COMPENDIUM OF ICT APPLICATIONS ON ELECTRONIC GOVERNMENT

Volume 2:
Mobile Applications on Human Security and Business development

UNITED NATIONS

Department of Economic and Social Affairs

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New York, 2010

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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The designations contained in this compendium are not original content and are intended solely to provide information. The accuracy of this information cannot be guaranteed and the product descriptions provided are those of the product manufacturers and related groupings and does not imply the endorsement of the United Nations.

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

Foreword

At the United Nations World Summit in 2005, country leaders outlined a vision for a people-centered and inclusive information society, putting the potential of information and communications technology (ICT) at the service of development and addressing the new challenges of the information society. The onus to come up with new initiatives for ICT-led development, which ensure that everybody regardless of their socio-economic background has an equitable playing field, lies collectively on national governments, the private sector and civil society, on the one hand, and on international organizations and the donor community on the other. As a catalyst for achieving the Millennium Development Goals (MDGs), ICTs have been recognized and promoted by the United Nations as one of the key elements to increase socio-economic opportunities for all citizens from both developed and developing nations.

E-government, through the infusion of ICTs, can contribute significantly to the process of the transformation and development of a more cost-effective and efficient digital society and government. Furthermore, e-government and digitalization can enhance the speed and efficiency of operations by streamlining processes, lowering costs, enhancing service delivery and research capabilities, and improving documentation and record-keeping. However, the real benefit of e-government lies not in the use of technology as such, but in its application to the processes of transformation.

The incredible growth in the use of mobile phones demonstrates that they remain, and are likely to remain, the primary mode of telecommunication. In addition, the rising demand for multi-sectorial and multi-purpose applications is driving mobile phone developers and manufacturers to design 'smart' and highly personalized mobile devices and applications, which also become an important source of information and new channels for the delivery of digital services.

The Division for Public Administration and Development Management of the United Nations Department of Economic and Social Affairs is undertaking an initiative to collect a broad array of current ICT applications from almost all geographic regions of the world. The cases documented serve as a useful tool for government at all levels around the world, as well as for the private sector and civil society. The primary goal of this initiative is to provide information that will stimulate an even more rapid expansion of electronic government that will be more tailor-made to needs of citizens.

Volume 1 of Compendium of ICT Applications on Electronic Government focused on the use of mobile technology in the areas of health and learning. This Volume generated considerable international attention because of the practical utilization of its content at international and national levels by both developing and developed countries. This second volume focuses on the use of mobile technology, specifically m-technology software products and applications in the areas of human security and business development that are being used in both developed and developing countries. These products and applications are used by various groups, including m-government practitioners and researchers, government officials, policy makers and mobile IT solution providers in the areas of e-government, mobile business, mobile internet and public administration. To keep up with rapidly changing m-technology, this Compendium will be periodically updated both in printed form and electronically on the United Nations Public Administration Network (UNPAN), hosted on the United Nations Knowledge Portal on Public Administration.

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United Nations Department of Economics
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New York, December 2009

Acknowledgements

Contents

Contents – chapters in details

Chapter 1: Mobile Applications on Human Security

Contents – chapters in details (cont.)

Chapter 2: Mobile Applications on Business Development

Software Product Summary by Countries

Glossary of Technical Terms and Abbreviations

API

An Application Programming Interface is an interface implemented by a software program to enable interaction with other software, much in the same way that a user interface facilitates interaction between humans and computers. APIs are implemented by applications, libraries and operating systems to determine the vocabulary and calling conventions the programmer should employ to use their services. It may include specifications for routines, data structures, object classes and protocols used to communicate between the consumer and implementer of the API.

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".

CMMS

Computerized Maintenance Management System is also known as Enterprise Asset Management and Computerized Maintenance Management Information System (CMMIS). It schedules, tracks and monitors maintenance activities and provides cost, component item, tooling, personnel and other reporting data and history. The system can often be interfaced with production scheduling and cost systems, and may be used to follow preventive maintenance policies.

Connectivity

Is the linking among networks and computers.

DGPS

Differential Global Positioning System is an enhancement to Global Positioning System that uses a network of fixed, ground-based reference stations to broadcast the difference between the positions indicated by the satellite systems and the known fixed positions.

G3

The third generation of a product, typically hardware rather than software.

GIS

A geographic information system (GIS) integrates hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information.

GPL

General Public License

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.

GRX

GPRS Roaming Exchange

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.

HTML

Hypertext Markup Language is a cross-platform text-formatting system for creating web pages, including copy, images, sounds, frames, animation and more.

IP

The Internet Protocol is the method or protocol by which data is sent from one computer to another on the Internet.

ISP

Internet Service Provider

IVR

Interactive Voice Response is an interactive technology that allows a computer to detect voice and keypad inputs. It is used extensi vely in telecommunications allowing customers to access a company's database via a telephone touchtone keypad or by speech recognition. It is also being introduced into automobile systems for hands-free operation.

Java Application

A trademark used for a programming language designed to develop applications, especially ones for the Internet, that can operate on different platforms.

Glossary of Technical Terms and Abbreviations (cont.)

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.

MMS

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

Open Source

Software whose source code is published and made available to the public, enabling anyone to copy, modify and redistribute the source code without paying royalties or fees.

PDA

Personal Digital Assistant is a lightweight consumer electronic device that looks like a hand-held computer but instead performs specific tasks.

PDF

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

Platform Protocol

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

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.

SIM card

Subscriber Identity Module card is a small flat electronic chip on a plastic card that holds your phone number and account details.

SMS

Short Message Service (text messaging)

Spatial Dataset

A homogeneous collection of data that relates to a location and is managed as a single digital entity. Also known as Geospatial and Geographic Datasets.

SQL

Is a standard interactive and programming language for querying and modifying data and managing databases.

Throughput

In computing, this refers to the digital data per time unit delivered over a physical or logical link.

WAP

Wireless Application Protocol is designed to show internet contents on wireless devices such as mobile phones.

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.

WML

Wireless Mark-up Language is similar to HTML in many ways and serves a similar purpose. However, WML has been specially designed and optimized to take into account the constraints of mobile communications and mobile customer equipment such as cell phones and PDAs.

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

The Millennium Declaration set 2015 as the target date for achieving most of the Millennium Development Goals (MDGs), which established quantitative benchmarks to halve extreme poverty in all its forms.

As a catalyst for achieving the Millennium Development Goals, Information and Communication Technologies (ICTs) have been recognized and promoted by the United Nations as one of the key areas to bring socio-economic opportunities into the lives of disadvantaged populations from developing nations.

Today, the innovations and technological advances in the ICT field are far outpacing the evolution in development thinking and practice. Almost all governments across the world have embarked in a long process of continuously integrating ICTs into their development policies and programmes by formulating e-strategies and incorporating ICTs into poverty reduction strategies.

We live in the world where the use of technologies is fostering economic and social development at an unprecedented scale. Technology in the developing world is helping to close the digital divide, creating opportunities to meet long-standing challenges to international development goals.

The development of mobile communication technology has created a new avenue for information exchange capable of reaching out to a much greater number of people than traditional wired methods. We are witnessing an extraordinary explosion of mobile phone use in developing countries. People in rural communities can get a mobile phone much more easily than a desktop device. This technology has high potential to increase access to public services in areas where infrastructure constraints exist.

Mobile services are quickly emerging as the new frontier in transforming government and making it even more accessible and citizen-centric by extending the benefits of remote delivery of government services and information to those who are unable or unwilling to access public services through the use of mobile devices.

The transformative impact of what is now the fastest technology adoption in human history has had the most dramatic ramifications within some of our most under-served societies.

Mobile technologies are having a great impact on how we live our life, from personal relations to interactions in a society; and from the transformation of public sector to dynamics of economic development. Public demand for mobility, the efficiency and productivity gains of the public sector through mobility, lead to a natural move from e-Government to m-Government.

The use of wireless-network technologies and mobile devices (personal digital assistants, cell phones, wireless Internet connections, other wireless network systems, and other mobile devices) has spread rapidly. Government agencies use this technology to promote rapid information exchange intra- and inter-governmentally as well as between government and non-governmental entities (citizens, non-profit organizations, and private businesses). Governments have actively integrated mobile tech¬nologies into the delivery of public services, particu¬larly in the areas of health, education, public safety, finance, etc.

Today's ICT's innovations and technological advances are far outpacing the evolution in development thinking and practice.

With mobile penetration out-pacing fixed lines by more than 80% and significant investments in broadband infrastructure, mobile phones will soon be the main medium for accessing the Internet in developing countries. With 3.3 billion mobile users around the world today, and a growing users' base, the prospects and possibilities of using the mobile phones as a two-way service delivery platform are incredible. Increased availability of mobile devices and connectivity, together with the emergence of new mobile platforms and trends in convergence are exciting new opportunities on the horizon to enable delivery of a variety of rich content and services directly to users that were previously unreachable. The rapid growth in satellite and wireless connectivity is also making new last-mile solutions possible.

The impact that mobile phones have on the developing world is as revolutionary as roads, railways and ports, increasing social cohesion and releasing the entrepreneurial spirit that stimulates trade and creates jobs. Essentially mobile technology is a key infrastructure which can deliver a number of services reliably and cost effectively, bringing a closing of the digital divide and a rise in the standard of living. A new smartphones report from Juniper Research forecasts that these so-called 'smartphones' will account for 23% of all new handsets sold per annum by 2013. Driving interest in smartphones will be the proliferation of online stores selling specialized applications that will make these devices better suited to individual users' needs.

The mobile phone is becoming a key device used in the contexts of most ICT4D approaches. While internet access on the mobile phones is still constrained to the higher-end handsets that are still too expensive for the majority of mobile phones users in the developing world, there are encouraging signs that things are changing. Handset makers are addressing the low-end mobile data-capable and cheap phones. These devices now function as fundamental tools instrumental to billions of economic livelihoods.

Mobile technology holds great potential for the developing world, The use of mobile technologies in health, education, finance, safety and security, etc has increased tremendously. Day laborers repairing roads throughout Nairobi no longer need to congregate in the morning in central areas throughout the city waiting for prospective employers to collect them for the day's work. Instead, in many of these regions, daily labor is now organized via text messages. Mobile phones have become a necessity in everyday life for many disabled people. They enable the Deaf – Mute, Visually Impaired and other disability users to have access to e-mail messages and mobile Internet sites such as i-mode, EZ-web, and Yahoo! Mobile. Mobile finance and mobile commerce worldwide and in the African continent in particular has exploded due to the lack of fixed line capability and the demand from consumers for a cheaper medium of communication. SMS has developed as one of the lowest cost and easily payable communication mediums.

Given the unprecedented expansion of mobile networks, if mobile government is adopted many government services can be now made available on a 24x7x365 basis at any place in the world covered by mobile networks, which today means almost everywhere

By listing software for mobile applications in vital sectors such as health, education, security, finance, etc UNDESA/DPADM aims to provide a prime platform for presenting, exchanging and disseminating recent mobile software developments, ideas, applications and services in the field of m-Government among three essential constituents: public sector, their private sector partners and the researchers and developers without endorsing or promoting one versus the other.

