Mobile and Development Intelligence

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Esoko

Esoko provides a suite of applications that a network can use to push and pull information to targeted and profiled users. The service started as a piece of software to push market prices out to farmers via SMS alerts. Esoko now targets agribusinesses, smallholder farmers, network operators, NGOs, and ministries. The basic aim is to reduce the cost of communication and improve value chain management for stakeholders in the agricultural sector. The service was officially launched in 2008, and is currently operating in ten countries across East and West Africa.

Year launched
2008

Business model
Business

Targeted Device
Basic/ Feature Phone

Primary Delivery Technology
SMS, Voice, WAP, Web

Products & Services
Data collection, push content

Markets deployed in
East Africa/ West Africa

Estimated number of users
3.5 million (end users)

Background and opportunity:

The founder and CEO of Esoko, Mark Davies, came to the venture with a background in dotcoms, some capital, and an interest in how technology could drive development in Africa. He created an incubator in Ghana in 2001 called BusyInternet. Although this was very active, Mark felt he wanted to drive innovation through a project of his own. This spurred him to go out into the field, targeting rural businesses, and asking what they really needed. “Immediately they said they needed price information. That was the beginning. It started off as a pure software platform for the collection and distribution of prices via SMS.” Since then Esoko has refined and developed its service, providing weather information, agricultural tips, as well as voice based services. These are provided in addition to market prices pushed via SMS to smallholder farmers. The service is now rolling out this mixture of tools for businesses, and a mix of content and voice services for farmers.

Progress since launch:

How have things gone so far?

The idea of a market price push SMS system had a relatively narrow focus, and started as an R&D project in 2005. Esoko launched officially in 2008. The service was deployed to Mozambique and Cameroon shortly afterwards in 2009, and has since been deployed to many other markets in East and West Africa.

Esoko have learned a lot in this time. When they first sought market price information in Ghana they discovered that existing content providers were not appropriate for

[1] http://www.esoko.com/
[2] http://www.esoko.com/about/

commercial/digital use. “You’ve really got to invest in and generate a lot of the content. Even when there was market information this content was inconsistent, you couldn’t really digitise it, and it wasn’t being collected fast enough to be commercially viable.” Esoko now collect their own market information, which was one big lesson. The second big lesson was that a narrow cut on information doesn’t necessarily serve the market the way they first expected. For example, in developed markets a narrow stream of information on one agricultural product can often be very helpful. However, in developing markets it doesn’t always work like this. “They also need weather, they need agricultural tips, and so forth.” This meant that the scope of content increased over time.

A further big lesson came from interacting with development partners. Initially Esoko thought these partners would be doing the deployment. However, they found these organisations (at the time) had very little experience or understanding of mobile. “Frankly nobody had any experience in training farmers how to use a mobile phone.” Here the organisation found themselves growing in content acquisition, and also content scope in terms of deployment and training. “Although we were a software company we had to become more of a strategy and consulting business that specialised in training.” The final lesson came from a switch in focus from push to pull with respect to mobile content. Esoko learnt that it’s not so much what you can push into the field, but rather what you can get out of the field that matters. Anyone who is trying to manage, engage with, or trade with small farmers in the country needs to know who these people are, where they are, and what they’re doing. This level of detail quickly increases as people want to know what chemicals farmers are using, how big their farm is, their history, the amount of product they’ve planted this year, and so on. This is what’s required to achieve transparency in the supply chain, and what reduces buyer risk.

Scalability:

How is the service being scaled to reach a larger audience?

Esoko is already being used in 10 countries. “I think the reason we’re in those 10 countries is that we built it for scale from the start. We built it as a tool for other projects, and this is clearly important in terms of scale.” Esoko also emphasise their business model in relation to the issue of scale. Here a franchised model has been used where other commercial entrepreneurs in the private sector have an interest in scaling Esoko’s product and deploying it – “that’s what I see as the key to scale”. While mere adoption of their tool through development projects and other initiatives was one way to reach scale, Esoko were worried about the sustainability of this approach. “I think the idea of reaching scale just because it’s a good product – like Facebook or Google – probably doesn’t work in this context because self-adoption of technology, which works with Facebook, doesn’t really work with mobile services within the kind of rural communities that we’re dealing with.” Instead Esoko have created the service for-profit from day one.

The other interesting point Esoko raise in relation to scale is the issue of impact. An independent study has already been completed by CIRAD to help clarify the impact of Esoko’s work upon increases in agricultural income. “We think it’s probably around a $100 a farmer a year, which is maybe 10-15% of their annual revenue. However, the fact that impact equals scale doesn’t necessarily follow.” Here Esoko raise an interesting question as to why an initiative that demonstrably achieves social impact doesn’t replicate itself virally. “I think we’re still trying to understand that.” From a practical point of view, one of the key barriers to scale in agriculture is the cost of acquiring clients. Unlike health or financial services, agriculture is unique in the sense that clients are very distributed and expensive to reach. Thus, rather than going for a retail model or a consumer model, Esoko recognised that the way to reach scale was going through the organisations that are already working with the farmers. “That’s one of the biggest lessons for us with the issue of scale. It’s just like IT would be used by any company to make their business more efficient in reducing communication costs. I think that’s your strategy for scale.” In this respect agriculture represents a promising sector given its scale and cost structure. “It’s extremely expensive to try and manage small holder farmers; you can’t call 2,000 of them.”

