection - to form FrontlineSMS:Medic, which became Medic Mobile. In 2010, Medic Mobile grew to a team of four and expanded its work to ten countries across Africa, Asia, Latin America, and the Caribbean. By 2011, the Medic Mobile SIM application for feature phones was released, the service launched its first regional-scale programme in Africa, and it collaborated with 25 partners to reach one million people.

Objective

Medic Mobile aims to develop mobile-enabled services that support community health workers, staff at community clinics, ministers of health, and others to: monitor diseases, stay in touch with families, send emergency alerts to regional hospitals, and convey critical data to key decision makers at health ministries. Combined, these components can increase and improve the delivery of vital healthcare in underserved communities worldwide.

Results

- Currently working with over 9,000 community health workers (CHWs), a 71% increase from 2012
- Worked with 39 partners to deploy tools in 21 countries
- Serving over an estimated 5 million end users

Impact

Medic Mobile enables people at all levels of the health delivery system to use simple, powerful, flexible, and inexpensive tools to help people access care, stay in care, and receive care that is of a higher quality. Over 5 million end users have felt these benefits as a result of the Medic Mobile platform.

2 Lessons Learned

- **As technology evolves, it is necessary to maintain a knowledge base of use cases.** As the service develops, Medic Mobile's use of a case roadmap - combined with their delivery model - is the foundation for their strategy, which helps them to develop roadmaps for their product, partnerships, and staffing.

3 Approach

The Medic Mobile platform runs on feature phones, smartphones, tablets, and desktop computers. These tools are currently focused on antenatal care, childhood immunizations, disease surveillance, drug stock monitoring and communicating about emergencies.

The mobile aspects of the service allow patients and community health workers to use inexpensive feature phones to collect structured data that they can submit via SMS to a centralised computer or laptop at a clinic, hospital, or NGO. Healthcare workers can also make direct calls to receive help in caring for community members. Data can also be sent through a variety of SMS formats. Users can also install Medic Mobile for feature phones via a small parallel SIM—a small wafer that slides under a phone's existing SIM card—so that any GSM phone can run the Medic Mobile app. This makes it possible to register new pregnancies and births, schedule appointment reminders, and perform other tasks. Medic Mobile for desktop is situated on a computer or laptop in a clinic or ministry of health. In this setting, it acts as a flexible, scalable information and communication centre, without requiring a connection to the Internet or remote server. Medic Mobile stores data received from community health workers, manages relationships, sends automated messages to individual or multiple recipients and automatically schedules appointments, among other functions.

Alongside this, Medic Mobile for desktop provides real-time access to community data, enabling faster communication and more targeted support to patients and communities. Data can be entered via SMS, smartphones, or through a web-based interface. The platform is optimised to support a variety of uses and can easily be adapted to support other mHealth needs.

Medic Mobile also provides a powerful analytics feature that health officials can use as a dashboard to visualise their data. This feature can be used by district healthcare workers or ministries of health to track operational progress, measure impact, spot trends, and make decisions based on accurate, real-time data. It can be accessed from laptops, netbooks, tablets, and smartphones. It is cloud-hosted and works seamlessly with the mobile field reporting tools.

4 User Centric Attitudes

The success of Medic Mobile, and their approach to mHealth relies on the input of the people involved in healthcare delivery at every stage of design and implementation. This helps the tools' eventual end users to see them as powerful ways to improve health in their communities. This means that, the wider the participation, the greater the impact is likely to be. This human-centred design in turn sets the stage for greater scale.

The Medic Mobile team works with the communities in which it operates to identify potential solutions and new workflows, exploring ways that its technology platform can lead to faster, more personalised, more accurate, and often less expensive ways of working. This process also identifies possible barriers to implementation of Medic Mobile tools. Overall, this aids the organisation in fulfilling its commitment to building the right tools and developing the right use cases for each user, partner and community served by Medic Mobile. An outline of the process Medic Mobile have created, utilising principles of human-centred design, is shown below.

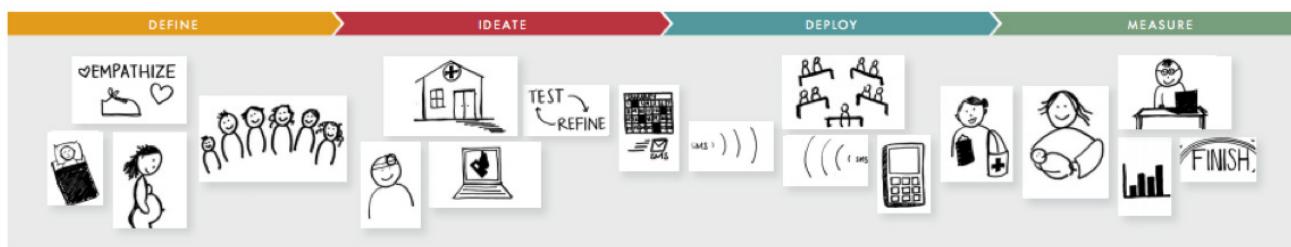


Figure 1 - Medic Mobile's Human Centred Design Approach

the human centred design process enables Medic Mobile to keep refining their base of use cases for the platform, and ensure they keep the roadmap of their product development, staffing and partnerships in line with current needs.

5 The Use and Value of Data

Medic Mobile has collected impact data since its initial deployment in 2009. This data is managed and visualised on an internal impact dashboard. Data is used both for internal learning and to help improve tools and services; as well as by partners to manage their health programmes, inform clinical decision making and better support their health workers. Medic Mobile has a full time analytics manager who supports this work, with leadership from the CEO and directors, demonstrating the value that this role plays within the organisation.

The service's data collection capability has matured as overall organisational capacity has grown, allowing it to now collect information on all 54 active projects. In 2014, Medic Mobile began to pay particular attention to impact indicators for four current priorities: (1) to increase coverage for focused antenatal and postnatal care, skilled care during birth, and childhood vaccinations; (2) to increase stock visibility and availability for essential medicines, and protect the cold chain for vaccines; (3) to increase early detection and treatment of infectious disease; and, (4) to increase support for remote health workers.

This data-collecting aspect of the Medic Mobile platform can be used by anyone who accesses, stocks, distributes, and monitors medications in systems where the platform operates. This increases coordination and efficiency, thereby making it easier to get the right drugs to the right place at the right time. For example, clinics and pharmacies can send information to government agencies on a daily basis about dwindling supplies. This data can then be aggregated and displayed on easy-to-read analytics dashboards, providing information that can be used to restock drugs more quickly (often from nearby clinics) and improve forecasting to avoid future stock-outs. Additionally, patients can use mobile phones to notify ministries of health if local clinics have run out, helping to ensure greater accountability. An example of the kind of dashboard that can be delivered using the platform is shown below.



Figure 2 - Example of Medic Mobile Dashboard

Another area in which data brings value to the organisation stems from their ability to showcase their own progress in a data driven way. For example, aggregating insights and metrics across implementations of the platform allows the team to generate a rich annual report, which can be shared with partners and others.