This volume presents 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 public administration and public service, while addressing governance challenges. The volume is essentially a showcase for the available software applications that if adopted innovatively can bring up new developments in public administration services and business models.

Volume 2 of the Compendium, the second in the series, focuses on m-technology software products and applications in the areas of human security and business development that are being used in both developed and developing countries, and applies to various groups, including m-Government practitioners and researchers, government officials, policy makers and mobile IT solution providers in the areas of e-government, mobile business, mobile internet and public administration.

Methodology and Quality Assurance

The information presented here on the ICT Applications was acquired and compiled through several sources. Information is mostly garnered through extensive research, mission workshops, and/or provided by UNDESA Partners. Quality assurance is guaranteed through careful checking of credible sources, as well as related websites and statistics relating to each ICT Application. Most ICT Applications found here have a link to the product for the reader's convenience. ✑

Chapter 1

Mobile Applications on Human Security

The first chapter of the current Compendium (Volume 2) presents mobile technology applications for human security. These applications range from humanitarian relief, management of natural and environment-induced disaster management, and environmental protection.

As regards humanitarian relief, conflict continues to displace people from their homes and drive them into poverty. In this situation, relief organizations have to provide immediate humanitarian assistance to the refugees. Mobile technology proves advantageous in this regard. In disaster management, mobile technology also assumes an important and useful role. The evidence abounds of the utility of mobile technology.

In fact, mobile technology is transforming the way relief organizations operate to deal with emergency, humanitarian and other challenges. It can enable quick emergency communications and speedy responses of emergency relief workers, empower them with transmission of vital data when and where needed most, track the environmental impacts and help deliver food aid and other assistance in many effective ways.

The relationship between human security and environment is a close and complex one. Human security is closely tied to peoples' access to resources and vulnerability to environmental risks. This interconnectedness is one of the reasons that human security and environmental categories were selected for the collection of application cases.

The chapter provides an at-a-glance collection of 42 applications for humanitarian relief, disasters and other related relief efforts, which are currently being used or have recently been used. These cases are not meant to be exhaustive. They provide illustration of m-technology applications in these selected areas.

Environmental Management

Software product summary	**mobGAS – Mobile Climate Change Control**
Country	Europe
Focus	Environmental Management
Status	In use
License	Proprietary
Developer name	European Commission
System requirements	VSAT

http://ec.europa.eu/dgs/jrc/index.cfm?id=4420

Description

Check consumer's impact on climate change through mobile phones.

mobGAS is a mobile phone application available in 21 European languages that allows users to see how their daily choices are impacting on climate change. This smart technology is fun to use, offers practical tips and demonstrates to users that climate change is not just a distant issue for others to tackle, but something that they too can really influence.

Although easy to download and use, mobGAS is a sophisticated application that calculates an individual's emissions of the three main greenhouse gases – carbon dioxide CO_2, methane CH_4, and nitrous oxide N_2O. It does so by compiling basic information inputted by the user on, for example, how they regulated their heating, what means of transport they took or the household appliances they used. Calculations of individual emissions of greenhouse gases can be accessed by users at the touch of a button at any time of the day. A users-diary of daily, weekly and yearly emissions can be securely registered on a dedicated website that allows them to compare their results with other country or world averages. The application also includes an animation reflecting the user's contribution to the Kyoto Protocol target.

Software product summary	**WildObs Observer**
Country	Global
Focus	Environmental Management
Status	In use
License	Proprietary
Developer name	National Wildlife Federation (NWF)
System requirements	Compatible device: i-Phone or Android Phone

http://wildobs.com/

http://wildobs.com/

Description	WildObs (abbreviated from wildlife observations) is about sharing memorable encounters and putting them to work as part of wildlife conservation effortWith the WildObs Observer applications, users can capture what/where/when with a few touches, and easily record details of user experience. Uploading those encounters to customised WildObs database, when back in wireless or cellphone signal range, is automated.

Features list:

- Use it to record personal wildlife life-list
- Guide fellow nature lovers (young and old) to wildlife spots
- Do citizen-science in specific region
- Share that once-in-a-lifetime or funny encounter

Information about the Application:

- Automatically uses mobile device's location services (GPS or otherwise) to determine encounter's location.
- Works off-line for those remote locations. (Downloads species lists & images for fast/offline browsing.)
- Stores favorites and recent species, and allowing user to add species not yet in the database.
- Synchronizes with WildObs
- Posts into the National Wildlife Federation (NWF) Twitter stream.

Compendium of ICT Applications on Electronic Government – Volume 2

Environmental Management   Mobile Applications on Human Security   **1**

Software product summary	**Mobile Environmental Management System (MEMS)**
Country	Ireland
Focus	Environmental Management
Status	In use
License	Proprietary
Developer name	School of Computer Science and Informatics, University College Dublin, Ireland; Digital Media Centre, Dublin Institute of Technology, Ireland

http://arrow.dit.ie/dmcart/18/

Description	This is a web-based and mobile Environmental Management System (MEMS) prototype specifically tailored to perform context-aware queries and updating of spatial datasets.

Spatially enabled computing can provide situation aware assistance to both web-based and mobile users by presenting the right information at the right time, place, and situation using context-associated knowledge. Context associated knowledge is assembled by combining knowledge gained about information accessed in the past with the activities planned by the user, together with other situation dependencies (e.g. location) of these activities.

The MEMS datasets are provided by the Canadian Department of Fisheries and Oceans (DFO) and the prototype is customised to the specific needs of the Great Lakes Laboratory for Fisheries and Aquatic Sciences (GLLFAS) Fish Habitat Management Group's requirements for fish species at risk assessment.

Software product summary	**SarVision Applications in GPS Local Surveillance and Monitoring**
Country	The Netherlands
Focus	Environmental Management
Status	In use
License	Proprietary
Developer name	SarVision

www.sarvision.nl/index.php?page=local-surveillance

Description

SarVision has developed a cheap and easy system for local inspections, offering more flexibility, more detail and faster detection and response, as well as mapping capabilities. The system is almost completely built from cheap and widely available of-the-shelf components. It is based on ultra-light aircraft (ULA) equipped with GPS (global positioning system) and digital video camera. Work on a prototype imaging radar for biomass measurement and 3D tree mapping is ongoing. Due to the on-board GPS the system is particularly useful for repeated surveys over specific areas, as skilled pilots can easily re-fly the same routes even in unmarked terrain.

In Indonesia, the ultra-light aircraft survey system is currently maintained and operated by SarVision Indonesia. It is used in and near nature reserve areas to regularly monitor changes in human settlement (number, distribution and quality of houses) and land clearing for agriculture, to detect illegal mining, poaching camps and mill-sites inside the reserves and verify the expansion of roads into frontier areas.

Its most appealing use is for the inspection of changes detected by the high resolution radar monitoring system, collecting high quality legally acceptable evidence of illegal logging.

Additionally, it is possible to seamlessly put together and further analyse the videostills in order to map large areas at high resolution. For this product and other one-off mapping activities using other airborne systems such as AirSAR, DoSAR, see the airborne mapping section. ✎

Software product summary	**Mobile Environmental Sensing System Across Grid Environments**
Country	United Kingdom of Great Britain and Northern Ireland
Focus	Environmental Management
Status	In development
License	Proprietary
Developer name	Centre for Transport Studies, Imperial College London

http://bioinf.ncl.ac.uk/message/
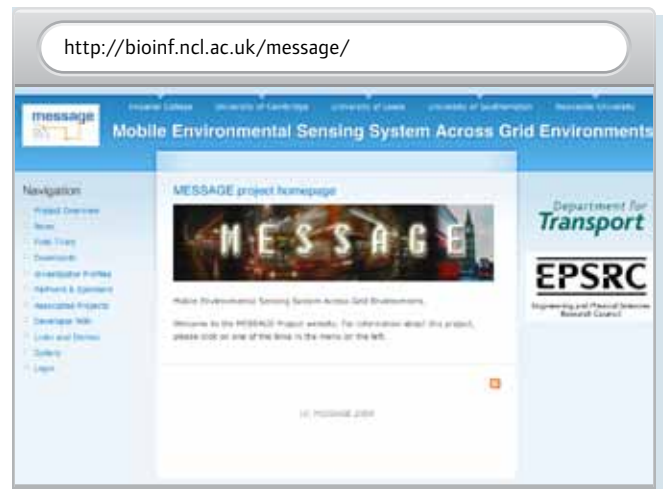
Description

The impact of road traffic on local air quality is of major concern in public policy, and in recent years has stimulated a substantial body of research. This is aimed at improving underlying vehicle and traffic management technology and informing public policy action. Recent work has begun to exploit the capability of a variety of vehicle-based, person-based and infrastructure-based sensor systems to collect real-time data on important aspects of driver and traffic behaviour, vehicle emissions, pollutant dispersion and concentration, and human exposure.

The project will develop the capability to equip vehicles and pedestrians with a range of environmental sensors, to track the position of these sensors in the urban environment (using a combination of GPS and wireless network positioning), to retrieve data from them in real time, to integrate these data with those from more conventional (static) environmental and traffic sensors and to estimate pollutant concentrations and individual exposure.

The case-study applications will be carried out in London, Cambridge, Gateshead and Leicester. They will build on the Universities' existing collaborative arrangements with the relevant local authorities in each site, drawing on substantial existing data resources, sensor networks and ongoing EPSRC and industrially funded research activities. These applications will address important problems that to date have been difficult or impossible to solve due to a lack of relevant data. These problems are of three main types: (i) measuring human exposure to pollutants, (ii) the validation of various detailed models of traffic behaviour and pollutant emission and dispersion, and (iii) the development of transport network management and control strategies that take account not just of traffic but also air quality impacts. The various case studies will look at different aspects of these questions and use a variety of different types of sensor system to do so. In particular, existing sensor networks in each city will be enhanced by the selective deployment of a number of new sensor types (both roadside and on-vehicle/person) to increase the diversity of sensor inputs.

Software product summary	**Piqqo Projects**
Country	United Kingdom of Great Britain and Northern Ireland
Focus	Environmental Management
Status	In use
License	Proprietary
Developer name	Piggo

http://www.piqqo.com/

Description	Piqqo Projects is an online service for presenting carbon reduction projects. This application lets user view exciting and meaningful carbon reduction projects from around the world.

Piggo's mission is to drive action on climate change by creating awareness and understanding in a cool, fun and engaging way.

