Economic & Social Affairs

COMPENDIUM OF ICT APPLICATIONS ON ELECTRONIC GOVERNMENT

Volume 1: Mobile Applications on Health and Learning

United Nations

Department of Economic and Social Affairs

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UNPAN

DESA

The Department of Economic and Social Affairs of the United Nations Secretariat is a vital interface between global policies in the economic, social and environmental spheres and national action. The Department works in three main interlinked areas: (i) it generates, compiles and analyzes a wide range of economic, social and environmental data and information on which Member States of the United Nations draw to review common problems and to take stock of policy options; (ii) it facilitates the negotiations of Member States in many intergovernmental bodies on joint courses of action to address ongoing or emerging global challenges; and (iii) it advises interested Governments on the ways and means of translating policy frameworks developed in United Nations conferences and summits into programmes at the country level and, through technical assistance, helps build national capacities.

Notes

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For further information on any of the products please refer to the contact details provided in each case.

Foreword

E-government, the infusion of Information and Communications Technology (ICT) at all levels of government is assuming a critical role in achieving the United Nations Millennium Development Goals (MDGs). Government has the responsibility of developing comprehensive, successful and sustainable implementation strategies at the national, regional and local level. The private sector, in dialogue with government, has an extremely important role to play not only in devising e-government strategies, but also in developing and putting on the market appropriate cost-effective ICT applications.

ICTs are becoming powerful mechanisms for generating economic growth, stimulating job creation and enhancing employability. The inter-connectivity provided by ICTs among stakeholders allows vastly improved communications leading to both better decisions and better delivery of services to the general population. Government can provide vitally needed services more efficiently, more effectively and at lower costs.

UNDESA is undertaking an initiative to collect a broad array of current ICT applications from almost all geographic regions of the world. Through this Compendium, these cases could become a useful tool at the disposal of government at all levels, the private sector and civil society around the world. The primary goal of this initiative is to provide information that will stimulate an even more rapid expansion of electronic government which will be more tailor-made to citizens' needs.

This first volume focuses on the use of mobile technology in the areas of health and learning. Future plans include publishing additional volumes on the use of ICTs in other areas such as human resource development, environment, management development, finance, farming, and government operations. In addition, to keep up with rapidly changing m-technology, ICT applications in the various areas will be periodically updated both in published form and on the United Nations Public Administration Network (UNPAN) E/M-government Knowledge Bank hosted on the UNPAN Portal.

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Acknowledgements

Contents

Glossary of Technical Terms and Abbreviations

AIFF Audio Interchange File Format is an uncompressed audio file format.

AJAX Asynchronous JavaScript and XML is a programming language used in web application development.

AMR Adaptive Multi-Rate is a digital speech compression format used widely in mobile phones.

ASCII American Standard Code for Information Interchange is a standard code used to represent English characters in computers.

AVI Audio Video Interleave (AVI) files contain both audio and video data in a standard container that allows simultaneous playback.

Bit Is a binary digit with a value of either '1' or '0' on which computing is built.

Bitrate Are the number of bits (information) processed per unit of time, referring to the rate of transfer of information or connection speed.

Bluetooth Provides a way to connect wirelessly and exchange information between devices using a radio frequency.

Bytes A byte is made up of eight bits. One byte storage capacity is equal to one character. Ten bytes is equal to a word, and so on.

Codec Compression-Decompression is a program or device that encodes a stream or signal for transmission, storage or encryption and decodes for viewing or editing.

CDMA Code Division Multiple Access is a channel access method utilized by various radio communication technologies. Also, cdmaOne which is a mobile phone standard is often referred to as "CDMA".

Connectivity Is the linking among networks and computers.

Container Holds data in the form of a software data file (e.g. AVI or MP3).

Datamatrix or Semacode - Datamatrix symbols are made up of square modules arranged within a perimeter finder pattern. It can encode up to 3,116 characters from the entire ASCII character set (with extensions). The symbol consists of data regions which contain square modules set out in a regular array. Datamatrix and Semacode codes are widely used in manufacturing to identify components. They require a scanner in order to read the encoded information.

Data weight The amount of data is an indicator of file size; the higher the data weight, the larger the file.

DRM Digital Rights Management refers to technologies used by creators and publishers to control access to and the availability of digital materials on digital devices.

DSL Is a family of technologies that provide digital data transmission over the wires of a local telephone company. DSL uses high frequency signals while a regular telephone uses low frequency signals.

EDI Electronic Data Interchange is a particular set of standards for computer-to-computer exchange of information.

GIF   (or GIF98a) – This is a Graphics Interchange Format which uses the 256 web safe color palette to maintain high quality graphics (not suitable for photos).

GPC   Global Product Classification

GPRS   General Package Radio Service is a data service for mobile phones used for WAP, SMS and MMS.

GPS   Global Positioning Systems pinpoint geographic locations via the transmission of signals from a satellite to GPS receivers.

GSM   Global System for Mobile communications is the most popular standard for mobile phones in the world. Its promoter, the GMS Association, estimates that 82 per cent of the global market uses this standard.

HLE   Handheld Learning Environment created by handheld mobile devices.

IMS   IP multimedia Subsystem is an architectural framework for delivering internet protocol (IP) multimedia to mobile users.

IPTV   Internet Protocol Television is a system wherein a digital television service is delivered using the Internet Protocol over a network infrastructure that may include delivery by a broadband connection.

IrDA   A suite of protocols for infrared (IR) exchange of data between two devices, up to 1 or 2 meters apart (20 to 30 cm for low-power devices). IrDA devices typically have throughput of up to either 115.2 Kbps or 4 Mbps. IrDA protocols are implemented in Symbian OS phones, many PDAs, printers and laptop computers. The Infrared Data Association, the industry body that specifies IrDA protocols, was founded by Hewlett-Packard and others.

LAN   Local Area Network which is a computer network covering a small geographic area such as a home, office, or group of buildings, e.g. schools. The defining characteristics of LANS include much higher data transfer rates (in comparison to WANs – wide area networks), smaller geographic range, and no need for leased communication lines.

LMS   Learning Management System is a term used to describe software tools designed to manage user learning interventions, e.g. learner self-service such as self-registration for courses, training work flow, on-line learning, on-line assessment, management of Continuous Professional Education (CPE), and collaborative learning.

J2ME   Java 2 Mobile Edition has become a popular option for creating games for mobile phones.

JPEG   A method of compressing photos, standardized by the Joint Photographic Experts Group (JPEG), and indicates the file extension (.JPEG or .JPG).

MDTS   Mobile Delivery Tracking System

MIS   Mobile Information System

MMS   Multimedia Messaging Service is the standard for telephone messaging systems allowing messages to be sent that include multimedia objects.

PDF   Portable Document Format, such as those produced by Adobe Acrobat and Open Office software.

Platform   In computing, platforms refer to frameworks on which applications can be run.

Protocol	Refers to a set of rules governing an operation. For example Internet protocols are rules that help in governing an operation on the Internet and communications over it, while communications protocols are set rules governing communications between electronic devices.
Proximal	Is a device that activates in response to another nearby device (a few inches to a few meters) without necessarily making physical contact.
Px	pixels, single points or samples in a graphic or image.
QR code	Quick Response code is a two-dimensional bar code that allows its contents to be decoded at high speed. Widely used to track manufacturing materials and manage inventory, QR codes can be read via a camera phone using software that decodes the bar code information.
QTI	Is the specification for tests and items that allows these to be authored and delivered by multiple systems interchangeably. The IMS Question and Test Interoperability specification (QTI) defines an XML language for interchanging questions and assessments between systems.
RFID	Radio Frequency Identification is an automatic identification method relying on storing and remotely retrieving data using devices called RFID tags or transponders. RSS 1.0 Rich Site Summary feeds content summaries from subscribed sources (e.g. news sites, weblogs) and presents them in a readable format (Also known as Really Simple syndication).
SCORM	Sharable Content Object Reference Model is a specification for developing web-based learning resources. It communicates between different platforms (similar to Learning Management Systems) and uses XML and Zip formats to package and transfer content.
Server	In computing, a server is dedicated to a specific application, e.g. an applications server is dedicated to running certain software applications, a communications server is a carrier-grade computing platform for communications networks, a database server provides database services.
SMS	Short Message Service (text messaging)
SQL	Is a standard interactive and programming language for querying and modifying data and managing databases.
SUS	Software Update Server
Throughput	In computing, this refers to the digital data per time unit delivered over a physical or logical link.
UCC Standards	Uniform Code Council Standards
VoIP	Voice over Internet Protocol is a protocol optimized for the transmission of voice through the Internet or other packet switched networks.
WAP	Protocol designed to show internet contents on wireless devices such as mobile phones.
Weblogs	(Web+logs or blogs) A personal website where entries are made in journal style and displayed in reverse chronological order.

WI-FI Is a wireless technology, brand owned by the WI-FI Alliance, intended to improve the interoperability of wireless local area networks products based on the <u>IEEE 802.11</u> standards. Common applications for WI-FI include Internet and VoIP phone access, gaming, and network connectivity for consumer electronics such as televisions, DVD players, and digital cameras.

Wi-Fi/WLAN Wireless Fidelity is based on a Wireless Local Area Network. It is a localized network that businesses and institutions use to systematically store, share and retrieve information digitally and is often password protected.

WiMAX World Interoperability for Microwave Access is a telecommunications technology aimed at providing wireless data over long distances in a variety of ways, from point-to-point to full mobile cellular type access.

Wireless Any type of electronic operation that can be performed without using a hard wire connection, for example relying on an energy frequency such as radio, light waves or infrared.

XML Extensible Markup Language is a general purpose language. It is classified as an extensible language because it allows its users to define their own elements. The primary purpose of XML is to facilitate the sharing of structured data across different information systems.

An Introduction to Mobile Technology

A series of United Nations Conferences and Summits, held in the 1990s together with the United Nations Millennium Summit Declaration, led to the acceptance of shared economic and social priorities that were translated into the following Millennium Development Goals (MDGs): eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equality, reducing child mortality, improving maternal health, combating HIV/AIDS and other diseases, ensuring environmental sustainability, and promoting a global partnership for development.

Information and Communication Technologies (ICT), as noted in the Geneva and Tunis Declarations adopted by the World Summits on Information Society (WSIS) in 2003 and 2005 respectively, have an immense impact on virtually all aspects of our lives and could play a critical role in implementing the MDGs. The rapid progress of these technologies opens completely new opportunities to attain higher levels of development. The capacity of these technologies to reduce many traditional obstacles, especially those of time and distance, has the potential to benefit millions of people in all corners of the world. ICTs are a powerful instrument, increasing productivity, generating economic growth, job creation and employability, and improving the quality of life for all. Within ICTs, portable technology through the use of mobile devices (m-technology) is by far the fastest growing segment. IT could be considered as the new frontier in transforming government and making it even more accessible and citizen-centered. The benefits of remote delivery of government services and information can be extended to those who are unable or unwilling to access public services through the Internet or simply prefer to use mobile devices.

M-technology can trace its beginnings to the agreement made by a dozen companies in July 1985 to establish the Global System for Mobile Communications (GSM). The GSM Association estimates that it took 12 years to reach 1 billion connections, but only 30 months thereafter to reach 2 billion connections. In a recent survey by Reuters, global mobile phone usage will exceed 3.25 billion users by the end of 2007. According to the Association, almost 7 billion text messages are sent each day.

The Association has observed that m-technology is rapidly becoming indispensable in the developing world. Sixty-four percent of mobile users are in emerging markets and the mobile industry plans to invest more than $50 billion in sub-Saharan Africa over the next five years to provide more than 90 per cent of the population with mobile coverage. Nokia, a major m-technology corporation, estimates that by 2012, 50 percent of individuals in the remote areas of the world will have mobile phones.

M-technology is much more than mobile phones. Generically, m-technology refers to technology that is portable. Mobile devices use wireless technology to transfer information over distances that can be very short or very long. These connections tie mobile devices to centrally located information and/or applications platforms.

Some examples of mobile devices include:

- Mobile phones and smart phones, which are high-end phones with more advanced capabilities.
- Laptop computers.
- Palmtop computers or Personal Digital Assistants (PDAs).
- Global Positioning System (GPS) devices.

Mobile devices can be used with a variety of wireless communications technologies such as:
- Wireless fidelity (WIFI) – a type of wireless local area network technology wherein networks use an array of receiver transmitter towers built by public or private service providers. These towers pick up signals from mobile devices and transmit them to a central hub. The hub usually has access to a network of hubs as well as satellite communications.
- Bluetooth – connects mobile devices wirelessly over short distances using radio waves.
- "Third Generation" (3G) Global System for M-technology (GSM) and General Packet Radio Service (GPRS) data services which allow internet access for mobile phones and PDAs.
- Virtual private networks – secure access to a private network.

M-technology is rapidly changing the delivery of programs and services in a broad range of fields such as learning, health, finance and government. While the available hardware associated with m-technology is expanding, according to the International Telecommunications Union (ITU), 33.6% of the world's population and 22.2% of developing countries' populations already have mobile phones but as yet are not using the Internet.

The effectiveness of m-technology in addressing MDGs will depend upon the quality of available software. As it was stressed in the Plan of Action of the World Summit on the Information Society (WSIS), the development of useful ICT instruments for all stakeholders that foster increased awareness, together with an optimal choice of appropriate software products, will best contribute to achieving development goals within local conditions.

This *Compendium of ICT Applications on Electronic Government* is a unique collection of current ICT applications being used directly by or in partnership with governments, governmental institutions and the private sector around the world to support administration and public service, while addressing governance challenges. The Compendium also presents private sector ICT applications that are available in the marketplace.

Volume 1 of the Compendium, the first in the series, focuses on m-technology software products and applications in the areas of health (m-health) and learning (m-learning) that are being used in both developed and developing countries. It is important to note that m-technology is evolving extremely fast. Some of the software applications presented may have already been modified and newer versions released.

Chapter 1 – Mobile Health

M-technology is increasingly being used in the health care field (m-health). Government officials use m-health to collect health-related data on the general population. The use of m-health is becoming a cost-effective method of identifying and monitoring health issues as well as guiding the formulation of health policies. Programs to support the professional development of people in the health field, using m-health technology, are becoming readily available.

M-health also provides health professionals with access to patient data as well as access to various information sources, both of which provide valuable assistance in the diagnosis and formulation of treatment. Individuals can use m-health to access resource materials on health issues. Patients can self-monitor and transmit information to their health care provider; e.g. blood pressure, glycemic data for diabetes control or a photograph of a wound. Using m-health could be particularly important to people living in remote areas or those who are physically impaired.

This chapter presents eighty-five examples of m-health applications that are being used today. These cases are divided into four categories: Health Administration, Health Care Delivery Systems, Health Information and Patient Care. The cases are further divided into regions of the world and then countries within these regions.

Health Administration

SOFTWARE PRODUCT

Product Summary

Name	Charge Capture Suite
Product URL	http://www.patientkeeper.com/products_and_technology/ charge_capture_suite/index.html
Product Description	This product helps hospitals improve the following services to its patients: billing accuracy and billing process. This may increase revenue and simplify the billing process for physicians and billing staff.
License(s)	Proprietary
Status	In use
Target Users	Patients, nurses, doctors, researchers
System Requirements	Handheld PDA and wireless systems.

Developer/Owner Details

Name	Patient Keeper
Contact URL	http://www.patientkeeper.com/index.html
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	MDCoder Capture
Product URL	http://www.mobiledesigntech.com/product.index/htm
Product Description	MDCoder Capture is software that allows doctors to access a central billing system through mobile devices to ensure efficient and speedy processing.
License(s)	Proprietary
Status	In use
Target Users	Physicians
System Requirements	Palm OS, Pocket PC

Developer/Owner Details

Name	mdTechnologies
Contact URL	http://www.mobiledesigntech.com/
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	Patient Keeper
Product URL	http://www.pdamd.com/products?oec-match=&oec-category=22&Search.x=13&Search.y=16
Product Description	Patient Keeper offers a comprehensive collection of software, handheld devices and accessories for mobile health care professionals.

PatientKeeper Provider Directory is a software product that enables health care providers to track down contact information or numbers for other physicians quickly using their PDAs. In today's increasingly specialized healthcare environment, the number of other physicians a health care professional may need to work with is dramatically increasing. This software reduces the tracking time thereby increasing efficiency.

PatientKeeper Charge Capture is a product designed for PDAs to ensure that health care providers can capture and submit charges in an accurate, compliant and timely fashion. This can be done at the point of care, in the office, or virtually anywhere. Loss of revenue stemming from processing delays, errors, and inaccuracies can be very costly.

PatientKeeper eSignature is a software product that provides for fast, accurate electronic signing on mobile devices, such as PDAs. In most instances when a health care provider enters a clinical note on a PDA, in order for it to be a part of the official medical record, it must be reviewed, edited, and signed. This can be a lengthy process that can waste time and delay the availability of the medical record.

PatientKeeper Messaging is a software product that uses mobile technologies to improve secure clinician-to-clinician communications.

License(s)	Proprietary
Status	In use
Target Users	Health professionals
System Requirements	Handheld PDAs and wireless systems

Developer/Owner Details

Name	Patient Keeper
Contact URL	http://www.patientkeeper.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	hTrak
Product URL	http://www.htrak.com/index.php?option=com_content&task=view&id=17&Itemid=29
Product Description	The hTrak handheld application uses the very latest handheld Windows Mobile scanning solutions to reduce high cost procedure areas such as operating theatres, radiology, cardiac catheter labs, endoscopies, and day surgery.
	Using mobile handheld barcode scanning devices, clients can capture important information at the point of the procedure. They then make this information accessible through either an hTrak web server environment or through a server installed on the client's own IT infrastructure using industry standard web browser technology. Business processes can be automated to meet individual client requirements.
	There are two global barcode standards used in the unique identification of products in the Health marketplace. They are the HIBCC and the UCC/EAN standards. hTrak has coded the logic to be able to recognize both standards and extract the appropriate data elements. These data elements include the UPN (Universal Product Number) as well as the lot number and expiration date.
License(s)	Proprietary
Status	In use
Target Users	Patients and medical practitioners and hospital administrators
System Requirements	NA

Developer/Owner Details

Name	hTrak Mobile Health Solutions
Contact URL	http://www.htrak.com/index.php?option=com_contact&Itemid=3
Type	Private Sector
Country	Australia

SOFTWARE PRODUCT

Product Summary

Name   The Doctor's PDA and Smartphone Handbook

Product URL   http://www.doctorsgadgets.com/the-doctors-pda-and-smartphone-handbook/

Product Description   PDAs (Personal Digital Assistants) are becoming an ever more useful tool for doctors. These m-technology devices are being used to organize office operations as well as medical reference information. Doctors' Gadgets produces this handbook, guides doctors through this technology, features what is available to buy or as a free download, and how to make the best use of PDAs to ensure maximum medical efficiency.

Doctors' Gadgets holds annual workshops with the Royal Society of Medicine's Young Fellows on the subject of PDAs in healthcare, provides medical technology information and a discussion forum for doctors. The Doctors' Gadgets web site also provides links to many other sites involved with m-health, such as award winning medical software for the Palm OS or Pocket PC PDA.

License(s)   Proprietary

Status   In use

Target Users   Medical professionals

System Requirements   M-Technology Devices

Developer/Owner Details

Name   Doctors' Gadgets

Contact URL   www.doctorsgadgets.com/

Type   Private Sector

Country   New Zealand

Health Care Delivery Systems

SOFTWARE PRODUCT

Product Summary

Name   EpiHandy

Product URL   http://www.epihandy.org/

Product Description   EpiHandy is a product that provides a way of surveying and collecting data in health and development research. This product eliminates bulky paper questionnaires and subsequent data entry as well as costly errors related to manual data entry and lack of validation of data at time of collection.

With EpiHandy the users can create their own custom surveys, tap in respondents' answers to questions accurately and quickly directly on the screen of any number of handheld computers.

EpiHandy consists of several interrelated programs including industry standard SQL databases for storage of data.

EpiHandy Server database software uses industry standard SQL databases (MSDE 2000). The latest version is 0.906.100.

EpiHandy Study Manager designs and manages the studies. The latest version is 1.5.490.

EpiHandy MobileClient collects the data using handheld computers. The latest version is 0.906.813.

License(s)   Open Source

Status   In use

Target Users   Health care institutions, mainly in Africa

System Requirements   EpiHandy was developed for Windows CE (PocketPC) with plans for porting it to Palm and Linux.

Developer/Owner Details

Name   Center for International Health

Contact URL   http://www.cih.uib.no/

Type   Academic

Country   Implemented in Africa, developed in Norway

SOFTWARE PRODUCT

Product Summary

Name	EpiSurveyor

Product URL   http://www.datadyne.org/?q=episurveyor/home

Product Description   EpiSurveyor is a free, open source tool enabling anyone to easily create a handheld data entry form, collect data on a mobile device, and then transfer the data back to a desktop or laptop for analysis. With EpiSurveyer, a windows-based program, health care workers enter survey questions on a desktop or laptop. The resulting form is then published to any number of mobile devices, such as a PDA or smartphone. The mobile devices can then be taken into the field and used to record information. Afterward, the devices are synchronized with a desktop or laptop, with the ability to combine all of the data collected into a single table.

In June 2006 a partnership among DataDyne, the UN Foundation, the Vodafone Group Foundation, and World Health Organization was launched to support the fight against measles in Burkina Faso, Kenya, and Zambia. Data officers in each country received training in how to use the EpiSurveyor tool via a Palm handheld computer to collect information from clinics, and then aggregate and analyze it nationally. By replacing paper-based processes, the countries' ministries of health have dramatically speeded up the rate at which vital information could be collected and the impact of current treatments assessed. Based on the success of this three-country pilot, plans are underway to create new digital health systems for use in over 20 measles-affected countries in Africa, as well as to enable health care workers to use the technology to fight other diseases such as malaria.