With this in mind, the question then turns on what breadth of services organisations offer. Will this be a widely applicable and adaptable service that anybody can use for simplistic messaging solutions? Or a single deep vertical application that does one thing well, like weather, or insurance, or traceability? “I think those are the questions we’re struggling with within our sector, because what you find is that most of these businesses don’t want to use a lot of different databases, they want one integrated space.”

User centric attitudes:

How does the organisation build itself around the end user?

Esoko stresses that a lot of real innovation is hard to test. Although the ability to deploy, test, and ask users about their requirements is essential, services cannot necessarily test the exact modality of what they're going to provide. Particularly in rural agricultural communities it's often quite hard to get critical push back on ideas or suggestions. "You tend to find a lot of people will say yes, or accept proposals because they feel that's the right thing to do."

Another issue arises in relation to time lag. Esoko only recently saw formal impact studies completed from work they started 5 years ago, and in that time it has taken two years to test. "If I was to do a test today in terms of our current product and service, then I think it would be a different solution being tested… validation runs about four years behind innovation."

In addition, the studies already completed are all based upon price information, which Esoko don't now regard as the right model. "Now we think you've got to provide not just prices over SMS, but also provide weather, tips, and you've also got to compliment it with voice." This new model will need to be refined by Esoko themselves, then tested by an independent assessor, which the organisation reckons spans a four year period in total. The formal testing process is long, expensive, and difficult in that it must rigorously isolate the effect information from Esoko has on farmer income. "I think these tests are under-represented and under-invested in in terms of the kind of thoughtfulness, analysis, and money that needs to go into preparing them." Esoko see donor money as important for the research here. They also report a symbiotic relationship with research organisations. "Their results feed into our product design and deployments. We're using that data directly, and, of course, they can't do anything without us rolling out in the field in the first place.

Challenges:

What are the internal and external challenges currently faced?

Many of the external challenges Esoko have faced are discussed above. These include having had to create a lot of the content from scratch (e.g., market information), having had to train many of the users in a consulting-like capacity, and understanding the right mix of content and features required by end users. The primary challenge is reaching scale, and many of the key points here are relayed in the section addressing scale above.

Operationally, Esoko set out to build a company in Ghana. Like any venture, its success depends upon the skills available. The more sophisticated the business, the more important it is that it be located where the skills are available. "There aren't a lot of software companies in West Africa or Ghana. Our intention by placing it here was to develop that sector. We aimed to create an environment to mentor, train and hire graduates out of university around a formal structure of software development. That has been difficult, and one of the challenges I'm proudest of in terms of building internally in Ghana."

Partnerships:

What is the value of partnerships, particularly with MNOs?

Enterprise partners are integral to Esoko's business model, and are therefore of the highest value. All partners come with their specific set of needs and requirements, whether corporates, development projects, MNOs, or ministries. "They're all potentially very exciting." Esoko have found it difficult to work with MNOs to date because their terms of revenue share haven't yet been economically viable. They have also struggled to communicate the value of their agri service to MNOs, "it's not a sector that's represented real value to them in the past. You need to approach them in such a way as meets their business objectives, which is client acquisition and declining ARPUs." Even now, Esoko feel that because models aren't yet proven, it is hard to interface with MNOs on a business and technical level.

Looking back, looking forward:

What key lessons have been learnt, and what are the organisation's future objectives?

Although having mentioned many of the lessons learned already, Esoko sum up by stressing the importance of simplicity. "Unfortunately I think the sector we've chosen to work in – agriculture – is inherently complex. This is in terms of content, technology platform, and deployment. You've got to deal with all three of those elements." Esoko see

other players increasingly drawn into this complexity when realising that users want more features and advanced services. “You can’t avoid complexity, but you need to stay agile and be able to iterate quickly.” Interestingly, Esoko have found that iterating quickly can misfit with development agendas, particularly where these involve fixed budgets, and a conservative community that isn’t used to quick change. However, they see staying agile as critical in the context of being drawn into multiple deployment scenarios. “You need to be able to test which ones fly and then give up on the others. Sacrifice is important here. You’ve got to give up on some of the things you know people want sometimes.” In terms of objectives for the next few years the first is reaching project maturity. “We’ve got all the features that we want, we’re confident in terms of the choice and the mix, but now we need to take it to the next level where it becomes incredibly intuitive and easy to use.” The other objective is to prove an MNO model. To date Esoko have sold their tools to various projects and businesses, but the next project is to pick a big mobile operator and roll out with them. “We’ve got a few in the pipeline – 2013 should be interesting!”

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About the GSMA Association

The GSMA represents the interests of mobile operators worldwide. Spanning 220 countries, the GSMA unites nearly 800 of the world’s mobile operators, as well as more than 200 companies in the broader mobile ecosystem, including handset makers, software companies, equipment providers, Internet companies, and media and entertainment organisations. The GSMA also produces industry-leading events such as the Mobile World Congress and Mobile Asia Congress.

About Mobile for Development - Serving the underserved through mobile

Mobile for Development brings together our mobile operator members, the wider mobile industry and the development community to drive commercial mobile services for underserved people in emerging markets. We identify opportunities for social, economic impact and stimulate the development of scalable, life-enhancing mobile services.

About Mobile for Development Intelligence

MDI is a freely available, online platform of market and impact data, analysis and access to an active community of practice. The mobile phone’s ubiquity is uniquely well-placed to drive economic and social development in emerging markets. Investments in the mobile and development sectors are rising yet there is limited data on which to base these decisions. MDI is designed to bridge this information gap

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