Features:

- Multimedia showcase including videos and photos
- Insight into the technologies and methodology used
- Full details of how reductions happen
- Piqqo Wikipedia page for busting the carbon jargon
- Rate projects and flag users' favorites
- Keep up to date with project news and developments

Carbon Reduction Projects:

- Carbon reduction projects reduce carbon dioxide in the atmosphere by either replacing activities that previously produced carbon or absorbing carbon already in the atmosphere.
- There are lots of different types of carbon reduction projects, from a wind-farm in India replacing power from a coal-fired power plant, to a reforestation project in Peru, restoring native habitat and absorbing CO2 from the atmosphere.
- Buying an offset from a carbon reduction project means you are funding a project that could not otherwise have happened. This project reduces CO2 in the atmosphere to balance the carbon produced by your product. ✐

Software product summary	**Elk River Watershed Improvement Association Online GIS**
Country	United States of America
Focus	Environmental Management
Status	In development
License	Proprietary
Developer name	Elk River Watershed Improvement Association

http://www.i-maps.com/elk-river/elk-river-map.html

Description

The Elk River Watershed Map is an online geographic information system for the Elk River Watershed Improvement Association (ERWIA). The ERWIA promotes public education and environmental improvement projects concerning the Elk River and its tributaries in Southwest Missouri, Eastern Oklahoma, and Northwestern Arkansas.

The Elk River and its tributaries are outstanding recreational clear water streams that begin in rural farm pastures and converge through the forest covered hills of the Western Ozarks. While most of the watershed is dominated by farms and forest, portions of the land are being transformed by explosive urban growth such as that surrounding the international headquarters of Wal-Mart in Bentonville, AR, and the popular retirement community of Bella Vista, AR. Concentrated animal feeding operations associated with the area's poultry industry are also impacting the watershed.

The Elk River Watershed Map is provided as an aid for public education and discussion of issues concerning water quality protection and environmental improvement in the Elk River Watershed. The online GIS features 12-digit (HUC12) USGS Hydrologic Unit Code watershed boundaries and 1:24000 scale USGS National Hydrography Dataset stream centerlines that conform to the map's shaded relief topography. Water quality data and other environmental data will be added to the map as development of the GIS continues. ✐

Software product summary	**Epicentral**
Country	United States of America
Focus	Environmental Management
Status	In development
License	Proprietary
Developer name	Penn State Department of Geosciences

http://eqseis.geosc.psu.edu/~cammon/Tools/iEpicentral.html

http://eqseis.geosc.psu.edu/~cammon/Tools/iEpicentral.html
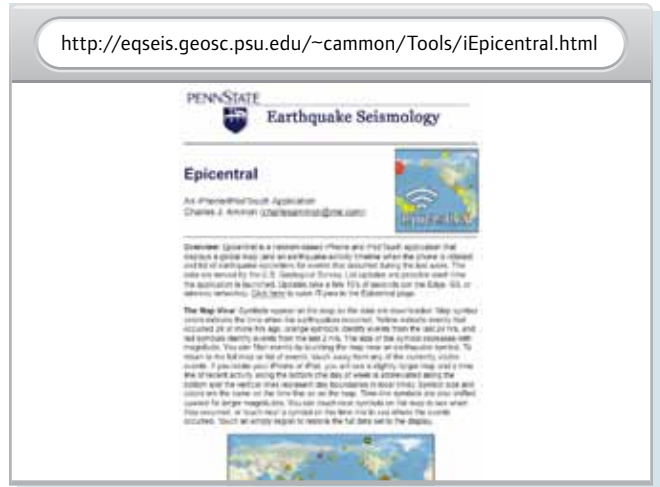
Description

Epicentral is a network-based application that displays a global map of earthquake epicenters for events that occurred during the last week. List updates are possible each time the application is launched. Updates take a few 10's of seconds (on the Edge, G3, or wireless networks). The information can be browsed graphically and in tabular format.

The data are served by the U.S. Geological Survey. For each event, links are provided to connect to the event-specific USGS earthquake information page, search Google news, or a pin on Google Maps (the Maps app on the iPhone).

Users will see that information on small earthquakes (magnitudes less than about 4.0) is available only in regions where the USGS and their collaborators maintain dense seismometer networks, such as California, Alaska, Puerto Rico, etc.

Software product summary	**ESRI's ArcPad**
Country	United States of America
Focus	Environmental Management
Status	In use
License	Proprietary
Developer name	Wind Environmental Services, LLC

http://www.windenvironmental.com/index.php?option=com_content&&id=107&Itemid=233

Description

ESRI's ArcPad software is a mobile geographic information system (GIS) technology.

ArcPad provides database access, mapping, GIS, and global positioning system (GPS) integration to users out in the field via handheld and mobile devices. ArcPad makes field data collection fast and easy, improves data accuracy, and provides immediate data availability and validation. ArcPad leverages existing mapping and GIS software systems and databases. There is no need to convert data to unique portable formats. When a user is finished editing data in the field, changes and additions can be uploaded into the master database in the office. Data can also be provided from the Internet via wireless technology. GPS or differential global positioning system (DGPS) receivers can optionally be added, facilitating direct data capture. Data is now immediately available and validated in the context of an actual map. ArcPad is the low-cost solution for data capture projects in the field. ArcPad enables specialized mapping and data collection in a wide range of industries and applications including power pole maintenance and meter reading for utility companies, vehicle tracking, mineral exploration, habitat studies, crop management, and property damage assessment.

ArcPad Application Builder: Effective mobile GIS workers require applications and tools that have been customized for a specific field task or project. ArcPad Application Builder is the development framework for creating custom solutions for mobile GIS applications and tasks.

ArcGIS mobile ADF: ArcGIS mobile ADF is an API to develop applications on windows mobile platform and hardware such as Pocket PC and smartphones

ArcPad Street Map: ESRI's ArcPad StreetMap is designed to maximize the flexibility, productivity, and efficiency of mobile GIS users. ArcPad StreetMap integrates high-quality U.S. street and location data, geocoding, and routing within the existing functionality of ArcPad.

Software product summary	**iFeltThat Earthquake and Tsunami Warnings**
Country	United States of America
Focus	Environmental Management
Status	In development
License	Proprietary
Developer name	Independent: DannyG

http://dannyg.com/iapps/iFeltThat.html

http://dannyg.com/iapps/iFeltThat.html

Description

iFeltThat retrieves information directly from multiple official sources to show users microquake activity as low as magnitude 0.1 in most U.S. regions. Earthquake lists for U.S. regions show more precisely where an event occurred (not just "Northern California," but "5 mi SE of Santa Rosa, CA").

In addition to 23 region-specific event listings around the world, iFeltThat v.2 features a Nearby region, which uses the current location as a center point. Users may add an unlimited number of center points to keep an eye on seismic activity near family and friends down to magnitude 1.0 in the U.S. (or 4.5 elsewhere).

Users may view single-event and interactive region-wide maps in roadmap or satellite hybrid styles. All maps are pinch-zoomable and draggable, just like the Maps app. Optional one-touch zoom buttons in detail maps let users zoom in and out quickly for one-handed operation while on the go.

If a USGS Shake Map is available for an event, a special icon appears in that event's detail view. Tap the icon to see the Shake Map within iFeltThat. In fact, all related web pages (including direct access to tsunami warnings) appear inside the app (portrait and landscape). Also from inside the app, users may send an email with info, links, and a screenshot of an event detail screen/map to anyone.

Users can also customize which four regions are ready to view at a single tap on the bottom bar. For each region list, the minimum magnitude threshold and default map zoom level can be set.

Software product summary	**INRIX Location-based Environment Management Application**
Country	United States of America
Focus	Environmental Management
Status	In use
License	Proprietary
Developer name	INRIX, Inc.

http://www.inrix.com/pdf/INRIX%20Mobile%20Industry%20Solutions.pdf

INRIX Mobile Industry Solutions.pdf

MOBILE DEVICES

INDUSTRY SOLUTIONS

INRIX® THE LEADING PROVIDER OF TRAFFIC INFORMATION

Market Need
Market demand for location-based services is driving an entire new generation of mobile applications for consumers and businesses. Wireless operators and mobile application developers are searching for innovative, "sticky," geo-aware applications to differentiate their offerings and increase ARPU.

INRIX® traffic solutions enable the delivery of high value functionality such as personalized SMS traffic alerts, dynamic routing based upon real-time and predictive traffic flow, and metropolitan map displays showcasing real-time speed and incidents. The bottom line: INRIX traffic services can help generate customer loyalty and support your subscriber growth models by providing personalized, actionable, and reliable traffic information.

Consumer Interest in Traffic Alerts Service at $4.95/Month

24%	28%	31%	44%
Total	1+ Cellular Calls	$100K Income	4+ Cellular Calls

Solution Features
INRIX delivers focused solutions for mobile devices. Key features include:
- White label mobile traffic application for smartphones and feature phones or XML-based traffic service data feeds
- High-quality, nationwide real-time reporting of traffic flow information, including proprietary error detection and correction of flow sensor data
- Real-time reporting of traffic-related incidents, construction alerts, and events from Clear Channel's Total Traffic Network, with comprehensive nationwide coverage of over 122 metropolitan areas
- A unique method of using real-time and predicted traffic flow for dynamic routing, taking into consideration secondary and tertiary road levels for local detours, and replacing inaccurate speed limits as a reference
- Ability to enable personalized SMS traffic reports that send changing traffic condition alerts, commuter route status, and other traffic status information based on specific user profiles
- Comprehensive coverage of metropolitan markets from coast-to-coast
- Network connectivity support for GSM/GPRS/EDGE, CDMA/W-CDMA, FLO, DVB-H and DMB

Description	Market demand for location-based services is driving a new generation of mobile applications for consumers and businesses. Wireless operators and mobile application developers alike are searching for innovative, "sticky" location-based applications to differentiate their offerings and increase average revenue per user (ARPU).

INRIX's solutions enable the delivery of valuable functionality such as personalized SMS traffic alerts, dynamic navigation based on real-time and predictive traffic flow, and interactive map displays with real-time speeds and congestion alerts. These solutions can help generate customer loyalty and support subscriber growth by providing personalized, reliable and actionable traffic information.

Key features for wireless operators include:

- A "white label" mobile traffic application for smartphones/feature phones or XML-based traffic service data feeds
- High-quality, nationwide real-time reporting of traffic information, including proprietary error detection and correction of road sensor data
- The industry's most comprehensive coverage of metropolitan areas throughout the United States
- Dynamic navigation using real-time and predicted traffic conditions
- Highly personalized SMS alerts with traffic conditions, route status and other information
- Accurate routing on embedded navigation systems without network connectivity
- Compatibility with all major map databases and Traffic Message Channel (TMC) referencing
- Optimized XML feeds for low bandwidth communications.