6 Success and Scalability

Medic Mobile's impact metrics are essential to the organisation, informing its pathway to scale and guiding its decision-making across the organisation. In addition to the kinds of specific priorities discussed above, Medic Mobile measures its success according to the number of users it has, and the number of people those users cover. These metrics are based on Medic Mobile's historical growth and an understanding of community health worker populations in their priority countries. To date, Medic Mobile works with over 9,000 community health workers with a cumulative coverage of over 5 million people. In line with this, Medic Mobile's success is ultimately defined by its ability to connect partners with the right tools to achieve impact and improve equity within their health system.

Scaling in the future will require a mix of national scale deployments, as well as widespread adoption of the recently-launched DIY download of the platform. Medic Mobile expects to maintain its working relationships with community-based organisations, international NGOs and ministries of health - the focus being to work together to support the maximum number of community health workers possible within their system and supporting their workforce-strengthening activities.

7 Partnerships

As discussed above, Medic Mobile values CHWs as key partners in designing and developing all of their tools. This is enhanced by relationships with implementation partners, who are essential for connecting with these users, as well as learning how to best support CHWs. Medic Mobile also works with partners across the health system - ranging from community-based organisations to international NGOs and ministries of health - to deploy a national-scale program addressing several priority use cases.

Technology partners are also essential for effective collaboration. For example, thanks to a partnership

with Mozilla, Medic Mobile released the first community health app for Firefox OS, which is now available in the Firefox Marketplace. On top of this, philanthropic partners have supported Medic Mobile at critical stages of growth and service implementation. This has enabled supporting research and development work, building capacity to deliver and support projects which have subsequently become more self-sustaining, while also helping to support Medic Mobile's capacity to deliver its DIY platform at scale.

When considering partnerships, Medic Mobile aims for a mutual commitment to using its design processes, focusing on solutions that are defined and built in collaboration with CHWs. It also seeks an understanding from prospective partners that an iterative process will lead to a more effective workflow and sustainable program. Strong, productive partnerships are a key element to the Medic Mobile delivery model and will be critical when aiming to support 200,000 health workers covering 100 million people by 2020.

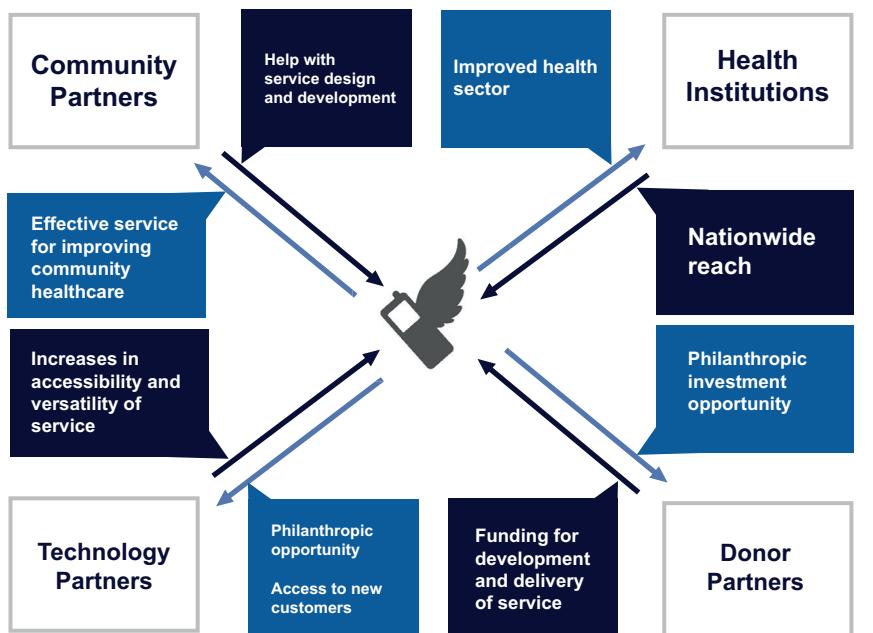


Figure 3 - Partnerships diagram

8 Challenges

Medic Mobile's greatest on-going challenge is designing systems that work as effectively and conveniently as possible for its users. The organisation seeks to overcome this by maintaining focus on human-centred design and refining the service's delivery model. In doing so, it can continue to design its product so that any small clinic can use it, based the unique needs of users at these clinics. Nevertheless, in order to scale this model to meet the ambitious targets set by themselves, the Medic Mobile team will have to find new paths and avenues to release their platform to reach a very wide user base of health workers. This is a challenge the organisation has firmly in sight.

9 Future Plans

Looking forward, the Medic Mobile team is particularly excited about two specific innovations: a downloadable version of its offline web app and an all-in-one hardware kit designed for last-mile clinics. Both of these innovations will make its most impactful products significantly easier to access

for grassroots organisations and clinics. Building on these and other elements, the organisation has set an ambitious goal of supporting 200,000 health workers covering 100 million people by 2020. To achieve this goal, it must meet a 65% growth rate for its user numbers each year from 2014 onwards.

Case study: Njorku

Peter McNally, M4D Impact

Product summary

Year Launched: 2011

Business Model: B2B

Targeted Device: Basic phone

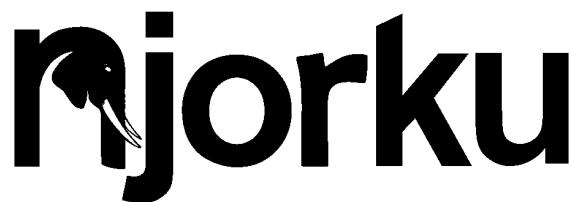
Primary Delivery Technology: SMS, Web

Products & Services: Job-matching service

Markets Deployed In: Cameroon, Nigeria, Kenya, Ghana, Uganda, South Africa, Egypt

Estimated Total Number of Users: 2500+ unique users per day; approx 1million per year

Mobile Employment




Njorku is a social business based in Cameroon and operating in a total of 7 African countries. Njorku is a recruitment service that matches job-seekers with suitable and relevant vacancies. It does this by providing aggregated and indexed vacancies on its online platform, which users can search through and filter according to their interests. Users are also able to upload their CV to the website and receive email and SMS alerts when a suitable vacancy arises. This way, skilled African professionals can be linked with recruiters seeking out their skillsets, thereby increasing employment rates and the efficiency of business. Njorku believes that by providing a job-seeking platform that is accessible, convenient and fast, it can bring considerable social benefits to the people of Africa.

1 Background

The founder of Njorku, Churchill Mambe Nanje, is the owner of a consultancy company in Cameroon named AfroVisioN Group Ltd. While recruiting new staff, Churchill was frustrated by the lack of a

single tool or platform that he could use to search for potential employees. He also saw that those searching for a job faced a similar problem - even those proficient on the Internet did not know where to go to find indexed and up-to-date vacancies online.

AfroVisioN is based in Buea, home to the largest English-speaking university in Cameroon. As a university town, it is home to many students and graduates who are in search of jobs. Since there was no other way for job-seekers to link up with organisations that may require employees with their skills, the job-seekers had to travel for hours handing out CVs to offices in the region in the hope that they were recruiting. Njorku was designed as a solution to these problems.

