A Voice Portal For Health

Case Study Presentation

Mark Scott

1st March 2006

ES.259 ICT Solutions for Africa
COMPANY OVERVIEW

- Voxiva provide ICT solutions to improve exchange of information
- Real-time collection, analysis, response
- Access through telephone, fax, email, SMS or web
- Suitable for use with under-developed infrastructures
- Specialises in co-ordination of:
  - Healthcare: Disease surveillance, response management, patient care
  - Development Co-ordination
  - E-Government
CASE STUDY

PERU HEALTHCARE INFORMATION DISTRIBUTION SYSTEM
THE PAIN – Current Situation

• Over 6,000 healthcare centres in Peru

• Require constant stream of communication between floor-level healthcare practices and centralized Ministry of Health.

• Typical communication requirements include
  - Disease reporting eg. *Malaria, Cholera, Polio*
  - Feedback from centralised MoH

• Current system is paper based on floor-level, with computer facilities only available at top levels of the health service.

• **Consequence:** 90% of healthcare centres rarely or never receive information regarding health alerts
Peruvian Demographics

Population: 27M
Country Area: 1.3Msqkm

ICT Prevalence:
5.7M telephones
3.6% Internet Users

MISSION STATEMENT

“Improve the speed and reach of communication between health professionals and organisations with no investment in new hardware”
The Solution

- Well developed and widely available telephone network
  → Create a chiefly telephone based information portal! Also integrate it with additional internet solutions.

- Provision of a **Freephone** number to healthcare practices and organisations for:
  - Reporting diseases
  - Collection of voicemails
  - Access to databases or reports
  - Access voice-recorded library information
  - Contact an operator
  - Make transactions

- Developed a bespoke platform **ALERTA**, launched 2001
Finance and Sustainability

• For profit
• Setup funded by a $250,000 grant from InfoDev
• Does not charge users
• Aims to become fully supported by Peruvian MoH after an evaluation of its sustainability
• Sales opportunities to groups across the globe. Current interested groups include the Peruvian Navy and US FDA.
Successes

• 76 health facilities connected (188 more pending)
• 200,000 habitants
• 4,269 reports submitted
• 28,296 cases filed
• Immediate communication between ground-level and central organizations for suspected diseases such as cholera
• Branching out of services into crime reporting
Merits for Success

• No charge to healthcare practice
• Uses currently installed infrastructure – no new hardware.
• Effective training programme for installing ALERTA into new practices.
• User friendly platform
• Flexible means of connectivity
• Receipt of grants
• Wide range of uses for technology model (high customer base)
• Co-operation with Peruvian MoH
Obstacles

• Lack of telephones in many rural areas
• High rate of personnel turnover in healthcare and government offices – difficult to maintain a trained workforce.

HOW CAN THESE BE OVERCOME?

• Access of portal via radio communication
• *Telefonica* intends to make greater use of radio communication to connect rural areas to the mainline telephone system.
Feedback

• Voxiva are continuously reforming the system in response to user feedback.

“We can see the information immediately. Now everyone is informed about a case and the appropriate measures can be taken. It is truly an important benefit. It could help eradicate diseases.”
Conclusions

• A successful seeding of new technology in healthcare communications
  - Uses currently installed infrastructure
  - Free for users

• Developed a sustainable commercial programme
  - Wide customer base
  - Adaptable technology
But I thought this was a class about ICT solutions for AFRICA!
ALERTA for Africa

• ALERTA’s future successes lie in the acceptance of the technology in other countries and organisations across the globe.

• Is Africa a potential customer for this system?
Sub-Saharan Demographics

2003 ICT Data for Sub-Saharan Africa
Source ITU 2003

Telephone Access: 3.0%
Internet Access: 1.6%
Are there Enough Telephones?!

GrameenTelecom