Software product summary	**Integrated Mobile GIS and Wireless Internet Image Servers for Environmental Monitoring and Management**
Country	United States of America
Focus	Environmental Management
Status	In development
License	Proprietary
Developer name	San Diego State University

http://map.sdsu.edu/mobilegis/

http://map.sdsu.edu/mobilegis/

Description

Natural habitat preserve managers and scientists can access the Internet map servers via their mobile devices, such as pocket PC's, notebooks, or personal dig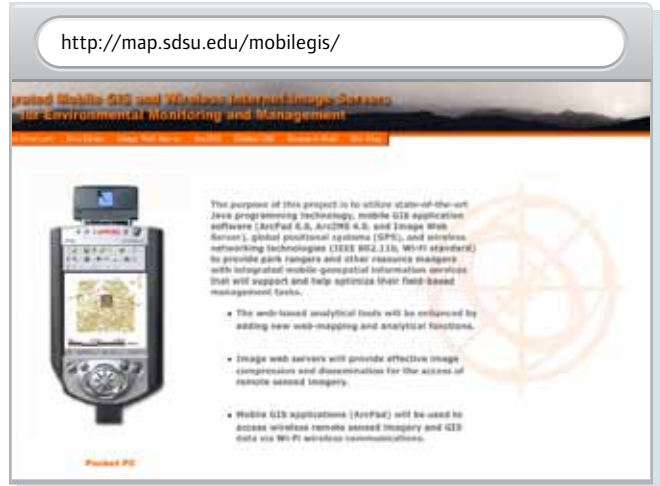ital assistants (PDA's) during their field trips. Monitoring and change detection of natural habitat areas can be accomplished in real time by integrating GPS, wireless communication, and Internet Mapping facilities.

Implementation of tools for mobile GIS applications via wireless communications would simultaneously provide several functions expressly desired by users:

- Provide a working prototype for the development of mobile GIS solutions. This prototype will be used to demonstrate the potential capability for field workers, such as park rangers and other resource managers to access and update geospatial information
- Provide wireless web-based mapping facilities for displaying remote-sensing images and geo-spatial data for natural habitat management
- Provide managers with integrated GPS/GIS/remote-sensing capabilities to perform critical real-time monitoring and analysis that is essential to tracking habitat conditions and the status of preserves.

Software product summary	**Mobile National Hurricane Centre (NHC)**
Country	United States of America
Focus	Environmental Management
Status	In use
License	Proprietary
Developer name	General Public

http://www.nhc.noaa.gov/index.shtml

Description	National Hurricane Centre(NHC) offers the following information to those customers with basic HTML and/or Wireless Application Protocol (WAP) capable cellphones, PDAs, or other mobile devices:

- Tropical Cyclone text advisories and graphics
- Aircraft reconnaissance messages
- TAFB marine text forecasts and discussions
- Satellite imagery courtesy of NOAA's Satellite Services Division

Two versions of NHC's mobile web pages are available: basic HTML and WAP. To view these mobile pages, you will need a cellphone or PDA equipped with a data plan from your wireless service provider. The basic HTML pages can be viewed in a regular web browser, but you can also simulate the NHC WAP pages if you are using the Mozilla Firefox web browser.

Mobile NHC home page in WAP (WML)* format:

- www.nhc.noaa.gov/index.wml

Other NWS Mobile Weather Links:

- weather.gov in basic HTML: mobile.weather.gov
- weather.gov in WAP (WML)* format: cell.weather.gov

Software product summary	**Reality Mining – Use of machine-sensed environmental data**
Country	United States of America
Focus	Environmental Management
Status	In development
License	Proprietary
Developer name	Massachusetts Institute of Technology (MIT)

http://reality.media.mit.edu/

http://reality.media.mit.edu/

Description

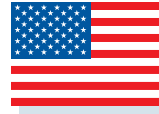Reality Mining defines the collection of machine-sensed environmental data pertaining to human social behavior. This new paradigm of data mining makes possible the modeling of conversation context, proximity sensing, and temporospatial location throughout large communities of individuals. Mobile phones (and similarly innocuous devices) are used for data collection, opening social network analysis to new methods of empirical stochastic modeling.

The original Reality Mining experiment is one of the largest mobile phone projects attempted in academia. The research agenda takes advantage of the increasingly widespread use of mobile phones to provide insight into the dynamics of both individual and group behavior. By leveraging recent advances in machine learning, MIT is building generative models that can be used to predict what a single user will do next, as well as model behavior of large organizations.

MIT has captured communication, proximity, location, and activity information from 100 subjects at MIT over the course of the 2004-2005 academic year. This data represents over 350,000 hours (~40 years) of continuous data on human behavior. Such rich data on complex social systems have implications for a variety of fields. The research questions we are addressing include:

- How do social networks evolve over time?
- How entropic (predictable) are most people's lives?
- How does information flow?
- Can the topology of a social network be inferred from only proximity data?
- How can we change a group's interactions to promote better functioning?

Software product summary	**Trimble Mobile GIS Application**
Country	United States of America
Focus	Environmental Management
Status	In use
License	Proprietary
Developer name	Trimble Navigation Limited

http://www.trimble.com/mgis_mobilegis.shtml

http://www.trimble.com/mgis_mobilegis.shtml

Description

Mobile GIS is the use of geographic data in the field on mobile devices. It's an evolution of how the enterprise database is used and managed within an organization. Mobile GIS integrates three essential components; Global Positioning System (GPS), rugged handheld computers, and GIS software. Bringing these technologies together makes the enterprise database directly accessible to field based personnel – whenever and wherever it is required.

When firefighters or emergency workers are out managing the impacts of natural disasters they need to have current and accurate information to make decisions that will affect lives and resources. That's why mobile GIS is imperative; field teams can now respond to changing conditions and immediately make important management decisions to evacuate residents, change in-field management tactics, inform other crews of the magnitude of the disaster – all by using up-to-the-minute data.

With the streamlined workflow of mobile GIS, emergency workers, inspectors, maintenance teams, utility crews, and many other field workers have real-time access to the enterprise data they require to get their job done with confidence, while they're in the field.

Public Safety and Law Enforcement

Software product summary	**Western Australia Police Service**
Country	Australia
Focus	Public Safety and Law Enforcement
Status	In use
License	Proprietary
Target users	Police Department
Developer name	Fujitsu

http://www.fujitsu.com/nz/casestudies/wa_police.html

http://www.fujitsu.com/nz/casestudies/wa_police.html

Description

Policing an area as vast as Western Australia is a testing business. To extend the long arm of the law in the world's geographically largest law enforcement jurisdiction, the Western Australia Police Service is looking to new technology for a helping hand. The potential benefits were demonstrated during a recent pilot project conducted by the WA Police in conjunction with Fujitsu and Microsoft – with emphatic results.

The pilot used hand-held computers and high-speed wireless communications to provide officers on patrol with direct access to databases holding information about people and vehicles. Compared to the existing voice radio queries, the technology boosted the number of queries conducted during routine police operations, leading to a dramatic improvement in identification of people who were wanted by police for matters as serious as armed robbery and drug trafficking.

Software product summary	**TETRA Digital Radio System**
Country	People's Republic of China
Focus	Public Safety and Law Enforcement
Status	In use
License	Proprietary
Target users	Aviation Safety
Developer name	Motorola

http://mediacenter.motorola.com/content/Detail.aspx?ReleaseID=10788&NewsAreaID=2

http://mediacenter.motorola.com/content/Detail.aspx?ReleaseID=10788&NewsAreaID=2
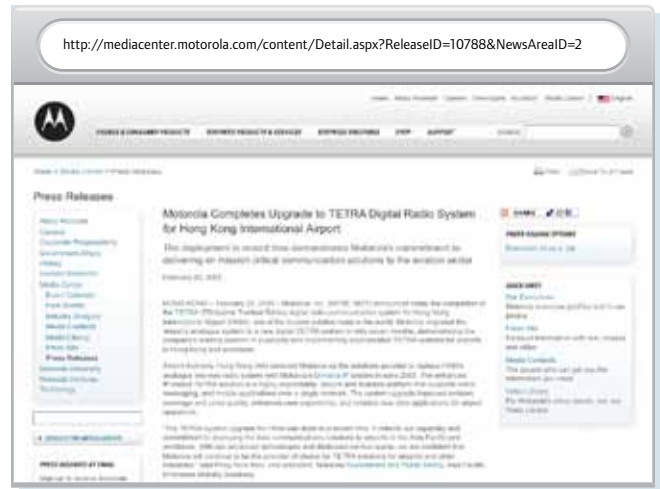
Description

Motorola, Inc. announced today the completion of the TETRA (TErrestrial Trunked RAdio) digital radio communication system for Hong Kong International Airport (HKIA), one of the busiest aviation hubs in the world. Motorola migrated the airport's analogue system to a new digital TETRA system in only seven months, demonstrating the company's leading position in supplying and implementing sophisticated TETRA systems for airports in Hong Kong and worldwide.

Airport Authority Hong Kong (AA) ed Motorola as the solutions provider to replace HKIA's analogue two-way radio system with Motorola's Dimetra IP system in early 2008. The enhanced IP-based TETRA solution is a highly dependable, secure and scalable platform that supports voice, messaging, and mobile applications over a single network. The system upgrade improves network coverage and voice quality, enhances user experience, and enables new data applications for airport operations.

|	
Software product summary	**Cisco Mobile Network Solution for Public Safety**
Country	Global
Focus	Public Safety and Law Enforcement
Status	In use
License	Proprietary
Target users	Police Department
Developer name	Cisco Systems

http://www.cisco.com/en/US/prod/collateral/routers/ps272/prod_white_paper0900aecd806220af_ns768_Networking_Solutions_White_Paper.html

http://www.cisco.com/en/US/prod/collateral/routers/ps272/prod_white_paper0900aecd806220af_ns768_Networking_Solutions_White_Paper.html
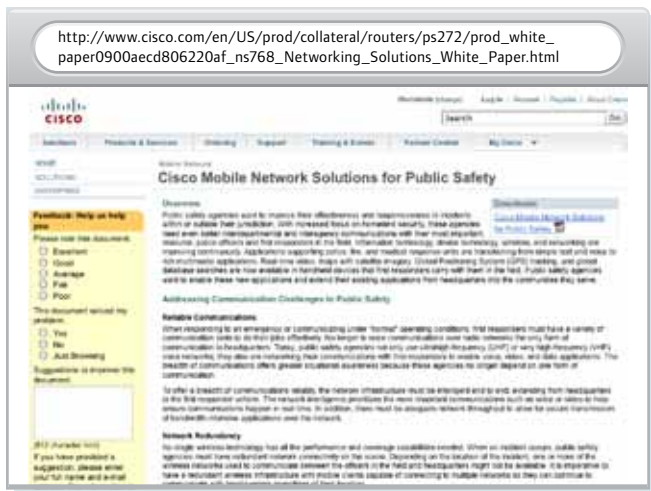
Description	Public safety agencies want to improve their effectiveness and responsiveness to incidents within or outside their jurisdiction. With increased focus on homeland security, these agencies need even better interdepartmental and interagency communications with their most important resource, police officers and first responders in the field. Information technology, device technology, wireless, and networking are improving continuously. Applications supporting police, fire, and medical response units are transitioning from simple text and voice to rich multimedia applications. Real-time video, maps with satellite imagery, Global Positioning System (GPS) tracking, and global database searches are now available in handheld devices that first responders carry with them in the field. Public safety agencies want to enable these new applications and extend their existing applications from headquarters into the communities they serve. ✎

Software product summary	**Frontline SMS**
Country	Global
Focus	Public Safety and Law Enforcement
Status	In use
License	Proprietary
Target users	Non-Governmental Organizations
Developer name	Motorola

http://www.frontlinesms.com/

http://www.frontlinesms.com/

Description	FrontlineSMS is award-winning free, open source software that turns a laptop and a mobile phone into a central communications hub. Once installed, the program enables users to send and receive text messages with groups of people through mobile phones. What you communicate is up to you, making FrontlineSMS useful in many different ways.