At the time - as today - Internet accessibility in Cameroon was fairly widespread but not ubiquitous. Mobile penetration, on the other hand, was considerably higher. As a result, the Njorku platform was designed to incorporate a strong mobile component in order to make it as accessible and convenient as possible to ordinary job-seekers. In response to similar problems elsewhere in Africa, the service has expanded to six other markets. Having launched simultaneously in Cameroon and Nigeria in March 2011, within months Njorku had spread to South Africa, Kenya, Ghana, Uganda and Egypt - all of which were seen as having the same existing problems and possible solutions as Cameroon.

Objectives

There are 350 million people aged 15-35 across Africa, including 10 million entering this demographic anew each year. Njorku seeks to help all of these people to find suitable and sustainable work in a way that is convenient and accessible. Njorku also aims to make the recruitment process as straightforward and comfortable as possible for employers and recruitment agencies, Njorku very much prioritises current and future impact over short-term profit.

Results

- 2500+ users of the platform each day
- 5000 recruiters have used the service to date

Impact

In the past, those searching for a job had no single platform they could access in order to find vacancies. Through Njorku, the process is made much more accessible and convenient. Every day, jobseekers can search for the exact kind of job they want, and vacancies from recruiters and job websites across its seven markets will appear. Similarly, recruiters now have access to huge numbers of suitable prospective employees who have been suggested to them through the Njorku service. Overall, this has reduced average time taken for Njorku users to find a new job from 2 months to 2 weeks.

2 Lessons Learned

- **Don't simply try to copy things that you have seen working elsewhere** - especially if the conditions are completely different. Compared to the US and Europe, Internet penetration across Africa is still relatively low. As a result, a model that is working well in the US or Europe may not translate well if you try to implement a replica in Africa. Instead, you have to strike a balance between what you've seen work elsewhere and what you know about your surroundings.
- **Investors may be naturally drawn to initiatives in some regions, and less attracted to others.** In looking for outside investment, Njorku observed that its location in Cameroon seemed to lead to reduced interest in its service. Thus, the team deduced, made for a less appealing opportunity for investors than other initiatives in markets like Nigeria and Kenya. In Njorku's case, the fact that it was also operating in these countries and elsewhere in Africa made this less of an issue. However, the Njorku team did learn that the conditions in which your service exists are of similar importance to the service itself when attempting to attract investment.

3 Approach

In the design of the service, Njorku looked primarily to other similar services that already existed. It saw that many websites featuring classified ads and job vacancies were very popular in Cameroon and across Africa. Through this, Njorku was able to ascertain that there was a widespread demand for the kind of web-based service it was planning to offer, as many people were already accessing similar versions.

The service is designed around accessibility and convenience for end users. Initially, Njorku was intended as a simple vertical search engine for job vacancies. However, it soon evolved into its current system whereby jobseekers upload a full CV to Njorku online, a process which requires one-off Internet access for around five minutes (at present this features requires a desktop). This CV is then processed and used to match the user with relevant jobs via a unique algorithm. Jobseekers then receive alerts via email or SMS regarding these matches, and have the option to save these with the intention of applying later when they have access to a desktop computer. The mobile component is particularly crucial to the service's accessibility: SMS brings benefits of speed, accessibility and scalability.

The websites are populated using an automatic crawler. This visits websites that advertise jobs and detects their job opportunities. It then adds these sites to the Njorku index and regularly fetches jobs from them. Vacancies are checked to ensure that they are relevant, accurate and up-to-date. These tools were developed in-house, allowing Njorku to source and aggregate jobs from all across Africa in the mutual interest of both the recruiters and jobseekers - both of whom benefit from a more accessible and navigable platform.

Njorku is a small company with a team of just six full-time employees and operates much like a lean start-up. It regularly updates and alters its service based on the team's observations on their service's ability to deploy these alterations with great speed. As such, its approach has evolved somewhat since it launched. The initial plan was to utilise a vertical search engine, but ultimately it has evolved into a platform populated by the profiles of jobseekers.

4 User Centric Attitudes

Njorku can be accessed worldwide by people looking for employment in any of the 7 African countries in which it operates. Whilst most users come from these countries, the service is also accessed by many users in such countries as India, Pakistan, the UK and the US. This reflects Njorku's aim of helping any user looking for work in Africa, regardless of their pre-existing situation. Additionally, the use of SMS is further reflective of the service's focus on positively impacting its users: the high penetration of featurephones in the areas in which it operates means that this approach makes the service more accessible to all.

5 The Use and Value of Data

Njorku's activity around analysing user data is still nascent. However, it does organically collect a lot of data. By uploading CVs to Njorku, users share personal information, location data, educational information, and other demographic data points. Currently, the main use of this for the service is to suggest vacancies based on the user area of interest and expertise, and preferred locations. However, as it stands, little is done in the way of analysing this data for the purpose of expansion and enhancement of the service.

That said, this is something that Njorku see as potentially very valuable and deserving of future action. The specifics of these plans are yet to be decided, but it will be based around mining the service's extensive collection of data to identify areas and ways in which Njorku can improve its user experience and increase accessibility. This is not something that Njorku prioritises at this moment while its focus is on expanding the service and widening its availability across Africa. As a result, the service itself remains somewhat minimalist and this is something that users demonstrably like, meaning that it will most likely remain the case until Njorku has the capacity and time to analyse its user data in a way that will highlight areas for improvement.

6 Success and Scalability

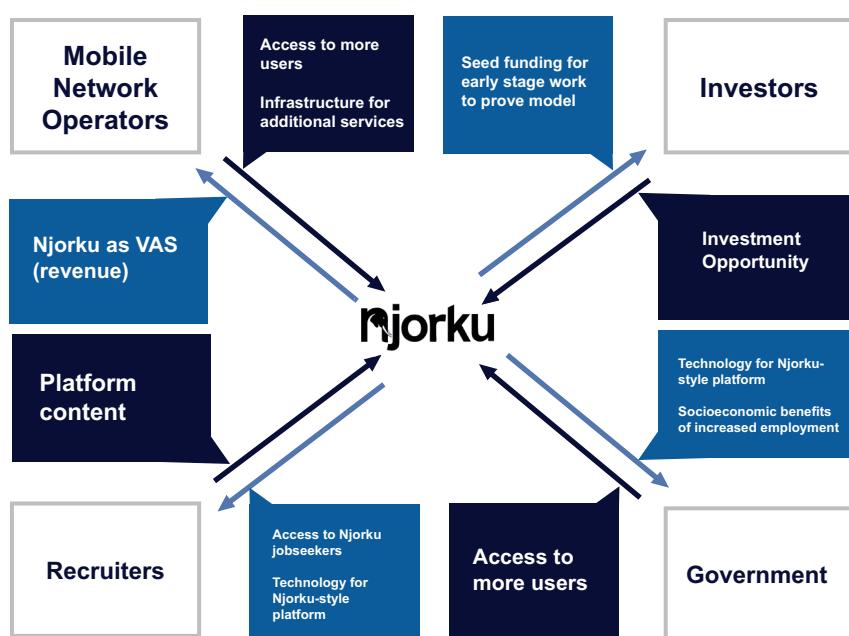
Njorku measures its success by how many people use the service to find employment in Africa each year. This metric best reflects the service's focus on impact: the more people who use the service, the more Njorku can contribute to enhancing their lives and careers. Specifically, Njorku aims to interact with 10 million people each year. Currently, the number of users reached annually stands at just under one million, based on the estimation that 2500 unique users access the service every day.

