ILLUSTRATION: TAIPEI TIMES

# Ushahidi helps citizens put crises on the map

*From Kenya to Haiti to Russia, the crowdsourcing tool Ushahidi allows anyone with a phone to take part in coherent coverage of a humanitarian crisis. Now, its creators say it's becoming even simpler*

BY **JOSH HALLIDAY**
THE GUARDIAN, LONDON

Tapping away furiously at her well-worn keyboard, close to tears, Ory Okolloh feared Kenya was on the brink of civil war. A media blackout ushered the country into 2008, ensuring there was little coverage of a crisis that would go on to claim more than 1,100 lives and displace more than a quarter of a million people.

Okolloh, a prominent lawyer, recalls the contested Kenyan election of late 2007: "There was a realization that we're not that far from a civil war. There was fear and anger, and a sense of community soon grew. It spiraled completely when people were struggling to find out what was going on, including journalists."

Widespread protests escalated into ethnic violence as the president, Mwai Kibaki, was declared to have been re-elected on Dec. 30, 2007. Raila Odinga, leader of the opposition, claimed the vote was rigged. Okolloh took to the Internet as her country turned to ruins.

Posting updates on her Kenyan Pundit blog, Okolloh soon became deluged with comments from people reporting instances of violence throughout the troubled country. There has to be a better way of sharing this information, she thought. Then, two days after coming up with an idea, she wrote: "Last week, in between nightmares about where my country was going, I was dreaming of a Google mashup to document incidents of violence, looting, etc that have occurred during the post-election crisis. Today, Ushahidi is born."

Two years later, when a colossal earthquake struck Haiti and 1.5 million people were left homeless, her platform for crowdsourcing crises was put to work again. Within four days, Ushahidi was said to have received more than 100,000 reports from the ground. A fortnight later, volunteers had only managed to process half the messages. To date, the application has been downloaded more than 4,100 times.

Ushahidi — Swahili for "testimony" — works by mapping user-generated reports of incidents submitted by SMS, e-mail and Twitter and via the Internet. The text message option means that those submitting information do not need to have access to the Internet, which makes reporting incidents open to many more people in the developing world: Kenya has 17 million mobile phone users.

"It feels like it was just last year," says Erik Hersman, one of Ushahidi's founding members, reflecting on the two days in January 2008 when "the world's greatest crowdsourcing tool" went from being an idea to a platform pinpointing a sequence of catastrophes.

"In the first week of post-election violence we were all blogging and it was this one bullet point on a long blog post that mentioned Google Maps and I thought, 'Ah — we could do something with that,'" he recalls. "We were looking for technological solutions to overcome the inefficiencies of commenting — that looked like a good answer to it. We Skyped and tried to get a few people involved, then we were only 24 hours into this idea about what it could be and we were talking about names. All the good ones were taken.

"We cared about the micro game. If we cared about the macro game, we wouldn't have chosen the name Ushahidi! The feeling was that we needed to get this out there, even if it wasn't perfect. We launched it on the Monday after a weekend of work, thinking it's got to be better than nothing."

But, apart from a few structural updates, little substantial had changed in Ushahidi, until now. Groups wishing to use the tool — be they collections of citizens, international humanitarian bodies or media organizations — had to install the platform on a local server and pay for domain hosting rights. All of which acts as a barrier to entry.

This month those barriers were removed and Okolloh, very much the mother of Ushahidi, is under no illusions as to how important this new service — dubbed "Crowdmap" — is. "This is huge. It's a landmark," she says. "This has the potential to take us to the next level in terms of scale, like Blogger did for blogging — Crowdmap has the potential to do that for mapping.

"A lot of the groups wanting to use Ushahidi didn't have a techy person to assist or couldn't afford a host, so the idea is to make the tool more accessible, like with WordPress and wordpress.com."

With expertise, Ushahidi can already be deployed within a matter of hours.

In the past week, extreme weather conditions sweeping across large swaths of China, Russia and Pakistan have brought Ushahidi into new territories. Faced with the worst drought since records began, Russian bloggers found that the best way to coordinate a relief effort was to use Ushahidi. This should comes as no surprise, but its use from Haiti to Chile, Pakistan to Congo, Philippines to Peru, Kenya to China, never fails to astound the four-person team whose idea was born out of a close-to-home crisis.

"I don't think I've processed it yet," Okolloh says. "If you'd asked me three years ago if we'd still be doing this I'd have said: 'Forget it.' We had so many things we didn't have a clue how to do. There was a naivety we had when we started off — we just wanted to make it easier for people to tell stories. But I also think it's important for us not to underestimate the influential role we play."

When Okolloh spoke at this year's Guardian Activate conference, Ushahidi launched a drive for a sustainable future. Picking up awards and the money that goes with them is fine for now. But when the novelty vanishes, it's a certainty that the disasters won't do the same. And that's why Ushahidi matters.

"Everybody thinks we have money but we don't," Okolloh laughs. "We're still largely supported by foundations and it will take years before we wean ourselves off that, but the aim is that we become sustainable. When you think of tools like Google or Facebook, I wonder what it's like for your creation to become a verb. That is what I dream about."