It does not require an Internet connection. It works with your existing plan on all GSM phones, modems and networks. Attach a phone and SIM card, and pay your local operator per SMS as usual. It is laptop-based so it can be used on the road or during power outages. It stores all phone numbers and records all incoming and outgoing messages. All data lives on a local computer, not on servers controlled by someone else. It is scalable. Messages can be sent to individuals or large groups. It enables two-way communication, useful for fieldwork or during surveys. It is easy to install and requires little or no training to use. Developers can freely take the source code and add their own features. It can be used anywhere in the world simply by switching the SIM card. ✐

Software product summary	**u-Seoul Child Protection System**
Country	Republic of Korea
Focus	Public Safety and Law Enforcement
Status	In use
License	Proprietary
Target users	General Public
Developer name	Seoul Metropolitan Government

http://kidsafe.seoul.go.kr/index.jsp

http://kidsafe.seoul.go.kr/index.jsp

Description

The u-Seoul Child Protection System is one of Seoul Metropolitan Government (SMG)'s ambitious plans to ensure more secure and pleasant environment for its citizens, especially for parents and their children. In simple terms, the System is devoted to protect our children against possible dangers such as child abduction by taking preventive actions that are empowered by the latest technologies, including GIS, integrated video surveillance and amber alert system. In case of an accident, however, post measures are also to be taken readily in collaboration with a communication service provider and the city's fire headquarter.

Since the inception of the Child Protection System in May 2008, Information System Planning Bureau, the department responsible for the initiative, has focused on giving parents with primary school-age children peace of mind by reducing possible threats of child abduction through the implementation of ICT and mobile internet technology.

Within the framework of the initiative, first of all, the SMG produced and distributed a parents' manual describing how to protect their children from child abduction, and built the internet portal "Seoul Child Safety Portal." In this context, the SMG and one of major Korean telecommunication companies signed a MOU that serves as the basis for launching a special mobile price plan for parents/children subscribers. With this special telecom service, the parent subscribers not only enjoy affordable monthly fees but also can they track down their children's location on a real-time basis thanks to the latest GIS. And thus, if any child-related incidents occur, the parents are to be well informed of their kids' whereabouts. Plus, the parents can find out their children's location through the Seoul Child Safety Portal as well. ✑

Software product summary	**INTERGRAPH CAD Solutions for the UK Ambulance Services**
Country	United Kingdom of Great Britain and Northern Ireland
Focus	Public Safety and Law Enforcement
Status	In use
License	Proprietary
Target users	Ambulances
Developer name	Intergraph

http://www.intergraph.com/global/uk/publicsafety/ambulance.aspx

http://www.intergraph.com/global/uk/publicsafety/ambulance.aspx

Description

The reorganisation of the UK Ambulance Services has given rise to a range of challenges stemming from the merging of neighbouring services. These include assimilating and coordinating the merged services and ensuring the performance and resilience of core functions, such as CAD, are maintained despite having a greatly increased user base, substantially higher call volumes and more complex structure.

As a leading global provider of spatial information management (SIM) software with a history extending almost four decades, Intergraph Corporation helps some of the world's largest government, military and commercial organisations in more than 60 countries create, manage and visualise vast amounts of complex data in clear, actionable forms, enabling our customers to make better and faster operational decisions.

Software product summary	**e2Campus**
Country	United States of America
Focus	Public Safety and Law Enforcement
Status	In use
License	Proprietary
Target users	Universities
Developer name	Omnilert
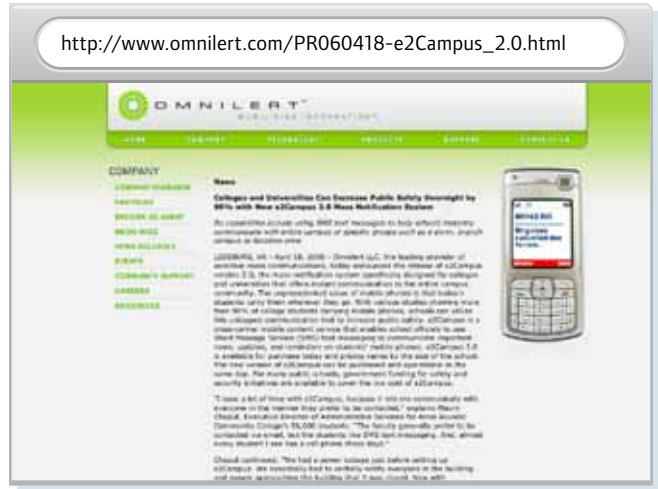
http://www.omnilert.com/PR060418-e2Campus_2.0.html

Description	Omnilert LLC, the leading provider of selective mass communications, today released e2Campus version 2.0, the mass notification system specifically designed for colleges and universities that offers instant communication to the entire campus community. The unprecedented value of mobile phones is that today's students carry them wherever they go. With various studies showing more than 90% of college students carrying mobile phones, schools can utilize this untapped communication tool to increase public safety. e2Campus is a cross-carrier mobile content service that enables school officials to use Short Message Service (SMS) text messaging to communicate important news, and reminders on students' mobile phones. e2Campus 2.0 is available for purchase today and pricing varies by the size of the school. The new version of e2Campus can be purchased and operational in the same day. For many public schools, government funding for safety and security initiatives are available to cover the low cost of e2Campus.

Software product summary	**Motorola Government Enterprises**
Country	United States of America
Focus	Public Safety and Law Enforcement
Status	In use
License	Proprietary
Target users	Government and enterprises
Developer name	Motorola

http://motorola.com/governmentandenterprise/il/en-us/public/functions/home/home.aspx

Description

Organizations need agility to provide headquarters-grade wireless networking to all remote and branch facilities, but the time and expertise required to deploy and maintain remote wireless adds cost and strain to IT operations.

Motorola offers the Wireless SMART Branch, a portfolio of wireless 802.11n LAN and complementary products that easily and economically extend premium wireless services to any size and any number of remote facilities.

Motorola SMART Branch offers on-board intelligence with automated 24x7 security and wireless performance management tools that remotely troubleshoot the network, so it's like having an IT expert in every branch. Organizations can expect that deployments are fast & simple, users are always-on & secure, and expert support is immediate & effective. 📝

Software product summary	**Motorola PremierOne Mobilie**
Country	United States of America
Focus	Public Safety and Law Enforcement
Status	In use
License	Proprietary
Target users	Public Safety Department
Developer name	Motorola

http://business.motorola.com/PremierOne/index.htm

http://business.motorola.com/PremierOne/index.htm

Description	PremierOne: More streamlined operations for a timelier, more targeted response.

Public safety agencies require solutions that can assist in streamlining critical day-to-day operations. PremierOne helps and drive efficiencies throughout agencies by delivering on the fundamental needs for information consistency, location commonality and simplified system administration with applications that seem second nature. It also provides the ability to remotely monitor and manage systems, so agencies can proactively respond to system concerns. With PremierOne, agencies can spend more time serving the public and less time managing data accuracy, integrity, processing and interoperability issues. |

Humanitarian Relief Management

Software product summary	**Maps 2.0**
Country	Fiji
Focus	Humanitarian Relief Management
Status	In development
License	Open Source
Developer name	Nokia/Philippine Department of Education

http://www.humaninet.org/index.html

Description	Maps 2.0, a collaboration – Geospatial Tools – already under way, will launch online resource for nonprofit and humanitarian organizations to share best practices in geographic information systems (GIS) and digital mapping tools.
	Maps 2.0 will establish the first nonprofit online resource for sharing best practices in GIS and digital maps.
	The Maps 2.0 community will be a boost to the nonprofit and humanitarian teams that are otherwise "on their own" to find, evaluate, and implement map-based tools in support of such projects as community action, affordable housing, preserving endangered species, water and agricultural development projects, and of course disaster response.

Software product summary	**Nokia Data Gathering**
Country	Fiji
Focus	Humanitarian Relief Management
Status	In use
License	Free
Developer name	Nokia/Philippine Department of Education

http://irevolution.wordpress.com/2008/10/18/ future-of-crisis-mapping/

Description	Nokia Data Gathering is a new software solution to help public sector and non-governmental organizations (NGOs) quickly and accurately collect data on critical issues such as disease outbreaks or disaster relief via mobile devices.
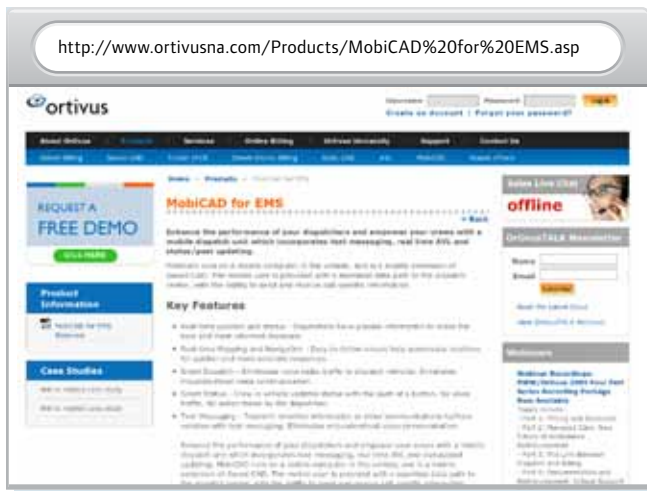
It can be used to tailored questionnaires and distribute them to multiple mobile phones using a normal mobile network. Field personnel surveying local conditions can quickly complete the questionnaires and immediately transmit their findings to a central database.

Software product summary	**MobiCAD for EMS**
Country	Global
Focus	Humanitarian Relief Management
Status	In use
License	Proprietary
Developer name	Ortivus

*http://www.ortivusna.com/Products/
MobiCAD%20for%20EMS.asp*

http://www.ortivusna.com/Products/MobiCAD%20for%20EMS.asp

Description

MobiCAD runs on a mobile computer in the vehicle, and is a mobile extension of Sweet-CAD. The mobile user is provided with a seamless data path to the dispatch center, with the ability to send and receive call specific information.