When considering areas for expansion and options for scale, Njorku makes its decisions based on regional data. When assessing markets for expansion potential, the team looks at internet penetration, employment rates, the competitive landscape, and the demographics of the population. Expansion into new markets will only be considered if conditions appear favourable for Njorku to have a significant impact. These decisions are made in collaboration with business partners and investors. Together, these parties assess the landscape and make decisions based on the potential impact. If the conditions suit Njorku, the model itself is largely replicable. Expansion is a key element of the Njorku outlook: the more areas in which it operates, the more people it can reach. Based on this model, the service is currently looking to lay the foundations for expansion into Senegal and

Cote d'Ivoire.

7 Partnerships

There are three primary categories of partnerships which Njorku leverages to support the effectiveness, sustainability and growth of the business since its launch. The first is employers and recruitment agencies. Currently, Njorku has around 5000 recruiters on its site. Their presence is essential to the value that the service holds for its users. Njorku therefore puts great effort into making the service easy for recruiters to use, so that more of them will want to use it more often. In the early days of Njorku, the team would have to approach recruiters, now recruiters recognise the value of Njorku and commonly ask to be featured on the platform. In order to maximise the accessibility and impact of the service, and to maintain these essential relationships in the long term, Njorku has decided not to charge recruiters' to post on its website. The second is partnerships with MNOs, to date these only existed in pilot form. Njorku is currently in discussion with MTN Cameroon about establishing a more formalised relationship. This could include co-branded and discounted services. Njorku would like to move its mobile component beyond SMS alerts. It hopes that the partnership with MTN will enable job applications to be submitted to employers via mobile, for example, taking the form of a joint service that is powered by Njorku and brought to customers by MTN Cameroon - who currently has over ten million subscribers.. The team hope that once this has been successfully established, it can act as a template for further partnerships with MNOs across Africa. The third categories is relationships with government bodies since they have far reaching influence, and many people could be impacted through partnerships with them. The nature of these partnerships could take a number of forms: for example a government could act as a channel for the Njorku service, or could be given the technology required to operate a government-sponsored Njorku-style platform. Njorku is currently in discussion with the National Employment Fund (NEF) in Cameroon about piloting some of Njorku's technology. Whilst any relationships with government bodies are not yet concrete, Njorku sees in such partnerships as holding potential for improving its impact.



*arrows represent direction of value-add

Figure 3 - Partnerships diagram

8 Challenges

Ironically for an employment service, one of the main challenges which Njorku has faced since its launch is finding the right staff to join its small team to further build its operations. Particularly during the service's earlier days, Njorku found it difficult to attract people with the very specific skill sets that it was seeking. This is somewhat easier now that the organisation has reached a certain prominence and has improved networks, including its own website, to spread word of vacancies and attract people working elsewhere in the sector. However, it remains a challenge for many organisations in Africa, and one which Njorku aims to help overcome.

The second key challenge that Njorku has faced is access to capital. As a relatively new company, Njorku require continuous outside investment in order to have sufficient capital to cover operational expenses and further develop the service. The organisation must therefore dedicate staff time to attracting such investment. This is made more difficult by the fact that Njorku is a social enterprise that explicitly prioritises impact over profit, and expects investors to respect this. The process of securing capital has therefore been a significant challenge over the years. Nonetheless, this has become easier for the organisation for two main reasons: the service has gained higher profile and is therefore a more attractive investment opportunity, and investors generally are seeing Africa as a rich source of future return on their investments. This is especially true for investors who see the value in long-term impact and sustainability over short-term profit. As a result, Njorku now has a small number of minor donors and investors which enable the company to better sustain itself and seek further expansion.

9 Future Plans

Njorku plans to expand its service and enhance its impact, reach, and accessibility as wide as possible through new partnerships and continuous service development. In particular, a formalised partnership with MTN Cameroon could bring great value, as well as paving the way for future relationships with MNOs; such relationships have the ability to bring the Njorku service to many millions more jobseekers.

Njorku continues to assess and trial new ways to bring its service to the jobseekers in the 350 million Africans aged 15-35 in Africa, as well as many others around the world. Among other things, this will involve expansion into other African countries where Njorku could bring positive benefits for recruiters, employers, jobseekers, and for the wider population.

Case study: Frontline SMS Credit

Finn Richardson, M4D Impact

Product summary

Year Launched: 2009

Business Model: Donor, Open Source, Consumer (non-MNO led)

Targeted device: Basic Phone, PC/Laptop

Primary Delivery Technology: SMS

Products & Services: Payments, Accountancy overview software

Markets Deployed in: Kenya

Estimated total number of users: 600 PaymentView downloads, 50+ organizations directly supported

Mobile Financial Services



**FRONTLINESMS
CREDIT**



The Social Impact Lab (SIMLab) Credit project is part of the SIMLab Foundation, best known for their FrontlineSMS service. The Credit project (formerly known as FrontlineSMS:Credit) developed a software product called PaymentView, which currently works in tandem with Safaricom's M-PESA mobile money service in Kenya. PaymentView is a mobile money management tool for 'last mile' organizations who cannot access or afford other types of management tools. PaymentView diverts the payment processes via the FrontlineSMS platform that utilises an M-PESA enabled (Safaricom) SIM card, a GSM modem, and a desktop computer to aggregate payments into the software interface. From here users can - without the need for an internet connection - conduct overview financial management and analysis, track progress on instalment plans as well as generate manual and automated M-PESA payments, SMS reminders and financial reports. A new version of the platform called 'Payments', sporting greater power, functionality and versatility is currently under development and will be launched as a beta product in early 2015 with plans to become a fully developed product soon thereafter.

1 Background

SIMLab Credit (aka FrontlineSMS:Credit) was originally conceived in 2009 by Ben Lyon, who later went on to become a co-founder of Kopo Kopo. Having witnessed great suffering, deprivation and oppression worldwide, Ben concluded that the primary common denominator that could have the greatest positive impact upon people in all these situations was better access to financial services.

Having seen the early success of M-PESA in Kenya, it was observed that while M-PESA had seen a lot of success with person-to person (P2P) transactions, there wasn't much use among organisations and businesses because they lacked a suitable payment tracking and management systems. This often meant that using M-PESA became overwhelming and more daunting than reverting to cash payments. In response to this, SIMLab Credit was established in order to provide a software platform designed to better manage M-PESA transactions. This software, called PaymentView, works in tandem with M-PESA and diverts the payment processes via the FrontlineSMS platform that utilises an M-PESA enabled (Safaricom) SIM card, a GSM modem, and a desktop computer to aggregate payments into the software interface. From here even users without an internet connection can conduct financial management and analysis, track progress on instalment plans as well as generate manual and automated M-PESA payments, SMS reminders and financial reports.

