

Exuma Thesis Paper
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Exuma End User Scenario:

The Platform:

Exuma is a secure mobile communications platform with two main components, the first is a secure mobile communications platform and the second is an online platform, which will allow for the viewing and distribution of the uploaded media assets uploaded by Exuma users.

I should also mention that I am considering allowing the online platform component to either be a Wikipedia style platform or have it exist with a p2p network. Within the P2P network, I can imagine a platform in which the various media files that are generated by the users will need to be assembled piece-by-piece and only viewable with the P2P network. This will help circumvent any restrictions issues that may arise within the use of Exuma.

Distribution of Users:

Exuma's mobile application component can be distributed to large groups of users within developing nations through the following distribution methods.

A: Distribution of out3G Mobile devices, which will have Exuma, pre-installed and with instructions on how it can be used.

B: Allowing mobile users to download the application from the web to their mobile devices.

C: Strategic partners who already have contact or offices in the areas of interest can act as distribution nodes. Some of these strategic partners may be Human Rights Watch, Witness.org, Committer to Protect Journalist, and then freely share it via Bluetooth with each other.

GUI & Language Issues:

In thinking of the possible end users of Exuma I began to understand how important the GUI for the mobile application will be. For the user scenario that follows I created users from various African countries to give you a better sense of why Exuma is needed and how it can be possibly used.

I chose the following countries because I wanted to research how I can resolve the language barrier issue that would hamper Exuma's implementation and use from country to country.

I believe that in order for the mobile component of Exuma to be successfully implemented and used in each of the following countries, I will need to review the following language issues.

A: Exuma will need to be translated to the main language of each country. Since English is the official language of choice in many countries, I think it is safe to still have the beta version in English.

B: The GUI needs to be designed in such a way that anyone can use the application even if they are illiterate. The use of basic shapes and forms and functions would need to be explored.

User Scenarios:

(1)Anjon

Anjon is a 19 years old and a junior at the Accra State University in Ghana. Anjon is a smart, upwardly mobile, activist who is keenly aware of the events in the world as well as in his community. Anjon is not afraid to voice his personal opinion and is viewed by his friends and peers as being brash, outspoken and at the same time charming.

Anjon was born to hard working farmers from a small town near Larabanga. Anjon saw firsthand the role of corruption and poverty. He was awarded a full scholarship to the national University in Accra because of his excellent grades and he wants to make a difference with the educational opportunity he has been given.

Anjon is very active in college and from his own personal experience growing up struggling, he understands that there needs to be change in order to truly make things different in the Ghana society. Anjon was given his Exuma equipped mobile device from a NGO Human Rights organizer., who taught him how to use it.

Needs and Wants:

Anjon seeks a way to securely share with his friend and fellow students the events that took place at the protest rally without revealing his identity.

Setting: Student university dorms, street rally, street protests against government corruption; protest rallies against the closing of the two newspapers in his city; protest rallies against the censorship of his articles in the college paper about corruption within the city's administration.

Plot: Anjon attends a student protest rally against the removal of a very popular city official who had started implementing measures to limit and remove corruption within the University and in the city.

Thousands of students and residents who voted for her have turned out for this peaceful protest rally to show their support. Close to an hour into the rally, they are approached the police who give no advance warning to disperse and shots are fired. Anjon attempts to stay and fight but is taken by his friends to a friend's second floor apartment near the rally.

Anjon, from a window, takes out his Exuma equipped mobile device and records and takes pictures of what he witnesses. Anjon will now share this information with the world, as well as with his friends.

Anjon wants to make sure that the world (or anyone who has an interest in promoting democratic reform) is not attacked like he and his friends were. Anjon needs the world and his community to understand what happened in order to make sure it will not happen again.

Resolution: The brutal attack by the police upon thousands of peaceful students and resident protesters is now shared with the Exuma network. A BBC news reporter in London reviews the footage that Anjon submitted to the Exuma distribution network and assigns a reporter in Accra to cover the story, which is then broadcast around the world. With outside public pressure the city mayor resigns, the head of the police force is sacked, the arrested students are released and the new mayor makes a public apology to them. The reform minded public official is also reinstated to her position.