Key Features

- Real-time position and status – Dispatchers have precise information to make the best and most informed decisions.
- Real-time Mapping and Navigation – Easy-to-follow visuals help accentuate locations for quicker and more accurate responses.
- Silent Dispatch – Eliminates voice radio traffic to dispatch vehicles. Eliminates misunderstood voice communication.
- Silent Status – Crew in vehicle s status with the push of a button. No voice traffic. No action taken by the dispatcher.
- Text Messaging – Transmit sensitive information or other communications to/from vehicles with text messaging. Eliminates misunderstood voice communication.

35

Software product summary	**Information Society**
Country	Greece
Focus	Humanitarian Relief Management
Status	In development
License	Open Source
Developer name	Infodev Technologies, Inc.

http://www.infosoc.gr/infosoc/el-GR/sthnellada/

http://www.infosoc.gr/infosoc/el-GR/sthnellada/

Description	The aim of Measure 2.6 is to use ICTs in order to support the wider strategic improvement of the quality of the provided medical care and the upgrading of citizen service. It is directly related to the reorganization of administration and finances in the health sector.

Software product summary	**GeoNetwork**
Country	Israel
Focus	Humanitarian Relief Management
Status	In use
License	Free and Open Source
Developer name	Multiple Developers

http://www.fao.org/geonetwork/srv/en/main.home

http://www.fao.org/geonetwork/srv/en/main.home

Description

OpenSource software and improving standardized access to spatial data and information.

GeoNetwork is a facility that provides various services, such as a global library for geospatial data a metadata catalogue a system for searching, editing and publishing geospatial information as well as information on how to integrate geospatial data from various sources on the Internet. It is open source software package to share Geographical information system (GIS) in humanitarian and other cases.

Software product summary	**Ushahidi Engine**
Country	Kazakhstan
Focus	Humanitarian Relief Management
Status	In use
License	Open Source
Developer name	Multiple Developers

http://www.ushahidi.com/

Description

The Ushahidi Engine is a platform that allows anyone to gather distributed data via SMS, email or web and visualize it on a map or timeline. Its goal is to the simplest way of aggregating information from the public for use in crisis response.

The original deployment of Ushahidi was born during the post-election violence in Kenya in early January 2008.

Software product summary	**MOTOTRBO**
Country	Malaysia
Focus	Humanitarian Relief Management
Status	In use
License	Proprietary
Target users	Emergency response team
Developer name	Motorola

http://mediacenter.motorola.com/content/Detail.aspx?ReleaseID=10359&NewsAreaID=2

http://mediacenter.motorola.com/content/Detail.aspx?ReleaseID=10359&NewsAreaID=2

Description

The new MOTOTRBO™ system in Malaysia is equipped with the latest software release that is capable of supporting Motorola's IP Site Connect application. The new feature enables MOTOTRBO users to link up to 15 connections, instantly creating a wide-area network where users can share or transfer business-critical voice and data information across multiple or dispersed geographic locations, eliminating the impact of physical barriers resulting in seamless mobility and connectivity

In addition, MOTOTRBO™ supports integrated data applications such as text messaging, GPS-based location tracking and other IP data applications. MOTOTRBO™ is a comprehensive system including portable and mobile units, repeater, data applications, accessories and services, with the capability of operating in digital or analog mode, making it possible for professional businesses to easily and affordably migrate to a digital platform at their own pace.

MOTOTRBO™ is designed to meet the expanding needs and challenges of professional customers in various industries such as transportation, education, construction, manufacturing, private security, smaller municipalities and public service entities which require a highly reliable business critical communication solution to help improve workforce productivity, operational efficiency and increased mobility while maintaining constant connectivity with the workforce.

Software product summary	**Integrated Disaster Warning Software**
Country	Qatar
Focus	Humanitarian Relief Management
Status	In use
License	Proprietary
Developer name	KITValley Co.

http://www.kitvalley.com/eng/

| Description	The system alarms information about natural disasters to Mobile Phone. The system already used in Korea for public safety from natural disaster such as earthquakes.

Software product summary	**WIDER**
Country	Swaziland
Focus	Humanitarian Relief Management
Status	In use
License	Proprietary
Developer name	Ericsson
System requirements	VSAT

http://www.ericsson.com/technology/tech_articles/G
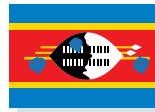
Description

Ericsson's WIDER, on behalf of UN-OCHA to provide wireless hotspots and telecommunications between different relief agencies at the disaster site and to Internet via satellite. WIDER was first installed and utilized in the aftermath of the severe earthquake in Muzaffarabad, Pakistan, where Ericsson employees installed WIDER, which provided relief personnel with wireless network connectivity to an intranet that was maintained and for information transfer among relief organizations' own networks.

WIDER, which provided relief personnel with wireless network connectivity to an intranet that was maintained and d for information transfer both within the relief organizations' own networks and among personnel. The relief camp was then linked via OCHA's VSAT system to provide common access to international voice and Internet connectivity The Ericsson Response system and support provided all relief workers access to a common network, enabling them to share the same local information. WIDER helps overcome the problem of communications system, often disrupted by disasters and humanitarian emergencies.

Software product summary	**IMSMA**
Country	Sweden
Focus	Humanitarian Relief Management
Status	In use
License	Open Source
Target users	Humanitarian relief and demining agencies
Developer name	Center for Security Studies Zurich

http://www.gichd.org/

http://www.gichd.org/

Description	The new Pan American Health Organization's ISMA system helps address key problems in humanitarian demining, including the lack of accurate information about mined areas and the need to facilitate the collection and handling of relevant information. IMSMA supports these information needs by providing a comprehensive tool to gather, store, and map data, to analyze the needs of mine action centers in the field, and to aid mine field identification and mine clearance. IMSMA is the world's largest information management system used in mine action, having been deployed in nearly 40 mine-affected countries and regions worldwide.

Software product summary	**DEWS**
Country	United Republic of Tanzania
Focus	Humanitarian Relief Management
Status	In development
License	Proprietary
Developer name	Multiple developers

http://www.dews-online.org/front_content.php?idcat

http://www.dews-online.org/front_content.php?idcat

Description	Distant Early Warning System (DEWS) project aims at strengthening the early warning capacities by building an innovative generation of interoperable tsunami early warning systems. Tsunami detection will be based on an open sensor platform, integrating sensor systems for earthquake (seismic), sea level (tide gauge, buoys) and ground displacement (GPS land stations) monitoring. Based on this improved upstream information flow the downstream capacities will be enhanced by improving information logistics and multi channel warning dissemination. Warning messages have to be disseminated to the public, authorities and emergency management forces. Of special importance is the distant communication of warning information among warning centres in the Indian Ocean region.

43

Software product summary	**Dynamic COMPAS**
Country	United Republic of Tanzania
Focus	Humanitarian Relief Management
Status	In use
License	Free and Open Source
Target users	NGOs
Developer name	Multiple developers

http://sourceforge.net/projects/compasdyn
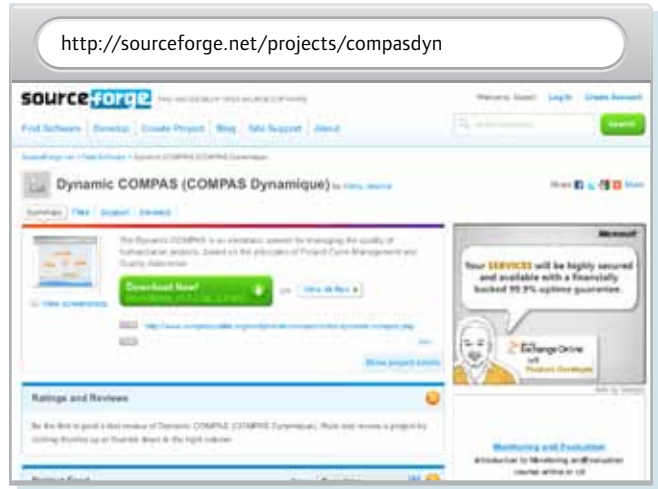
Description	Dynamic COMPAS software are project and information management tools for humanitarian projects. Its Operating systems is OS Independent (Written in an interpreted language), Win2K.

Software product summary	**FACTS**
Country	United Republic of Tanzania
Focus	Humanitarian Relief Management
Status	Not specified whether in use
License	Proprietary
Developer name	Multiple developers

http://cic.si.umich.edu/node/532

http://cic.si.umich.edu/node/532
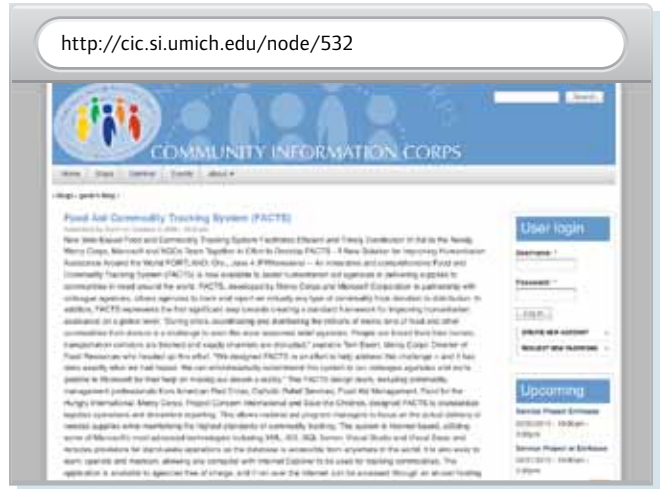
Description	Food and Commodity Tracking System (FACTS) is a software for humanitarian logistics process. It is developed through Microsoft and Mercy Corps partnership designed in collaboration with several global NGOs. Program is designed to cover the "last mile" of the logistics process. It is highly mobile, internet-based system.

Software product summary	**Global Relief Technologies solution**
Country	United Republic of Tanzania
Focus	Humanitarian Relief Management
Status	In use
License	Proprietary
Developer name	Multiple developers

http://www.globalrelieftech.com/

Description	Global Relief Technologies solution combines handheld PDA survey applications for field workers, GIS mapping imagery and near real-time GPS tracking with a web-based information management center, or VNOC (Virtual Network Operations Center) for data hosting, analysis and reporting. The data are transmitted to and from the PDA via mobile satellite terminals. It deals with "mobile computing solutions in extreme environments" such relief and emergency management.

Software product summary	**HLS**
Country	United Republic of Tanzania
Focus	Humanitarian Relief Management
Status	In use
License	Open Source
Target users	Humanitarian assistance agencies
Developer name	Fritz Institute

http://www.fritzinstitute.org/prsrm-HLS.htm

http://cic.si.umich.edu/node/532

Description

Humanitarian Logistics Software (HLS) was developed to address the unique supply chain needs of humanitarian organizations.

HLS tracks the pipelines of supplies, information and financing from donation to delivery, providing multiple benefits, including increased timeliness of information for decision-makers at headquarters and in the field and improved collaboration among humanitarian relief organizations. HLS was developed by Fritz Institute in partnership with the International Federation of the Red Cross and Red Crescent (IFRC).

