Case Study: Red Cross Uses Souktel's High-Volume Mobile Messaging Platform to Save Lives in Gaza

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Overview and Project Description

When conflict erupted in Gaza in late 2008, several key aid agencies contacted Souktel asking for help in reaching their staff and beneficiaries, who were scattered across the 40 km-long Strip. One of these agencies was the national Red Cross/Red Crescent: as the crisis escalated and the number of people flooding hospitals with critical injuries increased, national Red Cross staff realised they had a dire shortage of additional blood donations. They needed a large scale, fast mechanism for reaching previous blood donors in the midst of the emergency. However, calling thousands of people would have been time-consuming and ineffective as many land-lines were non-functional. To solve this problem, Souktel designed a customised, web based platform that let the Red Cross send large numbers of SMS alerts in a matter of seconds, requesting urgent blood donations from their database of thousands of donors.

Souktel's large scale, web based alert management system helped the Red Cross achieve its goal quickly: Staff instantly sent SMS alerts to 2,000 previous donors, requesting that they give blood at their nearest clinic as soon as possible. More than 500 donors rushed to the hospitals in the first two hours after the messages were sent. This represented an enormous saving of time: In follow-up conversations after the crisis subsided, Red Cross staff estimated that voice calls to 2,000 blood donors would have taken close to seven days during which time many needy recipients would have gone without critical blood supplies. A one-touch send-out of SMS alerts ensured that donors began giving blood within hours of the campaign's start.

What Worked – And Why

- **Direct connections to mobile network infrastructure:** To ensure that this project succeeded in the limited timeframe available, Souktel software developers built a custom web platform and connected it directly to mobile networks operating in Gaza. The fact that Souktel already had relationships with all mobile operators in Gaza helped get the system up and running sooner: Text-in 'shortcodes' (or phone hotlines) could be activated immediately for blood donors to respond by SMS to Red Cross requests. Leveraging these relationships further, Souktel reached out directly to mobile network management and secured a commitment to provide text messages for the Red Cross service at no cost. In the end, these key partnerships allowed the Red Cross to reach more blood donors, more quickly, at a lower cost.

- **Custom software design to meet partner needs:** Before creating any mobile messaging platform for partners (and even in crisis situations), Souktel's first step is to discuss the goals of the project with the partner organisation in order to understand how the software can meet their needs. During its initial discussions for this project, Souktel sought to understand who exactly the Red Cross would target with its SMS alerts. The Red Cross initially stated that it aimed to reach as many Gazans as possible, in an attempt to secure the highest possible number of blood donations. However, from past campaign delivery experience Souktel was aware that SMS campaigns can often be more effective when they target a specific audience. Analysing the Red Cross' donor database, Souktel found that the blood bank faced a critical shortage of Type O blood. As a result, Souktel software developers created an application that filtered the Red Cross' donor database by blood type so that the Red Cross could send

customised text message requests to each blood group, with messages to Type O blood donors being delivered first, highlighting the Type O shortage. Red Cross staff later reported that, as a result of this 'filtering', Type O donors arrived at local clinics first, enabling critical stocks to be replenished sooner.

- **Web based platform enables campaign management from multiple sites:** Souktel's messaging platforms can typically be managed via both a web interface and from users' mobile phones so that staff in multiple locations can work together on crisis response messaging. This was a critical feature for the Red Cross, as the organisation wanted its staff in Gaza City **and** at field sites to send out emergency blood donation alerts. Web user interfaces met this need, allowing staff to send text messages to blood donors from offices around the Gaza Strip (multiple users can be logged in and send messages from their own accounts at the same time). At the same time, a centralised reports panel ensured that no duplicate messages were sent, eliminating added cost and time. This multi-site campaign management was crucial: Red Cross staff expressed fears that during the crisis their Internet connections might get cut off, and mobile phone signals might be disrupted. The web-based system allowed for multiple back-up options: If a field office in the Gaza town of Khan Younis faced a power outage or the Internet failed, staff could reach out to their colleagues in any location that still had Internet to ensure that, regardless of the circumstances, messages were still delivered. A parallel 'send-from-phone' feature also allowed staff to trigger SMS alert send-out to large groups of blood donors from their mobile handsets, using password protected commands. This added feature ensured that message delivery would continue even in times of total web network failure.