(2) Kamal

Kamal, 28, is a community activist who is also a shopkeeper in Bir Gandus in Western Sahara (Morocco). Kamal has been using his mobile device for over three years now to keep in touch with his family members and also for his business.

Kamal wants to use his Exuma equipped mobile device to inform his family abroad how the government soldiers have been abusing the city residents in order to fight against the Polisario independence movement. Kamal downloaded the application from a friend's mobile device, via Bluetooth, who had traveled abroad.

Kamal has witnessed firsthand the lack of news, which fails to cover this and other important topics because almost all the media outlets are almost government owned or influenced. There are no truly independent news outlets that are daring enough to tell the truth because the editor and employees would be jailed and their property confiscated.

Settings: In his own home, in remote parts of the desert interviewing Polisario independence fighters. In friends home with concealed faces who will tell their own personal stories of government obstruction and abuse.

Needs and wants:

Kamal wishes to share with the world what he has witnessed and what others have told him but he does not want to risk his or his families lives. Kamal wants to let the world know of the oppression that the Western Sahara people face under the Moroccan government.

Plot: Kamal secretly interviews his neighbors, Polisario fighters, and other residents with his Exuma equipped mobile device. Kamal has concealed their identities by only recording the audio of the interviews. Usually the interviews, he tells the story of why people of the Western Sahara have been fighting and what type of oppression they face on a daily basis from the government.

Resolution: Jamal Watson, who is a young film student at NYU listens to the audio components submitted by Kamal onto the Exuma platform and is interested in investigating this matter. Jamal raises money from his classmates and school and heads to Western Sahara where he films a 20-minute student film about the oppression the people face from government troops.

The film becomes a minor hit within the independent documentary film world and eventually leads to further interest from media outlets that have long neglected this story. With outside pressure the government is forced to explain its policies as being one in which it is attempting to root out radical Islamists from the southern portion of Morocco. Very few journalists believe this story and the pressure continues to mount on the Moroccan government from the U.N and other governments.

(3) Genet:

Genet is a 34-year-old journalist who lives in Eritrea, and former freedom fighter who spent 12 years of her life in the deserts to free her country from Ethiopia. She trained to become a journalist during the independence struggle. Genet now teaches Journalism at the Asmara University and was one of the co-founders of the newspaper Hakee, which means the truth. Genet has not only witnessed the independence of her nation but also the closure of all forms of free press, such as her newspaper, by the government she helped bring into power. She has been warned not to be politically active in her teaching or she risks going to jail and losing her job.

Genet is now at a crossroads. She has seen firsthand the corruption of the government, which she helped form and wishes there were a way for her to share this with the world, but she is afraid to lose her job, which is the sole support for her kids, and of the harm that may be inflicted on up her and her family.

Thankfully, Genet had a family friend visit her from Sweden last year who gave her an Exuma equipped mobile device that she can use to share with the world what she has witnessed securely and without any fears. The settings would be in her home or a private secure location.

Needs and wants: She wants to share with the world the lack of freedom of speech in her country but is afraid of what the government would do to her.

Plot: Genet interviews her former partners from her newspaper that was shut down by the government. She interviews university students and tells her own personal story without disclosing any personal details. Genet also tells the story of other journalists whom she has known who are in hiding or imprisoned. Genet sends the audio interviews to the Exuma platform when she is done.

Resolution: After the audio files are posted, several news organization pick up on story, Eritrea is listed on the CPJ (Committee to Protect Journalist) and the government is under intense pressure to release the journalists and allow for freedom of the press. Economic sanctions are imposed on Eritrea, but the government defies the embargo and continues to hold journalists, and anyone else who defies it rule, in prison.