License(s)   Open source

Status   In use

Target Users   Health care workers

System Requirements   PDA / Smartphone

Developer/Owner Details

Name   Datadyne

Contact URL   http://www.datadyne.org/?q=contact

Type   Public/ Private Sector

Country   Implemented in Burkina Faso, Kenya, and Zambia , developed in the United States of America

SOFTWARE PRODUCT

Product Summary

Name   PDAs in Ghana, Kenya and Uganda

Product URL   NA

Product Description   In Ghana, community volunteers have been using PDAs to collect data as part of a measles vaccination program. In Kenya, medical students were equipped with PDAs loaded with relevant information about their studies in obstetrics/gynecology, internal medicine and pediatrics. In Uganda, practicing physicians were given PDAs containing basic reference material as part of their continuing medical education.

The Ghana project yielded compelling evidence of the value of PDAs for data collection and reporting. Data from 2400 field surveys were submitted to the implementing agency by mid-day following a vaccination campaign in a particular location. They were analyzed and a report prepared for the Ministry of Health by the end of the day. Previously, data entry also would have taken 40 hours using paper and pencil surveys.

The Kenya and Uganda pilots demonstrated the value of using PDAs for information dissemination. In Uganda, 95 per cent of physicians reported that using the reference materials over a three-month period improved their ability to treat patients effectively. This included improvements in diagnosis, drug selection and overall treatment. In Kenya, the majority of students actively used the treatment guidelines and referred to the medical references and textbooks stored on the PDA during their clinical practice.

License(s)   Open Source

Status   In use

Target Users   General population, health professionals

System Requirements   PDAs

Developer/Owner Details

Name   Governments of Ghana, Kenya and Uganda

Contact URL   NA

Type   Government, Non-Governmental Organization

Countries   Ghana, Uganda and Kenya

SOFTWARE PRODUCT

Product Summary

Name   Rwanda TRACnet HIV/AIDS Solution

Product URL   http://www.voxiva.net/rwanda.asp

Product Description   The Rwanda Ministry of Health strives to provide and continually improve the health services of the Rwandan population through the provision of preventive, curative and rehabilitative health care, thereby contributing to the reduction of poverty and enhancing the general well being of the population.

Rwanda is rapidly expanding anti-retroviral (ARV) care and treatment for People Living with HIV/AIDS (PLWHA). Today, approximately 10,000 Rwandan adults are receiving treatment, and the government plans to expand coverage to as many as 101,000 adults and children by 2007.

Information for timely and informed decision-making is critical for Rwanda to successfully achieve its goal of rapid ARV program scale up. Effective program management requires policy makers and care providers to closely monitor program issues. These issues include patient adherence to treatment regimens, drug resistance, ARV drug and lab supplies (to avoid shortages or stock-outs). The government's ability to establish effective program management mechanisms is vital to successful delivery of ART to an increasing number of people.

TRACnet is Rwanda's dynamic Information Technology solution designed to collect, store, retrieve, and disseminate critical program, drug, and patient information related to HIV/AIDS care and treatment. The system was implemented to support the Rwandan Government's vision of rapidly scaling up HIV/AIDS clinical services in a variety of health care settings. Under the leadership of the Ministry of Health and the Treatment Research and AIDS Centre (TRAC), TRACnet is being deployed to increase the efficiency of Rwanda's HIV/AIDS program management and enhance the quality of patient care.

With a bilingual English and French telephone and web interface, TRACnet employs a practical and sustainable approach to using information technology. By leveraging existing infrastructure - mobile telephone networks, connected and stand alone computers, and underlying paper record systems - TRACnet has been deployed nationwide to connect every health facility providing ARV treatment and related services.

TRACnet provides a central repository of HIV/AIDS program information and delivers real-time information for decision-making. The system has transformed a largely paper-based one-way information flow that took several weeks, into a bi-directional data exchange completed in seconds. It allows decision-makers and supervisors to quickly analyze and respond to program information.

TRACnet includes program indicators, drug inventory information from the point of care, patient registry, lab results, group and individual communications, and management dashboards.

The results achieved since deployment in January 2005 include:

Coverage - Deployed in all 94 health facilities offering ART in Rwanda, accounting for 100% of all ART patients in Rwanda. In addition, approximately 6,000 individual case records are monitored securely using the system.

Trained Personnel - More than 200 site level users have been trained to submit monthly program indicator reports and weekly consumables (drug) reports.

Access - Most users (more than 90%) access the system via a toll-free telephone interface, thereby minimizing infrastructure-linked constraints (unreliable power supply, poor or non-existent internet connection), as well as the cost of accessing the internet.

User Adoption - Anecdotal evidence has shown that most health facility personnel own mobile phones and that those who have phones are accustomed to using text messaging features; they demonstrate an ease of use after 15 to 30 minutes of training.

License(s)	Proprietary
Status	In use
Target Users	General population
System Requirements	Mobile phones

Developer/Owner Details

Name	Voxiva
Contact URL	http://www.voxiva.net
Type	Private Sector
Country	Rwanda

SOFTWARE PRODUCT

Product Summary

Name	Cell-Life
Product URL	http://www.cell-life.org/component/option,com_frontpage/Itemid,71/
Product Description	Cell-Life uses Information Communication Technology (ICT) to develop solutions that support the management and monitoring of HIV/Aids in the public health sector. Their solutions have a central focus on treatment (ART) but also cover prevention and Voluntary Counseling and Testing (VCT) aspects. Additionally, they develop custom solutions to meet specific requirements in other arenas. All solutions fall under a Cell-Life version of the open-source software GNU GPL (General Public License), which allows for widespread public access, modification and distribution of applications in the public sector.
	There are two examples of Cell-Life mobile solutions:
	Aftercare - A cell phone menu-based, real-time system for counselors to capture treatment-relevant data from the patient, such as symptoms, drug adherence and socio-economic factors. This information is instantly and directly logged to a central database. Cell-Life's technology eliminates the need for cumbersome paperwork and provides for logging accurate data about patients on a large scale and with minimum cost, maximum efficiency and significantly less human error. In addition, various modifications to this system can result in a variety of application solutions that require remote data collection components.
	Remote Booking for VCT - This is an Internet and cell phone-based system that allows large organizations (corporations and universities) to manage the bookings for HIV Voluntary Counseling and Testing (VCT) sessions.
License(s)	Open source
Status	In use
Target Users	HIV patients
System Requirements	NA

Developer/Owner Details

Name	Cell-Life
Contact URL	http://www.cell-life.org/content/blogcategory/31/105/
Type	Private Sector
Country	South Africa

SOFTWARE PRODUCT

Product Summary

Name   Mobile Walkie Talkies in Uganda

Product URL   NA

Product Description   The Rural Extended Services and Care for Ultimate Emergency Relief (RESCUER) pilot project in eastern Uganda uses a VHF radio and mobile walkie talkies to enable a network of traditional birth attendants to partner with the public health service centers in order to deliver health care to pregnant women. This results in increased and timelier patient referrals as well as providing health care to larger numbers of pregnant women. RESCUER led to a reduction in maternal mortality from 500 per 100,000 in 1996 to 271 in 1999.

License(s)   Open Source

Status   In use

Target Users   Pregnant women and health care providers

System Requirements   Mobile Walkie Talkies

Developer/Owner Details

Name   Government of Uganda

Contact URL   NA

Type   Government, Non-Governmental Organization

Country   Uganda

SOFTWARE PRODUCT

Product Summary

Name Andhra Pradesh AESSIMS

Product URL http://www.voxiva.com/aessims.asp

Product Description Throughout Asia, up to 50,000 people a year become infected with Japanese Encephalitis, a mosquito-spread disease that primarily affects children under fifteen. The disease is fatal for 30 percent of its victims, with half of its survivors suffering long-term neurological disability.

Voxiva is collaborating with two organizations to deploy the Acute Euplalitis Syndrome Surveillance Information System (AESSIMS) in Andhra Pradesh, India: Program for Appropriate Technology in Health (PATH) and the Government of Andhra Pradesh. PATH is an international NGO based in Seattle, Washington. The Children's Vaccine Program (CVP) is a PATH program that aims to improve Japanese Encephalitis (JE) disease surveillance, accelerate development of an improved vaccine, and to integrate vaccine immunization in Asia.

In 2004, PATH, Voxiva and the Government of Andhra Pradesh launched AESSIMS. This program is designed to build health capacity at the field level by enabling front-line health workers to report disease incidence through a combination of telephone and web-based technology that leverages available infrastructure. AESSIMS enables health officials to better understand the scope of the disease impact and to strategically allocate resources to areas with highest prevalence and need. Analytical tools, such as a GIS-map, provide visual representations of JE prevalence.

At the district level, real-time information enables officials to readily identify and respond to disease outbreaks through daily, weekly and monthly reports. Officials can also use the system's analytic tools to assess epidemiological trends and coordinate strategic medium and long-term public health interventions. Front-line health workers can rapidly communicate and share real-time information on detected cases.

License(s) Proprietary

Status In use

Target Users Government officials, health professionals and the general public

System Requirements NA

Developer/Owner Details

Name Voxiva Company

Contact URL http://www.voxiva.com

Type Private Sector

Country India and the United States of America

SOFTWARE PRODUCT

Product Summary

Name   Tamil Nadu Health Watch

Product URL   http://www.voxiva.com/tamil.asp

Product Description   The devastating tsunami which struck Southeast Asia in 2004 severely impacted Tamil Nadu. To contain and reduce escalating disease incidence during the post-tsunami relief effort, health officials needed a surveillance network that allowed them to easily access and analyze disease information in real-time.

In May 2005, Tamil Nadu Health Watch was launched in the four most devastated districts. Health Watch allows health workers, even in remote areas, to immediately report disease incidence data to health officials. In turn, health managers can quickly analyze information about suspected cases, share technical information and resources, and initiate an informed response.

By linking Primary Health centers with district experts and program managers, activities can be coordinated more effectively and resources (e.g., supplies, technical personnel and transport) can be allocated more efficiently. Voxiva trained more than 300 doctors from Primary Health centers using simple, easy to use bilingual manuals and interactive sessions. The training sessions were coordinated with the State to reinforce disease surveillance guidelines and outbreak response protocols.

The phone and web-based data collection system strengthens Tamil Nadu's disease surveillance capabilities at the district and sub-district levels. The solution maximizes the use of the existing communications infrastructure – mobile phones, fixed line and the Internet - making it a cost-effective and sustainable solution.

License(s)   Proprietary

Status   No information on whether the system is still being used.

Target Users   Government officials and health professionals

System Requirements   NA

Developer/Owner Details

Name   Voxiva Company

Contact URL   http://www.voxiva.com

Type   Private Sector

Country   India and the United States of America

SOFTWARE PRODUCT

Product Summary

Name   EasyTRAC

Product URL   http://www.publicconsultinggroup.com/easytrac.asp

Product Description   EasyTRAC is an Internet and Palm-based solution for documenting health-related services provided to special education students. The services provided can easily be documented at anytime and from anyplace. Using a Palm, data can be forwarded to a central database for checking compliance and for initiating billing.

License(s)   Proprietary

Status   In use

Target Users   Health care professionals working with special education students

System Requirements   PALM OS

Developer/Owner Details

Name   Public Consulting Group, Inc. (PCP)

Contact URL   http://www.publicconsultinggroup.com/contact.asp

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   HazardPoint

Product URL   http://www.hazardpoint.com/overview.htm

Product Description   HazardPoint is a powerful platform that integrates existing environmental monitoring devices with handheld computers, GPS location technology, GIS mapping and real-time communications. The product addresses the heightened need for organizations to react to hazmat incidents rapidly using credible information. It is a flexible software and hardware solution that significantly enhances the data collection process for first responders and environmental investigators.

License(s)   Proprietary

Status   In use

Target Users   Government officials, scientists, health professionals and researchers

System Requirements   The product is compatible with Solaris, Reliant UNIX, Linux, Pocket PC, Windows Mobile and Windows

Developer/Owner Details

Name   Global Bay Mobile Technologies, Inc.

Contact URL   http://www.hazardpoint.com/index.htm

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   Mobile Validity

Product URL   http://www.warshawgroup.com/products/data_collection.aspx

Product Description   Mobile Validity data collection tools create and deploy intelligent forms across mobile, wireless, PC, and web platforms. Software tools facilitate data synchronization, quality assurance, and data integration with databases.

Intelligent forms can be written without programming and published across platforms. The data collection technology is comprehensive providing built-in logic, completeness checks, audit trails, version control, security and authentication.

There are two examples of how Mobile Validity is being used:
Asthma Critical Event Response System, New York, NY
The New York City Department of Health and Mental Hygiene Asthma Initiative Program was designed to help improve the outcomes of New York City school children by:

> Monitoring students across asthma critical events more effectively
> Notifying healthcare personnel and parents of critical asthma events
> Promoting general awareness
> Improving preventative maintenance of the disease

As part of the integrated solution developed by Warsaw Group, the Mobile Validity software was used for collecting demographic and clinical data at various citywide sites.

Wireless Integrated Pest Management Software System, New York, NY
The New York City Department of Health and Mental Hygiene (DOHMH) launched an initiative in public housing to reduce pest infestations and significantly lower the use of, and exposure to, toxic pesticides. Mobile Validity data collection software on mobile pen tables allows 23 inspectors to collect data at the point of their inspection work on computerized questionnaires. Inspectors upload their completed reports to the server using a wireless network.

License(s)   Proprietary

Status   In use

Target Users   Public heath officers

System Requirements   Pocket PC, RIM Pager, Tablet PC

Developer/Owner Details

Name   Warshaw Group

Contact URL   http://www.warshawgroup.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	San Diego Project SHARE
Product URL	http://www.voxiva.com/sandiego.asp

Product Description Project SHARE serves two Voxiva customers working in collaboration: the San Diego County Health and Human Services Agency (HHSA) and the San Diego County Office of Education (SDCOE). HHSA provides a broad range of health and social services, promoting wellness, self-sufficiency, and a better quality of life for all individuals and families in San Diego County. SDCOE oversees 42 school districts with approximately 600 schools and about a half a million students.

Concern about the control of infectious disease and increasing fears of bioterrorism have highlighted the need to significantly strengthen disease surveillance and response capabilities. Real time information plays a crucial role in the ability to respond to health emergencies. Frontline health workers, including family doctors and school nurses, are the primary entry point into the health system for most patients. As such, frontline workers can serve as an "early warning system" for disease outbreaks of all kinds.

In December, 2003 the Community Epidemiology Branch (CEB) of HHSA in collaboration with SDCOE launched Project SHARE. Through Project SHARE, public health officials can monitor data submitted in real time through a web based interface, including a map-based view of data using GIS (geographic information system). Officials can use Project SHARE's communication features to reach individual health workers, send broadcast voice mail, e-mail, and SMS alerts to groups, post the latest health guidance, and host conference calls. When predefined trigger events are reported, the system generates emergency notifications via e-mail, voicemail, pager and SMS text messages.

The information collected through Project SHARE is accessed and analyzed by the Community Epidemiology group which looks for trend information and identifies and investigates abnormal levels.

License(s)	Proprietary
Status	In use
Target Users	Government agencies
System Requirements	NA

Developer/Owner Details

Name	Voxiva Co.
Contact URL	http://www.voxiva.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name   United States SAFEVAX

Product URL   http://www.voxiva.com/safevax.asp

Product Description After September 11, concern about weaponized smallpox led Voxiva's client to vaccinate its personnel against the disease. As data on the effects of the smallpox vaccine were more than 30 years old, and because of changing demography and health status of the U.S. population, Voxiva's client wanted to closely monitor the recipients of the vaccine. The objectives were to protect personnel against infection and also protect against any adverse effects of the vaccine.

In collaboration with Abt Associates, Voxiva developed SAFEVAX, an adverse event reporting solution that enables rapid identification of vaccine reactions, analysis of reaction patterns and trends. It also provides for an automatic alert and notification. Criteria can be specified (e.g. fever over 103 degrees) that would result in an automatic telephone or e-mail notification being sent to the appropriate person. Each vaccinee, using a secure ID and Password, reports "take" and reaction data on a daily basis via phone or the Internet. If vaccinees don't report on schedule, they receive a reminder call from a call center operator who can help them submit their data. To ensure security, Voxiva hosts SAFEVAX at a carrier grade, HIPAA-compliant facility. Data collected is available only to designated and authorized personnel. The data is collected and stored in a centralized database where it can be viewed or forwarded in common formats for further manipulation and analysis.

License(s)   Proprietary

Status   No information on whether SAFEVAX is still in use.

Target Users   Government agency

System Requirements NA

Developer/Owner Details

Name   Voxiva Co.

Contact URL   http://www.voxiva.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   Voxiva HealthWatch

Product URL   http://www.voxiva.com/solutions_healthwatch.asp

Product Description   Voxiva HealthWatch is designed to help strengthen the capacity of national, state, regional and local governments to monitor and respond to disease outbreaks. Voxiva HealthWatch enables field staff to submit real-time data reports to the system via web, text messaging, mobile phone or PDA. The data can then be mapped and analyzed by supervisors via a web interface. Communication tools permit sending alerts and broadcasting messages back the field. Voxiva HealthWatch can also be used to store and share key documents and other relevant information.

Voxiva HealthWatch is being used in developing countries around the world such as Peru, India and Indonesia. It is also being used in the United States by local government agencies such as the Washington, DC and San Diego Departments of Health.

For example, Voxiva HealthWatch has been used in three Indonesian provinces by more than 150 agricultural workers, who are being trained to use mobile phones to document suspected cases of Avian Flu among birds. The H5N1 virus is a major health concern in the country, which has led to the deaths of more than 70 people. In the past, it could take weeks or even months for officials at the Ministry of Agriculture to receive vital information about suspected outcomes and take appropriate action such as halting or redirecting bird shipments. Now, vital data will be transmitted – instantly – via mobile phone software to central health authorities who are able to pinpoint suspected cases, respond, and offer feedback. The approach leverages Indonesia's cellular network, which covers over 90 percent of the nation's 220 million population.

License(s)   Proprietary

Status   In use

Target Users   Government agencies

System Requirements NA

Developer/Owner Details

Name   Voxiva Company

Contact URL   http://www.voxiva.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   Voxiva Pyramid Platform

Product URL   http://www.voxiva.com/products.asp

Product Description   Around the globe, organizations recognize the need to leverage Internet-based technologies to change the way they do business. Yet in many places their efforts are frustrated by the limited reach of the Internet. To connect large distributed networks of users and make applications accessible to the broadest range of users, they must look beyond Internet-only solutions.

Voxiva's Pyramid Platform is designed to bring technology to the "Bottom of the Pyramid." By leveraging phones, mobile phones, PDAs, faxes, and radios, as well as the Internet, applications built and deployed on Vioxiva's multi-channel Pyramid Platform have broader reach. Solutions built on the Pyramid Platform allow organizations to collect information from and communicate with distributed networks of people in a timely and systematic way. Voxiva also provides the tools to organize, map and analyze the data collected and make the right decisions. Voxiva systems are deployed to track diseases, monitor patients, manage HIV/AIDS programs, and respond to disasters across Latin America, Africa, Asia and the United States.

License(s)   Proprietary

Status   In use

Target Users   Government agencies, health professionals, and general population among others

System Requirements   NA

Developer/Owner Details

Name   Voxiva Company

Contact URL   http://www.voxiva.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   WISER

Product URL   http://wiser.nlm.nih.gov/

Product Description   WISER (Wireless Information System for Emergency Responders) is a system designed to assist first responders with hazardous material incidents. WISER provides a wide range of information on hazardous substances, including substance identification support, physical characteristics, health information, and containment and suppression advice. This product is free and is available for Windows Mobile Smartphones, Palm, and Pocket PC.

License(s)   Free

Status   In use

Target Users   Emergency responders

System Requirements   NA

Developer/Owner Details

Name   U.S. Department of Health and Human Services (DHHS)

Contact URL   http://www.nlm.nih.gov/

Type   Government

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   Digital Inclusion Kit in Health

Product URL   http://lsc.dc.uba.ar/digital-inclusion

Product Description   The Digital Inclusion Kit incorporates a set of integrated telemedicine and m-technology tools aimed at underserved rural and urban zones. In telemedicine the objective is to allow medical data acquisition on patients who are unable to access specialized medical centers. Mobile devices with portable acquisition systems, such as ECG or arterial blood pressure, allow for building a clinical database for use in preventive medicine. As a backbone, a Virtual Cluster is constructed sharing all patient data between educational and research communities. A Clinical Database stores patient information related to health status, cardiovascular risks through measurable variables such as arterial pressure, congenital illness treatments, diet, ECG's and medical images. Geographical regions are taken into account for analysis and prevention policies. This information is available for physicians' consultations and statistics. Database access is through web services and mobile systems including GPRS.

A handheld device is used by a physician to gather a patient's information through a specially developed application running on a mobile phone (Windows Mobile). Information such as personal data will be incorporated into the patient's medical record. An ECG module connected to the handheld device, using a Bluetooth interface, will permit the administration of an ECG which will be later entered into the medical record.

Licenses   NA

Status   In use

Target Users   General population, health professionals and public health officials

System Requirements   Windows platforms

Developer/Owner Details

Name   Laboratorio de Sistemas Complejos, University of Buenos Aires

Contact URL   http://lsc.dc.uba.ar/

Type   Academic

Country   Argentina

SOFTWARE PRODUCT

Product Summary

Name   Guatemalan Nursing Promotion Program

Product URL   http://www.enecav.edu.gt/ (on-line courses)

Product Description This is a program to educate and train nursing students while delivering nursing care to remote areas of Guatemala. Doctors and medical staff working in the country's capital, Guatemala City, assist and guide the nursing students who carry emergency kits for initial diagnosis, treatment of emergencies, ordinary problems, and follow-up visits. Serious cases are referred to the nearest clinic.

Before becoming part of this mobile healthcare network, the nursing students are trained by real-time video conferencing using telephones, computers and a telewriter. Tele-courses are also given on-site in the Nursing School in Coban and in other remote areas.

The course "Community Nursing" introduces students to diagnosis, treatment, emergencies, child care, birth, and prevention of health problems in these remote areas. The course is supported by a complete virtual library.

