

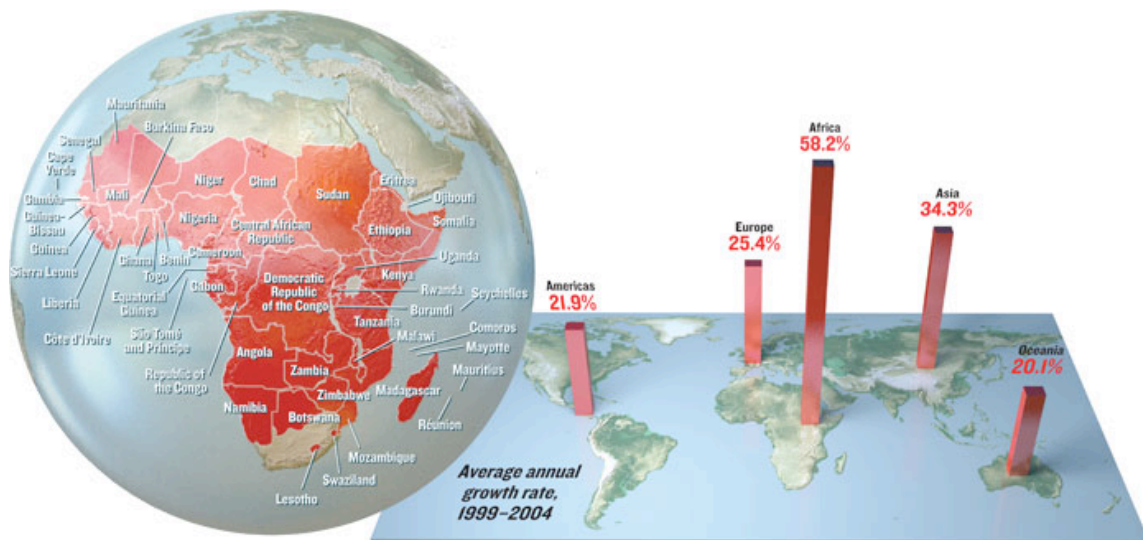
Yonatan Kelib
Thesis Studio
Prof. Kathleen Wilson
1/31/2007

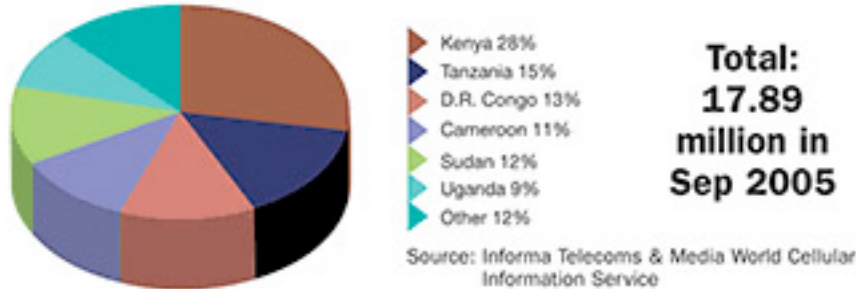
Exuma: A secure mobile communication platform, which can allow users to anonymously blog/post about any issues without the fear of personal repercussions.

Exuma helps encourage the use of mobile phones as a tool for the creation and growth of grassroots journalism.

In the world today there are 1.7 billion people in the world have a mobile phones(1). and this number is expected to grow to 2 billion within the next 5 years. This projected 2 billion figure will exceeded the number of consumer computers and digital cameras worldwide. It will revolutionize the way people are able to record information and share it with each other.

Now within this growth, the continent to experience the largest market demand for mobile phones is Africa (2). According to a recent Timeonline article (3), from 1999 through 2004, the number of mobile subscribers in Africa rose from 7.5 million to 76.8 million, an average annual increase of 58 percent. It is predicated by Gartner Dataquest that by 2008, Africans will buy about 31 million new mobile phones.





Beside the telecommunication aspect, mobile phones can also have a social, political and economical impact. According to a recent research project conducted by Vodaphone (4), mobile phones not only have a positive impact on economic growth in countries but that this impact was more than twice as significant within developing nations.

The impact that mobile phones will have on the creation of growth of grassroots journalism is undeniable. With limited access to computers, media outlets, the people in African nations will turn to mobile phones as the clear alternative to gather and share information.