(4) Ken Saro-Miwa

Ken Saro-Miwa is a farmer, and father of three, who lives in the rural city in the Delta state of Nigeria. Ken is an active Ogoni activist who is opposed to the oil exploration and development in the Niger Delta region. Ken is opposed to the way foreign oil companies have no regard for the environment and economical impact they cause with their oil exploration or the extraction methods. Ken is also upset about the millions and millions of dollars that has been stolen by corrupt government officials and the lack of any improvement in the Niger Delta region infrastructure. Ken downloads the Exuma mobile application from the web through his 3G mobile device which he heard about through a BBC news article.

Needs and wants: Ken seeks a way to securely share with his friend and the world information about the events that are going on in Niger Delta.

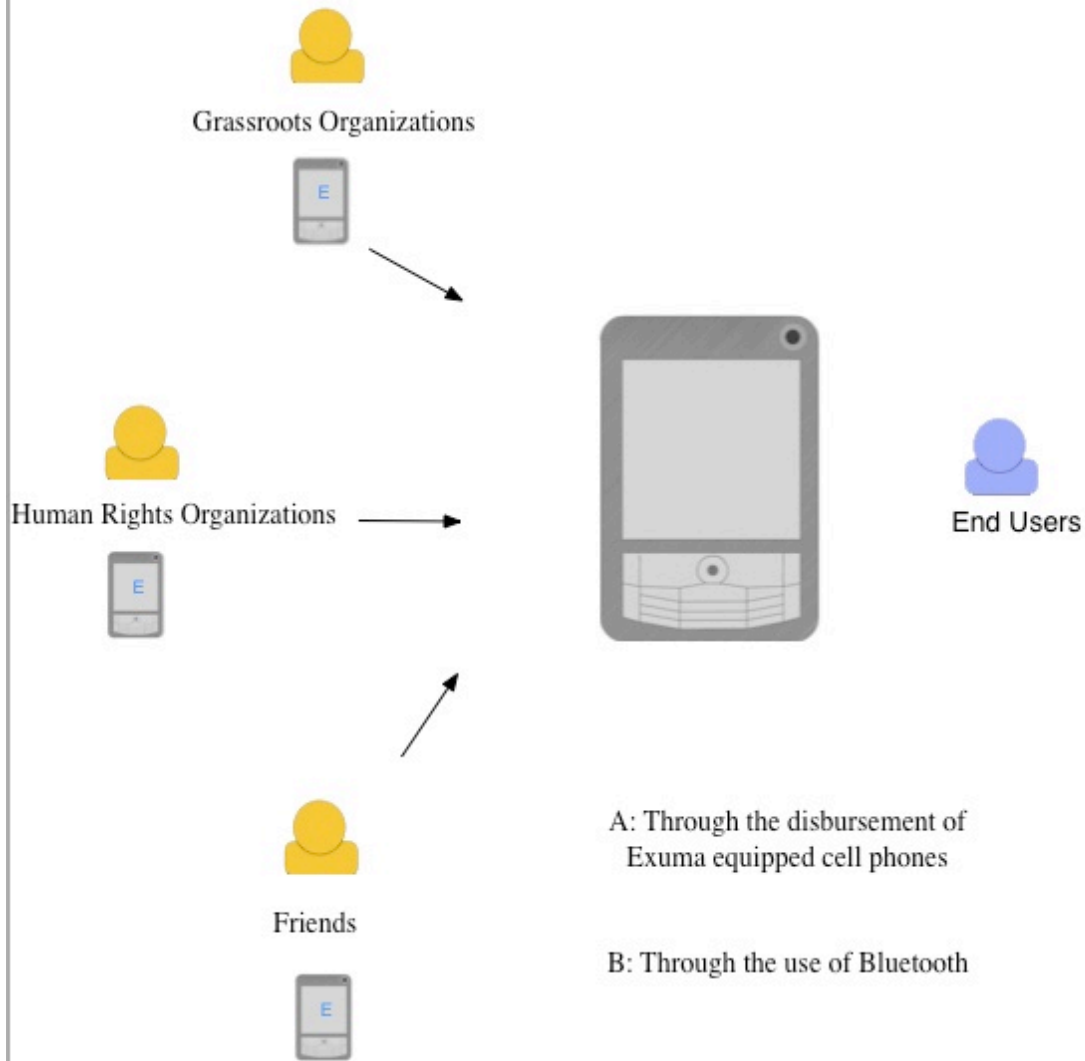
Settings: in the farms of the area, Ken will show you the damage that the oil companies are doing in drilling for oil. He will videotape and take pictures of the oil spills and the wildlife that has been devastated by the oil extraction methods. Ken will interview farmers who have lost their farmland to oil companies. And will tell us his own personal story as well.

