

Mobile Product Authentication™ (MPA™)

Brief Overview

The global counterfeit drug market is a serious threat to public health worldwide. Up to 30 percent of medicines sold in developing countries are counterfeit or are substandard. The global counterfeit drug market is estimated to be worth USD \$200 billion.

Counterfeit drugs have led to a significant number of deaths globally. According to a 2009 International Policy Network report, over 700,000 deaths have resulted from inauthentic drugs for malaria and tuberculosis alone. Counterfeit drugs have also contributed to increased drug resistance in treating serious global diseases.



Sproxil, Inc. is combating the global counterfeit drug market through a Mobile Product Authentication™ (MPA™) solution that enables consumers to verify the authenticity of pharmaceutical products. Sproxil's MPA solution allows customers to send a free text message containing a code found on a drug to Sproxil's servers, which immediately respond and indicate whether the drug is genuine or fake. In partnership with BIOFEM Pharmaceuticals and Nigeria's National Agency for Food and Drug Administration and Control (NAFDAC), Sproxil piloted its mobile verification application between February and May 2010 in Nigeria where the government has been proactive in the fight against fake drugs and there is a strong mobile phone culture.

Since its pilot, Sproxil has expanded rapidly in Nigeria, Ghana, Kenya, and India.

■ Geographic Coverage:

Nigeria, Ghana, Kenya, and India

■ Implementation Partners:

Sproxil, Inc. developed the application and partnered with a team which included:
Nigeria National Agency for Food and Drug Administration and Control (NAFDAC) |
BIOFEM Pharmaceuticals

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About MPA

Sproxil has developed a Mobile Product Authentication™ (MPA™) solution that enables consumers to verify that the pharmaceutical product they are buying is genuine. Nigeria-based drug distributor BIOFEM Pharmaceuticals had been searching for a solution to address massive counterfeiting of its flagship Merck Soreno product for Type 2 Diabetes, Glucophage. Sproxil's solution provided the company with a low-cost and efficient way to combat this negative trend.

Consumers use a scratch card, similar to those used to replenish cellular talk-time, to reveal a one-time-use code on pharmaceutical products. They then send the code via SMS to a "911 for fake drugs" number which is identical on all cellular networks within a country. A response is dispatched immediately from Sproxil's servers, indicating whether the drug is real or fake. If a fake product is found, consumers are given a hotline number to call and report it.

Evaluation and Results

During the pilot phase in Nigeria, Sproxil's scratch codes were affixed to over one million sachets of Glucophage. Glucophage sales increased by more than 10 percent in Nigeria and BIOFEM had seen a return on investment of over 1,000 percent within 90 days.

As of February 2012, Sproxil had sent more than one million text messages in Nigeria to verify drug authenticity. To further improve access, Sproxil partnered with all global systems for mobile communication (GSM) networks in Nigeria (Etisalat, Glo, MTN, and Zain), with the potential of reaching 67 million users. Consumers can now text on any GSM network in the country using one live short code, 38353. The company has been able to replicate this same service in Kenya through its partnership with Safaricom and the Kenya Pharmacy and Poisons Board (PPB), the national drug regulatory authority.

Lessons Learned

- Partnership building is a major component of Sproxil's success. The company works very closely with multinational mobile phone companies to bundle the price of text messaging for its clients and collaborates with national governments to ensure coordination.
- Care must be taken to secure qualified and reputable manufacturers for scratch labels. The company has introduced a rigorous vetting and screening process to make sure that the suppliers meet quality needs, especially focusing on security and reliability.
- Technology can be used for national tracking of counterfeit drugs. Using MPA™, pharmaceuticals and the appropriate national authorities can track the specific mobile network associated with an incoming text message and identify areas of the country with possible counterfeit activity.

Conclusion

Leading pharmaceutical companies and regulatory organizations in developing countries of Africa and India have been leveraging Sproxil's MPA™ solution to protect consumers from taking potentially harmful counterfeit and substandard drugs since the company launched in 2009.

Since its pilot, Sproxil has been expanding rapidly in Nigeria, Ghana, Kenya, and India. In 2011, Sproxil received US\$1.8 million in investment from Acumen Fund, a non-profit impact investment fund. These new funds enabled Sproxil to begin expansion into India and Kenya, build sales teams in Nigeria and the United States, and further enhance the company's technology.

In August 2012, Bharti Airtel ('Airtel'), a global telecommunications company with operations in 17 countries across Africa, announced a partnership with Sproxil to combat the counterfeit drug market in Africa. The partnership is designed to facilitate the deployment of the MPA™ solution throughout developing regions of Africa – markets where Airtel is entrenched as a leading telecommunications provider.

Information was excerpted from:

<http://www.acumenfund.org/investment/sproxil.html>
http://www.businesscalltoaction.org/wp-content/files_mf/sproxilcasestudy2.23.2012forweb17.pdf
<http://www.policynetwork.net/health/publication/keeping-it-real-protecting-worlds-poor-fake-drugs>
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