Using mobile telephones combined with tele-learning in remote areas of Guatemala has proven to be a very cost-effective healthcare delivery tool. Mobile phone are relatively inexpensive and are widely used in remote areas. This integrated program has trained at least 300 new nurses in the last year while providing healthcare service in remote areas.

License(s)   NA

Status   In use

Target Users   Nursing educators, nursing students, general population in rural areas

System Requirements Telewriter AGS, LAN and/or Wan and the Internet, Mobile and Satellite phones

Developer/Owner Details

Name   Ministry of Education and the National School for Nurses in Coban

Contact URL   http://www.mspas.gob.gt/
http://www.enecav.edu.gt/
Also contact: Isabel Lobos – teleeducacionenec@hotmail.com

Type   Government

Country   Guatemala

SOFTWARE PRODUCT

Product Summary

Name   Alerta DISAMAR: An Innovative Disease Surveillance System in Peru

Product URL   http://www.voxiva.net/news/121603.asp

Product Description   Real-time reporting of disease outbreaks as well as ordering of medicines and supplies via software such as the Voxiva, Inc. tool set pioneered in Peru, has dramatically increased the efficiency of health services delivery. Alerta DISAMAR is a pilot disease surveillance program initiated in 2002 by the Peruvian Navy. It relies on novel technology from Voxiva. Alerta DISAMAR allows users to collect, store, disseminate, and analyze data on diseases under surveillance that are reported by telephone or through the Internet. Designated users receive automatic notification of selected reports via e-mail, voice mail, or Short Messaging Service (SMS) message. Health officials can communicate with remote health professionals using voice mail messages as if they were emails to individuals or to predetermined groups of users. The system sends timely automatic reports on the number of cases, comparing the previous three weeks and monitoring cases that do not yet have a final diagnosis.

Alerta DISAMAR has demonstrated a sustained improvement in coverage, data quality, baseline incidence rates, and outbreak detection capability. Alerta is a flexible and stable program with minimal recurring costs. It is a prime example of sustainable technology transfer for improving public health in a country with limited resources. More than 18,000 health events have been reported so far using this program. In addition, 18 outbreaks have been detected that have led to recommendations for improving vector control and food procurement processes.

License(s)   Proprietary

Status   In use

Target Users   General population

System Requirements Mobile phones capable of receiving SMS

Developer/Owner Details

Name   Voxiva

Contact URL   http://www.voxiva.net

Type   Private Sector

Country   Peru and the United States of America

SOFTWARE PRODUCT

Product Summary

Name   Peru Nacer
                          Maternal and Child Health Solution

Product URL   http://www.voxiva.net/news/nacer.asp

Product Description   In the year 2000, the maternal death rate in the Ucayali region was 185 per   100,000 compared to 146 per 100,000 for Peru's national average. The infant mortality rate was 52 per 1,000 compared to 34 per 1,000 nationally. Reducing these rates by half is a primary health goal of the Regional Health Directorate of Ucayali and the Peru Ministry of Health. This is difficult to achieve in many areas of Ucayali. Thick Amazon rainforests make it impossible to travel via motorized land vehicles. Most transportation is by river, which is time consuming.

Through a USAID-funded Pathfinder International program, Voxiva worked with the Regional Health Directorate of Ucayali, a region south of Lima in the Amazon, and the Peru Ministry of Health to develop Nacer, a maternal and child health solution. Nacer enables rapid, real-time information exchange between remote health posts, medical experts, and regional hospitals.

Nacer is a phone and web-based information and communication system that allows health professionals in remote locations to communicate and exchange critical health information among themselves, medical experts, and regional hospitals. All reported data is recorded in a central database and is available to health officials in real-time for analysis and decision-making. Health workers in locations without Internet connectivity can access the system using any phone.

The Nacer solution includes the following capabilities:
Patient Monitoring - Health workers electronically report information about the progress of women's pregnancies, allowing experts at regional hospitals to monitor the health status of pregnant women, answer questions from health personnel regarding recommended care, and suggest treatment options.

Patient Referral - Local health workers can refer women requiring care to regional health facilities and provide key clinical information to the hospital.

Follow-up Care - Once a woman is discharged from a regional hospital, attending specialists can send notifications to local health posts regarding recommended follow up care.

Critical Supply Tracking - Nacer allows regional health personnel to notify health officials of critical supply levels, such as medical equipment and drug supplies. This ensures remote health posts have adequate supplies of pharmaceuticals and other equipment for treatment.

Disease Surveillance - Workers at remote health posts can report cases of infectious disease in pregnant women and others receiving health services. This allows officials to monitor overall health trends in the region and use public health resources to prevent and respond quickly to disease outbreaks.

Benefits include increased coordination as health outposts share data with hospitals when referring patients, receiving feedback for follow up and reducing supply shortages as program managers can view the status of critical supplies (e.g., drugs) in real-time. They will receive more timely notification when clinical equipment needs repair or replacement.

Health officials at regional hospitals receive information about the health status of women in remote areas. These officials can also provide feedback to health workers when reported conditions raise medical concern. Health officials can receive real-time reports of infectious disease cases (in pregnant women and others), as well as cases of people affected by natural disasters. The surveillance functionality can be used to monitor overall health trends and appropriately respond when disease outbreaks or disasters occur.

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License(s)	Proprietary
Status	In use
Target Users	General female population
System Requirements	Mobile phones

Developer/Owner Details

Name	Voxiva
Contact URL	http://www.voxiva.net
Type	Private Sector
Country	Peru and the United States of America

SOFTWARE PRODUCT

Product Summary

Name   HealthMapper

Product URL   http://www.who.int/health_mapping/tools/healthmapper/en/

Product Description The HealthMapper is a surveillance and mapping software product, developed by the World Health Organization, that aims to address critical surveillance information needs across infectious disease programs at national and global levels. The system facilitates data standardization, allows for collection and updating of data on epidemiology and on interventions, and provides immediate visualization of data in the form of maps, tables and charts.

License(s)   Proprietary

Status   Information not available

Target Users   Health administrators

System Requirements Handhelds

Developer/Owner Details

Name   World Health Organization

Contact URL   www.who.int

Type   International Organization

Country   Switzerland

Health Information

SOFTWARE PRODUCT

Product Summary

Name	FrontlineSMS
Product URL	http://frontlinesms.kiwanja.net/download.htm
Product Description	FrontlineSMS is an easy-to-use text messaging system designed to bring the benefits and power of text message communication to the wider NGO community. It was conceived, designed, and written with the needs of the non-profit sector in mind. The software is free to download but only free for use by charities and non-profit organizations. Before messages can be sent and received, an activation code is required.
	Frontline SMS has been successfully deployed in over forty countries for a wide range of activities including blood donor recruitment, keeping medical students informed about education options, coordinating health care workers, and monitoring disease outbreaks. Assisting human rights workers, promoting government accountability, providing security alerts to field workers, the distribution of weather forecasts, and carrying out surveys are other examples of how this text messaging system is used.
License(s)	Free for use by charities and non-profit organizations
Status	In use
Target Users	General population
System Requirements	PDAs, PCs ,Laptops, personal computers

Developer/Owner Details

Name	FrontlineSMS
Contact URL	http://frontlinesms.kiwanja.net/about.htm
Type	Non-Governmental Organization
Country	Africa

SOFTWARE PRODUCT

Product Summary

Name   AED-SATELLIFE Center for Health Information and Technology

Product URL   http://pda.healthnet.org/handhelp-projects.html

Product Description   For over nineteen years, SATELLIFE has been a leader in developing solutions to the everyday information needs of health professionals working in communities where AIDS and malaria are commonplace, but where medical journals and the Internet are a luxury. In July 2006 SATTELIFE joined the Academy for Educational Development, a non-profit international development organization, to create the AED-SATELLIFE Center for Health Information and Technology. The Center's strength lies in its ability to address the challenges it faces through multiple approaches by:

> disseminating up-to-date information that leads to good decision making;
> deploying multiple technologies and building health care workers' skills to utilize these technologies effectively; and
> creating local, regional, and global communities that share information and support each other.

HealthNet is the name of AED-SATELLIFE's global communications network, which links healthcare workers around the world. Since its inception, HealthNet has worked with ministries of health, medical schools, medical libraries, and other health facilities to build locally owned and managed networks. Each HealthNet has evolved according to local needs.

Handheld computers and mobile devices are key technologies that are showing dramatic results:

AED-SATELLIFE is working with Tebelopele, a local non-profit organization in **Botswana**, to improve its data collection and reporting capacity for its voluntary testing and counseling programs and for the "Door-to-Door" campaign funded by the Centers for Disease Control (CDC), an agency of the United States government. Client intake forms are now completed directly on handheld computers (PDAs). The collected data is automatically uploaded daily to program databases eliminating errors and delays in data collection and reporting.

Collecting and using health data to make policy and resource allocation decisions is an extremely important role of the public health sector. Too often inaccurate and incomplete collection of data, faulty aggregation of data and delays in data transmission impede analysis and the issuance of timely and actionable reports. To address this problem, the HealthNet partners in the LSDI Malaria Program area **(Mozambique)** introduced using PDAs with geographic positioning systems (GPS) to provide better malaria control mapping thereby enhancing resource allocation.

PDAs are the key tool in a project underway in **Uganda** to explore the usefulness of mobile technologies as tools for HMIS data collection and health information dissemination in rural districts. Since the introduction of PDAs in 2003, health care workers in 174 health centers, serving more than one million people in five districts, have been trained. The PDAs are being used for routine weekly reporting and for obtaining continuing education and reference materials.

It has been estimated that if every African child under five years slept under a insecticide-treated mosquito net (ITN), nearly 500,000 child deaths could be prevented each year. A multi-organizational initiative is under way in **sub-Saharan Africa** to increase both the supply of ITNs and the public demand for them. An evaluation of the effectiveness of these efforts was undertaken. Interviewers used PDAs to record the survey responses and to collect GPS coordinates for each of the 2000 households in the sample. Comparing results with the handheld computers to a paper-based survey conducted seven years earlier showed that using PDAs resulted in improved data quality and eliminated the potential for error during data entry of completed questionnaires. For more information on using handheld computers and mobile devices contact HealthNet at: PDAprojects@healthnet.org.

License(s)	Open Source
Status	In use
Target Users	General population, health professionals and administrators
System Requirements	PDAs

Developer/Owner Details

Name	AED-SATELLIFE
Contact URL	www.satellife.org
Type	Government, Non-Governmental Organization
Country	Africa (various countries and regions)

SOFTWARE PRODUCT

Product Summary

Name   Mobile for Good (M4G)

Product URL   http://uk.oneworld.net/section/mobile

Product Description   Mobile for Good (M4G) is a social franchised product designed to use mobile phone technology to help alleviate poverty and improve the lives of people in the developing world. It delivers vital health, employment and community content via SMS on mobile phones in order to inform and empower disadvantaged individuals and help bridge the 'digital divide' – the widening technology gulf which exists between rich and poor countries.

The Mobile for Good has already been implemented in Kenya, where it has been instrumental in helping more than a hundred people to find jobs every week. The success of this pilot stage implementation has driven plans to replicate the franchise in other countries across Africa and the rest of the developing world including Cameroon, Tanzania, Uganda, Nigeria and Nepal. One World is currently looking for potential franchisees and investors.

License(s)   Proprietary

Status   In use

Target Users   General public

System Requirements   NA

Developer/Owner Details

Name   M4G

Contact URL   http://uk.oneworld.net/section/mobile

Type   Private Sector

Country   Kenya

SOFTWARE PRODUCT

Product Summary

Name   Freedom HIV AIDS

Product URL   http://www.freedomhivaids.in/FreedomHivAids.htm

Product Description   ZMQ is an innovative software solutions provider based in New Delhi, India, which specializes in developing customized E-Learning, Gaming, Edutainment, Knowledge Management and Human Performance solutions. Freedom HIV/AIDS is a social initiative of ZMQ Software Systems in India and Africa.

As experts in mobile game development, ZMQ developed an innovative IEC methodology to educate people on HIV/AIDS using mobile devices. On World AIDS Day, 1 December 2005, through its edutainment-based interactive learning solutions in the form of four mobile games, each targeting different mindsets of mobile users, ZMQ was able to reach out to millions of people to teach them about HIV/AIDS and spread HIV/AIDS awareness in India.

In the first phase, ZMQ launched the games on Reliance Infocomm - one of the largest mobile operators of India and was able to reach out to over 9 million handsets. Later, the games were made available on other mobile carriers expanding the potential outreach to 30 million handsets. In a span of 15 months, there have been a download of 10.3 million game sessions. According to ZMQ, more games have been downloaded in the typically 'media dark' smaller cities and towns in India than larger ones. ZMQ has provided these games for download free of charge.

This Indian initiative is now being expanded to combat other diseases such as tuberculosis, malaria, cholera and dengue; and other health related issues like reproductive health, malnutrition, children's health, hand washing, basic sanitation and drug abuse.

On World AIDS day, 1 December 2006, Freedom HIV/AIDS celebrated the first anniversary of their fight against HIV/AIDS using mobile phone games by adding a new chapter – "Africa Reach Program." The new initiative "Star Programme" has two corporate partners: Hivos, a leading Dutch development organization, and KPN, the largest Dutch telecom company. Six countries are covered under the Star Programme: Uganda, Tanzania and Kenya in Eastern Africa, and Malawi, Mozambique and Namibia in Southern Africa. Both are regions of high HIV/AIDS incidence.

Under the Africa Reach program, ZMQ developed two mobile games - AIDS Fighter Pilot and AIDS Penalty Shoot Out. In addition to English, the games have been developed in local languages - Kiswahili and Shen. The games have been made available to over 6 million handsets in the Eastern African regions. There is more demand for the games when in Kiswahili and Shen.

ZMQ embarked on other HIV awareness projects in India. "Health Mela" is a comprehensive CD-ROM based Interactive Learning and Edutainment solution for Youth on Health issues with a prime focus on HIV/AIDS information. The package has been developed in three languages - English, Hindi and Marathi. The CD-Rom solution is being disseminated through over 200 NGOs, 500 Schools and 200

technical institutions reaching 2 million youth. It is also disseminated through the Knowledge Centers of NASSCOM Foundation.

ZMQ has also produced the first interactive Monitoring and Evaluation Course specifically designed to assess the efficacy of corporate HIV/AIDS programs. The course is available to over 220 companies worldwide and is used to enhance the efficacy of their HIV/AIDS programs. The interactive course provides critical quantitative and qualitative data to companies planning and implementing HIV/AIDS workplace programs.

License(s)	Open Source
Status	In use
Target Users	General population
System Requirements	Almost any mobile phone

Developer/Owner Details

Name	ZMQ software
Contact URL	http://www.freedomhivaids.in/ContactUs.htm
Type	Private Sector
Country	India, Uganda, Tanzania Kenya, Malawi, Mozambique, Namibia

SOFTWARE PRODUCT

Product Summary

Name	BiancaMed Health Technology Solutions
Product URL	http://www.biancamed.com/solutions/index.php
Product Description	BiancaMed offers leading health technology solutions for monitoring everyday living. Increasing healthcare costs, coupled with the rise in chronic conditions, increasing obesity and the rapid aging of the population, suggest that health management will need to shift from traditional institutional settings (such as hospitals) to an individual's everyday environment.

BiancaMed's mission is to transform personal health by providing the ultimate convenience in personal health monitoring. A completely wireless and very sensitive motion sensor is at the core of this product platform. The sensor detects heart rate and respiration electronically.

The sensor is combined with sophisticated health analysis software to provide improvements and solutions in these areas:
 Sleep
 Heart
 Respiration
 Fitness

The product lineup will include baby monitors, home health and exercise monitors. It will provide solutions with the convenience and ease of a mobile phone.

License(s)	Proprietary
Status	In use
Target Users	General population – home health sector
System Requirements	NA

Developer/Owner Details

Name	BiancaMed
Contact URL	http://www.biancamed.com/contact/contact_us.php
Type	Public-Private Partnership
Country	Ireland

SOFTWARE PRODUCT

Product Summary

Name	Biorhythm Mobile
Product URL	http://www.orneta.com/products/biorhythm/
Product Description	Biorhythm Mobile provides a simple and easy way to track an individual's daily emotional, intellectual and physical states through a Windows mobile device. Biorhythm theory states that each person is influenced by three biological cycles – physical, emotional, and intellectual. These begin at birth and continue throughout one's life.
	This product analyzes emotional, intellectual and physical biorhythm readings. It indicates upcoming critical, zero, minimum and maximum cycles.
License(s)	Proprietary
Status	In use
Target Users	General population
System Requirements	NA

Developer/Owner Details

Name	Orneta
Contact URL	http://www.orneta.com/about/
Type	Private Sector
Country	Poland

SOFTWARE PRODUCT

Product Summary

Name	myFoodPhone
Product URL	https://www.myfoodphone.com/product.aspx
Product Description	myFoodPhone is a camera-phone food-journaling feedback service. It links individuals with their personal nutrition coaches and advisors. The company also develops other mobile health, wellness, and medical devices and software packages that are in the process of being deployed throughout the world.
License(s)	Proprietary
Status	In use
Target Users	General population
System Requirements	NA

Developer/Owner Details

Name	myFoodPhone, Inc.
Contact URL	https://www.myfoodphone.com/contact_us.aspx
Type	Academic
Country	Canada

SOFTWARE PRODUCT

Product Summary

Name	AIDSinfos
Product URL	http://aidsinfo.nih.gov/PDATools/PDAToxicities.aspx
Product Description	This PDA tool provides users "on-the-go" access to important antiretroviral therapy associated with adverse events (drug toxicities) including information on the clinical manifestations, risk factors, and monitoring and management of adverse events.
	The tool is based on tables from the United States "Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents."
License(s)	Proprietary
Status	In use
Target Users	Patients, health care professionals
System Requirements	Pocket PC 2002 and later Installation file requires Microsoft Windows 98, ME, NT4, 2000 or XP

Developer/Owner Details

Name	United States Department of Health and Human Services (DHHS)
Contact URL	http://www.nlm.nih.gov/
Type	Government
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name   AIDSinfo's HIV/AIDS Glossary

Product URL   http://aidsinfo.nih.gov/PDATools/PDAGlossary.aspx

Product Description   The HIV/AIDS Glossary for Palm PDAs provides easy access for HIV/AIDS related terms. Users have the option of searching for a term or listing all the terms in each alphabetical category.

License(s)   Proprietary

Status   Information not available

Target Users   General population, health care professionals

System Requirements   Palm OS, Pocket PC

Developer/Owner Details

Name   U.S. Department of Health and Human Services (DHHS)

Contact URL   http://www.nlm.nih.gov/

Type   Government

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	BioMed Central PDAs
Product URL	http://www.biomedcentral.com/info/about/avantgo/
Product Description	BioMed Central is an independent publishing house committed to providing immediate open access to peer-reviewed biomedical research. All original research articles published by BioMed Central are made freely and permanently accessible online immediately upon publication. BioMed Central views open access to research as essential in order to ensure the rapid and efficient communication of research findings.
	Users of Palm compatible PDAs (Personal Digital Assistants), PocketPCs and Windows CE devices can receive up-to-the-minute research article abstracts from BioMed Central. AvantGo's free software, which must be installed on a computer, will automatically download research abstracts from BioMed Central when you synchronize your PDA. These articles can be read at any convenient time. Articles are available from three categories: BioMed Central, Biology Research and/or Medical Research.
License(s)	Open Source
Status	In use
Target Users	Health professionals, students
System Requirements	Computer plus Palm compatible PDAs, PocketPCs and Window CE devices

Developer/Owner Details

Name	BioMed Central
Contact URL	http://www.biomedcentral.com/info/about/whatis
Type	Non-Governmental Organization
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name   DietOrganizer for Mobile Phones

Product URL   http://www.dietorganizer.com/

Product Description DietOrganizer for Mobile Phones is an easy-to-use yet powerful diet diary. Food intake is recorded using a database of over 1000 foods. Weight can be tracked with the results shown graphically on a customized chart. The individual's own food intake plus new foods from existing lists can be added.

        Features:
          Tracks Calories, Carbohydrate, Protein and Fat
          1,000+ food database, with common portion size and weight conversions
          Weight tracking
          Set nutritional goals
          Charting
          Create menus of frequently used foods to speed entry

License(s)   Proprietary

Status   In use

Target Users   Hospitals, general population

System Requirements Palm, BlackBerry, Windows Mobile or Desk to PC

Developer/Owner Details

Name   DietOrganizer

Contact URL   http://www.dietorganizer.com/Home_Pages/Contact_Us.htm

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   eMedic

Product URL   http://emedic.com/

Product Description Software, designed for Palm and Pocket PCs but now available for desktop and laptop computers, that provides an emergency medical reference library. It contains various modules, medical calculators, sample ECGs (electrocardiogram) strips, anatomical illustrations, reference cards on more than 100 traumas and medical emergencies. Also, eMedic provides a list of most prescribed medicines, emergency medications and a list of popular medical acronyms.

License(s)   Proprietary

Status   In use

Target Users   General population, health professionals

System Requirements Windows for Pocket PC, Palm OS.

Developer/Owner Details

Name   Iterum, LLC

Contact URL   http://emedic.com/contacts.htm

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   Harrison's on-Hand

Product URL   http://store.accessmedicine.com/hoh.aspx

Product Description   Harrison's on-Hand is an information tool on medical diagnosis and treatment for handhelds. By using browsing and navigation features, local and online search capabilities, a user can find, capture, and store information needed to answer questions and solve problems. It consists of four resource tools: Harrison's Manual of Medicine, Harrison's Online updates, Harrison's Online access to an annual individual subscription and a Personal Web Library which allows users to customize their handheld subscriptions and manage their library requests.