Resolution: Once the world is aware of this, the consumers in other countries will hopefully protest the oil companies as well as bring attention to the UN of the treatments that the Ogoni are suffering under the government. Media outlets will question Nigerian government officials and hopefully this will limit the oil exploration of the Niger Delta and lead to improvement in how the Ogoni people are treated by the government.

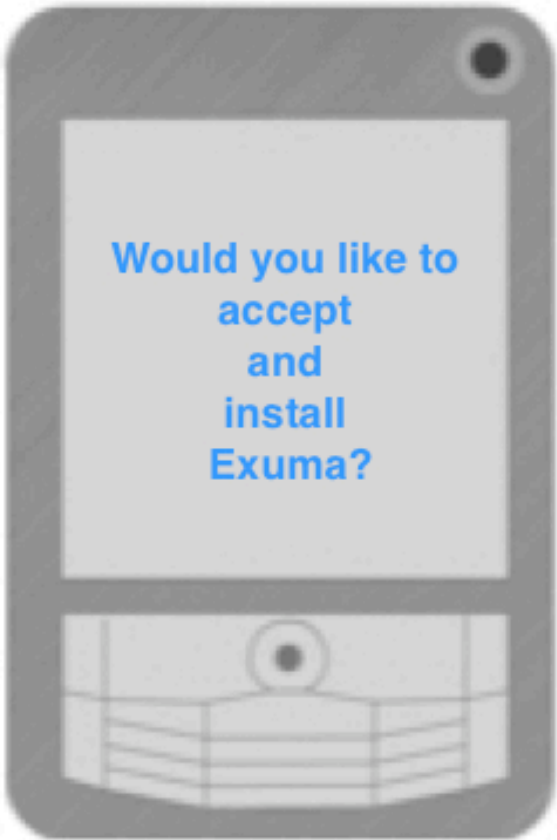
Exuma Visual Diagram

The following is a visual pathway on how Exuma can be used by an end-user to send media files from the mobile component to the platform.

How Will Exuma Be Made Available to End Users?