Objectives

The objective of SIMLab Credit is to improve the efficiency, transparency and accountability of mobile money use for business, including among the 'last mile' of users. It aims to improve efficiency by enabling mobile money payments and receipts to be processed through the software platform itself, thereby reducing the error-prone and time-consuming procedure of manually performing these functions on a mobile handset. It improves transparency and accountability by aggregating all payment actions in a single interface and providing overall improvements in payment tracking and visibility. Importantly, it also aims to improve access to these benefits specifically among base of pyramid (BoP) organisations using mobile money within low-income emerging markets. Importantly, like FrontlineSMS, PaymentView is designed to operate without the need for an internet connection, thereby making it as accessible as possible to the 'last mile' of users.

Results

PaymentView has been downloaded over 600 times in Kenya, and the SIMLab Credit project provides direct support to over 50 organizations in Kenya. PaymentView also acted as a beta test for the design and build of a more advanced Payments platform soon to be launched by SIMLab.

Impact

Among MFIs (Micro Finance Institutions) and SACCOs (Savings and Credit Cooperative Organisation) there is a huge incentive in the efficiency of using M-PESA for payments, but the organisations previously had no suitable tracking management systems. This often meant that using M-PESA became overwhelming and more daunting than reverting to cash payments with which they were familiar. The PaymentView software provides a solution to this issue by providing a control centre for the payment processes. By using PaymentView, one small savings collective in Kenya, for example, was able save 85% of the time typically taken to process payments, and also increased average savings by 50%.

SIMLab Credit directly implemented PaymentView in a rural primary school and allowed the school to create flexible payment terms for parents, increasing access to education for low-income students. Another unintended but beneficial outcome within the school was decreased administrative costs and increased coordination and communication due to the use of SMS. Prior to PaymentView and FrontlineSMS, the school regularly printed hundreds of hand-outs on a monthly basis to communicate essential pieces of information with parents. Furthermore, the hand-outs rarely made it all the way home, leaving parents without any information about their children's education.

2 Lessons Learned

- **Mobile money is not the only solution** - To date SIMLab Credit has operated solely in Kenya, where the mobile money market is well established and easily accessible. However, many countries do not have such a strong mobile money market, and in these markets, airtime top-ups and other mobile payments platforms often supplement traditional and informal currencies. SIMLab plans to research these mobile economies in 2014-15.
- **The BoP market is not ready for internet-based services** - While there has been a push within the industry to move away from desktop solutions to online platforms, the SIMLab Credit project has consistently found that even in a place like Kenya where the mobile money industry is well established and connectivity is relatively high, a significant portion of the market is still not ready for the move to internet-based services
- **Don't underestimate the value of communication within service delivery** - In some instances, the SMS components included within PaymentView have been as popular as the mobile money transfer technology, proving the value of SMS communications as a well understood and appreciated technology for improving efficiency at the organizational level.

3 Approach

SIMLab focuses on 'last mile' users first and specifically utilises technologies that are the lowest common denominator in terms of access and affordability. Many MNOs providing mobile money, such as Safaricom and Airtel, provide an internet-based solution where you can track and manage your business transactions. While there has been a push within the industry to move away from

desktop solutions, the SIMLab Credit project has consistently found that even in a place like Kenya where the mobile money industry is well established and connectivity is relatively high, base of pyramid (BOP) organisations are still not ready for internet-based services. The Credit project and platform has been designed specifically with these limitations in mind.

For the initial design process the project worked closely with the financial sectors, but since then the team have realised that the platform can be used by schools and NGOs and similar organisations. The same basic set of transactions facilitate the activity of all these different organisations and institutions. In the design process the project is strongly informed by user feedback, and also utilises scrum methodology and agile software development to push out iterations a little at a time to test their value. This approach continues to inform the design and decision-making process at the project.

PaymentView has always been delivered for free in order to reach the widest audience. However, the new release of a redesigned 'Payments' platform is likely to be available for a subscription fee, to reflect its greater power and functionality and to align with a newly implemented business model for the Credit project that focuses on ensuring financial sustainability. However, it is important to the project mission that this platform remains completely accessible in terms of price-point and willingness/ability to pay, to the type of organisations that are currently informing the design process. The price-point schedule is also proposed to include a tiered pricing scale relative to the level of functionality required by a user. Though the software side of the project will continue to utilise donor funding throughout the design and build process of the new platform, after release it will ultimately become financially self-sustaining and independent from donor funding. At this time the SIMLab Foundation will continue to focus on implementation, policy and best practice in a consultancy capacity, while the technical team take the Frontline suite of products, including the new Payments platform into a new company.

4 User Centric Attitudes

User data entirely informs the decision-making process for the design of the SIMLab Credit project. The ongoing design of the new Payments platform is being strongly informed by the needs of a broad group of organisations currently using the PaymentView beta and working directly with SIMLab. The project is working closely with these organisations in order to ensure that relevant functionality with the end-user in mind is incorporated into the end product design. Part of the incentive for the organisations who have partnered with the project in this process is having the opportunity to influence the end design such that it incorporates the functionality that would be most useful to their work. The platform is still in active usage by many organisations, but is currently limited to the Kenyan market.

5 The Use and Value of Data

As part of standard project monitoring and evaluation, the project team are collecting information about the impact of PaymentView on the organizations using it, their relationship with their communities and customers, and the through-put of payments and messages. This information is being used to assess whether the software is making a difference, and also to help inform the design process for the new version of the system. Where possible, the project is also interacting with beneficiaries of the organizations using PaymentView and attempting to uncover reasons for adoption or non-adoption of mobile money. Collecting and exporting monthly log reports of all actions within the

system has benefited many organisations using PaymentView, particularly SACCOS, by enabling better accountancy and finance overview management.

The development of the Payments platform is benefiting from user testing throughout each iteration of the software development and includes A/B testing of the interface, including load/capacity testing, and design and vocabulary-cues.

6 Success and Scalability

The main success metrics for the Credit project are in line with its objectives to increase efficiency, transparency, and accountability in mobile money management among BoP organisations.

Historically the ability of FrontlineSMS products to scale has depended on conventional hosting hardware - usually a laptop computer, phone or modem, and the user interface itself. This set up, while broadly accessible and designed for horizontal scaling, can actually act as an obstacle to vertical scaling under certain scenarios. SIMLab hopes to overcome this by ensuring that more complex payment models are easier to set up within the new Payments software. SIMLab is also researching the possibilities of running the service in the cloud, but must first assess the legal and regulatory landscape associated with hosting the service online. Nonetheless, SIMLab have previously proposed a model for further maximising the horizontal scalability of the platform through the incorporation of many hundreds of nodes for small-scale innovation that and personalisation. However, if managed and aggregated at higher levels by a single organisation this functionality could amount to vertical scalability.

Furthermore, the software design and build approach employed by the project utilises the SIMLab consultancy operations, which limit its scalability in terms of resource and practicalities. Again, solutions to these limitations are being built into the new Payments platform and the surrounding business model.