License(s)   Proprietary

Status   Information not available

Target Users   General population and health care professionals

System Requirements   Windows (no information about the version), Palm OS, Pocket PC

Developer/Owner Details

Name   McGraw-Hill's AccessMedicine.com

Contact URL   http://www.accessmedicine.com/

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   Health & Diet Manager for Windows Mobile Smartphone

Product URL   http://www.iambic.com/healthdietmanager/wmsmartphone/default.asp

Product Description   Health & Diet Manager for Windows Mobile Smartphone will help people take control of their health and nutrition. This program does everything from tracking health-related vitals (resting pulse, blood pressure, hours slept), calories consumed and calories expended, to help create an action plan for eating and exercising.

License(s)   Proprietary

Status   In use

Target Users   General population

System Requirements Palm OS, Pocket PC, Smartphone, Symbian, BlackBerry or Windows PCs

Developer/Owner Details

Name   Iambic

Contact URL   http://www.iambic.com/about/contact.asp

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	Healthy Palm Pilot
Product URL	http://www.pdaverticals.com
Product Description	Healthy Palm Pilot is a comprehensive website that provides information on m-technology devices and available software for individual devices in a variety of fields including health and education. These products are produced by pdaVerticals Network.

Other products include:
pdaMD - a resource for medical professionals
URL – www.pdaMD.com

pdaED - a resource for students and education professionals
URL – www.pdaED.com

License(s)	Proprietary
Status	In use
Target Users	Health professionals

Developer/Owner Details

Name	pdaVerticals Network
Contact URL	http://www.pdaverticals.com/
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	Mayo Clinic In Touch
Product URL	http://www.mayoclinic.com/health/intouch/AM00070
Product Description	Mayo Clinic In Touch provides topical news and health information from the world's first and largest integrated not-for-profit group medical practice. The Mayo Clinic enjoys a worldwide reputation for reliable health information. This product is a reliable health source that includes information on symptoms, first aid tips, and timely health alerts.
License(s)	Proprietary
Status	In use
Target Users	General public
System Requirements	Compatible with all major wireless carriers

Developer/Owner Details

Name	Digital Cyclone in partnership with Mayo Clinic
Contact URL	http://www.digitalcyclone.com/
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

<u>Product Summary</u>

Name   MD on Tap

Product URL   http://archive.nlm.nih.gov/proj/mdot/mdot.php

Product Description   MD on Tap is an application for PDAs that retrieves MEDLINE citations directly through a wireless connection to the Internet. There are versions of the MD on Tap Client for PDAs and PDA/Cellphones with both Pocket PC and with Palm Operating Systems. The PDA or PDA/Cellphone must have a wireless connection to the Internet.

License(s)   Proprietary

Status   In use

Target Users   Health care professionals

System Requirements   MD on Tap is designed for PPCs with a screen resolution of 240W x 320H. Although it will run on the Windows Mobile square-screen Smartphones, such as the Treo 700, the user will not see the bottom portion of the tabs.

<u>Developer/Owner Details</u>

Name   MEDLINE (National Library of Medical Science)

Contact URL   www.medlineplus.gov

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   Medical Dictionaries for Palm

Product URL   http://www.beiks.com/Windows Mobile/showprod.asp?ProdID=141

Product Description   Various medical reference dictionaries are available for the BEIKS Dictionary
                             Reader platform. They come from different content providers and address different
                             topics from the medical reference field.

                             The Medical Abbreviations Dictionary developed by Pharma-lexicon is an
                             example of the products available. This Dictionary is one of the world's largest
                             databases of medical, pharma, biotech, agrochem, and healthcare abbreviations and
                             their meanings. It was created for Windows smartphones with contributions from
                             hundreds of people and organizations from around the world.

                             The Pharma-Lexicon's Medical Abbreviations Dictionary for Windows Mobile
                             smartphones contains over 46,000 unique medical abbreviations and 6,000 medical
                             abbreviations. It is expandable with other BEIKS dictionaries and phrasebooks for
                             Windows smartphones.

                             Based on the mobile industry standard BEIKS Dictionary Reader, this product is
                             specially suited for one-hand operation. It has minimal memory requirements and
                             optimal access speed. It can be installed on either main memory or on an extension
                             media card and, once installed, does not require or utilize network connection. This
                             dictionary is also available with the Pro version of BDicty Dictionary Reader.

                             Other available dictionaries:

                             Medical Dictionary /BEIKS/ - Offers over 38,000 medical terms with compact yet
                             informative definitions and references. The dictionary was assembled by medical
                             students under the leadership of retired medical professors. The package includes the
                             Pro version of BDicty Dictionary Reader, allowing individuals to extend the lexicon
                             with their own entries.

                             Pocket Guide to Common Medications /MedicineNet/ - This dictionary is from
                             the editors of Webster's Medical Dictionary and is a drug guide to the most popular
                             US medications. It contains 400+ monograms and 1,000 generic/brand names. This
                             dictionary is also available with the BDicty Dictionary Pro.

                             Pocket Medical Encyclopedia /MediceNet - Doctors at MedicineNet.com have
                             written the encyclopedia for lay persons. It contains more than 15,500 entries that are
                             not only the usual medical terms, but also pertinent scientific items, abbreviations,
                             acronyms, jargon, institutions, projects, symptoms, syndromes, eponyms, and
                             medical history. It is written entirely by U.S. board certified physicians to be used by
                             anyone concerned about health.

First Aid Spanish Dictionary Phrasebook for ER and First Aid Workers - This product provides essential English to Spanish medical vocabulary and key phrases that field healthcare workers need to communicate with Spanish-speaking patients.

Epidemiology Glossary - This free glossary contains about 200 specialized terms from epidemiology contributed by Mr. Stephane Richard and Mrs. Erin Coullahan.

Before purchasing a particular title, BEIKS strongly advises downloading and evaluating the trial version.

License(s)	Proprietary
Status	In use
Target Users	Health professionals, general population
System Requirements	Palm
Developer/Owner Details	
Name	BEIKS, MedicineNet,Pharma-Lexicon
Contact URL	http://www.beiks.com/palm/Medical.htm
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name   PDA Health Resource System

Product URL   http://www.healthsystem.virginia.edu/internet/library/wdc-lib/services/computing/pda/

Product Description   The University of Virginia's Health Science Library provides resources and support for students wishing to use their PDAs as a medical information tool. All third year medical students at the university are required to have a PDA. The library's website includes a comprehensive list of health and medical PDA software and portals as well as basic security and support resources. Library instructors are available by appointment to provide consultations on using PDAs as a medical information tool.

License(s)   Proprietary

Status   In use

Target Users   General population, health professionals, health insurers, pharmaceutical professionals, individual patients, caregivers, researchers, and students.

System Requirements   PalmPCs, PDAs

Developer/Owner Details

Name   Health Science Library, University of Virginia

Contact URL   http://www.healthsystem.virginia.edu/internet/library/home.cfm

Type   Academic

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	PDA Medical & Health Software for BlackBerry
Product URL	(See individual products below)
Product Description	PDAMEDISOFT offers a broad range of medical software for BlackBerry, PalmOS, Pocket PC and Smartphones. These are a sample of what is available for BlackBerry:

Medical dictionary for BlackBerry 4.0 - This is a medical dictionary containing over 38,000 easy-to-understand explanations of medical terms.
URL: http://pdmedisoft.com/BlackBerry/medical-dictionary-for-BlackBerry

Pocket Medical Encyclopedia for BlackBerry handhelds 4.0 - This product is an add-on for Medical dictionary. Based upon the MedicineNet Pocket Medical Encyclopedia, the information includes standard medical terms, pertinent scientific items, abbreviations, jargon, institutions, projects, symptoms, syndromes, eponyms, and medical history.
URL:http://pdamedisoft.com/Pocket-Medical-Encyclopedia-for-Blackberry-handheld

MedicineNet's Pocket Guide to Medications for BlackBerry 4.0 - The Pocket Guide gives quick and convenient access to important information on common medications to mobile users. It is a doctor-produced informational database of 400+ monographs covering over 1,000 generic and brand names of the most popular U.S. medications.
URL:http://pdamedisoft.com/BlackBerry/MedicineNet's-Pocket-Guide-to-Medications-for-BlackBerry

Other software products for the BlackBerry mobile device include Tarascon Pocket Pharmacopoeia Deluxe 1.0, and Ascendo Fitness for BlackBerry 3.41.

License(s)	Proprietary
Status	In use
Target Users	Health professionals, medical students, general population
System Requirements	BlackBerry

Developer/Owner Details

Name	PDA Medical and Health Software
Contact URL	http://pdamedisoft.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	PocketBFL
Product URL	http://www.softspecialist.com/PocketBFL-Body-for-Life-companion-108.htm
Product Description	PocketBFL is a mobile device companion to the "Body–for–Life" wellness program. The product assists the user in maintaining the program's regimen:

      Exercise planner with rest period alarms
      Meal planner with alarms on Pocket PC and PC
      Photo album for body measurements
      Graphical view for measurements
      Body fat percentage, body mass index, waist-to-hip ratio calculations
      Support for up to five users – track family and/or friends
      Auto plan-forwarding to next exercise day
      Sorted list of exercises and meals
      Body – for – life reports on the desktop
      Add multiple foods in the meal period

License(s)	Proprietary
Status	In use
Target Users	General population
System Requirements	Pocket PC, PC

Developer/Owner Details

Name	SoftSpecialist
Contact URL	http://www.softspecialist.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name   Sextext

Product URL   http://www.sextextsf.org/index.html

Product Description   Sextext was launched in April 2006 as an innovative response to the increasing Gonorrhea and Chlamydia rates among African-American young people, aged 18 to 25, in San Francisco. The service, which targets 12- to 24-year-olds, was established in response to growing rates of sexually transmitted diseases among minority youth. Adapted from a similar program in London operated by the Brook Advisory Centres, it capitalizes on the popularity of text messaging among youth.

Youth text the word "sexinfo" to one of two numbers set up by ISIS, Inc., a nonprofit organization that uses Internet technologies to prevent disease transmission. Within seconds SEXINFO users receive a response asking them to choose a subject they wish to explore from a list of possible options. Among those issues addressed through the service are relationship abuse, depression, what to do if you think you're pregnant, and how to avoid contracting sexually transmitted diseases, including HIV. Informational messages are written in a way that appeals to youth; for example, "it's ur choice to have sex or not get informed before u decide." Each response includes the contact information of one or more service agencies specializing in that particular issue, which a young person can call/visit for additional information. The pilot project was funded by the San Francisco Department of Public Health, Division of STD Prevention and Control. Additional funding for marketing, evaluation, and expansion has been provided by private foundations.

License(s)   Open source

Status   In use

Target Users   General population (mostly 12-24's)

System Requirements   NA

Developer/Owner Details

Name   Isis.inc

Contact URL   http://www.isis-inc.org/contactus.php

Type   Public / Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	Skyscape Products – Lippincott's Nursing Drug Guide for PDA
Product URL	http://www.skyscrape.com/estore/Productdetail.aspx?productid=2200
Product Description	Skyscape offers a large portfolio of resources and tools for the medical profession. The company has products for eight professional categories. For physicians, Skyscape supports 34 specialties. There are forty-five titles available in cardiology alone and sixty eight titles in nursing.
	Lippincott's Nursing Drug Guide for PDA is one of the products. It has been updated in 2008 with over 800 complete drug monographs and full-color photos of pills and capsules which focus on the needs of practicing nurses.
	The 2008 edition of the Nursing Drug Guide includes key patient teaching points, interaction with drugs, food, alternative therapies, and laboratory tests. It has been updated with dozens of newly approved drugs and indications.
License(s)	Proprietary
Status	In use
Target Users	Nurses, health professionals and general public
System Requirements	Palm OS, Pocket PC, Motorola Q compatible

Developer/Owner Details

Name	Skyscape, Inc.
Contact URL	http://www.skyscape.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name   USBMIS Mobile Health Products - SkinDX Software

Product URL   http://www.usbmis.com/skindx/

Product Description   US Biomedical Information Systems, Inc. (USBMIS) is a software solutions company that specializes in developing interactive, mobile applications for the healthcare industry. The company develops their software products in partnership with publishers and authors who are experts in their fields.

SkinDx PDA software is one of USBMIS's software products. As the newest addition to their mobile reference library, USBMIS offers this comprehensive guide to essential information for the detection, treatment, and management of common dermatological conditions. Its value stems from an intelligent database system, which allows users to query a comprehensive list of dermatological conditions by morphology, shape, symptoms, distribution, color, arrangement, and systemic symptoms. SkinDx is compatible with Palm, Pocket PC, and BlackBerry devices. Other USBMIS products include:

- RNotes: Nurse's Clinical Pocket Guide
- MedSurg Notes
- IV Med Notes
- Taber's Cyclopedic Medical Dictionary
- Obstetrics, Gynecology & Infertility
- ECG Notes
- Derm Notes
- Treatment Guidelines from The Medical Letter
- Scutmonkey / JTF Emergency Medicine plus 10 other products

License(s)   Proprietary

Status   In use

Target Users   Patients, medical professionals, students

System Requirements   PDAs

Developer/Owner Details

Name   USBMIS

Contact URL   http://www.usbmis.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   Anthro 2005

Product URL   http://www.who.int/childgrowth/software/en/

Product Description   Anthro is software for assessing growth and development of the world's children, composed of three modules:
        Anthropometric calculator
        Individual assessment
        Nutritional survey (cross-sectional)

The macros that work together with Anthro are compatible with statistical software packages such as SPSS, SAS, S-Plus and STATA. They are made available in order to facilitate survey data analysis.

License(s)   Proprietary

Status   In use

Target Users   General population, public officials

System Requirements   Windows 98 & above, pocket PC, and MS Win Mobile

Developer/Owner Details

Name   World Health Organization

Contact URL   http://www.who.int/en/

Type   International Organization

Country   International

Patient Care

SOFTWARE PRODUCT

Product Summary

Name SIMpill Real Time Medication Compliance Management

Product URL http://www.simpill.com

Product Description SIMpill's is an innovative, proven, and affordable solution which enables health organizations to be more efficient and effective. Using wireless technologies, patients with chronic conditions are reminded to take their medication as prescribed.

SIMpill has three products to support, improve and improve compliance: SIMpill real time compliance management, On Cue compliance service, and medical appointment reminders.

The system works as follows: when a pill bottle is opened, a message is delivered to a central server thereby indicating that the medication is being taken. Should no message be received, the central server automatically sends out a SMS message as a reminder to the patient. If the patient still does not take the medication, messages are sent to different levels of care givers. Data on levels of compliance and responses to reminders is gathered and reported.

The product is readily portable to any location with a GSM network and is already operational in Southern Africa, USA, UK, Europe and Australia. It can be instituted in any location with the co-operation of the local GSM networks and run through the servers in Cape Town, South Africa. Servers can be also be replicated in areas that wish to use this compliance system.

License(s) Proprietary

Status In use

Target Users Health insurers, pharmaceutical manufacturers, patients and caregivers

System Requirements NA

Developer/Owner Details

Name Simpill

Contact URL http://www.simpill.com

Type Private Sector

Country South Africa

SOFTWARE PRODUCT

Product Summary

Name Mobile Phones for Keeping Track of HIV and TB

Product URL www.cell-life.org/

Product Description South African researchers have developed novel applications for mobile phone technology that improves adherence to HIV and TB treatments. These approaches have obvious benefits for the patients as well as helping to improve the health infrastructure and monitoring systems.

The Cell-Life project, backed by local mobile phone giant Vodacom, has developed software and data management systems that let clinic workers use their mobile phones to monitor patients' HIV treatment and spot health problems before they become life-threatening. The phones are loaded with R55 (US$8.50) in airtime each month and equipped with a special menu that enables HIV counselors to record data on a patient's symptoms and whether they are sticking to drug regimes. Other information that might affect their health, such as a lack of money to pay for transport to the clinic or a shortage of food, can also be recorded. The information collected is instantly relayed over Vodacom's network to a central database, which clinic staff can access over a secure Internet connection. Cell-Life has just completed successful pilot projects in townships in Cape Town and Durban, in which about 80 counselors were trained to use the mobile phones and keep track of nearly 800 patients. There are plans to expand the project's reach into other provinces and to develop "reverse billing" software that will allow the clinic to be charged instead of the counselors using the mobile phones. They could then contact clinic staff in an emergency even if they had no airtime left — a measure that could save lives in communities with few fixed-line phones.

License(s) Open Source

Status In use

Target Users Patients, counselors

System Requirements Mobile Phones

Developer/Owner Details

Name Cell-Life

Contact URL www.cell-life.org/

Type Private Sector

Country South Africa

SOFTWARE PRODUCT

Product Summary

Name   TeleDoc

Product URL   http://www.jiva.com/teledoc/

Product Description   The TeleDoc application is designed to transmit data from mobile computing devices such as mobile phones and PCs to a central database. To achieve this, the program uses the TeleDoc Mobile Information System (MIS) to bring healthcare directly to villages in India. The TeleDoc Mobile Information System (MIS) comprises three parts: (1) mobile phones used by field representatives to input patient data, (2) computers used by doctors in clinics to access data and write medical prescriptions, and (3) a central database. Field representatives conduct medical examinations using mobile telephones with structured data-entry systems to guide them through the medical consultation process. Information from each examination is forwarded to doctors in a central clinic, who use the data to make a diagnosis and prescribe medicines. The field representative retrieves this information and brings it back to the village. The information is also stored in the database for future reference and to provide demographic data.

License(s)   Proprietary

Status   In use

Target Users   General population, health professionals and health officials

System Requirements   Simbian OS with Java 2 ME

Developer/Owner Details

Name   Jiva Institute

Contact URL   http://www.jiva.com/teledoc/contact.asp

Type   Private Sector

Country   India

SOFTWARE PRODUCT

Product Summary

Name   Aerotel's Telemedicine and Home Telehealth

Product URL   http://www.aerotel.com/en/?gclid=CIyMhq3X7pAFCQmgGgodDSnF2A

Product Description   Aerotel provides complete solutions for telemedicine, telehealth, and telecare applications. The patient monitoring systems consist of medical call center software, compact transtelephonic and digital monitoring devices that effectively transfer vital medical and lifestyle data over a telephone, the Internet or wireless networks. Modular monitoring systems provide reliable transfer of vital signs to a monitoring center for accurate diagnosis.

License(s)   Proprietary

Status   In use

Target Users   Patients, medical professionals

System Requirements   NA

Developer/Owner Details

Name   Aerotel

Contact URL   www.aerotel.com

Type   Private Sector

Country   Israel

SOFTWARE PRODUCT

Product Summary

Name @Anyplace Health

Product URL http://www.capgemini.com/services/technology/mobile/solutions/health/

Product Description Capgemini's @Anyplace Health provides a mobile care solution that allows clinicians to make better decisions with access to real-time data—anytime, anywhere. Clinicians can respond more quickly to changing patient conditions and treatments. With @Anyplace Health, clinicians spend less time doing paperwork and more time on patient care.

This secure point-of-care mobile health solution combines the developer's experience in the health environment with Windows Mobile software to reduce costs and inefficiencies. Unlike other point-of-care solutions, Capgemini maintains that its approach offers maximum functionality with a full range of wireless devices and applications, as well as rapid implementation. Users gain mobile access to lab results, patient lists, schedules, charge-code capture, notes and dictation capabilities, voice communications, remote information collection and more.

License(s) Proprietary

Status In use

Target Users General population

System Requirements NA

Developer/Owner Details

Name Capgemini

Contact URL http://www.capgemini.com/help/

Type Private Sector

Country France

SOFTWARE PRODUCT

Product Summary

Name	Emergency Mobile Phone
Product URL	http://www.vitaphone.de/en/emergency_mobile_phone/
Product Description	A press of a button connects the individual with the Vitaphone Service Center. Competent operators provide support for almost any situation. Whatever the circumstances, the emergency mobile phone is a reliable companion that conveys an invaluable feeling of safety in critical or dangerous situations. Thanks to the integrated GPS locating system (global positioning system) with a bidirectional location function, the individual's present location can be determined. Satellite reception is provided. This mechanism provides assistance quickly and safely.
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License(s)	Proprietary
Status	In use
Target Users	General population
System Requirements	NA

Developer/Owner Details

Name	Vitaphone
Contact URL	http://www.vitaphone.de/en/news_media/press_contact/
Type	Private Sector
Country	Germany

SOFTWARE PRODUCT

Product Summary

Name   Card Guard's PMP4 Wireless Healthcare System

Product URL   http://www.cardguard.com/newsite/inner.asp?cat=23&type=2&lang=1

Product Description Card Guard's PMP4 Wireless Healthcare System provides the tools to screen, monitor and manage general consumer health, high-risk and chronically ill patients, and the wellness and fitness communities. Card Guard's PMP4 Wireless Healthcare System includes a Web-Based Medical Center, software applications, and wireless medical monitors:
SelfCheck ECG 1/12-lead ECG monitor
Spiro Pro Spirometer
Oxy Pro Pulse Oximeter
SelfCheck BP and BP Pro blood pressure devices
SelfCheck Gluco
SelfCheck Weight Scale

The PMP4 Wireless Healthcare System uses the most advanced communication technologies, such as Bluetooth, Internet, WiFi, and GPRS. The PMP4 medical monitors measure and transmit medical data to handheld devices, which is stored on the device and can be uploaded to the PMP4 Web-Based Medical Center thereby providing round-the-clock monitoring services for healthcare providers and patients. The PMP4 Center generates and manages electronic medical files for each patient that can be accessed from any handheld or PC browser. Patients receive a secure personal web page to send, view and store their health measurements, physician diagnosis, and disease-specific health trends. Physicians receive a secure patient database to host medical files and test results.