How Will Exuma Be Accepted and Installed By End Users



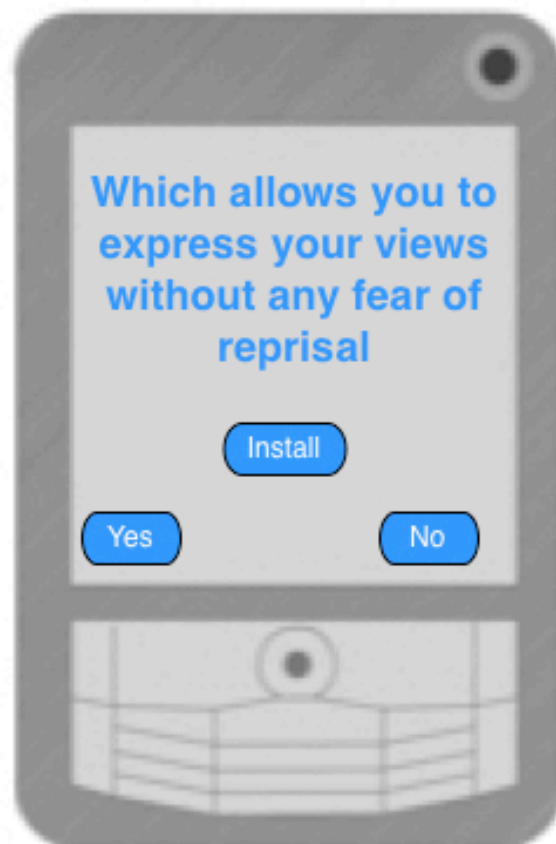
End Users

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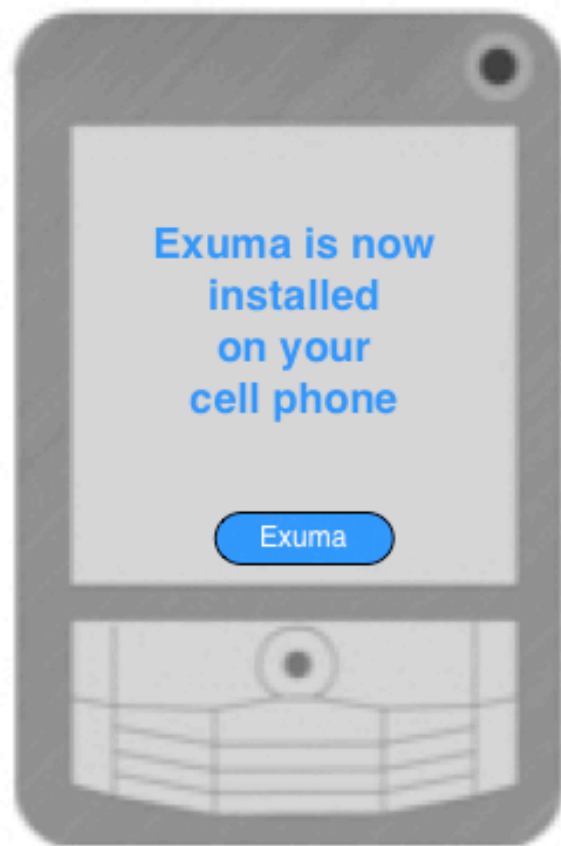
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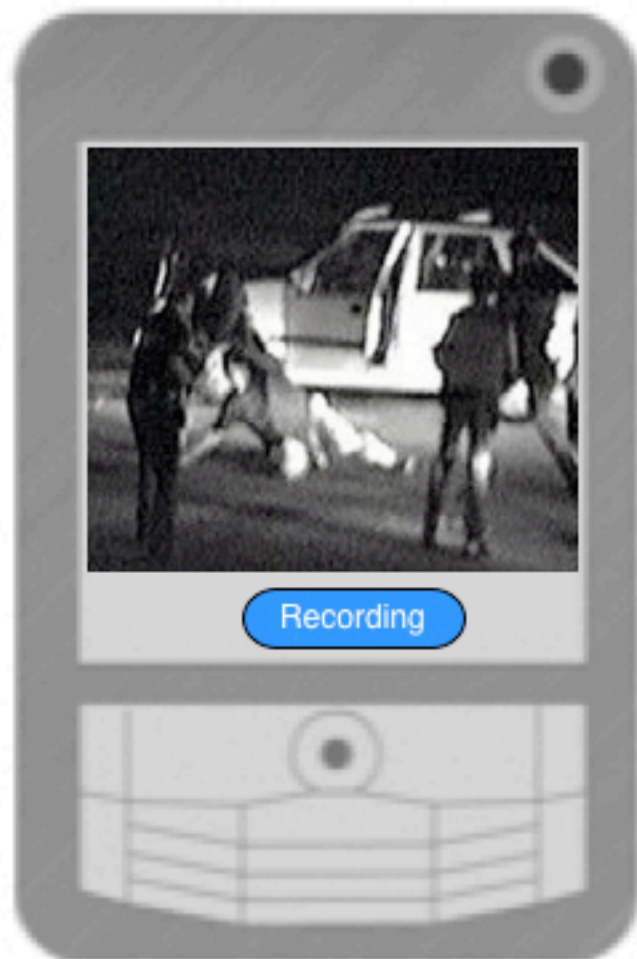
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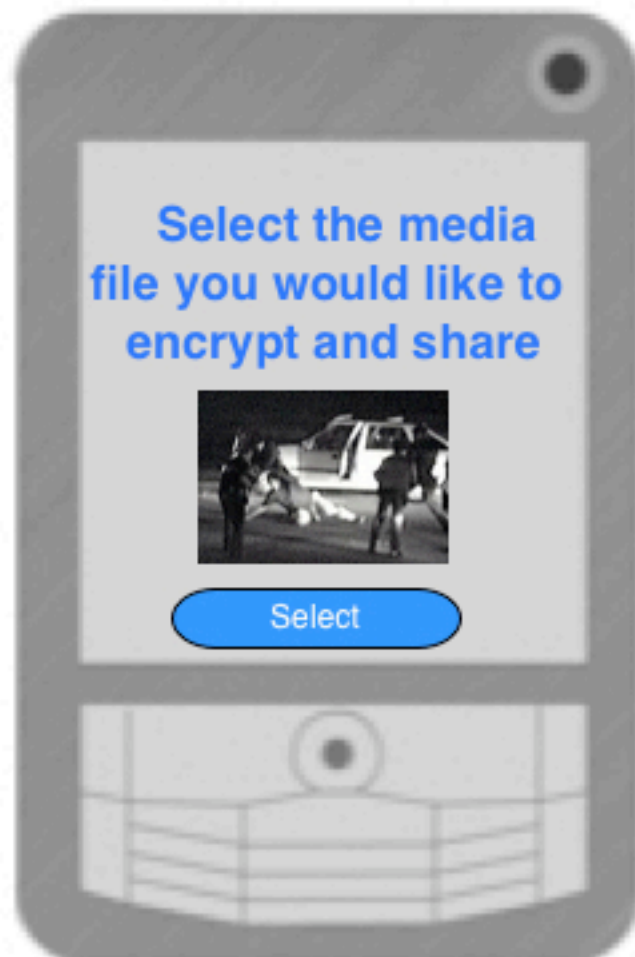
End Users