Fully implemented in September 2003, HLS has provided documented benefits in several recent responses by the IFRC, including Morocco s earthquake Haiti and the Dominican Republic s floods the refugee crisis in Darfur, Sudan and most recently in the countries affected by the Southeast Asia tsunami. HLS is being used extensively today by the IFRC to coordinate relief in Indonesia, Sri Lanka, India, Maldives, and Myanmar.

System requirements

Humanitarian Logistics Software (HLS) system runs on Windows 2000 server with MS SQL Server 2000 as a database server. HLS has a 3-tier web-based architecture which comprises of C#, ADO.NET, ASP.NET, JavaScript. HLS can be accessed from any client machine running the Internet Explorer 5.x or Netscape Navigator 6.x.

Software product summary	**Sahana**
Country	United Republic of Tanzania
Focus	Humanitarian Relief Management
Status	In use
License	Free and Open Source
Target users	Disaster relief organizations
Developer name	Multiple developers

http://en.wikipedia.org/wiki/
Sahana_FOSS_Disaster_Management_System

http://en.wikipedia.org/wiki/Sahana_FOSS_Disaster_Management_System
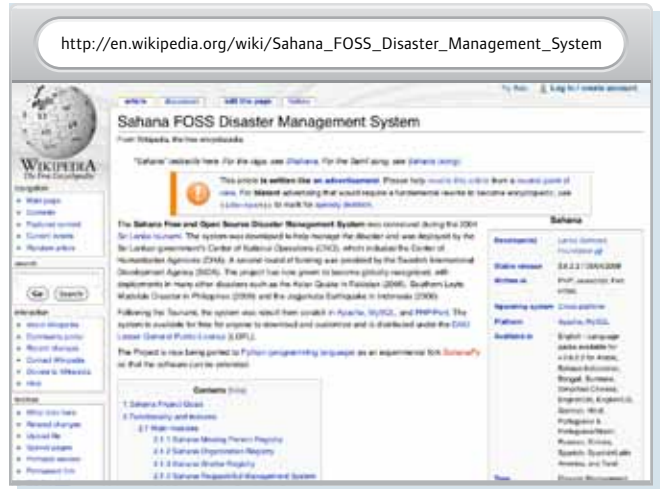
Description	The Sahana Free and Open Source Disaster Management System was conceived during the 2004 Sri Lanka tsunami. The system was developed to help manage the disaster and was deployed by a government's Center of National Operations (CNO), which included the Center of Humanitarian Agencies (CHA). Based on the success of this initial application, the project to generalize the application for global use and to help in any large-scale disaster has now grown to become globally recognized, with deployments in many other disasters such as the Asian Quake in Pakistan (2005), Southern Leyte Mudslide Disaster in Philippines (2006) and the Jogjarkata Earthquake in Indonesia (2006).

Software product summary	**SMS Framework**
Country	United Republic of Tanzania
Focus	Humanitarian Relief Management
Status	In development
License	Open Source
Target users	Humanitarian and development agencies
Developer name	Multiple developers

http://drupal.org/project/smsframework
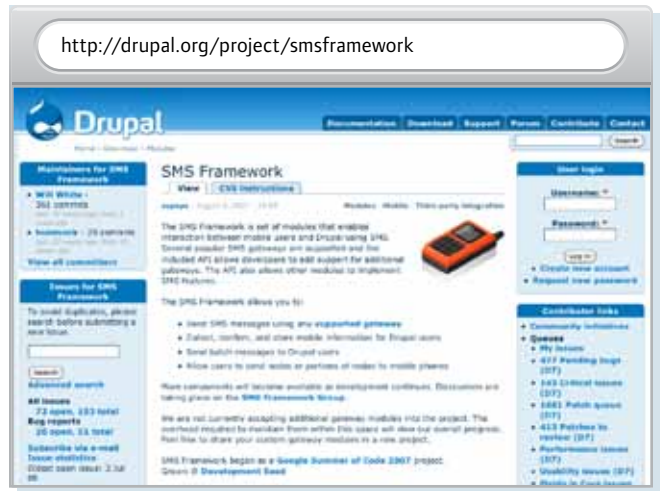
Description	Drupal's SMS Framework is set of modules that enables interaction between mobile users and Drupal using SMS. Several popular SMS gateways are supported and the included API allows developers to add support for additional gateways. The SMS Framework allows sending SMS messages using any supported gateway, collect, confirm, and store mobile information for Drupal users, send batch messages to Drupal users and allow users to send nodes or portions of nodes to mobile phones.
	Drupal is open-source software distributed under the GPL ("GNU General Public License") and is maintained and developed by a community of thousands of users and developers.

Software product summary	**Google SMS (Uganda)**
Country	Uganda
Focus	Humanitarian Relief Management
Status	In use
License	Proprietary
Developer name	Google Inc.

http://www.google.co.ug/mobile/sms/

http://www.google.co.ug/mobile/sms/

Description

Google SMS Tips for your phone

Get relevant and actionable information on sexual & reproductive health, clinic locations, as well as agriculture pests and diseases from your mobile – it's easy and fast!

Just text a short descriptive question or some keywords to 6001.

Find tips on sexual & reproductive health (family planning, maternal & child health, HIV/AIDS, STI/STDs, sexuality)

Use ClinicFinder to find a clinic near you, the clinic's telephone number and services offered.

Get access to weather forecasts and critical agriculture information, such as tips on planting, pest management and disease control.(Targeted at farmers to help improve their livelihood).

Chapter 2

Mobile Applications on Business Development

Mobile financial service delivery refers to the provision of banking and financial services to citizens with the help of mobile telecommunication devices. The scope of offered services may include facilities to access account information, conduct bank transactions such as payment and transfer, initiate stock market transactions, administer banking accounts and access customized financial information.

The advent of the Internet has revolutionized the way the financial services industry conducts business, empowering citizens to access products and services 24x7 through innovative delivery platforms. In recent years, mobile service providers and users have started to fully utilize the data capabilities in mobile phones.

According to the International Telecommunication Union (ITU), there are 4.6 billion mobile cellular subscribers around the world by the end of 2009. Some 600 million of them are broadband subscribers, underscoring the huge potential of mobile Internet, particularly in the expansion of scope and scale of mobile financial services delivery around the world. Mobile technologies are making major inroads toward extending information communication technologies (ICTs) in developing countries, with a number of nations launching and commercially offering IMT 2000/3G networks and services.

There is a global trend of increased uptake in mobile financial service delivery. This is evidenced by research in South Africa which has concluded that the number of people banking from their mobile phones has exceeded that of people banking from their PCs, with more than a quarter of bank customers turning to their mobile phones for services ranging from informational transaction types such as balance enquiries to financial transaction types which include account payments. People are generally becoming more comfortable with mobile banking and are

taking advantage of the ease of use and availability of mobile financial services, though a proportion of people are still nervous of it, citing trust and security as obvious concerns.

One common application observed in this Compendium is the use of electronic money or e-money, which is the electronic alternative to cash. It is monetary value that is stored electronically on receipt of funds, and which is used for making payment transactions. E-money can be held on cards, devices, or on a server. Some cases in this Chapter include electronic purses, such as M-PESA in Kenya, MoneyBoxAfrica or web-based extended services such as PayPal Mobile. Through support from the monetary authorities and the banking industry, e-money can serve as an umbrella term for a number of more specific electronic value products and services.

There are estimates provided, that in many countries over half the population has never had a bank account. It is viable that mobile financial service delivery will give poor people in developing countries access to financial services for the first time and that could change the developing landscape drastically. Remittance is one area where mobile financial service delivery will really be world-changing. The economic and social benefits of mobile financial service delivery in emerging economies are expected to increase over time, driven by network externalities as a broader part of society becomes connected.

This chapter provides a list of 62 applications for mobile banking and other forms of financial delivery services. These applications are not meant to be exhaustive. They provide an illustration of m-technology applications in the selected areas. ✐

M-Banking B

Software product summary	**M-Paisa**
Country	Afghanistan
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Roshan

http://www.roshan.af/web/?page_id=475

http://www.roshan.af/web/?page_id=475

Description

M-Paisa is a mobile money transfer system aimed at mobile phone customers who do not have a bank account. M-Paisa enables customers to deposit cash, withdraw cash, send and receive money, receive and repay loans, buy airtime and receive salaries. In order to register for M-Paisa, customers should go to an authorized M-Paisa agent to complete the registration form and accept the M-Paisa Terms and Conditions. To transact, customers need to deposit money in their M-Paisa account at an authorized M-Paisa agent. The authorized M-Paisa agent will send e-money to the customer in exchange for cash. When e-money has been deposited, customers can use their mobile phones to transact.

M-Paisa is mainly acting as a vehicle for loan disbursements and repayments of microfinance institutions, with an additional range of business to business applications such as salary disbursement and airtime distribution. Consumer person-to-person transactions is, however, also available, enabling those microfinance institutions clients and employees who have received their money via M-Paisa to benefit from the full capabilities of the service. In 2008, Roshan and Vodafone have launched inter-active voice recognition services, which enables greater use of M-Paisa by consumers who might otherwise be excluded due to high illiteracy rates in Afghanistan (30% of the population).

Software product summary	**MobilBank**
Country	Azerbaijan
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Azercell Telecom JV

http://www.azercell.com/en/services/info/mobilbank

http://www.azercell.com/en/services/info/mobilbank

Description

The MobilBank service is a mobile banking service that enables subscribers of Azercell Telecom JV to control their bank accounts, including information about status of the account, latest transactions, pay in and pay out, and also to pay their bills for phone usage and electricity through the mobile phone 24 hours of weekdays and weekends. The MobilBank service is permitted via a PIN code, which is assigned by the customer himself or herself.

To use the MobilBank service subscribers of Azercell Telecom JV need to join the service first. The subscriber will be able to make transactions using the banking card information via mobile phone. Information about each transaction made by the subscriber using his or her banking card will be sent to his or her mobile phone via SMS, which is to be provided by Azercell. The MobilBank service covers all pre-paid and post-paid subscribers of Azercell.

Software product summary	**Thumbpay**
Country	Bangladesh
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Aktel

http://www.aktel.com/?module=145

http://www.aktel.com/?module=145

Description

Thumbpay is a mobile banking service that allows Bank Asia customers access their bank accounts from their mobile phone. Thumbpay services include account balance query, prepaid or postpaid mobile phone bill payment, fund transfer, fund collection services through registered mobile phone.

Bank Asia customers need to fill up a registration form for Thumbpay service. All branches of Bank Asia are ready to give this service to its valuable clients. Currently Thumbpay services are only available to Aktel subscribers.

Software product summary	**RQ4**
Country	Canada
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	iQmetrix Software Development Corp.

http://www.iqmetrix.com/products

Description

RQ4 is the new generation of retail management software from iQmetrix, combining the comprehensive functionality that clients have come to rely on to manage their wireless retail business with a new look and feel – and some great new features – for superior user experience and increased productivity.