License(s)   Proprietary

Status   In use

Target Users   General population

System Requirements NA

Developer/Owner Details

Name   Card Guard

Contact URL   http://www.cardguard.com/newsite/inner.asp?cat=38&type=2&lang=1&mal=yes

Type   Private Sector

Country   Germany, United Kingdom

SOFTWARE PRODUCT

Product Summary

Name	M-Pill
Product URL	http://www.m-pill.com/index.php?action=products&browse=pharma&sub=3
Product Description	Users can receive reminders to take their medications and health related messages on their mobile phones from physicians and pharmaceutical companies. M-Pill can also be set up by companies and health professionals to collect health related information and to run clinical trials.
License(s)	Proprietary
Status	In use
Target Users	Patients, health professionals, pharmaceutical companies
System Requirements	All mobile phones

Developer/Owner Details

Name	M-Pill
Contact URL	http://www.m-pill.com/
Type	Private Sector
Country	Luxemburg, Belgium, Italy, and Germany

SOFTWARE PRODUCT

Product Summary

Name   Philips Remote Patient Monitoring

Product URL   http://.www.medical.philips.com/main/products/telemonitoring/products/telemonitoring/index.asp

Product Description   With Philips Telemonitoring Services, clinicians can remotely monitor patients' vital signs data and send them short surveys about their health status. This combination of objective data and subjective responses allows clinicians to make more timely care decisions and help prevent unnecessary hospitalizations.

Every day, patients take their own vital signs as prescribed by their physician. They also answer survey questions sent by their clinician, which may include general health assessment questions and/or targeted follow up questions, entering the self-reported data as directed. The information is then automatically transmitted through an ordinary phone line via a modem to the secure web-based Clinical Review Software. Clinicians can thereby track daily patient measurements, store and retrieve historical data in both tabular and graphical format. Reports can also be generated.

License(s)   Proprietary

Status   In use

Target Users   Patients, clinicians

System Requirements   NA

Developer/Owner Details

Name   Royal Philips Company

Contact URL   www.medical.philips.com /

Type   Private Sector

Country   Netherlands

SOFTWARE PRODUCT

Product Summary

Name	Ericsson Mobile Health (EMH)
Product URL	http://www.ericsson.com/solutions/enterprise/library/brochures_datasheets/verticals/mobile_health_bro.pdf
Product Description	EMH is a communication tool allowing patients to transmit medical data wirelessly to their health care provider. The product supports treatment and monitoring of most chronic diseases, including heart disease and hypertension. Patient sensors transmit medical data such as a ECG (Electro Cardio Gram), blood pressure, pulsoximetry, respiration and PEF (Peak Expiratory Flow), for follow-up medication, medical conditions, and support setup. Doctors and nurses can free up beds in the hospital and enable stable patients to remain home while being monitored.
	EMH makes monitoring remote and wireless within hospital premises or at a distance for home care. The captured measurements are transmitted to the doctor in a safe and certified way over Bluetooth and GPRS networks. The EMH is CE marked in accordance with the European Union's Medical Device Directory (MDD) and ISO 134 quality systems.
License(s)	Proprietary
Status	In use
Target Users	Patients and physicians
System Requirements	EMH works in harmony with other Ericsson offerings like On Phone, Solidus eCare and Building Solutions

Developer/Owner Details

Name	Ericsson
Contact URL	http://www.ericsson.com
Type	Private Sector
Country	Sweden

SOFTWARE PRODUCT

Product Summary

Name   t+ Medical Disease Management Systems (Prescription Management Services)

Product URL   http://www.tplusmedical.co.uk/prescription/

Product Description   t+ Prescription Management Services provide a mobile phone-based system that helps patients manage their medication more effectively and pharmacists run their pharmacies more efficiently.

The t+ Prescriptions service provides for easy re-ordering of all repeat medications. It saves time by removing the need to visit the doctor or pharmacy to place a repeat prescription, and then make another trip to collect the medication. The service allows for reordering medications from the pharmacy with a mobile phone. Further, the service reminds the individual when prescriptions are running low. The service is quick and easy to use with a WAP enabled phone or a PC with Internet access.

t+ Medical also offers mobile phone-based products to monitor and manage asthma, blood pressure, COPD and diabetes.

License(s)   Proprietary

Status   In use

Target Users   General population

System Requirements

Developer/Owner Details

Name   T+Medical

Contact URL   http://www.tplusmedical.co.uk/

Type   Private Sector

Country   United Kingdom

SOFTWARE PRODUCT

<u>**Product Summary**</u>

Name	Loadstone GPS
Product URL	http://www.loadstone-gps.com/
Product Description	Loadstone GPS is a free navigational application designed to be used with a Bluetooth GPS receiver and a mobile phone using the Series60 platform on the Symbian operating system. Loadstone GPS was developed as a low-cost feature-rich navigational assistant for the blind. It is fully functional and available free of charge (funded by voluntary donations).
License(s)	Open source
Status	In use
Target Users	Blind / visually impaired people
System Requirements	Mobile phone with Symbian (Series60), Screen reader/Magnifier (if you are blind/visually impaired), Bluetooth GPS receiver

<u>**Developer/Owner Details**</u>

Name	Loadstone
Contact URL	http://www.loadstone-gps.com/contact/
Type	Private Sector
Country	United Kingdom

SOFTWARE PRODUCT

<u>Product Summary</u>

Name	Broomwell HealthWatch TeleMedical Monitoring Services
Product URL	http://www.broomwellhealthwatch.com/desktopdefault.aspx?tabId=104
Product Description	Measures important bodily parameters by using one of the user-friendly state-of-the-art Vital Signs Monitors.
	The information is automatically transmitted to the TeleMedical Monitoring Centre where it is used immediately by the expert medical staff to enable them to respond intelligently to the clients' symptoms in the context of the clients' history. Appropriate action can then be taken immediately.
License(s)	Proprietary
Status	In use
Target Users	General population
System Requirements	NA

<u>Developer/Owner Details</u>

Name	Broomwell Health Watch
Contact URL	http://www.broomwellhealthwatch.com/desktopdefault.aspx?tabId=53
Type	Private Sector
Country	United Kingdom

SOFTWARE PRODUCT

Product Summary

Name	TZ1038 ECG Sensium
Product URL	http://www.toumaz.com/products/sensium.htm
Product Description	The ECG Sensium is a wireless ECG and temperature monitor that provides non-intrusive continuous monitoring and analysis of the individual's heartbeat and temperature.
	The ECG Sensium comprises 3 elements: a wearable ECG sensor module with ultra low power Zoum transceiver, a temperature sensor and an SD card with a built in Zoum transceiver for receiving the ECG and temperature data. The ECG Sensium module is attached to the body with a plaster, hence the term 'Digital Plaster'. The SD card plugs into a standard PDA running Windows Mobile 2003 or Windows Mobile 5. The ECG and temperature data is processed, and displayed on the PDA. A sophisticated arrhythmia detection algorithm continuously analyzes the received ECG. The ultra low power Zoum transceiver and ECG interface enable the ECG Sensium to be made in a small non-intrusive form factor while providing continuous monitoring for typically five days.
License(s)	Proprietary
Status	In use
Target Users	General population
System Requirements	NA

Developer/Owner Details

Name	Toumaz
Contact URL	http://www.toumaz.com/sitewide/contact.htm
Type	Private Sector
Country	United Kingdom

SOFTWARE PRODUCT

Product Summary

Name   ClarinetIR Package

Product URL   http://www.Clarinetsys.com/en/download-sw.htm#clarinetIR

Product Description   ClarinetIR is a freeware application, which provides network connectivity via infrared (IR) without the difficulties involved with setting up and/or launching a dial-up network. With a few simple clicks, the application can be installed onto a computer(s) and/or device(s). The uninstall feature also makes removal of an application quite simple. This application supports Windows laptops, PocketPC devices and Palm devices.

This Package can easily be used with Palm HotSync, AvantGo Sync on both PocketPC and Palm. In addition, it can be used with ActiveSync for PocketPC, web surfing and file transfer for Windows laptop, and any type of network based application.

The technology provider, Clarinet Systems, in 1999 was the first company to envision and pioneer PDA-based infrared networking solutions for the healthcare market. Since then, Clarinet Systems has become well known in the healthcare and hospital, medical school and health sciences library markets for its EthIR LAN infrared (IR) wireless systems. These provide network access for physicians, clinicians, staff, faculty, and students for both Palm and PocketPC PDAs. Virtually all Palm and PocketPC PDAs on the market have built-in infrared ports.

License(s)   Open Source

Status   In use

Target Users   Health care industry, health professionals, health care students

System Requirements   The installation requirement for a PocketPC platform is: Windows and supported by the manufacturer as part of default components; and, Microsoft ActiveSync 3.0 or higher installed.
The System requirement for the Palm platform is Palm OS 3.3 or up.

Developer/Owner Details

Name   Clarinet Systems

Contact URL   http://www.clarinetsys.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   Clinical Xpert Navigator

Product URL   http://www.micromedex.com/products/cxnavigator/

Product Description   Clinical Xpert Navigator delivers real-time HIS system patient data to a desktop, BlackBerry smartphones and Palm, PocketPC windows mobile-based devices. Doctors, nurses and pharmacists get direct access to the latest updates on their patients via the web, through the cellular network, hospital wi-fi or on location IR synchronization.

Navigator delivers information directly from the hospital's various HIS system components – including demographics, laboratory results, medication lists, radiology reports, pathology reports, consults and other transcribed reports – directly to the doctor's BlackBerry smartphone, the nurse's desktop, and the rounding hospital pharmacist's PocketPC device.

Navigator helps hospitals streamline their clinician's daily rounding workflow, saving physicians time and delivering up–to–date clinical results to the point of care.

Clinical Xpert Navigator also seamlessly integrates with:
Clinical Xpert Medication Reconciliation – a complete admission–to–discharge workflow solution that addresses all hospital-based functions required for medication reconciliation.
Clinical Xpert Pharmacy Intervention – a mobile and web-based hospital pharmacy workflow solution that manages intervention tasks and reports on intervention status and outcomes.

Other available modules: **Charge Capture** – uses mobile devices to transmit information for improved revenue capture, **CareFocus** – a web and mobile patient profiling system to identify at-risk patient populations**, ESign** – a web and mobile system for physicians to view, sign and transmit orders, and **Handoff** – electronically generates a single, centralized list for each care team.

License(s)   Proprietary

Status   In use

Target Users   Hospital administrators, health care professionals

System Requirements   BlackBerry smartphones, Palm, Pocket PC, and Windows-based devices

Developer/Owner Details

Name   Thomson Healthcare

Contact URL   www.thomsonhealthcare.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Nam	Commander Data Management System
Product URL	http://www.cardiocom.com/commander.htlm
Product Description	The Commander Home Monitor is an interactive home monitoring device for disease states such as CHF, Diabetes, COPD, Asthma, and Hypertension. The modular design allows physicians to select the Cardiocom peripheral devices that provide the most appropriate and cost-effective care for their patients. Each day, patients use the Home Monitor to generate objective biometric data such as weight, blood pressure, glucose, peak flow, and oxygen saturation. Patients also answer a series of questions about their current symptoms. Questions are displayed both verbally and in large font. The data is transmitted over the patient's telephone line directly to the Commander Data Management System at the physician's facility. Data can be transmitted by an integrated cellular modem that uses GPRS technology or other cellular transmission systems if GPRS is not available. Data can also be transmitted using a standard telephone.
License(s)	Proprietary
Status	In use
Target Users	Patients, physicians
System Requirements	NA

Developer/Owner Details

Name	CARDIOCOM
Contact URL	www.cardiocom.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	Endocrine Doctor
Product URL	http://islandcoders.com/emd.html
Product Description	Endocrine Doctor is a complete guide to the management and diagnosis of the nine most common diseases of the endocrine system. It is compatible with various mobile platforms. This product is also equipped with a diagnostic tool, a description tool, and a comprehensive glossary. Information concerning endocrine systems diseases is now within a tap of the stylus.

The Diagnostic tool of Endocrine Doctor employs the two-tap system of narrowing down disease diagnosis. Through the analysis of eighty two symptoms, the nine endocrine diseases can easily be identified and specified. Differential diagnosis has never been easier.

The Description tool of Endocrine Doctor covers virtually all aspects of disease management. The Description (DS) tab gives a comprehensive definition of the disease. The Orders (OR) tab lists all the usual orders that physicians give to nurses if the patient is to be admitted. The Diagnostics (DX) tab lists all the tests to be done with regards to the identified disease. The Therapeutics (TX) tab contains the disease treatment and management.

The Glossary tool contains an impressive list of the medical terms for this application. Powered by a fast search algorithm to ease word search, this tool serves as a source of information or as a refresher guide to endocrine disease discussions.

Endocrine Doctor is a useful tool for the physician, the medical student and for the general public.

License(s)	Proprietary
Status	In use
Target Users	Health care providers, medical students and the general public
System Requirements	Endocrine Doctor runs on Palm OS 3.5 and higher. It also runs on Pocket PC 2002/Windows CE 3.x, Pocket PC 2003 and Windows Mobile. The Student Grade Manager will not work on Windows Mobile 5.0 smart Phones.

Developer/Owner Details

Name	Islandcoders, Inc.
Contact URL	http://www.islandcoders.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	HCS Interactant Software
Product URL	http://www.hcsinteractant.com/OutpatientProviders/OutpatientClinicalSystems Cfm?ShowWhichLayer=6
Product Description	HCS Interactant software allows wireless, hand-held devices to be used for point-of-care computing. All registration and admission information, clinical care documentation, order entry, and materials inventory data can be entered. Caregivers can capture information at the point-of-care in a cost-effective manner. Bar coding allows for medication verification, materials management and the immediate charging of supplies. Standardization of charting is improved. The software also facilitates data collection for utilization review and outcomes management.
License(s)	Proprietary
Status	In use
Target Users	Care givers and health professionals
System Requirements	NA

Developer/Owner Details

Name	Health Care Software, Inc.
Contact URL	http://www.hcsinteractant.com/HCSInfo/ContactUs.cfm
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	Health Tracker
Product URL	http://pdamedisoft.com/BlackBerry/Health-Tracker-for-Blackberry
Product Description	Health Tracker is a complete family health care tool which keeps track of a family's individual health care history. Separate histories, entered on a Blackberry are maintained for every family member. A journal permits daily entries of data such as blood pressure, weight, body fat, heart rate, blood sugar, etc.
	Complete information on the various doctors used by a family can be stored. Health Tracker also stores information on dosage requirements and information on vaccines including purpose, date, physician and location. Medical test reports can also be entered.
License(s)	Proprietary
Status	In use
Target Users	General population
System Requirements	Blackberry

Developer/Owner Details

Name	Infodev Technologies, Inc.
Contact URL	http://www.infodev.tech.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name   The Horizon Admin-Rx

Product URL

http://www.mckesson.com/en_us/McKesson.com/For%2BHealthcare%2BProviders/Hospitals/Interdisciplinary%2BCare/Horizon%2BAdmin-Rx.html

Product Description   The Horizon Admin-Rx point-of-care application helps caregivers improve medication safety. Nurses use a handheld bar-code scanning device during medication administration to verify the "five rights." The solution provides a full-screen view of the patient's medication profile, drug administrations and care unit reviews. Horizon Admin-Rx also provides an online clinical flow sheet documenting vital signs, medication profile, administration, history and care comments.

Benefits: Delivers real-time alerts and warnings for new, changed or cancelled orders; improves care team communications; interfaces with pharmacy, physician, nursing and automation solutions; and improves documentation required by regulatory agencies.

Features: Verification and validation of medications before administration; legible electronic medication administration record (eMAR); real-time review of patient's orders and history; longitudinal allergy information, common formulary, drug knowledge base; and administrative integration.

License(s)   Proprietary

Status   In use

Target Users   Hospital administrators

System Requirements NA

Developer/Owner Details

Name   McKesson Company

Contact URL   http://www.McKesson.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	IBM Mobile Health Toolkit
Product URL	www.306.ibm.com/software/success/ cssdb.nsf/topstoriesFM?OpenForm&Site=gicss67hlth&cty=en_us

Product Description   Gathering current patient medical data promptly and accurately is vital to proper health care. To this end, IBM has created an efficient and flexible toolkit, the IBM mobile health toolkit, for gathering measurement data from a range of devices. The toolkit presents the data to management software via a well defined and easily implemented interface.

The IBM Mobile Health Toolkit provides a Java-based middleware using J2ME MIDP 2.0 (Java Mobile Information Device Profile) and JSR 082 (Java APIs for Bluetooth). Both run on a personal (mobile) hub device to which sensors can connect wirelessly. Data can be processed locally and results forwarded to one or more fixed network connections.

Using a wireless link from the hub to the devices allows the hub to be placed in an unobtrusive location, saving the user from fiddling with cables, and saves the sensor manufacturer the trouble of finding an acceptable case location for the data connector. By requiring only Bluetooth, MIDP support, and a network connection from the hub, the range of suitable hardware choices for the hub extends from full PCs through OSGi home gateway units all the way to cellular phones.

License(s)	Proprietary
Status	In use
Target Users	Hospitals

Developer/Owner Details

Name	IBM
Contact URL	http://www.ibm.com/contact/us/
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

<u>Product Summary</u>

Name   MediCompass Mobile

Product URL   http://www.imetrikus.com/prod_MM.asp

Product Description   MediCompass Mobile enables anytime, anywhere data collection that can be shared by patients with their care team between provider visits. Users can also securely send and receive messages from their healthcare team. In addition to entering information on general health and wellness, patients can easily upload biometric data to their Personal Health Record (PHR) from over 40 personal health monitoring devices, including blood glucose monitors, insulin pumps, spirometers, and blood pressure monitors. The patient can send and receive tasks, alerts and reminders.

MediCompass Mobile supports communications options across a wide range of Internet-enabled mobile phones. This flexibility together with real-time and secure messaging, enables patients and professionals to connect from any location thereby enhancing the quality of care.

License(s)   Proprietary

Status   In use

Target Users   Health professionals and patients

System Requirements   NA

<u>Developer/Owner Details</u>

Name   iMetrikus

Contact URL   http://www.imetrikus.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

<u>Product Summary</u>

Name   MercuryMD Mobile Solution

Product URL   http://www.thomson.com/content/healthcare/brand_overviews/mmd_ mmdmobilesolution

Product Description The five-time KLAS winning MercuryMD Mobile Solution gives hospital clinicians real-time access to patient data, patient census, labs, medications, and radiology reports. These are delivered to the clinician's Palm, BlackBerry or PocketPC mobile device or direct to the Clinical Xpert desktop portal.

MercuryMD pulls together data from the hospital's disparate HIS component systems to provide a unified, up–to–date, picture of the patient. With MercuryMD, doctors have the latest information about their patients thereby saving time, reducing medical errors, and improving the quality of care.

The product features:
- Census Management – automatically builds site-specific patient census lists for in-patient and out-patient encounters.
- Patient Rounding Tool – provides comprehensive clinical information in a familiar, configurable, and easy-to-view format.
- Comprehensive Clinical Information – delivers comprehensive lab results (minimum of seven days) and clinical reports (minimum of thirty days) to a mobile device.
- SyncEverywhere – enables users to access patient information anytime and from anywhere via mobile devices using IR, Wi-Fi, cellular, and the Internet.

License(s)   Proprietary

Status   In use

Target Users   Health professionals, hospital administrators

System Requirements Palm, BlackBerry or PocketPC mobile devices

<u>Developer/Owner Details</u>

Name   Thomson

Contact URL   http://www.thomson.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   Misys Homecare PDA Application

Product URL   http://www.misyshealthcare.com/Products/
                      Product+Portfolio/Misys+Homecare/Home+Health+and+Private+Duty.htm

Product Description The PDA application, integrated by Misys Homecare solution, allows clinicians to transmit patient data to field staff and create customized plans for each patient. The device-independent application – one of the first healthcare applications available on the Microsoft Visual Studio 2005 platform – creates a paperless system and allows caregivers to spend more time on patient care. The built-in wireless capability of the platform presents healthcare workers easy access to up-to-date patient data, giving users critical information to make timely decisions.

The Misys Homecare system incorporates a three-tier architecture that distributes processing among clients, servers, and a central database. This three-tier architecture can scale to any size enterprise, from a small 5-user agency to a multi-location business with hundreds of users.

A familiar Windows-style graphical interface makes Misys Homecare intuitive and easy to use. Each document appears in a separate window with its own menu, tool bars, side bars, and functionality. Point-and-click, drag-and-drop operation enables users to perform tasks quickly and with minimal keystrokes.

License(s)   Proprietary

Status   In use

Target Users   Clinicians and healthcare providers

System Requirements NA

Developer/Owner Details

Name   Misys Healthcare Systems

Contact URL   http://www.misyshealthcare.com/

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

<u>Product Summary</u>

Name   MOTOHEALTH

Product URL   http://www.motohealth.com

Product Description   MOTOHEALTH is a tool to help individuals easily monitor physical measurements for managing chronic disease. It works with glucose meters, spirometers, blood pressure monitors, pulse oximeters, and weight scales.

The main features of the product:

Automatically captures biometric data at home, at work, or on the go.
Works with secure data transmission and multi-point encryption.
Allows for information exchange between end-users and their third-party care providers.
Sends automatic reminders.
Provides automated ways to record past readings.
Provides the option to customize patient parameters and schedules.

License(s)   Proprietary

Status   In use

Target Users   Health professionals, patients

System Requirements   Motorola OS

<u>Developer/Owner Details</u>

Name   Motorola

Contact URL   http://www.motorola.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	Patient Care Suite
Product URL	http://patientkeeper.com/products%5Fand%5Ftechnology/patient_care_suite/index.html
Product Description	<u>Patient Care Suite</u> is a line of software products that documents patient encounters anytime and from anywhere using PDAs, Smartphones or Web browsers. These products remove errors, streamline workflow, and update patient information:

<u>Physicians Portal</u> – Provides a comprehensive, longitudinal view of a patient's entire medical history from any web browser.

<u>Mobile Clinical Results</u> – Delivers access to essential patient clinical information anytime and from anywhere using PDAs and Smartphones.

<u>ePrescription</u> – Allows physicians to write electronic prescriptions quickly and accurately while ensuring patient safety by automatically checking the medications against the patient's existing medications and known allergies.

<u>Ambulatory Order Entry</u> – Allows physicians to efficiently and accurately enter orders for lab tests, diagnostic images, and other outpatient procedures.

<u>Clinical Surveillance</u> – Automates monitoring and identification of key patient populations.

