

A Voice Portal For Health

Case Study Presentation

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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

Source: ACTETSME (2003)



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 iradicate 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

MIT OpenCourseWare
<http://ocw.mit.edu>

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