The raising figure of mobile phones combined with the implementation of 3G networks, which will allow users to send and receive, media rich content, will transform the way people access and share information and this is where I believe Exuma can make a difference.

Inspiration:

I was inspired to work on this idea because of my own personal experiences in Eritrea in which there is now only one official media outlet. I was also surprised to see that in Cairo, the Islamist newspapers, which were banned by the government, were discreetly passed from one person to another inside old newspapers. Any government attempt to limit the freedom of speech will always be circumvented.

I was also inspired to formulate this idea from the research that I did for Witness.org, which is a human rights organization as well as the positive social and economical impact made by the Grameen Foundation /Village Phone program in Bangladesh and other developing countries.

The Grameen Foundation /Village Phone program which was tested and proven to be successful in Bangladesh is now being implemented in the Philippines, Rwanda, Uganda and Cameroon. The Grameen Foundation /Village Phone program (5) proves the fact that mobile phones not only have a positive economical influence in the region but they can also have a positive social impact.

It was by reading about the Village Phone that I began to understand just how powerful the impact mobile phones could have in developing nations. I began to realize that if mobile phones can have a positive economical and social impact then they can also be used as a tool to help address one of the most critical issues dealt with by almost all developing nations, which is the lack of a free press and unrestricted access to information.

The reason why the Village Phone has become successful is in its understanding and implementation of mobile services in helping create long-term positive economic and social influences in rural areas.

As from their site, their program is described as the following. “The Village Phone brings affordable telecommunication access to the rural poor in a way that is both sustainable and profitable. Through for-profit and non-profit partnerships, Village Phone links the telecommunications sector with the microfinance sector to enable microfinance clients to borrow the money needed to establish a Village Phone business in their rural communities. These grassroots entrepreneurs, Village Phone Operators, then rent the use of the phone on a per-call basis providing both affordable telecommunications access in their community while earning enough to repay their loan and raise their level of income.” (A)

The social implications of the Village Phone are quite amazing. The main beneficiaries have been women who live in these remote rural areas. These women who have limited education and social mobility for various social and cultural issues are now using the Village Phone as a tool for further self-empowerment through economic transformation (6).

A: Author Unknown, Gramenn Foundation Site

http://www.grameenfoundation.org/what_we_do/technology_programs/village_phone_direct/faq_village_phone_direct/

I believe that mobile phones can also be used as tools for the creation and growth of grassroots journalism. This is quite a possible reality with the advent of 3G network in developing nations, which allows users to send and receive rich media content as well as internet access and the rapid availability of feature rich mobile phones.

I believe that this can be accomplished through Mobile Blogging. Mobile Blogging is the immediate posting of multimedia content which can either be video, audio or digital still images from any mobile device.

The usage of mobile blogging has been increasing over the past few years especially with the rollout of 3G capable networks and media asset rich mobile phones, which can support higher resolution image taking capabilities as well as videophones capabilities.

As camera phones and other mobile technology become more popular, less expensive, as well as the data package plans, it is not hard to imagine that more and more people will become mobile bloggers, especially in third world nations with limited access to news and information.

Joi Ito is quoted (7)“I think that "Moblogging" like "Blogging" isn't really something that's technically new. It is the popularization and the impact of many people doing it that is exciting to me. Blogging can be said to be just online diaries. Moblogging is just mail-to-web. Moblogging is just an extension of wearable computing. Fine. Call it whatever you like, but let's do it, make it widely available and have fun and change the world”

While there are limitations that I will need to research such as high literacy rates, government ownership on government influence on the mobile network in which I am depending the success of Exuma on.

The other issues range from ensuring that the identity of the mobile user who has uploaded information is never made public as well as encrypting the media assets (audio, video, text files) they have uploaded.

It is with these concerns that I have partially scaled back my initial idea of Exuma. I first wanted to build a mobile platform which would allow the encryption of rich media assets such a pictures, videos and audio but after researching the Village Phone, I understand that I needed to focus on a common demonitor because of all the challenges in implementing a platform that would work in all the emerging nations.....that one common demonitor is voice transmission.

I believe that in dealing only with voice transmission, I can attempt to find way of encrypting the audio files that are recorded and distributed through public/ private keys stenography. Once I am able to find a way of truly encrypting the information of the sender and the message, then I believe this platform can be used to truly help spur the growth of mobile phones as a tool for the creation and growth of grassroots journalism.