License(s)	Proprietary
Status	In use
Target Users	Health care providers
System Requirements	NA

Developer/Owner Details

Name	Patient Keeper Company
Contact URL	http://www.patientkeeper.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name   Pediatrics On Call

Product URL   http://www.usbmis.com/pdaproducts.htm

Product Description   Pediatrics On Call provides mobile, on-the-spot treatment advice for the most commonly encountered problems in pediatrics. The unique, well-organized format for the Palm or PocketPC allows for quick access to the essential information needed to manage patients effectively. It is ideal for use on the wards. Pediatrics On Call offers pediatricians and medical students a convenient and comprehensive reference tool.

License(s)   Proprietary

Status   In use

Target Users   Pediatricians, medical students

System Requirements   Windows CE 3.0/Windows Mobile or greater with up to 26.5MBof available memory.
Windows 98/NT/2000XP with 128MB Pam and 14MB for/Palm91MB for PPC on hard drive
Palm Desktop 4.1.4 or greater (if using Palm)
Microsoft ActiveSync 3.5 or greater (if using PocketPC)
Only devices with touch screens are supported

Developer/Owner Details

Name   US Biomedical Information Systems, Inc.

Contact URL   http://www.usbis.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   PharmD ToolBox

Product URL   http://www.medicalwizards.com/client/productdesc.aspx?productid=53

Product Description PharmD ToolBox 6.0 was designed to provide content and calculation tools needed by experienced doctors at the point of care. This product is one of many produced by Medical Wizards for health professionals. ToolBoxes are also available for nurses, paramedics, anesthesiologists, physician assistants, and family physicians among others.

The Pharm ToolBox enables the user to perform instant weight-based calculations for drug dosages, antibiotics, critical care drips, emergency drugs, fluids, RSI, toxicology, and more for both pediatric and adult patients. This program also adds relevant information such as mixing, infusing and compatibility guides. More specifically, this product provides 17 modules including a miniature antibiotic guide with integrated drug dosing calculations for children and adults, advanced cardiac life support protocols, and adult critical care infusion calculator and reference. Other modules include a comprehensive toxicology guide divided into information on ingestions, overdoses, toxidromes and the specific antidotes with integrated dose calculator, a sedation module that calculates doses of agents used for procedural (conscious) sedation for adults and children, and a critical care infusion calculator and reference guide.

License(s)   Proprietary

Status   In use

Target Users   Health professionals, students

System Requirements The software operates on Palm OS, Pocket PC and on almost any PDA.

Developer/Owner Details

Name   Medical Wizards

Contact URL   http://www.medicalwizards.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   SenseCam

Product URL   http://research.microsoft.com/sendev/projects/sensecam/default.htm

Product Description   SenseCam is a wearable digital camera that is designed to take photographs passively, without user intervention, while it is being worn. Unlike a regular digital camera or a cameraphone, SenseCam does not have a viewfinder or a display that can be used to frame photos. Instead, it is fitted with a wide-angle (fish-eye) lens that maximizes its field-of-view. This ensures that nearly everything in the wearer's view is captured by the camera.

Early on in the development of SenseCam, Microsoft became aware of the work of the Memory Clinic and Memory Aids Clinic at Addenbrooke's Hospital, Cambridge, UK. This is a centre of excellence in the UK for diagnosing various conditions that affect memory as well as working with patients to try and mitigate their symptoms. While there are established techniques to help people remember to do things, there are very few aids that complement autobiographical memory, i.e. support the remembrance of things done or experienced. The Memory Clinic is hopeful that SenseCam can address this problem.

License(s)   Proprietary

Status   In use

Target Users   Alzheimer patients

System Requirements   NA

Developer/Owner Details

Name   Microsoft

Contact URL   www.microsoft.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	Sybase Mobile Healthcare Solutions
Product URL	http://www.sybase.com/products/industrysolutions/healthcare
Product Description	Sybase mobile applications and development tools enable health care providers to either leverage packaged applications or to develop their own custom solutions that eliminate the time, errors, and waste associated with paper processes. The system streamlines billing and record keeping while boosting the quality of care and customer responsiveness. More than 95 application partners offering clinical, financial, administrative, and medical management solutions have teamed with Sybase.

The mobile and wireless revolution promises not only expanded access to patient health information, but also improved patient care. Mobile applications and channels will become the preferred methods for securely sharing critical patient and equipment point-of-care information.

Sybase offers a range of mobile and wireless consulting services, matching the appropriate technologies to the health care provider's business requirements. The company employs proven project management and delivery frameworks, as well as ISO-certified processes. This helps Sybase assess the provider's existing infrastructure, recommend a course of action, and establish a plan to incorporate m-technology into the healthcare provider's organization. |
License(s)	Proprietary
Status	In use
Target Users	Health care enterprises
System Requirements	

Developer/Owner Details

Name	Sybase
Contact URL	http://www.sybase.com/contactus
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	UTS Blood Pressure Java (J2ME)
Product URL	http://pdamedisoft.com/BlackBerry/UTS-Blood Pressure---J2ME-edition
Product Description	UTS Blood Pressure Java (J2ME) Edition is software that tracks blood pressure and pulse on a RIM BlackBerry PDA or Java-enabled mobile phone. It also maintains an historical profile. Colored records alert the user if the blood pressure is high, normal or low. Interactive charts and diagrams assist the care giver in analyzing blood pressure trends. Summarized reports quickly show what the blood pressure readings were throughout the day.
License(s)	Proprietary
Status	In use
Target Users	Health care professionals, general population
System Requirements	RIM BB device with J2ME support

Developer/Owner Details

Name	UTRACK Systems Co.
Contact URL	http://www.utracksys.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	Voxiva CareNet
Product URL	http://www.voxiva.com/solutions_carenet.asp
Product Description	Voxiva CareNet is a solution designed to support the monitoring of clinical trials and adverse events, as well as the ongoing care of patients with chronic conditions such as HIV/AIDS, TB, or diabetes. Patients can report on symptoms, compliance and other key information using multiple technologies (phone, web, PDA). Clinicians can monitor multiple patients through the Voxiva CareNet web interface, receive automated notifications via SMS, and email when patients report specific pre-defined symptoms. The system can also be used to send out automated reminders to patients to improve adherence to treatment and drug regimens. The benefits of the system include closer supervision of patients, reduced burden on clinicians, and reduction in costly office visits.
	Voxiva CareNet is being used in Asia, Latin America and the US, to report on adverse events following vaccinations, to support treatment for sexually transmitted disease, and to monitor services for women with high risk pregnancies.
License(s)	Proprietary
Status	In use
Target Users	Patients and health care providers
System Requirements	NA

Developer/Owner Details

Name	Voxiva Company
Contact URL	http://www.voxiva.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	Virtual Health Pet
Product URL	http://www.vidatis.com.br/new/site/servicosesolucoes/servicosesolucoes.php?id=192
Product Description	This product, which runs on mobile phones, reminds patients to take their required medicines on time. If the patient does not react, the system sends an SMS to a designated contact person or to an emergency service.
	Virtual Health Pet can also be used to check on the general health of the patient. It stores details about patient habits, medicine, and dosage. The system is integrated with an electronic record system, allowing doctors to forward up-to-date information to their patients at any time.
License(s)	Open Source
Status	In use
Target Users	General population and health professionals
System Requirements	Java.net

Developer/Owner Details

Name	Vidatis
Contact URL	http://www.vidatis.com.br/
Type	Private Sector
Country	Brazil

Chapter 2 – Mobile-Learning

Mobile technology applied to learning activities (m-learning) is offering an increasingly varied array of cost-effective learning opportunities throughout the world: in developed and developing countries, in urban and rural areas, in formal and informal settings, with young and adult learners, for individuals or groups, at any time and at any place.

Mobile devices with expanding capabilities are becoming available at significantly reduced costs (for example laptop computers for learning applications at $100). Software products that support a wide range of learning objectives are also becoming available. Teaching and learning strategies are being designed and implemented by educators using the unique capabilities of m-technology. New mechanisms for strengthening the administration of the educative process using m-learning technology are being developed.

This chapter of the Compendium presents forty-six examples of m-learning applications that are being used today. These cases are divided into four categories: Instructional Process, Learning Products, Organizational Training/Informal Learning, and School Administration. The cases are further divided into regions of the world and then countries within these regions.

Instructional Process

SOFTWARE PRODUCT

Product Summary

Name   DFAQ – Mobile Dynamic Frequently Asked Questions

Product URL   http://www.mlearn.org.za/CD/papers/Ngambi.pdf

Product Description The Dynamic Frequently Asked Questions (DFAQ) is an intelligent, dynamic, and anonymous collaborative knowledge sharing tool. Students with questions on course content or administrative issues have access to knowledgeable peers, tutors and faculty. This communications mechanism is particularly useful to under-prepared students or students in large lecture sections. A side benefit of DFAQ is that it can be a useful diagnostic resource for instructional faculty to identify students' learning difficulties.

DFAQ utilizes the wide use of mobile devices and the SMS texting competence among students. When a question is posted into DFAQ, two processes are automatically activated. First, when a student enters a question into the system, it is placed in a publicly visible queue. The public waiting space allows peers to read the question and respond with the answer. Second, an email notification is sent to a forum manager or convener or educator for his/her response. Although most questions are answered by peers, some questions may require an educator's input such as course administrative type questions.

This m-learning application adds value to the student learning process. There are four ways in which learning has been affected:
- Exposure to other students' questions underscores a student's own understanding or, for that matter, misunderstanding.
- The system's anonymity creates the feeling of a safe environment which encourages more students to ask and respond to questions.
- Students are able to monitor their own growth/development through observing their own changes in the way they asked questions.
- Faculty receive feedback on students' learning difficulties enabling them to better respond to their learning needs.

License(s)   NA

Status   In use

Target Users   University students, faculty and administrators

System Requirements NA

Developer/Owner Details

Name   Center for Educational Technology, University of Cape Town

Contact URL   http:///www.uct.ac.za/

Type   Academic

Country   South Africa

SOFTWARE PRODUCT

Product Summary

Name   MobileED Audio Wiki

Product URL   http://mobiled.uiah.fi/

Product Description   The MobilED initiative designs learning environments that are meaningfully enhanced with mobile technologies and services. For the MobileEd Audio Wiki experiment, a MobilED platform was developed which offers an access to Audio Wiki - a collaborative information system. With MobilED audio wiki, students and teachers may use wiki and wiki content, such as Wikipedia, with their standard mobile phones.

In 2006 the application was tested and results compared between a poor, rural school environment and an affluent private school environment in South Africa. The system was used by three grade 11 classes (15 to16 year olds). The aim was to try out the audio wiki in a relatively formal school community as a part of study project related to HIV/AIDS.

The MobilED platform was built from the following Open Source components:

Kannel SMS-gateway;
the Asterisk telephone system for audio telephony communications;
Text to speech software, such as Flite;
MediaWiki server with suitable content, such as en.wikipedia.org.

The MobilED platform is also Open Source and developed in the development site of the project at: http://dev.mobiled.org/

License(s)   Open Source

Status   In use / In development

Target Users   Teachers, students

System Requirements   Mobile phone, Speech Synthesizer

Developer/Owner Details

Name   MobilED

Contact URL   http://mobiled.uiah.fi/?page_id=2

Type   Public / Private Sector

Country   South Africa / Finland

SOFTWARE PRODUCT

Product Summary

Name   Lifelines Education

Product URL   http://www.lifelines-india.net/vision.htm

Product Description   An initiative of the OneWorld International Foundation, British Telecom (BT), and CISCO systems, Lifelines India is a service that facilitates the exchange of vital information using the power of voice as the primary means of knowledge dissemination. In its initial pilot phase, Lifelines India concentrated on the agribusiness sector with considerable success. Now the same technology platform has been customized to provide critical academic support to teachers in rural areas.

The adaptation of the Lifelines India model for educational purposes is being carried out under the auspices of the QUEST Alliance, part of the International Youth Foundation's regional initiative, and the Education and Employment Alliance (EEA). Through an initial pilot phase launched in July 2007 in 116 schools in West Bengal, 600 elementary school teachers are now able to pose questions on academic matters via a normal telephone, the Internet, or mobile phone. In the second phase of the pilot, LifeLines will reach out to more than 2,000 teachers in West Bengal.

The service is based on an interactive voice response system. Teacher queries are answered within 24 to 48 hours (by phone or email) by a qualified panel of experts. Lifelines India thus helps link teachers with training resource persons, subject matter experts, and field level educational administrators. The service will also lead to the creation of a rich FAQ database that can be accessed by communities through information kiosks, village knowledge centers, or any Internet access point.

License(s)   Proprietary

Status   In use

Target Users   Students, teachers, educational administrators

System Requirements   NA

Developer/Owner Details

Name   International Youth Foundation, QUEST Alliance,

Contact URL   www.iyfnet.org

Type   Private Sector

Country   India

SOFTWARE PRODUCT

Product Summary

Name   Math4Mobile

Product URL   http://www.math4mobile

Product Description The Math4Mobile project enables mobile phones to be used for teaching and learning mathematics. Five software packages are offered:

Graph2Go is a special purpose graphing calculator that operates for given sets of function expressions. Graphing calculators are instrumental in teaching and learning mathematics. It is an environment that supports conceptual understanding of functions in general, and algebra and real analysis in particular. It especially enhances connections between graphic and symbolic representations.

Solve2Go supports solving equations and inequalities by means of conjectures based upon visual thinking. Conjectures can be refuted or supported by examples provided by the tool and should be proven using symbolic manipulations on paper.

Sketch2Go is a qualitative graphing tool. Graphs are sketched using seven icons representing constant, increasing or decreasing functions that change at constant, increasing or decreasing rates.

Fit2Go is a linear and quadratic graphing tool and curve fitter. Students can view a phenomenon, identify variables, conduct experiments and take measurements in order to construct models of the phenomena.

Quad2Go is a tool for learning about quadrilaterals by generating examples, observing and experimenting with examples with a view toward forming generalized conjectures. These are especially appropriate for 11 to 12 year old students learning geometry.

License(s)   Open Source

Status   In use

Target Users   Students, teachers

System Requirements Java Enabled (J2ME) Phone and certain Nokia, Sony, and Ericsson devices

Developer/Owner Details

Name   Institute for Alternatives in Education – University of Haifa

Contact URL   http://www.math4mobile.com/

Type   Education

Country   Israel

SOFTWARE PRODUCT

Product Summary

Name   Moodles for Mobiles

Product URL   http://docs.moodles.org/en/Moodle_for_Mobiles

Product Description Moodles is a free, open source, course management system designed to help educators create effective online learning communities. The design and development of Moodles is guided by a "social constructionist pedagogy." This educational philosophy is guided by four principles:
1. Constructivism – a point of view which maintains that people actively construct new knowledge as they interact with their environment.
2. Constructionism – asserts that learning is particularly effective when constructing something for others to experience.
3. Social Constructivism – extends the above ideas into a social group constructing things for one another collaboratively creating a small culture of shared artifacts with shared meanings.
4. Connected and Separate – the idea of looking deeper into the motivation of individuals within a discussion.

Moodles for Mobiles targets Japanese mobile phones, 98% of which at present support CHTML. MFM is a parallel interface to Moodles that works on mobile phones. It includes:
 User login
 Course navigation
 Multi language support
 Activities in a Moodles course can be mobile enabled by a teacher, so that they are then available for use on students' mobile phones
 Quiz and Feedback modules

License(s)   Proprietary

Status   In use

Target Users   Teachers, students

System Requirements Moodle can be installed on any computer that can run PHP and can support a SQL type database, i.e. MYSQL. It can be run on Windows and Mac operating systems and Linux.

Developer/Owner Details

Name   Moodles/Independent Developers

Contact URL   http://moodles.org/

Type   NA

Country   Japan

SOFTWARE PRODUCT

Product Summary

Name   Bridge*it*

Product URL   http://www.nokia.com/A4254307

Product Description   Using existing mobile products and satellite technologies, Bridge*it* delivers digital multimedia materials to teachers and students who otherwise would not have access to them. In practice, teachers use mobile phones to access a library of science, math, and English videos. Once selected, videos are downloaded via satellite to a digital video recorder connected to a television in the classroom. Through Bridge*it*, distance learning programs are immediately available to teachers and students.

The program is implemented through a unique cooperative partnership of Nokia, the International Youth Foundation, Pearson, and the United Nations Development Program (UNDP). The importance of this cooperation extends to local program partners: Globe, Seameo-Innotech, Ayala Foundation, Chikka, PMSI.

In May 2003, Bridge*it* was launched in the Philippines under the title "text2teach." It seeks to equip fifth and sixth grade teachers with educational resources that focus on science, math, and English. The 480 teacher lesson plans which are offered through the program are supported by a library of more than 370 science, math, and English videos that are integrated into classroom instruction. Within one year's time, the program demonstrated improved academic performance when compared to the study's control group. The positive impact went beyond the classroom, motivating school officials, parents, and community leaders.

License(s)   Proprietary

Status   In use

Target Users   Teachers, students

System Requirements   SMS

Developer/Owner Details

Name   Nokia/Philippine Department of Education

Contact URL   http://www.nokia.com/A4126575

Type   Public – Private Partnership

Country   Philippines/Finland

SOFTWARE PRODUCT

Product Summary

Name	Moop
Product URL	http://www.microlearning.or/micropapers/moop.ml_proc_2005.pdf
Product Description	The Moop interactive m-learning environment was developed for use by primary school pupils and teachers in the city Oulu, Finland. Primary school pupils use a mobile phone to analyze their surroundings and communicate within groups. Through Moop a pupil makes, saves and manages observations in the mobile network learning platform. The learning environment supports an inquiry process during which pupils outline their thoughts on an assigned topic, collect information through observations of the surroundings and report these findings on the learning network.
	The Moop project is based on school and teacher needs. The traditional classroom-based learning environment is broadened through pupils' out–of–classroom observations. The goal is to increase interactivity and learning collaboration among pupils with the help of a mobile phone.
	Moop learning occurs through tasks based on geographic location requiring creative problem solving. Experiences with mobile phones that have cameras and serve as mobile data terminals have shown that an inquiry learning process can be part of daily school experience and that mobile equipment can be easily used by 10 to 12 year old pupils.
License(s)	NA
Status	In use
Target Users	Primary school pupils, teachers
System Requirements	NA

Developer/Owner Details

Name	Department of Education, Oulu, Finland
Contact URL	http://ouka.fi/english/
Type	Government
Country	Finland

SOFTWARE PRODUCT

Product Summary

Name	eXact Mobile
Product URL	http://www.learnexact.com/info.php?vvu=34

Product Description eXact Mobile is purported to be the first commercial Mobile Learning Content Management Solution. It is a new module of learn eXact that provides context-aware learning content delivery when the learner needs to access it.

eXact Mobile is offered as the perfect learning solution for all an organization's mobile workers and learners. It is ideal for:

Sales force education
Industrial training and maintenance support
Continuous medical and pharmaceutical education
Cultural heritage edutainment
Blended academic learning programs

eXact Mobile can be integrated to learn eXact LCMS suite or interfaced with any 3rd party eLearning (LMS/VLE) solution. eXact Mobile provides access to the LMS through mobile UMTS Wi-Fi and GPRS devices, providing a high level of flexibility in learning program planning.

eXact Mobile also feeds tracking information back to the LMS allowing the learner or mobile worker to follow learning programs always using the most convenient device available.

License(s)	Proprietary
Status	In use
Target Users	See above
System Requirements	NA

Developer/Owner Details

Name	Giunti Labs
Contact URL	http://www.learnexact.com
Type	Private Sector
Country	Italy

SOFTWARE PRODUCT

Product Summary

Name	Public Bible SMS-School
Product URL	www.textually.org/textually/archives/2004/09/005358.htm
Product Description	The Bible SMS-school is a mobile application which aims to educate youth and help cultivate faith in younger generations via mobile SMS messaging. A pilot project was launched by the Voronezhskaya-Borisoglebskaya Diocese in Russia. Students who have access to mobile phones can forward a message to the Diocese asking for the free delivery of teaching materials. They then receive a weekly message with a text from the Old Testament along with a homework assignment.
License(s)	NA
Status	In use
Target Users	Students
System Requirements	NA

Developer/Owner Details

Name	Voronezhskaya-Borisoglebskaya Diocese
Contact URL	http:/English.pravda.ru/main/18/90/363/11765_phone.html
Type	Religious Diocese
Country	Russia

SOFTWARE PRODUCT

Product Summary

Name Tribal CTAD – M-Learning Products

Product URL http://www.m-learning.org/products/m-learning-products.htm

Product Description Tribal CTAD is the specialist educational software team within the Tribal Group organization. The team has developed a number of products which support m-learning:

SMS quiz author – Lets educators set up an automated SMS response for paper-based multiple-choice quizzes. Students text in answers from their mobile phone and receive instant feedback.

MyLearning author for Pocket PC – On a PDA, learners can access media resources including animations, sound and photography, making them ideal for mobile learning. The product is an easy–to–set software tool that lets the educator create vibrant learning activities for students to run on their Pocket PCs.

Pocket PC learning packs – Users can access a growing online library of ready-made content for use with Pocket PCs. The library includes generic screeners, themed exercises covering Skills for Life, literacy and numeracy modules for an adult core curriculum.

mediaBoard – With mediaBoard the learning package developer can host events where the learners are truly mobile and collaborate in a real-time event.

Java Games – These are phone games that will work on any color-screen enabled mobile phone. Java Game technology serves a large number of learners anytime regardless of their location.

License(s) Proprietary

Status In use

Target Users Educators, learners

System Requirements NA

Developer/Owner Details

Name Tribal CTAD

Contact URL http://www.m-learning.org/contact.htm

Type Private Sector

Country United Kingdom

SOFTWARE PRODUCT

<u>Product Summary</u>

Name   Go Test Go

Product URL   <u>http:/www.gotestgo.com/testtypes.html</u>

Product Description   Go Test Go software helps prepare the user for professional and educational tests. The mobility, portability and availability of mobile phone devices are combined with a set of features to deliver convenience and effectiveness in preparing for a test:
        Helpful, meaningful explanations of questions
        Multiple testing modes including normal, review and instant feedback
        Question marking and filtering
        Question randomization
        Potential answer randomization
        Ability to save answers
        Scoring and analysis by question category

Go Test Go also provides a number of self-awareness and self-assessment type tests. A wide selection of tests is available covering a broad range of subjects such as health assessment, general investment knowledge and personality awareness.