How Will Exuma Be Used By End Users



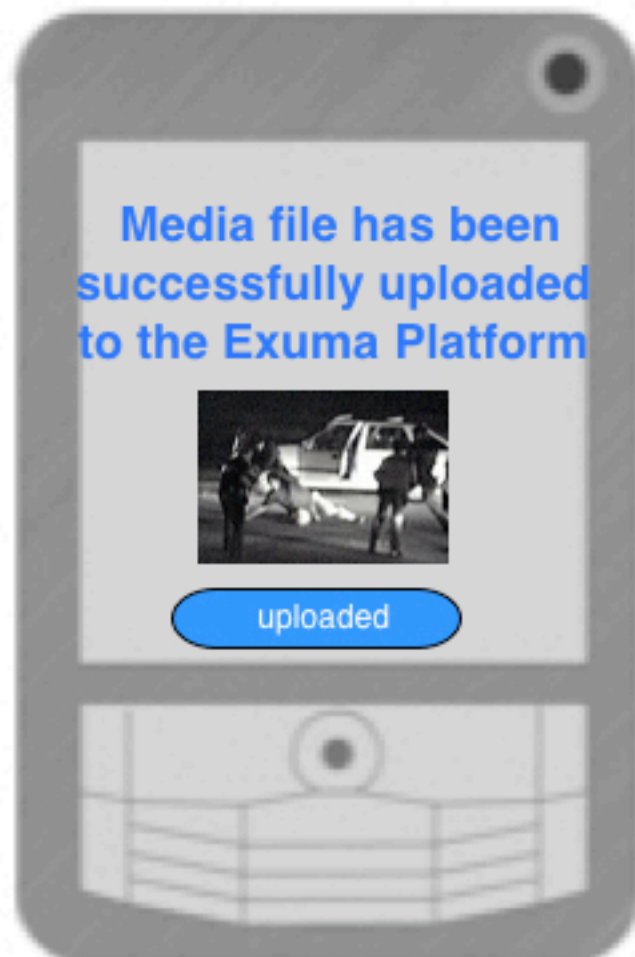
End Users

How Will Exuma Be Used By End Users



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