7 Partnerships

In order to ensure flexibility and reduce barriers to setting up a service, the FrontlineSMS platform is designed to work without the need for MNO partnerships. The Credit project follows this core design, using mobile networks to operate services and therefore building on MNO offerings rather than working with them directly.

To date, the majority of the SIMLab Credit project's work has been enabled by donor funding, and such relationships should be counted as among the key partnerships that make up the project's operations. Early funding came from the Vodacom Americas Foundation, and the project recently received a grant from the DFID Global Poverty Action Fund Innovation Program to roll out the software with 40 rural organisations - such as SMEs, SACCOs, MFIs and NGOs and schools - in Kenya. SIMLab's close working partnership with users and the feedback they provide is crucial to the design of the new version of the Payments software platform, the build for which has also been enabled by this grant.

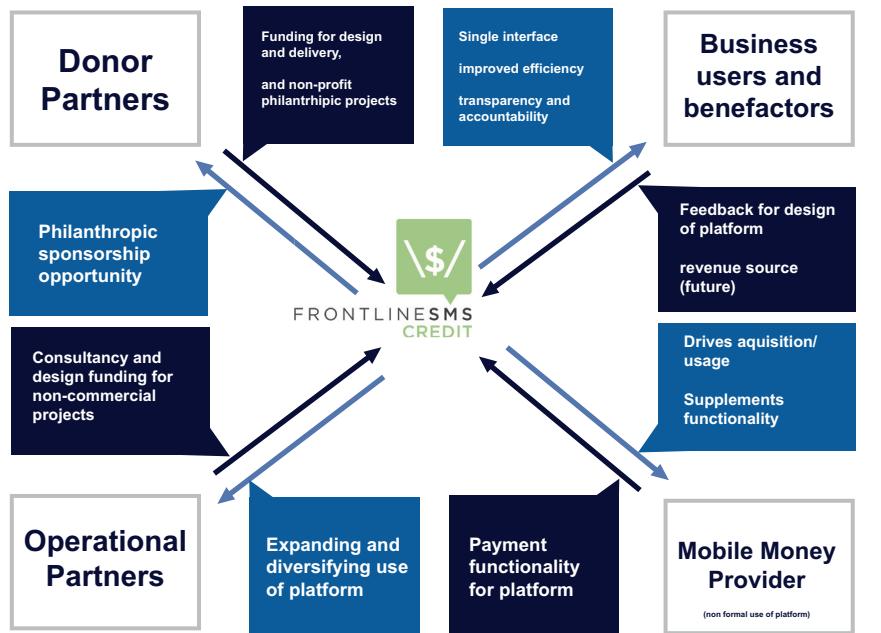


Figure 1 - Partnerships diagram

8 Challenges

The monetary savings and improvements in efficiency from engagement with these systems are clear. However, the incentives to adopt them can be diminished by the resource demands placed on business end-users and their beneficiaries, through having to learn and engage with new technological platforms. SIMLab has faced the complexity of this issue throughout the delivery of PaymentView and asserts the importance of communicating the value proposition to end users and assisting them in the learning process in order to reduce barriers to adoption.

In terms of accessibility, many of the end-users of SIMLab Credit and their beneficiaries live in places where M-PESA uptake is not yet universal and where local liquidity ('rural float') is a common challenge. In this context, where many users trade using both mobile and cash, difficulties can arise because the current beta of PaymentView doesn't allow for cash additions into the interface, which instead have to be processed manually. The prototype pilot has helped identify improvements to the software which are being built into the new Payments platform.

However, the main challenges will come when the project moves outside of Kenya to regions with less well-established mobile money sectors, or if the project is successful in expanding beyond traditional mobile money transactions. Here, the main challenge for the project will be in establishing partnerships of similar strength to the current use of M-PESA and its well-established user base in Kenya. However, challenges also exist in more mature mobile money markets, where solutions are readily available and the landscape is more competitive

s of planning interactions with users in the field.

9 Future Plans

SIMLab intends to expand the project's focus beyond East Africa and into markets such as South America, Southeast Asia and to some extent the Middle East. Proposed solutions to the challenges involved in expanding beyond the Kenyan market include the incorporation of payment aggregators,

and connecting with multiple MNOs and encouraging them to have more universal APIs that would be more easily compatible with the project platform. In more competitive landscapes, innovative solutions are key; the project hopes to pilot other types of mobile value exchange such as airtime exchange systems in order to attract mobile money and mobile network operators and gain their cooperation. Through working with the available infrastructure in 'last-mile' communities, SIMLab hopes to be able to penetrate more communities who, due to lacking infrastructure, might otherwise be excluded from mobile value transfer and miss out on business expansion opportunities. Such a mobile airtime exchange pilot could begin in a rural community without any mobile money systems, working with local vendors that already sell airtime to encourage them to work with the community to allow for airtime in exchange for cash or goods, helping to move value without the direct use of cash. The system could then be implemented elsewhere, including in more competitive landscapes.

The first users will begin to test the new Payments platform at the beginning of 2015, with the pilot phase continuing through to the end of 2015. Payments will be produced by a for-profit software company in support of SIMLab's not-for-profit objectives. The two will still remain partnered in their mission, but the split will enable the flexibility of working with technology providers other than FrontlineSMS on the Payments software project. SIMLab hopes to open up the project to new partnerships including with credit, legal and governance bodies, NGOs, large development organisations and software companies.

The new SIMLab Credit Payments platform will be released as beta product in early 2015 with plans to become a fully developed product soon thereafter.

Case study: Kubatana

Peter McNally, M4D Impact

Product summary

Year Launched: 2001

Business Model: Donor

Targeted Device: Basic phone, Smart Phone

Primary Delivery Technology: SMS, Mobile Web

Products & Services: Push content

Markets Deployed In: Zimbabwe

Estimated Total Number of Users: 95,000

Digital Inclusion



kubatana.net



Kubatana was founded in 2001 to strive for equal access to information and the inclusion of the general public in debate and discussion across Zimbabwe. It seeks to do so through providing a database of the contact details and publications of NGOs for citizens to access online and through mobile web. Additionally, it reaches out to its SMS subscribers with updates on news and events, as well as polls and feedback requests. These activities are aided by a select number of key partnerships, including with the NGOs whose details they publish. Kubatana is made up of a small team in Harare who run all aspects of the organisation, including updating and maintaining the NGO database and rolling out numerous promotional campaigns.

1 Background

At the turn of the millennium, the NGO (Non-Governmental Organisation) and CSO (Civil Service Organisation) sector in Zimbabwe was very active, comprising a wide variety of organisations. These organisations were producing huge volumes of reports and documents relating to social justice and

development issues in Zimbabwe. However, there was limited distribution. NGOs and CSOs tended to circulate them amongst themselves and like-minded organisations, meaning that the general public were being left out of the loop. Valuable and relevant information was not easily accessible to those for whom it was most applicable. Additionally, mainstream media would rarely feature development-related material because they too were unaware. As a result, there was a clear limitation to the number of people exposed to these valuable NGO/CSO produced resources.

The Kubatana team saw that this information, if unlocked, could contribute to the attainment of equal access to information in the development, governance and human rights sectors. This led to a vision of a platform on which such information could be aggregated and indexed, making it considerably more accessible to the general public.