License(s)   Proprietary

Status   In use

Target Users   General population

System Requirements   NA

<u>Developer/Owner Details</u>

Name   Go Test Go

Contact URL   <u>http://www.gotestgo.com/products.htlm</u>

Type   Private Sector

Country   Canada

SOFTWARE PRODUCT

Product Summary

Name	SynchronEyes
Product URL	http://www2.smarttech.com/st/en-GB/Products/SynchronEyes+classroom+management+software/
Product Description	SynchronEyes is software for classroom management that increases classroom flexibility by incorporating personalized or group learning into lessons. Teachers can work directly with individual pupils from their desktop. Pupils can be set up into groups. Communications within the classroom can also be facilitated through a wireless network.

Mr. Dave Whyley, Head teacher e-learning consultant, City of Wolverhamptom, UK stated, "Having connected pupils and their PDAs in an English lesson using SynchronEyes, our teacher was able to sort and choose examples of their work and share them with the whole class. Either the teacher or the individual learner can annotate these wirelessly for everyone to see. It's awesome stuff."

Another feature of SynchronEyes is that it helps students stay on track as the teacher can view all the computer screens in the classroom. The teacher can also take control of any pupil's computer and remotely guide him/her through a particular task.

SynchronEyes keeps the focus on learning as the teacher can control student access to the Internet or to specific computer applications. The teacher can block pupils individually or as a group making it easier to manage a class where pupils are working on different projects or at an individual pace. Student testing is done quickly and easily. Tests are marked automatically with the teacher receiving a summary of the results.

License(s)	Proprietary
Status	In use
Target Users	Teachers, students
System Requirements	NA

Developer/Owner Details

Name	SMART Technologies, Inc.
Contact URL	http:/smarttech.com/
Type	Private Sector
Country	Canada

SOFTWARE PRODUCT

Product Summary

Name   Adobe Flash Lite
Adobe Case Study – Parsons The New School of Design

Product URL   http://www.adobe.com/products/flashlite/

Product Description   Flash Lite is specifically developed for mobile phones and consumer electronics devices. Flash Lite 3, the latest version, allows mobile device manufacturers, operators and content providers to differentiate their offerings. This gives users the ability to watch Flash Player Compatible video, the world's most popular video format and browse Flash enabled Web sites when integrated with a mobile browser. This gives mobile users the freedom to access content whenever and wherever they want. Efficient resource management capabilities significantly improve and optimize performance for mobile devices.

Learning application designers and developers now have a new level of expression, efficiency and interactivity for content creation. Parsons The New School for Design's communication design and technology undergraduate and graduate degree programs embrace curricular innovation and pioneer the use of technology across disciplines. A variety of solutions, including Adobe software, become important learning tools to help modern designers reshape society.

Each student in the mobile media design class is provided with a Nokia N80 handset and is encouraged to develop projects that take advantage of the social anthropology of New York City. Initially, the class takes on small experiments to get comfortable with mobile basics building mobile websites in HTML viewable on handsets. Later, students undertake more challenging, semester-long projects. Graduate level students learn to connect Flash Lite projects to Bluetooth technology, digital cameras, GPS, and SMS interactions.

Case URL:http://www.adobe.com/cfusion/showcase/index.cfm?event=casestudy

License(s)   Proprietary

Status   In use

Target Users   M-Technology applications designers and developers

System Requirements   NA

Developer/Owner Details

Name   Adobe

Contact URL   http://www.adobe.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	Anesthesia Clinical Tutor and Calculator (ACTc), Version 3.0
Product URL	http:///www.gasshead.com/
Product Description	This product is designed to teach and simplify everyday calculations involved in anesthesia practice. It aims to bridge the gap between clinical anesthesia reference books (converted to a PDA format) and practical educational software. ACTc, Version 3.0 is designed for both Windows Mobile 5.0 and Palm OS 5.4.

The educational and foundational data behind ACTc is reviewed by a team of anesthesiologists and anesthetists and then field tested by a group of volunteer anesthesia clinicians worldwide for applicability and functionality.

Version 3.0 incorporates many features:
Patient Data Screen – core information to guide airway needs, fluids, medications and transfusions.
Snap Shot Screen – set up individual specific cases with drug and fluid information from the most used reference data: Standard GA, ICU/RSI, MAC, Vascular, and Neuro case profiles already set up.
LABS Screen – extensive lab section with the most commonly referenced lab values. Permits users to change institutional values or add other lab items.
MH (Malignant Hyperthermia) Screen – provides immediate dosing guidelines.
Drug Screen – both adult and pediatric databases to include induction drugs, sedatives, antiemetics, paralytics, reversals, ACLS, PALS, and analgesics.
Vital Statistics Page (pediatrics) – age appropriate statistics.
Interactive Tutor and Help Screens – each screen has help sections that enhance the teaching process and explain how each calculation is derived.
Other features – Interactive Electro-neutrality calculator, Regional Screens, Updated Blood Screens and Resuscitation Screens, Settings, Fluids, Drips Screens, Inhalation Screens, Airway Screens, and Calculation Database Reference/Readings Screens.

License(s)	Proprietary
Status	In use
Target Users	Anesthesiologists, medical students
System Requirements	Macintosh (Mac OS), Windows XP, Windows 2000, Palm OS, or Pocket PC 2002

Developer/Owner Details

Name	Gasshead
Contact URL	http://www.gasshead.com/
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name   Clinical Rotation Companion (CRC)

Product URL   http://pepid.com/products/crc/default.asp?product=CRC

Product Description CRC is a software product designed to deliver authoritative information to medical students on their clinical rotation. Rotation specific topics include step-by-step instructions for taking patient histories, conducting a physical examination, issuing admit and discharge orders and cross-coverage. It was developed in partnership with the Family Physicians Inquiries Network (FPIN) and other leading academic and clinical physicians. CRC is the only handheld reference guide with embedded evidence-based FPIN Clinical Inquiries and help desk answers.

License(s)   Proprietary

Status   In use

Target Users   Medical students

System Requirements PDA

Developer/Owner Details

Name   Pedid LLC

Contact URL   http://www.pepid.com/contact

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name Handheld Learning Environment (HLE) - Tools for Palm OS

Product URL http://www.goknow.com/Products/HLE_palm.php

Product Description GoKnow's Handheld Learning Environment for Palm OS (HLE) is based on over 10 years of classroom research at the University of Michigan. The Handheld Learning Environment is designed to support inquiry-based use of handheld computers in K-12 classrooms. HLE works well with existing lessons and curricula, and simplifies the management and assessment of students' materials.

PAAM is a component of HLE. It is the Classroom Synchronization Manager that allows teachers to manage, assess, and back up students' handheld work. Student work is viewable and is stored as a digital portfolio.

With an annual HLE license, the user receives:
FreeWrite - a complete word processing program for Palm OS Handhelds.
PiCoMap - an easy-to-use concept mapping tool that links directly to Sketchy and word processing documents.
Sketchy - an easy-to-use drawing and animation tool for Palm OS and Pocket PCs.
FlingIt -moves web page text and images from the desktop to PalmOS or Pocket PCs.
Cells - a spreadsheet program for Palm OS Handhelds.
iKWL - an exercise that guides students through material.
Locker - allows students to enter detailed information about assignments and upcoming events.
ViewPoint is a presentation program that enables students to create slideshows on their Palm handhelds.

License(s) Proprietary

Status In use

Target Users Teachers, administrators, students

System Requirements NA

Developer/Owner Details

Name GoKnow, Inc

Contact URL http://www.goknow.com/

Type Private Sector

Country United States of America

SOFTWARE PRODUCT

Product Summary

Name   Learning Mobile Author

Product URL   http://www.hotlavasoftware.com/index.php?cPath=92&osCsid=40b1861ed563e

Product Description   Learning Mobile Author is a mobile content authoring tool and publishing tool that allows the rapid design, editing and publishing of trackable mobile learning and testing content that was developed by Hot Lava Software, Inc.

Hot Lava Software, Inc. is the leading provider of mobile authoring, publishing, delivery and tracking solutions. Hot Lava Software anticipated the need for mobile content in the form of learning, reference, testing and job aides to support a growing remote and field workforce. Using Hot Lava Software's content development and publishing system (LMA), integrated with the Hot Lava mobile delivery and tracking system (MDTS), an organization will have the tools and knowledge needed to launch and track mobile initiatives faster and more cost effectively.

License(s)   Proprietary

Status   In use

Target Users   Designers and developers of m-technology applications

System Requirements   NA

Developer/Owner Details

Name   Hot Lava Software, Inc.

Contact URL   http:/www.hotlavasoftware.com/

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Name   Project View

Product URL   www.mobilestorytelling.org

Product Description   Project VIEW (Visual Inter-cultural Education on the Web) explores the use of camera phones and digital storytelling for cross-cultural connections among students around the world. Camera phones combined with non-verbal communications, like movement and digital storytelling, allow young people to establish meaningful connections with each other across geographic and cultural boundaries. The video exchanges combine elements of 'Web 2.0' social networks, traditional pen pal programs and distance learning. Students exchange video messages on locally relevant issues or more general content such as neighborhood exploration.

Initially, they started with a class format inspired by the Center for Digital Storytelling. The first group of students was from a leading media arts center called Bay Area Video Coalition (BAVC). Following that, they shared stories and photos with students from Keio University in Tokyo, Meraka Institute in South Africa, and Center for Democracy in Information Technology (CDI) in Brazil.

Project VIEW is part of the Digital Vision Program at Stanford University, an early-stage incubator for social ventures. It is supported by Stanford and the Reuters Foundation.

License(s)   Open Source

Status   In use

Target Users   Students, teachers,

System Requirements   Mobile Phone with video capability

Developer/Owner Details

Name   Project View

Contact URL   www.mobilestorytelling.org

Type   Private Sector

Country   Developed in the United States and also implemented in Japan, South Africa and Brazil

SOFTWARE PRODUCT

Product Summary

Name   Question*mark* Perception

Product URL   http://www.questionmark.com/us/perception/index.aspx

Product Description The Question*mark* Perception assessment management system enables educators and trainers to author, schedule, deliver, and report on surveys, quizzes, tests and exams. Individuals or groups can be scheduled to take the assessments. These can be delivered via a standard web browser, secure browser, PDA, CD or paper. Results can be analyzed using 12 standard reports.

 Question*mark* Perception offers a cost-effective, easy way to measure knowledge, skills and attitudes while enhancing the learning process:
 Easy question and assessment authoring
 Question banking by learning objective
 Delivers to browser, PDA, CD-ROM or paper
 Role-based security for multi-author environments
 Integration with other management systems
 Instant feedback to enhance learning
 Secure delivery for high-stakes exams
 Workflow management
 On-demand results, reports and item analysis
 Randomized presentation of questions and choices
 Adaptive branching based on how questions are answered
 Twelve customizable reports
 Support for key standards for interoperability
 Year-round learning opportunities
 Comprehensive technical support

License(s)   Proprietary

Status   In use

Target Users   Educators, human resource trainers, students

System Requirements Perception authoring applications:
PC with at least 256Mb of RAM running Windows 2000/XPPerception Server: Web Server PC with at least 512 Mb of RAM running Windows 2000 Server or Windows 2003 Server. Administering more than 100 assessments a day requires a separate database server running MS SQL Server or Oracle.

Developer/Owner Details

Name   Question*mark*

Contact URL   http://www.questionmark.com

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   University of North Carolina Medical School PDAs

Product URL   http://www.med.unc.edu/pda/

Product Description   The Medical School of the UNC requires students to have a PDA for their clinical assignments. The PDA is used as valuable reference tool, a clinical calculator, and to report and retain clinical information. The most basic model PDA can fulfill this requirement. The School does not require a specific brand or model, but the PDA must be a Palm OS version 5.0 or Pocket PC. If necessary, funds are put into a student's second year, second semester financial aid package for this purchase.

License(s)   Open Source

Status   In use

Target Users   Medical students

System Requirements   PalmPCs, PDAs

Developer/Owner Details

Name   University of North Carolina

Contact URL   http://www.med.unc.edu/pda/

Type   Academic

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	Sakai Project
Product URL	http://sakaiproject.org/

Product Description Sakai is an open source learning environment project that produces mobile applications for students: SMS (Texting) and MMS (picture from cell phone) to a student's personal learning space. Sakai is an online collaboration and learning environment. Many members of Sakai use it to support teaching and learning, ad hoc group collaboration, support for portfolios and research collaboration.

Sakai is a free and open source product that is built and maintained by the Sakai community. Sakai's development model is called "Community Source" because many of the developers creating Sakai are drawn from the "community" of organizations that have adopted and are using Sakai.

For a list of products that are either available or being developed, see: http://bugs.sakaiproject.org/jira/secure/IssueNavigator.jspa?reset=true&mode=hide&pid=10280

For a list of Universities using Sakai products, see: http://bugs.sakaiproject.org/confluence/display/PROD/Implementations

License(s)	Open Source
Status	In use
Target Users	College/University community
System Requirements	NA

Developer/Owner Details

Name	Sakai Project
Contact URL	http://sakaiproject.org/
Type	Collaborative
Country	International

Learning Products

SOFTWARE PRODUCT

<u>Product Summary</u>

Name   ChinesePod
                        SpanishPod

Product URL   http://chinesepod.com/learnmore
                        http://spanishpod.com/learnmore

Product Description ChinesePod and SpanishPod are software products for learning these languages with instruction delivered through mobile devices. Users pick the lessons they want and they are delivered daily. Each product is designed for absolute beginners as well as advanced students.

License(s)   Proprietary

Status   In use

Target Users   General population

System Requirements NA

<u>Developer/Owner Details</u>

Name   Praxis Language, Ltd

Contact URL   http://www.praxislanguage.com

Type   Private Sector

Country   People's Republic of China

SOFTWARE PRODUCT

Product Summary

Name Pocket Exam

Product URL http://www.bizon.org/pocketexam/index.htm

Product Description PocketExam lets users study anytime and from any location. It provides single/multiple choice, yes/no and flashcard questions to help users improve test results. PocketExam can be used to prepare for standardized tests like the GMAT, LSAT, USMLE, MCAT, SAT or MPRE, as well as to study for school tests in subjects such as history, science, or mathematics.

PocketExam provides a free editor to course developers, so they can create their own quizzes-single/multiple choice, yes/no and flashcard questions. They can print quizzes or publish them to PocketExam's website.

License(s) Proprietary

Status In use

Target Users Teachers, students, general population

System Requirements NA

Developer/Owner Details

Name Bizon Software

Contact URL http://www.bizon.org

Type Private Sector

Country Netherlands

SOFTWARE PRODUCT

Product Summary

Name   MSPhrase Oxford Italian-Portuguese Phrasebank (S60 3rd Edition)

Product URL   http://www.allaboutsymbian.com/software/item/MSPhrase_Oxford_Italian-Portuguese_Phrasebank_S60_3rd_Edition.php

Product Description This is a complete Oxford phrasebook with over 3,000 current "survival" expressions in Italian and Portuguese with an easy–to-use graphic interface and separate icon links covering common travel situations. This Italian-Portuguese-Italian phrasebook is based on the Oxford Phrasebook especially designed for travel reference. The phrasebook is designed to run on Symbian OS, the advanced open operating system licensed by the world's leading mobile phone manufactures. Mobile Systems, Inc. is the author and provides technical assistance.

The Phrasebook covers 3,000 base phrases (per language), 5,000 expanded phrases (excluding templates) and 20,000 expanded phrases (including templates). It features a compressed format reducing storage space phrase variants, 9 topics/15 subtopics, extension of selected phrases and 12 template lists. Topics include diversions, eating out, entertainment, hotel, money, problems, tourists, transportation and miscellaneous.

The MSPhrase Oxford Multilingual Phrasebank, Italian-Portuguese, is presented in MSDict electronic format. MSDict offers the best experience in mobile reference and is available for any handheld platform.

The Wordbank covers 17,500 core terms. All translations in the Wordbank are provided with appropriate parts of speech and gender information.

Nine other languages are available including regional variations: UK English, US English, French, German, Italian, European Spanish, Latin American Spanish, European Portuguese and Brazilian Portuguese. Mobile phrasebooks are available for each language pairing.

License(s)   Proprietary

Status   In use

Target Users   General population

System Requirements Symbian OS v. 9.5

Developer/Owner Details

Name   Symbian Limited

Contact URL   http://www.symbian.com/

Type   Private Sector

Country   United Kingdom

SOFTWARE PRODUCT

Product Summary

Name   PalmDict - Dictionary in Your Palm

Product URL   http://www.tranexp.com/win?palmDict.htm

Product Description   PalmDict, one of several translation products available from Translation Experts, can be accessed through a Palm OS 4 or higher compatible devices. It provides a dictionary in a wide range of languages and supports any pair of the following languages: Albanian, Arabic, Bosnian, Brazilian Portuguese, Bulgarian, Chinese, Croatian, Czech, Danish, Dutch, English, European Portuguese, Filipino/Philipino/Tagalog, Finnish, Flemish, French, German, Greek, Hindi, Hungarian, Icelandic, Italian, Japanese, Korean, Latin, Latin American Spanish, Norwegian, Old Church Slavonic, Polish, Rumanian/Romanian, Russian, Serbian (Latin script), Serbian (Cyrillic script), Slovenian, Spanish, Swedish, Turkish, Ukrainian, Vietnamese and Welsh.

Other translation products are:
PocketDict – Dictionary in your Pocket PC
This is a dictionary for Windows CE, Pocket PC 2002, Windows Mobile 2003, Windows Mobile 5 or Windows Mobile 6 compatible devices.

PocketTran – Translator and dictionary in your pocket. For Pocket PC compatible devices.

PalmTran – Translator and dictionary in the palm of your hand. For Palm compatible devices.

PalmKeys, PocketKeys – Free software keyboards for Palm OS or Pocket PC.

MobileTran – Mobile Telephone translator/Cell telephone translator.

License(s)   Proprietary

Status   In use

Target Users   General population

System Requirements   NA

Developer/Owner Details

Name   Translation Experts

Contact URL   http://www.tranexp.com

Type   Private Sector

Country   United Kingdom

SOFTWARE PRODUCT

<u>Product Summary</u>

Name	Ask Me Now
Product URL	http://www.askmenow.com/How.aspx

Product Description AskMeNow is dedicated to optimizing information access on all mobile platforms. It utilizes proprietary technology to offer a natural language-based interaction and dynamic provision platform designed for simple and quick information retrieval. By offering the first search solution with semantic understanding of data, AskMeNow is able to eliminate the need for wading through links and navigating menu screens. This results in easier access to all information on the Internet or an organizational data base.

AskMeNow is a pioneer in natural language semantic mobile search. Users can obtain accurate answers and information by asking questions in the way they naturally express themselves rather than figuring out the right keywords.

With its patent pending technology, AskMeNow is able to implement the semantic search across both structured and unstructured information (80% of all Web content). This allows the service to search every corner of the Web for answers and information.

License(s)	Proprietary
Status	In use
Target Users	General population
System Requirements	NA

<u>Developer/Owner Details</u>

Name	AskMeNow
Contact URL	http://www.askmenow.com/
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	Books24x7
Product URL	http://corporate.books24x7.com/browseabout.asp?item=books24x7
Product Description	Books24x7 is reference ware for professionals. It is a leading SaaS provider of on-demand business, technical, and engineering content. These materials include thousands of digitalized "best–in–class" books, book summaries, research reports and best practices. The Books24x7 On Demand Platform enables users to search, browse, read and collaborate with other users of these vast professional libraries. Books24x7 also offers a PDA accessible site to allow mobile users to access the company's broad range of content from their Internet-enabled PDA devices. Books 24x7 product offerings support workers across the enterprise in acquiring knowledge when and where needed. Customers who have adopted Books24x7 solutions include global enterprises, government, education and, small- to medium-sized businesses covering over 50 industries.
License(s)	Proprietary
Status	In use
Target Users	Professionals
System Requirements	PDAs

Developer/Owner Details

Name	Skillsoft Co.
Contact URL	www.skillsoft.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	Declan Language Learning Software for Windows Mobile Pocket PC
Product URL	http://www.declan-softwate.com/pocket_pc/index.htm
Product Description	This product is language learning software that can be used on mobile platforms. It is available for these languages: Japanese, Chinese, Korean, Russian, French, Italian, German and Spanish. The software contains audio FlashCards with native speakers and translation dictionaries.
License(s)	Proprietary
Status	In use
Target Users	General population
System Requirements	Windows Mobile, Pocket PC

Developer/Owner Details

Name	Declan-Software
Contact URL	http://www.declan-software.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	Factiva
Product URL	http://factiva.org/about/index.asp?node=menuElem1098
Product Description	Factiva, from Dow Jones, provides essential business news and information together with the content delivery tools and services enabling professionals to make better and faster decisions. Factiva's unrivaled collection of more than 10,000 authoritative sources includes the exclusive combination of The Wall Street Journal, the Financial Times, Dow Jones and Reuters newswires and the Associated Press, as well as Reuters Fundamentals, and D&B company profiles.
	Factiva's innovative, XML-based and Web services-enabled technology platform provides access to this rich content collection via Factiva's role-specific products or through customized enterprise, group or personal solutions. Executives, information professionals, marketers, salespeople, and other professionals can easily monitor and understand the latest news, market trends, and business challenges relevant to them – directly from the Microsoft Office and job-specific applications they use every day.
License(s)	Proprietary
Status	In use
Target Users	Factiva has nearly 1.8 million paying subscribers. Nearly 80% of the Fortune Global 500 has an account with Factiva
System Requirements	Any PDAs, Cell Phones, Mobile hand held devices

Developer/Owner Details

Name	Dow Jones and Company Inc.
Contact URL	www.dowjones.com
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name   HNHSoft Dictionaries and Talking Phrase Books

Product URL   http://www.hnhsoft.com/allproducts#phrasebook

Product Description   HNHSoft dictionaries are available for Desktop Windows, Windows Mobile PC, Windows Mobile Smartphone, BlackBerry and Java (J2ME) phones. The English-Chinese Dictionary includes 90,000+ English entries and 50,000+ Chinese entries. It supports both traditional and simplified Chinese. Their English Dictionary is a comprehensive English dictionary and thesaurus. It contains over 150,000+ English head words.

