ICT as a Tool for Accessing Medical Content & Knowledge in Local Languages - Sri Lanka's Perspective

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Abstract

ICT tools are crucial to providing urgently needed information and knowledge to healthcare professionals & the general public regardless of their geographical location. Most health care professionals in Sri Lanka   use ICT for acquiring knowledge, but the use of ICT by the general public for accessing health care information is till at a very low level, although the Government has spent millions of rupees in developing ICT infrastructure all over the island.

To address the needs of developing content and application relevant to the Sri Lankan domain, the e-society programme, ICT Agency of Sri Lanka rolled out a two pronged grant mechanism through which partnerships were established several CBOs, NGOs as well as state and private sector organizations. This paper will discuss and review the how ICT agency of Sri Lanka help in developing local language content related to medical information and how it has been facilitate access to general public. The paper will specifically converse the following projects.

Happy Life - Life provides an effective means of providing reliable and timely information through counseling services accessible through multiple channels - Interactive Voice Response, SMS, Web Chat, Skype, Google chat, Yahoo chat and the Web. It provides direct access to information and personal counseling facilities (from anywhere) without the identity of the inquirer being exposed.

Wedananasala -Wedanasala is bi-lingual Medical information portal which contain more than 2000 authenticated medical related article in Sinhala and Tamil Language. The Site is enriched with text, pictorial illustrations and video based content. The portal facilitate for accessing the information in easy way classifying and giving easy navigation options.

First Aider - First Aider is a Tri Lingual content portal which provides high quality information on First Aid . It provides two options for easy navigation. e-Text book version and web Version both of which are enriched with e photos, illustration and video content. The illustration and the text content have been made in compliance with international standards with the help of St John's Ambulance Association.

Keywords : ICT4D, ICT for Development, e-Health, e-Sri Lanka, Local Language, Local Content, Medical Content, Sri Lanka, South Asia

Introduction

ICT tools are crucial to providing desperately needed information and knowledge to healthcare professionals & the general public regardless of their geographical location. Most health care professionals in Sri Lanka   use ICT for acquiring knowledge, but the use of ICT by the general public for accessing health care information is till at a very low level, although the Government has spent millions of rupees in developing ICT infrastructure all over the island.

Quick flash back: Sri Lanka developed its own indigenous scheme of traditional medicine system based on a series of prescriptions handed down from generation to generation over a period of 3,000 years. The Mahawansa speaks of   King Buddhadasa (398 AD) as a prominent physician, surgeon and veterinary surgeon. In the days of royalty Sri Lanka had one native doctor per village. He enjoyed the support of the villagers in collecting leaves, roots and seeds for the medicines. As the general public was involved in making the medications, they knew what went into the medications and which medication was used for which illness. This knowledge is no more and we have turned in to western medicines and gradually Sri Lanka health care system developed along those libes. But, the knowledge and understading of even the most s basic levels of medicines and medical treatment is sadly lacking among the general public. If Sri Lanka is to fill this void it is necessary to come develop a comprehensive collection of digital medicinal knowledge and information in local language. Even in print form t medical knowledge and information sharing in local language is scarce.

Having completed a information needs assessment in 6 districts the e-Society Programme of the ICT Agency of Sri Lanka identified Health as a key area to be addressed in terms of developing and & enriching with information and knowledge in local language.   This was very much in line with the aims of the e-Society Programme, which seek to facilitate access to ICT amongst the most vulnerable groups in Sri Lanka, and ensure that the benefits of ICT development flow to these groups. By facilitating a more balanced access to information within Sri Lankan society it is envisioned the e-SDI (e-Sri Lanka development Initiatives) will assist in closing the development divide between urban and rural areas. .

To address the needs of developing content relevant to the Sri Lankan domain, the e-society programme rolled out a two pronged grant mechanism through which partnerships were established several CBOs, NGOss as well as state and private sector organizations, This paper will discuss and review the how ICT agency of Sri Lanka help in developing local language content related to medical information and how it has been facilitate access to general public.

Improving   Reproductive   Health   Information   Access   through   ICT (http://www.happylife.lk)

For Sri Lankans, information related to sexual health, family planning and contraception is a very sensitive area. While a certain amount of information is given out in school, most students only learn about the potential pitfalls after they have been afflicted. By that time, it is often too late for the easier options and more drastic measures have to be taken. There is also a social

stigma in seeking out such information which is only available in family planning clinics: for many young adults, such visits are simply not possible.

Young adults are one of the highest at-risk groups. But they are also the most open to new technologies like the Internet - many have accounts on social network sites - and mobile phones – almost all of them have a phone which can send and receive SMSs. To reach this group, the Family Planning Association of Sri Lanka proposed to build an online information repository and counseling service that embraced these new technologies. They reasoned that with the confidentiality and, more importantly, the anonymity the Internet and mobile phones can offer, more youths would be able to access this information and, with a proper understanding of the ramifications of their actions, be able to make more informed decisions and indulge less in the more risky behaviors.

Happy Life provides an effective means of providing reliable and timely information through counseling services accessible through multiple channels - Interactive Voice Response (IVR), SMS, Web Chat, Skype, Google chat, Yahoo chat and the Web. It provides direct access to information and personal counseling facilities (from anywhere) without the identity of the inquirer being exposed. In this manner it can very effectively bridge the information gap that exists in the area of reproductive health. By giving a wide range of the options for information access - phone call, SMS, Web portal, e-mail and an interactive Voice Response System with professional counseling on a one to one basis with the language of one's choice, the application clearly demonstrates the innovative use of ICT to overcome socially sensitive issues.

Wedananasala - High Quality Medical Information in Local Language (www.wedananasala.org)

In Sri Lankan's context most of people have their own opinion as to when they should take medicine, Some people believe that certain drugs are "too strong" and stop medication without completing the prescribed course. This is largely due to lack of awareness – the lack of f Medical information in local language.

Medical information is not a generic, it's a special knowledge. Therefore making authentic medical information available is a one of challenges ICTA faced before the Human Genetic Unit of the Department of Anatomy, Faculty of Medicine, University of Colombo proposed to make available high quality locla language medical information portal. .

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First Aider – Tri Lingual First Aid Learning Portal (www.Firstaider.org)

First Aid put simply "is the FIRST treatment given to a casualty at the scene of an accident prior to the arrival of a more medically qualified person". You reassured the casualty but did not move them, you dealt with what is known as the ABC of life by protecting the Airway, checking for Breathing and Circulation (i.e. heart beat), and dealing with any bleeding. Unfortunately, in Sri Lanka there only a small number of specialized Trainers on giving first Aid.   School children train as Boy Scouts, Girl Guide, and Cadets and engage in several extra curricula activities, but have very limited knowledge in First Aid because they don't have recourse to qualified resource persons.

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The Textbook version has the added benefit of having both a normal and 1024 screen size version for users of both 800*600 screens and 1024*768 screens to view the text in a format comfortable to them. It also has what is probably the first large print version of a site in Sri Lanka, to cater to the older user, whose eyesight is not what it used to be, those who cannot read very well as well as those who are losing their sight.

The Textbook version is laid out in similar format to the self learning manual which was created by St Johns to enable a user with no access to professional trainers or workshops to be able to effectively learn the entire course by himself. The Sinhala and Tamil versions of the Textbook version are written by in house trainers to maximize effectiveness for local audiences. The language in all three versions is very simple and easy to understand.

Not only the western medical information but the indigenous medicinal information also have been preserved in digital manner with several community based organizations and native doctors' support as the knowledge of these going to be not exist with futures generation. Developing specified & specialized content is the big task, it has been completed in some extent, but the awareness of the information portals has to be reached the grassroots.