❖ Objective

Kubatana's aims are built around their belief in equal access to information. This entails starting conversations about subjects that are quite often stifled, and encouraging debate, discussion and critique of the status quo. It recognises and respects the fact that ordinary Zimbabweans have opinions and feedback on current events and development issues, and therefore aims to create a medium through which these can be shared and published.

❖ Results

- As of August 2014, Kubatana has approximately 95,000 followers:
 - 27,000 email subscribers
 - 45,000 SMS subscribers
 - 3,000 WhatsApp subscribers
 - 10,000 Facebook and Twitter followers
- Estimates suggest that each recipient is likely to pass information on 5-8 times, further multiplying the rates of consumption.
- Many of the positive outcomes of the Kubatana service are anecdotal and personal, rather than quantifiable. For example, people securing funding to run social projects using the Kubatana network, or readers securing employment through job vacancies included in the Kubatana newsletter.

❖ Impact

Between the number of people currently using the Kubatana service and the frequency at which these people pass information onto their acquaintances, the organisation claim that the service is rivalling the reach of mainstream newspapers in Zimbabwe. As well as increasing access to valuable information, this is providing Zimbabweans with the opportunity to provide feedback on current events and communicate what is important to them to a wider audience. In many cases, this has led to the launching of campaigns based on issues that have been highlighted through Kubatana's communication with subscribers.

2 Lessons Learned

- **Be patient and consistent.** When Kubatana started, its staff were cold-calling NGOs, knocking on their doors and arranging lots of meetings in order to convince them to agree to be on the website. Now, the scales have tipped in the other direction, with NGOs approaching Kubatana for the same privilege. People see the value of the platform's distribution and reach as a result of the patience and perseverance of the team, as well as consistency and belief in what the organisation does.
- **Focus is key - even if this means losing funding.** As elements of the operation become permanent and institutionalised, they become part of the foundation of the organisation. However, donors may have more interest in what new and exciting projects you can offer. Over the years, Kubatana has seen how a service can become diluted as a result of attempts to meet these donors' desires. Today, the organisation considers it preferable to focus on the impact and value of core operations rather than spreading itself too thin.

3 Approach

One theme underlying everything Kubatana does is ensuring the general public are accessing and benefiting from information on social and political issues. Since the service's launch, a healthy publicity and marketing line has always been included in the service's budget. Early on, significant resources were devoted to running newspaper adverts, handing out flyers and generally raising Kubatana's profile both to NGOs and to the general public. Despite its healthy following, this interest in user acquisition remains today, especially in terms of attracting ordinary people to use the service.

Kubatana uses bulk SMS messaging to send news headlines, poll questions and advocacy materials to subscribers. In terms of its overarching aims, Kubatana actually sees the efficacy of SMS messaging in terms of activism and advocacy as being marginal. However, if used in a strategic way, it recognises that SMS can be used as a bridge to connect other elements of Kubatana's multimedia service. Therefore, in addition to the topical information that has become very popular with SMS subscribers, Kubatana uses SMS as a method for converting online materials to offline materials that can be distributed to people throughout the country.

Spotlight: Kubatana and 'Tree of Life'

Tree of Life is a DVD about torture rehabilitation for victims of political violence in Zimbabwe. Given its content, this DVD could not be shown in a public forum in Harare without significant security risks. However, Kubatana recognized the importance of the work discussed in the DVD and its potential value for the general public. It therefore initiated a drive for potential viewers to send their address to Kubatana via SMS, who would then distribute copies of these DVDs across the country. Here, SMS was used as a medium to connect this valuable material to thousands more people than would have otherwise been possible; estimates suggest that the number of recipients could have filled the biggest cinema in Harare for two weeks.

Figure 1 - Spotlight on use of SMS with other multimedia approaches

In the past, Kubatana also used mobile technology to pilot an IVR system that it developed called Freedom Fone - an accessible medium for broadcasting audio programmes. In piloting this technology, Kubatana made short dramas available on subjects such as sexual harassment, sexual health and reproductive rights. These could be accessed via a phone number advertised in offline material, through which callers navigated an IVR menu to find programmes. Again, the prevalence of mobile technology here was critical to disseminate information that may otherwise be very hard to come by, or even restricted for the general public.

4 User Centric Attitudes

Kubatana ensures that any packaged information they produce is varied according to what their customers actively want to see or hear - including job opportunities, scholarships, notifications of public debates and meetings, thought-provoking graphics and proverbs, and other content in the everyday interest of Zimbabweans.

Attention to appropriate content and media has also led to a burgeoning use of platforms like Facebook and WhatsApp. This is in part a result of the cheap Facebook and WhatsApp bundles offered by Econet, Zimbabwe's leading Mobile Operator by market share, which has allowed for a great increase in their use. Whilst these may not allow for the comprehensiveness of emails or written newsletters might, it has proved to be an effective way of engaging customers in a way convenient for them. One particularly positive outcome of this has been a willingness of users to engage in two-way communication with Kubatana. When the service sends out information and questions, it asks for feedback and local reports in return. The ease and accessibility of platforms like SMS, Facebook and WhatsApp has made users much more eager and able to do this. Kubatana's user base is very interactive, particularly during national events like elections and referenda.

Another element designed around the needs of users is Kubatana's recent changes to its website. The site contains a good deal of information on social, political and developmental issues through its library and database of NGOs. However, in light of the fact that the vast majority of Zimbabweans access the internet through their mobile phones, Kubatana realised the set-up of their information-focused website was not appropriate to its users. It has therefore undertaken a recent effort to optimise the website for mobile access. This is an ongoing effort that is designed to make selecting relevant information more immediately available to Kubatana's users.

5 The Use and Value of Data

Kubatana sees data as a fundamental building block of its operations. Given the communicative nature of the organisation, data collection and retention holds obvious importance. The primary data collected by Kubatana include users' names, gender and location. These enable the organisation to grow a database of its users, put together profiles, and understand male-female and rural-urban splits. Additionally, the polls and requests for feedback that Kubatana sends out allow the team to collect more qualitative information - specifically, trends in popular opinion, again including regional and gender differences therein.

The observations derived from this data collection act as a major determinant of Kubatana's policies and activities. For example, responses to information or a question on a certain issue can be mapped and examined in order to identify the views and priorities of Kubatana users across regions and demographics. This then informs Kubatana's actions on - and reactions to - a given subject. It also allows the organisation to look for information and knowledge gaps across the membership, thereby influencing the more educational side of the service.

However, as much as Kubatana has the desire to make full use of their data, current capacity does not allow it. For example, the basic level of managing and tidying the database of user contact details becomes a very difficult task for a relatively small team. Additionally, the team recognise that current operations could be enhanced through a more streamlined process of integrating feedback into existing databases in a way that would allow them to see trends in what people were saying about certain issues at certain times, across regions and periods. At its current capacity, Kubatana is unable to make use of its data in this way. Should the team become more able to do so, though, it would greatly contribute to developing campaigns further and building the more user-centric services.