**Haitians walk through collapsed buildings in Port-au-Prince on Jan. 31. Within four days of a massive earthquake hitting Haiti on Jan. 12, Ushahidi was said to have received more than 100,000 reports from the ground.** PHOTO: AFP





**Kenya Forestry Service rangers remove a blockade set up by protesters in Kikuyu, west of Nairobi, Kenya, on Jan. 30, 2008. As ethnic clashes erupted following widely disputed presidential elections in December 2007, Ory Okolloh turned to the Internet to get the word out about violent incidents and looting.** PHOTO: EPA

**A man reads the Koran in the Gamal Abdel Nasser mosque in Tripoli, Libya, on Sunday, the fifth day of Ramadan.** PHOTO: REUTERS

# Want to observe Ramadan? There's an app for that

*From finding Mecca's direction and purveyors of halal food to counting prayers and learning Arabic pronunciations, a slew of apps is putting a 21st-century slant on Islamic practices*

BY **SAMANTHA HENRY**
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The most ancient traditions of Islam are going high-tech, with a slew of modern offerings for those observing the holy month of Ramadan, which began on Wednesday.

Cellphone applications such as iPray or iQuran offer a beeping reminder of requisite prayer times, while the Find Mecca and "mosque finder" programs help the Muslim traveler in an unfamiliar city find the nearest place to pray.

"When I saw these applications for the first time, I thought 'this is amazing,'" said James Otun, who has several Islamic applications on his Apple iPhone and iPad. "Whoever came up with this idea: God bless him or her."

The applications aren't just for Ramadan; there are Islamic-themed programs that help users find the nearest Costco offering foods prepared according to Islamic dietary rules, learn the correct Arabic pronunciations in a daily prayer, or count how many pages of the Koran they've read that day — all on a mobile phone.

There also are applications, or apps, for the holy books of several other religions, from the Catholic Holy Bible to the Bhagavad Gita, a sacred Hindu scripture.

The first time Sumeyye Kalyoncu heard the *adhan* — or call to prayer — through surround-sound speakers on her iPhone dock, she was overcome with nostalgia for her native Turkey. Such applications are especially popular in the US, Kalyoncu said, as US mosques do not broadcast daily calls to prayer from external loudspeakers, as they do in Muslim countries.

"These are traditions and these have been in our lives for ages, like almost 15 centuries, so they seem very old," Kalyoncu said. "I think this is like combining together the technology and the things that we do daily."

Kalyoncu uses an iPhone app called iPray Lite, keeping track of requisite daily prayers with a program that simulates the clicking sound of prayer beads or the turning wheel of a handheld metal counter Muslims use to keep count of prayer repetitions. Using headphones, the 24-year-old says she can now fulfill her daily spiritual obligations by counting prayers on her iPhone while on the commuter bus to Manhattan from her Edgewater home.

Apple spokeswoman Trudy Muller said the company doesn't track the more than 225,000 apps for its phones by category so she doesn't know how many are Islamic-themed. The programs aren't just offered by Apple; Nokia has a Ramadan suite for its cellphones that consolidates everything worshippers need to know to observe Islam's holiest month, in which Muslims worldwide observe daily daylight fasting.

Some apps are free. Those that are not generally range from about US$0.99 to US$2.99, although some are more expensive.

The dates of Ramadan are determined by the lunar calendar, and calculations can differ among Islamic communities around the world. In North America, many Muslims marked the first day of Ramadan on Wednesday last week.

But Islam never has been at odds with innovation, said Zinnur Tabakci, who runs an Islamic religious book and gift shop in Paterson, New Jersey.

"Islam is not against technology. Now you can do it easier, faster," said Tabakci, who recently supplemented the strings of traditional prayer beads and religious texts he sells with a wall of mobile phone accessories to keep up with demand.

"Islam started 1,400 years ago, and at that time, they didn't have that much technology, but they knew everything," he added.

The mosque Tabakci attends in Paterson, called Ulu Cami, or "great mosque," has gone high-tech, too. After 16 cameras were installed for security purposes, one innovative mosque attendee began using them to broadcast services live over the Internet so those too sick or otherwise unable to attend could watch daily prayers online from home. Mosque leaders say the live broadcasts have become especially popular among relatives of immigrants who like to tune in from overseas to hear the same prayers as their loved ones in New Jersey.

Otun, a technology aficionado, says the apps on his iPhone and iPad make him a more observant Muslim. From the beeping reminder to stop and pray during his busy schedule running a limo service, to an app that tells him which nearby restaurants serve food prepared within Islamic guidelines, Otun says there's no longer an excuse to live an unobservant life.

"If you forgot to pray, you might not be responsible, because you're human; you forget and you can make it up later," said Otun, 35. "But not now that you have those apps, that might change things in God's level."

Otun's favorite application, called Find Mecca, is a compass-like program with an electronic indicator that changes from red to green when you've reached the requisite prayer angle of 58° northeast, to ensure you're facing Mecca from any location — a requirement of all Muslims when praying.

Otun said he was amazed to see an image of Mecca on his cell phone screen for the first time, and to realize he could carry a library of religious texts with him everywhere.

"iPhone makes you emotional," he said. "I can't carry 10,000 pages of books, now, you have it in your phone — it's priceless."