What didn't Work – And Why

As with any technology deployment in a crisis zone, the SMS blood donation system also experienced certain challenges: Some local partner staff expressed concerns that the technology — with its power to send out information quickly and instantly — could fall into the wrong hands and be misused for political purposes. In response, Souktel made special efforts to outline the wide range of security features (from password protected phone log-ins to content verification) which prevent unauthorised/unsanctioned use of the software platform. These efforts convinced most of the agencies operating in Gaza. However, as the crisis continued, Souktel staff had a pressing need to get the new systems up and running for aid agencies like the Red Cross, CHF International, and Relief International and could not dedicate additional resources to further demonstrations of system's security features. In the months after the violence subsided, Souktel did send representatives to Gaza to conduct additional local demonstrations of the security features. These demonstrations, in combination with the experience of the organisations that had used the Souktel platforms throughout the crisis, showed wider communities that the system's security features were indeed robust, and that fears of misuse were unwarranted. In the three years since the 2009 conflict, Souktel has continued its work in Gaza and expanded its partnerships to include mobile service delivery for a wide range of organisations — from UN agency UNESCO to US-based non-profit World Vision. Staff members who initially expressed security concerns later became enthusiastic supporters of the technology.

Lessons Learned

- **Maximize outreach to local communities/ NGOs prior to emergency situations**

Wherever possible, Souktel aims to work with local communities and NGO staff in disaster-prone areas **before** the outbreak of violence or natural disaster -to ensure that people are comfortable using the mobile messaging systems. This outreach includes hands-on practice with the platforms (with a focus on the web interface for NGO staff and the SMS components for the local beneficiaries).

- **Don't underestimate the willingness of mobile networks to help during crises**

Commercial mobile networks are often criticised for failing to provide free services, text messages, or infrastructure to local communities, even when these services are designed for humanitarian purposes. However, Souktel's experience during the 2009 Gaza conflict shows that in acute situations, mobile networks may be willing to change these policies. The free messages provided by Palestinian mobile operators allowed aid agencies in Gaza to send their messages to wider audiences and to reserve their limited resources for on-the-ground aid efforts.

After this experience, Souktel has made it a common practice to reach out to mobile operators when the circumstances suggest there might be room for collaboration. For example, in the fall of 2011, while designing an election incident reporting hotline for the Tunisian Bar Association, Souktel reached out to mobile network operators in Tunisia to elicit their cooperation. In the context of the Arab Spring and the lead-up to Tunisia's first democratic elections, there was a palpable sense of heightened nationalism in the country and the political climate suggested that telecom companies might be more willing to cooperate than usual. Indeed, Tunisie Telecom responded to Souktel's inquiry by making an offer to provide a special toll-free number for the election hotline ('23 10 11', the date of the elections). Making the support hotline toll-free ensured that this service was accessible to the widest possible range of Tunisian mobile users. This experience confirmed the lesson learned in Gaza: In key situations, outreach to mobile networks is worth undertaking; these corporations can do much to expand projects' reach and impact.

Recommendations

1) Make mobile a good habit: To promote effective use of the technology in a time of crisis, Souktel encourages partner NGOs -- even those whose systems have been built specifically for emergencies -- to **use the systems for ordinary, non-emergency communication on a regular basis.** For example, organisations might send SMS alerts to remind local communities about meeting times, or run mobile surveys to conduct workshop evaluations and gather participant feedback. This helps overcome some of the common fears that local communities have about using new technology, and it allows partner staff to correct any common user errors before emergency situations arise.

2) Work *with* mobile operators, not against them: While it may seem easier to just forego building relationships with mobile operators and instead work through independent providers, mobile providers can often offer better infrastructure and cheaper messaging rates, as well as the potential for free or reduced-cost messages, scaled marketing campaigns, and other services that will help increase the impact of a crisis response system. Reach out early and often, and work to establish relationships in target geographies, whether a current crisis zone or not.