Talking Phrase Books are available for Windows Mobile Pocket PC, Smartphone, Palm OS, and BlackBerry. They enable the user to learn Chinese, Cantonese, Japanese, and Korean, or use it as a translator during travel.

Asian language Talking Phrase Books include China2Go (Mandarin and Cantonese), Japan2Go, and Korea2Go. European language Talking Phrase Books include: France2Go, Germany2Go, Spain2Go and Italy2Go.

License(s)   Proprietary

Status   In use

Target Users   General population

System Requirements   NA

Developer/Owner Details

Name   HNHSoft

Contact URL   http://www.hnhsoft.com/

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

<u>Product Summary</u>

Name   Libravox

Product URL   http://libravox.org/

Product Description   Libravox is a digital library of free public domain audio books, read by volunteers. Most of the recordings are in English; however, other languages are also available, including German, Spanish, Italian, Hebrew, Finnish, Latin and Old English. Libravox.org will assist the user to find audio books, some of which are free.

Other resources available include Audio Books for Free, Free Classic Audio Books, Gutenberg: The Audio Book Project, Learnoutloud.com, AudioBooks.net, Simply Audio Books, Audible.com, Literal Systems and Ray Kay Audio Books. Audio books can be downloaded from these various sites to audio mobile devices such as mp3.

License(s)   Proprietary

Status   In use

Target Users   General population

System Requirements   NA

<u>Developer/Owner Details</u>

Name   LibraVox

Contact URL   http://libravox.org/

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	LingvoSoft Software
Product URL	http://www.lingvosoft.com/info/software/Phrasebooks/?atid=2437
Product Description	This is language learning software that can be used with Windows Mobile Pocket PC, Windows Mobile Smartphone, Windows, Palm OS, Symbian and a large number of other devices. It includes a dictionary, flash cards, phrasebook, and a picture dictionary.
	The LingvoSoft Talking PhraseBook features the natural voice of native speakers. The Talking PhraseBook includes about 3,000 frequently used phrases organized into 15 topics. There are several options for practicing each phrase. The PhraseBook is available in almost fifty different languages.
License(s)	Proprietary
Status	In use
Target Users	General population
System Requirements	NA

Developer/Owner Details

Name	LingvoSoft
Contact URL	http://www.lingvosoft.com/
Type	Private Sector
Country	United States of America

SOFTWARE PRODUCT

Product Summary

Name	Mobipocket
Product URL	http://www.mobipocket.com/en/HomePage/default.asp?Language=EN
Product Description	Mobipocket technology enables a person to read books on a PC, PDA or a smartphone by installing the Mobipocket Reader software and by downloading ebooks.
	More than 40 thousand titles are available on the Mobipocket online eBookstore including novels, dictionaries, medical ebooks, eLearning, ebooks among others.
	The Mobipocket Reader supports PC, Windows mobile, PalmOs, Pocket PC, Symbian, Blackberry. The reading experience is similar to a paperback. Reading is page by page (no scroll bars). Pages are turned by touching the screen. The text is justified. Bookmarks allow the reader to return to the last page read. There is a cover page and a table of contents.
License(s)	Open Source
Status	In use
Target Users	General population
System Requirements	PalmOs, Psion, Franklin eBookMan, Windows CE, Windows Mobile,

Developer/Owner Details

Name	Mobipocket
Contact URL	http://www.mobipocket.com/en/HomePage/default.asp?Language=EN
Type	Private Sector
Country	United States of America

Organizational Training/Informal Learning

SOFTWARE PRODUCT

Product Summary

Name Inveneo

Product URL http://www.inveneo.org/

Product Description Inveneo, is a non-profit social enterprise. Through its Certified ICT Partner (ICIP) program, it recruits, trains, certifies and supports in-country information and communications technology (ICT) professionals in remote and rural communities in the developing world. The purpose is to improve the availability, affordability, and local support levels for ICTs professionals. Inveneo launched this program in East Africa with support from 50x15, a global initiative founded by Advanced Micro Devices, Inc. (AMD) and whose goal is to provide 50 percent of the world's population with affordable Internet access and computing capability by the year 2015.

Inveneo has created a breakthrough model to serve remote and rural communities in developing countries with ICTs. Inveneo does this by designing, integrating, deploying and supporting solutions (hardware/software/power) for NGOs (Non-Governmental Organizations), local governments, and private entities. This enables them to build capacity for education, economic development, healthcare, relief and other services. Inveneo's systems are affordable, open, highly sustainable and designed specifically for the challenging physical and operating environments that these organizations often face.

The first system was released by Inveneo 2006. It is an ultra-low-power PC and communications system designed to provide computing, Internet access, telephony (VoIP), and regional wireless (WiFi) broadband for rural villages with little or no access to grid power or affordable communications. Since then, Inveneo has 20 projects either completed or underway using this system or a custom designed solution for schools, economic development projects and relief organizations.

Appropriate technology is only part of the solution. For rural ICTs to be truly sustainable, there must be a network of in-country experts who can install and support these systems. The Inveneo ICIP program addresses this critical need. Inveneo will recruit, train, and certify local Inveneo Certified ICT Partners to build a network that can distribute, install and support ICT projects for the organizations Inveneo serves. This approach reduces the cost of installation and support by at least 60 percent, dramatically increases service speed and quality, and provides the local partners with significant revenue opportunities.

In 2006, Inveneo established a small, successful pilot program in Uganda by partnering with local experts to provide installation and support. Today, this program has five projects completed or underway with two Ugandan partners, Linux Solutions (www.linuxsolutions.co.ug) and Keyskills.

Key ICIP program elements include:

--Recruiting and screening of local, highly talented ICT professionals, who are typically small-business entrepreneurs with 2 to 20 employees.

--Providing qualified entrepreneurs with a two- to three-week intensive, advanced training and certification process.

--Classroom and hands-on training courses that focus on deploying rural solutions and cover IT networking, long-distance wireless (WiFi) networking, Linux/Open Source desktop management, VoIP telephony and power design.

--Offering access to ongoing technical and business support resources for proposal development and technical-issue resolution, along with on-going training and information on rural ICTs to certified entrepreneurs who become ICIPs.

--Enabling ICIPs to generate and retain 100 percent of fees for services they provide to Inveneo clients, and to receive discounts on equipment purchased from Inveneo for resale.

To date, Inveneo has 20 projects completed or underway in Uganda, Rwanda, Ghana, Mali, Guinea Bissau and Burkina Faso. These projects serve schools (50%), economic development groups, telecenters, and relief camps in 66 communities. They will reach over 60,000 people, directly or indirectly, with ICTs. The goal is to serve over 4,000 communities over the next three years.

Inveneo and their local partner, Linux Solutions, played a primary role in managing the installation of ICT centers in three secondary schools for AMD and their partners the New Partnership for African Development (NEPAD) and the Uganda government.

License(s)	Proprietary
Status	In use
Target Users	Schools and general population
System Requirements	Any PDAs, Laptops, PCs

Developer/Owner Details

Name	Inveneo
Contact URL	itpartners@inveneo.org and www.inveneo.org/?q=itpartners
Type	Private Sector
Country	Uganda and other African countries (see text)

SOFTWARE PRODUCT

Product Summary

Name   CAERUS

Product URL   http://portal.cetadl.bham.ac.uk/caerus/default.aspx

Product Description CAERUS is a complete context aware educational resource system for visitors to outdoor tourist sites and educational centers. CAERUS consists of a handheld delivery system and a desktop administration system. It provides a visual interface to add new maps, areas of interest, add multimedia tours, and deliver this information to visitors through Pocket PC devices with GPS capability.

From an educational perspective, CAERUS enables individuals to make the most of their visit. Using CAERUS gives each visitor a personal guide to provide information and give the background of what is being observed. This handheld application also provides content files in any supported mobile device that enhances location-based activities such as observation and data collection. Each individual's experience can be recorded and evaluated, making it particularly useful for student visitors.

In May 2005, fourteen participants used CAERUS in the University of Birmingham's Botanic Garden at Winterbourne. The participants reported high satisfaction with the location-based content provided and, in particular, the audio commentary. Younger and older visitors differed in opinion as to how easy CAERUS was to learn and the clarity of the user interface. The main learning outcome of CAERUS was the participants' increased engagement with the physical surroundings.

License(s)   NA

Status   In use

Target Users   General population, students

System Requirements The following Pocket PC and GRS devices are supported: NAVMAN PiN (Pocket PC 2003 with integrated GPS), Compaq iPAQ H3760 (Pocket PC 2000) and NAVMAN GPS 3000, Mio 168 DiGiWalker (Pocket PC 2003 with integrate GPS) and hp iPAQ h5500 Series (Pocket PC 2003) and NAVMAN GPS 3300 Terrain

Developer/Owner Details

Name   University of Birmingham

Contact URL   http://caerus-info@bham.ac.uk

Type   Academic – Government – Private Sector Partnership (Birmingham City Council and Microsoft UK Limited)

Country   United Kingdom

SOFTWARE PRODUCT

Product Summary

Name   Meridian Anywhere 3.0

Product URL   http:/www.meridianksi.com/products/meridian_player.asp

Product Description   Meridian Anywhere 3.0 makes online learning available to employees without Internet or network access. Organizations are able to deliver SCORM-conformant content to anyone and anywhere without connectivity to the organization's learning management system. This versatile tool can be used as a mobile Learning Management System (LMS) application, a remote learning solution, or a multi-user learning kiosk. Meridian Anywhere is the first mobile LMS application to be certified for SCORM 2004 conformance and is also certified for conformance with SCORM 1.2.

Meridian Anywhere is the winner of the prestigious *Brandon-hall.com Excellence in E-Learning Award.* It provides learning to the decentralized workforce, such as sales professionals and others who are mostly in the field. Users can download courses during periods of connectivity or load them directly from a CD-ROM or LAN.

Students can take courses on their desktops without connecting to the Internet, network, or LMS. Data is synchronized with the LMS once online connectivity is re-established, or an administrator can import the data to the LMS via a floppy disk or CD-ROM.

License(s)   Proprietary

Status   In use

Target Users   Employees, administrators, students

System Requirements   NA

Developer/Owner Details

Name   Meridian Knowledge Solutions

Contact URL   http://www.meridianksi.com/about/contact_us.asp

Type   NA

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   mLearning Pro

Product URL   http://www.onpointdigital.com/new_site/products_mlearning.htm

Product Description   mLearning Pro is a new software module that extends OnPoint Digital's Learning Management System (LMS/LCMS) range of products to automate the delivery of content to today's diverse mobile devices. With mLearning Pro, organizations can easily publish, notify, and deliver learning content to mobile users. They can track course completion and assessment results regardless of their platform, location, or device. Organizations can now easily incorporate their mobile workforce into the company's active learning community. The software provides an automated way for authors to reformat and publish device-specific content stored in the LCMS database. They can easily route the content to the appropriate recipients using an integrated WAP server – delivering just the right format of content to each mobile user/device.

License(s)   Proprietary

Status   In use

Target Users   Organizations' training and development staff

System Requirements   Palm OS, Windows NT, ME or Pocket PC 2002

Developer/Owner Details

Name   On Point Digital, Inc.

Contact URL   http://www.onpointdigital.com/

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   SyberWorks Training Center – Mobile Learning

Product URL   http://www.syberworks.com/product-stc.htm#mobile_learning

Product Description SyberWorks has created one seamlessly unified Web-based Learning Management System (LMS). This complete product suite is designed to facilitate the development, dissemination, measurement, and management of corporate knowledge to improve productivity and performance.

SyberWorks Training Center now offers Mobile Learning, which allows organizations to install their online courses locally. Since a user does not have to be connected to the Internet to run the course, training can occur virtually anyplace and at any time. This makes delivery of training programs highly flexible and ultimately more valuable to an organization.

Mobile Learning differs from CD-ROM based training in two ways. First, the course can be installed from a CD-ROM or downloaded from the Internet so the user always has the most up-to-date version of the course. But control over the use of the course is always maintained, because the course won't run unless it receives an authorization string from the LMS. Authorization strings have a shelf life of 1 to 999 hours. Second, after the user is finished with a lesson and reconnects to the network, results can be uploaded back to the LMS.

Mobile Learning enables an organization's training materials to reach many more users thereby increasing organizational effectiveness. Mobile Learning is an important option if some or many of the users have low bandwidth connections to the Internet. For course vendors, Mobile Learning can be a significant advantage over competitors.

License(s)   Proprietary

Status   In use

Target Users   Corporate trainers, training materials developers

System Requirements Microsoft's Internet Information Server (version 4.0 or higher)
MicrosoftSQL Server or Microsoft Access

Developer/Owner Details

Name   SyberWorks

Contact URL   http://syberworks.com/

Type   Private Sector

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	Westlaw Training by Phone
Product URL	http://west.thomson.com/westlaw/training/calls/
Product Description	Free Westlaw telephone training sessions can be tailored to the user's experience level, area of specialization, and research needs. Account managers and telephone trainers are all attorneys themselves. They can teach users how to retrieve specific documents, formulate queries, review search results, and print them.
	Training sessions are also available for West's citation tools and the Premise and LawDesk CD-ROM research libraries.
License(s)	Proprietary
Status	In use
Target Users	Law professionals and paraprofessionals
System Requirements	NA

Developer/Owner Details

Name	Thomson West
Contact URL	http://west.thomson.com/
Type	Private Sector
Country	United States of America

School Administration

SOFTWARE PRODUCT

Product Summary

Name   ChildCheck

Product URL   http://www.dataset.ie/

Product Description   ChildCheck is a school administration software package for primary schools that controls pupil absenteeism. The product incorporates an automatic same day mobile phone text message system that notifies parents or guardians that their child is absent from school. Prompt and systematic same day notification of every absence is the first step in absenteeism control. There is some evidence that both parents/guardians and students understand that with same day text messaging, no absence will be overlooked. In a recent TV interview, students in one school admitted that with the introduction of same day text messages to their home, they would be far less likely to be a truant.

Same day automatic text messaging eliminates the tedious and costly daily search for phone numbers making telephone calls or sending written notification of the absence to the home. Many schools acknowledge that it is not possible to ensure that each parent or guardian is notified of every absence.

ChildCheck also produces reports on the control of absences as required by Ireland's **Education Welfare Act.**

License(s)   Proprietary

Status   In use

Target Users   School administrators, parents/guardians

System Requirements   NA

Developer/Owner Details

Name   Dataset IT Systems

Contact URL   http://www.dataset.ie/

Type   Private Sector

Country   Ireland

SOFTWARE PRODUCT

Product Summary

Name	Fifedirect
Product URL	http://www.fife.gov/uk/atoz/index.cfm?fuseaction=service.display&objectid=60A6360-E7FE-C7EA-09771CB865412C88
Product Description	Fifedirect offers free school closure alerts to parents, pupils and other people affiliated with the Fife County school system. The mobile text alert service lets residents know about disruptions to the school schedule due to bad weather. As mobile phones become more and more common, and the popularity of text messaging is increasing not just among young people, but also their parents, Fifedirect becomes an invaluable communications tool on school closures. As soon as a head teacher registers a school's closing, information is sent automatically to a number of outlets, including:

      radio and television stations
      Ceefax and Teletext
      the council's winter line
      personal email addresses
      pre-registered mobile phone numbers.

License(s)	NA
Status	In use
Target Users	Fife County community
System Requirements	NA

Developer/Owner Details

Name	Fife Council
Contact URL	http://www.fife.gov.uk/
Type	Government
Country	Scotland, United Kingdom

SOFTWARE PRODUCT

Product Summary

Name   SMS Online – Berkshire College of Agriculture, United Kingdom

Product URL   http://www.m-science.com/products/sms-online.php

Product Description   SMS Online, developed by M:Science, is a web-based interface that allows sending SMS messages to individuals or pre-defined recipient groups through any web browser in the world. It provides a number of important features to manage messages and message templates.

Berkshire College of Agriculture is using SMS OnLine to provide 2-way communications between college staff and students. SMS OnLine is being used for appointment reminders. Faculty can communicate with pre-configured groups of students or write the messages to individual students. Providing there is an Internet connection, faculty and staff can access their accounts from anywhere in the world.

Status   In use

Target Users   Public and private organizations

System Requirements   NA

Developer/Owner Details

Name   M:Science

Contact URL   http://www.m-science.com/

Type   Private Sector

Country   United Kingdom

SOFTWARE PRODUCT

Product Summary

Name   E2Campus

Product URL   http://www.e2campus.com/

Product Description   e2Campus is a web-based system offering a central interface that allows non-technical users to self-administer and manage time-sensitive communications to students, faculty, staff, campus security, first responders, volunteers, visitors, alumni, media and others.

Powered by the Omnilert Network, e2Campus works by sending an omnilert to all standard text communication devices: mobile phones (via SMS text messages), email accounts, RSS readers, text pagers, wireless PDAs, web site pages, as well as digital signage and alert beacons across the campus. It is a cross-carrier mobile content service, so it does not matter which phone providers and subscribers use.

How to Start Sending Alerts in 30 Minutes or Less:
1. Receive an ID and password from e2Campus
2. Create a group
3. Invite subscribers
4. Type and send alerts

e2Campus allows a school administrator(s) to send a message to ten or tens of thousands of people within minutes – without having to call anyone at e2Campus. Messages can be initiated from anywhere via the web or net-connected phone.

License(s)   Proprietary

Status   In use

Target Users   School administrators, students

System Requirements   Any PDAs, Cell Phones, Mobile hand held devices

Developer/Owner Details

Name   Omnilert, LLC

Contact URL   http://www.omnilert.com/notification_products.html

Type   Academic

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   MobileU

Product URL   http://mobileu.wfu.edu/

Product Description   MobileU is Wake Forest University's vision of using mobile technology to provide information when and where an individual wants it. Wake Forest became one of the first testing grounds for combination PocketPC phone devices on a college campus when it introduced MobileU in 2005.

MobileU began as a pilot program to test the efficacy of PocketPC phones in the academic and social life of students on a wireless college campus. MobileU continues to expand to include more students, faculty and staff, and more mobile device options. MobileU offers Wake Forest students, faculty and staff discounts on AT&T voice, data and messaging plans and a discounted purchase price for designated MobileU phone devices.

More than 100 Wake Forest students, and a dozen faculty and staff members participated in MobileU's first pilot phase. Ten of the students were residents in the University's Technology Quarters House, and nearly 50 were students enrolled in an introductory chemistry course. The remaining participants applied for the program and were selected from the student body at-large, to assure a diverse group. MobileU's second phase, during the 2006-2007 academic year, included approximately 200 students, faculty and staff on the University's Reynolds Campus. The program continues to grow as the University adds more devices and service plan options.

License(s)   Proprietary

Status   In use

Target Users   University students

System Requirements   Any PDAs, Cell Phones, Mobile hand held devices

Developer/Owner Details

Name   Wake Forest Research & Development

Contact URL   http://mobileu.wfu.edu/?page=what.mobileu

Type   Academic

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name   PDAs in Academic Libraries

Product URL   http://www.we.simmons.edu/-fox/pda/PDA_libraries_printing.ppt

Product Description   Many library services are now being provided through PDA mobile devices:
        Finding general library information
        Getting licensed books and reference materials
        Using electronic journals
        Using databases
        Using integrated library systems software for PDAs
        Borrowing hardware: devices and peripherals
        Using connectivity stations: synching and printing
        Services for librarians and library staff
        Asking reference questions
        Saving database and catalogue search results
        Filling out library forms
        Reading health news

License(s)   NA

Status   In use

Target Users   Students, faculty

System Requirements   PDAs

Developer/Owner Details

Name   NA

Contact URL   http://www.fox@simmons.edu

Type   Academic

Country   United States of America

SOFTWARE PRODUCT

Product Summary

Name	Rave Campus
Product URL	http://www.ravewireless.com/campus.shtml
Product Description	Rave Wireless is the leading provider of mobile applications and managed mobile phone services that improve communications, build community, and enhance academics and safety on college and university campuses.
	Rave Campus is a comprehensive mobile phone program that enables students, faculty and staff to get an institution-specific set of mobile applications and mobile phone programs.
	Rave Guardian, which is available as a part of Rave Campus, is a GPS-based campus safety application. Students activate a Rave Guardian timer on their mobile phones whenever they feel unsafe (e.g. about to cross the campus late at night). Students deactivate the timer when they safely reach their destination. Campus police are notified of the student's personal profile, date/time, and nearest GPS location only when the timer has expired and the student has **NOT** deactivated the timer.
	Rave Alert provides an easy and effective way to send broadcast messages to students, faculty and staff using any cell phone.
License(s)	Proprietary
Status	In use
Target Users	College/University community
System Requirements	NA

Developer/Owner Details

Name	Rave Wireless
Contact URL	http://www.ravewireless.com/
Type	Private Sector
Country	United States of America

This *Compendium of ICT Applications on Electronic Government* is a unique collection of current ICT applications being used directly by or in partnership with governments, governmental institutions and the private sector around the world to support administration and public service, while addressing governance challenges. The Compendium also presents private sector ICT applications that are available in the marketplace.

Volume 1 of the Compendium, the first in the series, focuses on m-technology software products and applications in the areas of health (m-health) and learning (m-learning) that are being used in both developed and developing countries. It is important to note that m-technology is evolving extremely fast. Some of the software applications presented may have already been modified and newer versions been released.