6 Success and Scalability

When it comes to measuring its success in a quantifiable way, Kubatana tracks selected indicators. These can include the number of subscribers, the growth rate of subscriber bases, and the number of people reached by an individual project (for example, the number of recipients of the Tree of Life DVD). These act as indicators of the reach of the service, allowing the team to assess their success.

However, properly examining the impact of the service is slightly more complicated, much of this is anecdotal and qualitative. Kubatana bases its impact evaluation on the feedback, reports and actions of its users. Here, information is largely harvested through one-to-one contact with subscribers. Given the importance of this kind of feedback to the service, there is no consistent rate of return or conversion. Instead, it considers it more important and appropriate to seek out instances of success and celebrate it where possible. In addition to this, the organisation understands success, in part, through the size and calibre of partnerships it attracts, such as the United Nations Development Programme and Zimbabwean local government.

Plans to grow and expand the service focus on acquiring new subscribers. This is done regularly through advertising and promotions, which remain a major component of Kubatana's operations. Given Kubatana's relative prominence - and owing in part to increased accessibility through the likes of mobile web and WhatsApp - the organisation is finding that general public awareness and word-of-mouth are proving as effective former marketing efforts. This is being boosted by visual campaigns around Harare - including Participate! - which is garnering a lot of attention and interaction from 'Twimbos' (Zimbabwean Twitter users). Additionally, further DVD distribution drives are being planned to increase the profile of Kubatana across the country. Already, the combination of these various elements are showing results in terms of new audiences engaging with the service.



Picture 2 - Example of *Participate!* campaign, spotted by a Kubatana Twitter follower

Service scalability will depend on whether these new audiences can be converted into increased income and capacity. Plans are currently being formulated to find ways of turning the service into an income-generating and self-sustaining one. Some form of monthly subscription fee would seem sensible given the service's large membership base, but Kubatana does not currently have mobile money systems in place that would allow for safe and convenient transactions. Additionally, the organisation is wary of creating barriers to the information. As a result, the scalability of the service - and its future in that respect - is as yet unclear.

7 Partnerships

Certain strategic partnerships have aided Kubatana in its growth to this point. However, due to the delicate political situation at Zimbabwe, these are not always easy to establish. Kubatana is explicitly an activist organisation in a nation where the term 'activist' carries negative - even dangerous - associations. One negative outcome of this emerged when the team sought commercial advertising to carry on the website that could act as an income stream. They found that private companies did not want to advertise through an organisation of Kubatana's aims and values when it first launched. This and other similar instances have constrained the success and growth of the service to some degree.

Significantly, it became the first user to pilot the FrontlineSMS software in 2005 in Zimbabwe. Kubatana utilised the platform to send and receive SMS messages en masse for many years. For example, in the lead-up to the 2008 elections, Kubatana used FrontlineSMS to ask its users 'what would you like a free Zimbabwe to look like?' This relationship made Kubatana much more able to engage with its user base in its earlier days.

Today, Kubatana works with Clickatell as its bulk SMS provider. The organisation speaks highly of Clickatell's very active tech support. This relationship came under strain when, approaching the 2013 elections, bulk SMS gateways were ordered to be blocked. Kubatana considered looking elsewhere for sources of this service which could have bypassed the order. However, it remained with Clickatell due to the lower cost and security that they offered their members, despite the fact that the bulk SMS that it sends out now cannot feature a local sender ID. This problem is mitigated somewhat by the inclusion within the messages of a number to which recipients should send responses. As a result, this partnership and the benefits that it brings have withstood this strain for the most part.

NGOs have acted as key partners of Kubatana, indeed they are integral to the organisation's premise.

Organisations are incentivised to be included in Kubatana's database given that it increases their status, presence and ability to be contacted. Many leaders in the Zimbabwean NGO sector would likely name Kubatana as their most influential technical and media partner. Today, organisations wanting to be on the Kubatana database must be in some way verified to ensure that they are sufficiently productive and valuable to merit inclusion. For the most part, this comes in the form of references of other organisations working in the same specific area. This way, the database remains of a certain quality, and Kubatana remains discerning about the kind of organisations with which they choose to partner.

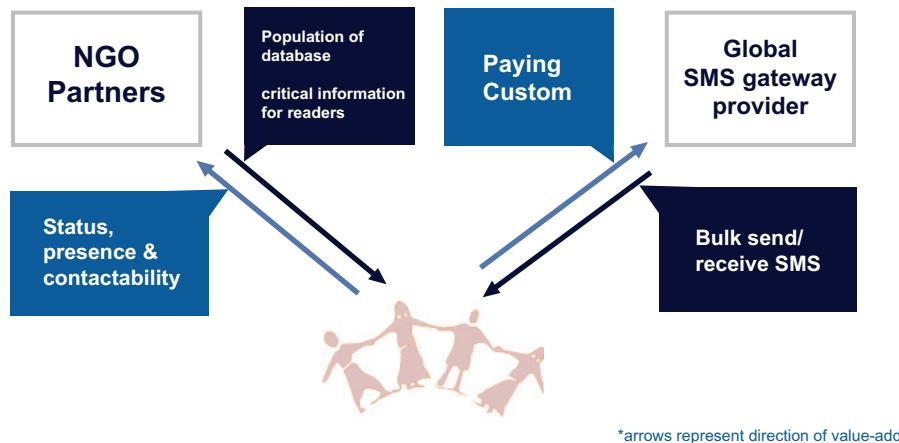


Figure 3 - Partnerships diagram

8 Challenges

Unsurprisingly, Kubatana has faced a number of challenges since its launch, relating primarily to the political landscape in which it operates. In the context of the current regime, the mobile/SMS space is seen as particularly threatening to the status quo - significantly more so than web and email-based activities. Additionally, broadcasting material is subject to considerable sensitivity and regulation. As a result, Kubatana's dissemination of news headlines and short audio programmes using SMS and IVR respectively have faced restrictions. With regards to each, Kubatana has had phone lines suspended. The problems were eventually overcome. However, whilst they have been resolved in the past, such challenges remain threats to Kubatana.

Another challenge that Kubatana faces relates to donors. The organisation has found that it goes through cycles of interest from the donor community. As an election or referendum approaches, global interest in Zimbabwe rights and development issues spikes. At these times, financial support for Kubatana is quite forthcoming. However, income diminishes at other points of these cycles. The organisation does not currently have the capacity to dedicate too much time to seeking out new sources of funding. As a result, one of Kubatana's current challenges is to implement a more balanced system for acquiring funding.

9 Future Plans

Looking forward, Kubatana's immediate plans centre around continuing with their current activities, but with greater emphasis on citizen participation to solve community issues and to keep government accountable. The growing popularity of social media and pervasiveness of mobile phones are making citizens more energetic and audible in how they provide feedback and report on issues. Kubatana will

harness this to identify areas that require more attention and to inform future campaigns, including an expansion into issues around local environmental degradation.

Beyond this, the organisation feels that the Kubatana model of sharing NGO information and publications could bring great benefit to Africa if replicated in other nations across the continent. The team consider the model to be simple, sophisticated and extremely fruitful in bringing the general public into human rights debates and discussions.

About

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