Powerful and intuitive, RQ4 is an integrated, on-demand retail management solution allowing you to:

The intuitive and user-friendly design of RQ4 allows our staff to serve customers faster, more effectively and with greater confidence than ever before.

- **Product Experts:** Employees have access to all the information they need to make the right product recommendations or solve problems in a timely manner.
- **Scan Anywhere:** Scan a bar code at any point in the software and RQ4 will automatically open up a new sale and Phone Activation Wizard specific to the product scanned – reducing transaction times.
- **Increase Profitability:** Effortlessly guide customers through the up-selling and cross-selling process to add extra value to each sale.
- **Centralized Data:** Customer data is centralized and accessible – ensuring personalized service at every touch point.
- **Application Integration:** Integration with third-party applications – allow you to serve customers faster and more effectively.

Software product summary	**Gemalto Mobile Banking services**
Country	Colombia
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Gemalto

http://www.gemalto.com/telecom/

http://www.gemalto.com/telecom/

Description	Gemalto Mobile Banking services is a complete financial services solution for mobile operators and financial institutions. Gemalto Mobile Banking services is providing secure access from a mobile phone for mobile banking for both banked and unbanked customers, mobile payment from either a bank account, a mobile wallet or a mobile top-up, and mobile money transfer services.
	Designed to easily integrate within the existing GSM network infrastructure and the bank's back-end, Gemaltos Mobile Banking services includes a secure applet stored in a SIM card in the mobile phone and a transactional platform that securely manages financial operations carried out over the wireless network between the bank or the mWallet and the SIM.

Software product summary	**Orange Money**
Country	Côte d'Ivoire
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	France Telecom/Orange

http://www.generation-nt.com/orange-money-cote-ivoire-paiement-mobile-transfert-argent-actualite-199081.html

http://www.generation-nt.com/orange-money-cote-ivoire-paiement-mobile-transfert-argent-actualite-199081.html

Description

Orange Money is a mobile phone payment and transfer service aimed at mobile phone customers who do not have a bank account. Orange Money allows customers to deposit cash in their local currency, pay electricity bills, buy goods and services, transfer money to friends or family, or top up their mobile phone. Orange Money is ideally suited to micro-credit lenders and beneficiaries since it allows both parties to save time and resources by facilitating payment collection.

For its release and marketing, Orange Money is drawing on rural and urban distribution networks available through Orange, BICICI and Belkofinance. Orange Money is activated free of charge and without any minimum deposit. Orange Money is built around a system that guarantees transactions against the risk of theft or fraud. In accordance with regulations in force within the West African Economic and Monetary (WAEMU), all transactions are guaranteed for both end customers and recipients.

Software product summary	**Mobile Banking Application**
Country	Cyprus
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	A & L soft

http://www.alsoft.cz

http://www.alsoft.cz

Description	The Mobile Banking Application (MBA) is a universal application intended for clients – users of services available through a mobile phone. The MBA is suitable for all types of financial services, especially direct banking. The offer of services available through the fully configurable MBA depends on the provider – bank of course, each bank can offer its clients services according to its goals.

The server for MBA provides all functions that are necessary for its full utilization:

- Application configuration management
- Database to store data used when processing clients' requests
- Configurable interface for communication with other systems (such as a banking system)
- Administration of security features.

Software product summary	**w-HA**
Country	France
Focus	M-Banking
Status	In use
License	Open Source
Target users	Citizens, financial sector
Developer name	w-HA

http://www.w-ha.com/sommaire.php3?lang=fr

Description

w-HA is a France Telecom's subsidiary and acts as technical manager of online payments. Users need to subscribe to some operator. Users who use a mobile phone company or an ISP that has linked up with w-HA do not have to provide any extra information or register with w-HA, because that information has already been shared between w-HA and the mobile phone company or the ISP.

Users do not really pay online. They are invoiced from their mobile phone bills, and debited from their prepaid credit or bank accounts. w-HA can enable a purchase with just two clicks, one to choose the content and one more to make the purchase. Everything happens in those two clicks, and it's a secure purchase because through the mobile phone identification users are sure that they have the right person.

Software product summary	**txtNpay**
Country	Ghana
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Afric Xpress (AX)

http://www.txtnpay.net/index.php

http://www.txtnpay.net/index.php

Description

txtNpay is a mobile phone-based secured payment system aimed at both banked and un-banked mobile phone customers. TxtNpay enables its users to send money to anyone with a mobile phone, pay bills, buy pre-paid airtime, check their bank balance, and purchase goods and services.

Customers need to get a txtNpay wallet before they can send money. The txtNpay wallet is an electronic stored value account. Customers can open a txtNpay wallet via the website www.txtnpay.net or at an approved partner location identifiable by the txtnpay partner logo. Wallets can be funded by buying txtNpay electronic cash at an approved partner outlet or making a transfer from their bank account. Customers pay a one-time registration fee when they open the wallet. All charges after this will only apply for the services they use.

Software product summary	**PortaCredit**
Country	Global
Focus	M–Banking
Status	In use
License	Open Source
Target users	Citizens, financial sector
Developer name	Accion

http://ictupdate.cta.int/en/Feature-Articles/
PortaCredit-improving-microloan-processing

http://ictupdate.cta.int/en/Feature-Articles/PortaCredit-improving-microloan-processing

Description

PortaCredit is an application which is designed to run on a PDA (personal digital assistant). When the PDA is equipped with PortaCredit, loan officers can input client data while in the field, complete and process applications and make loan calculations. Data is then quickly uploaded to the MFI's centralized database which eliminates the task of reentering the data. Since its inception in 1999, PortaCredit has continued to evolve and can now accommodate multiple loan products and the new platform incorporates various credit scoring tools, further contributing to the microfinance institutions's efficiency.

The micro-finance institutions who are implementing the PortaCredit program have reported significant cost-savings in non-salary operational costs. PortaCredit is now fully implemented at several Latin American MFIs.

Software product summary	**ViVOtech NFC mobile phone payment**
Country	Guatemala
Focus	M-Banking
Status	In use
License	Open Source
Target users	General public, citizens, financial sector
Developer name	ViVOtech

http://www.vivotech.com/products/vivo_pay/vivopay_5000.asp

Description

The Visa-led Guatemalan deployment, ViVOtech, has marked Latin America's first NFC-based mobile payment pilot and use of payWave-enabled mobile handsets at hundreds of merchants that have installed the ViVOpay 5000 contactless payment readers that can be adapted to existing POS systems to provide advanced contactless functionality and an interactive display for customers.

ViVOtech's readers and software were deployed in partnership with CompaAia de Procesamiento de Medios de Pago de Guatemala, known as Visanet Guatemala, Banco Industrial and Banco Uno and is expected to last six months. Mobile payments will be available to more than 200 Visa cardholders whose credit card data will be migrated onto the cell phone, allowing them to use the Visa payWave feature.

System requirements

In order to use ViVOtech NFC mobile phone payment, users need a Visa card and a Visa payWave feature on their mobile phones.

Software product summary	**Mobile Banking**
Country	India
Focus	M-Banking
Status	In use
License	Open Source
Target users	Citizens, financial sector
Developer name	State Bank of India

http://www.statebankofindia.com/user.htm?action=viewsection&lang=0&id=0,1,21,691

http://www.statebankofindia.com/user.htm?action=viewsection&lang=0&id=0,1,21,691

Description

The Mobile Banking service developed by State Bank of India and SKS Microfinance currently allows users access to services such as funds transfer (within and outside the bank–using NEFT), enquiry services (Balance enquiry/Mini statement), request services (cheque book request), bill Payment (Utility bills, credit cards), and m-Commerce (Mobile Top Up, Merchant payment, SBI life insurance premium).

The Mobile Banking service is currently available on java enabled mobile phones over SMS/GPRS/WAP as also non-java enabled mobile phones with GPRS connection. The service can be availed over the free GPRS facilities offered by various mobile service providers. The services for other non-Java mobile phones are under development and will be offered using Unstructured Supplementary Services Data (USSD).

Software product summary	**PayMate**
Country	India
Focus	M-Banking
Status	In use
License	Free and Open Source
Target users	Citizens, financial sector
Developer name	PayMate

http://www.paymate.co.in/web/index.aspx

http://www.paymate.co.in/web/index.aspx

Description

PayMate is a mobile payment solution that links mobile phones to existing bank accounts or credit cards thereby giving customer the convenience and security of paying anywhere, anytime. Once registered, customers can pay for online purchases, shopping bills, monthly utility bills with their mobile phones. Customers can also buy things like flight tickets, movie tickets, etc. All payments are authorized with a secure 4-digit PIN thereby ensuring complete control and security. There are no charges for using PayMate. PayMate is a free service.

PayMate works on the simplest mobile handsets. It is available across all GSM and CDMA operators, and does not require GPRS connectivity, SIM change or application download. The IVR based transaction platform makes it very easy-to-use. It has an enhanced risk-control through 2-factor authentication over IVR. The PIN is never saved in any form on the handset or in any application, and there is no financial details divulged during the transaction process. It has banking-grade data security with PCI-DSS 1.2 certified systems.

Software product summary	**Classifeye Mobile Rural Banking**
Country	Israel
Focus	M-Banking ◆
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Classifeye

*http://www.classifeye.com/Solutions/RuralBanking/tabid/75/
Default.aspx*

http://www.classifeye.com/Solutions/RuralBanking/tabid/75/Default.aspx

Description

Rural, branchless banking has increasingly become the solution for rural areas in the developing world. The service is typically based on a business correspondent model, in which a person (or "agent") who works for a microfinance institution ("MFI") serves specific villages, which he visits on a frequent basis. The agent will act as an enabler of financial transactions by actively recording and honoring the transactions themselves. A range of services are provided, such as cash deposits, loans provision, loan repayment etc.

While these services have been available for a few years in countries such as India, Bangladesh and Kenya, the market is now trying to scale in order to maximize the opportunity, enable more people to benefit from the financial services and thereby improve their economic situation. The main obstacle to progress is the lack of scalable identity solutions that can allow various services to be provided securely. Providing adequate solutions for these challenges will eventually open huge markets for new and sophisticated services that are perfectly suited to extensive rural conditions.

ClassifEye provides just such a solution to this problem: Our solutions are purely software based, run on mass produced handsets provided by leading handset providers (such as Nokia) and have the capability of creating and verifying identity at a very low cost per user. ClassifEye's core technology is based on fingerprint recognition using the digital camera already embedded in most cell-phones. The package, which is an integral part of a software package that is downloaded over the air, holds a suite of solutions for rural finance, such as Business Correspondent services, mobile banking, Micro Finance services, mobile payments, etc. Moreover, in order to ensure that people can be served even when data connectivity is weak or absent, ClassifEye has developed off-line transaction capabilities, so that services can be provided even in the remotest of locations. ✐

Software product summary	**Osaifu-Keitai**
Country	Japan
Focus	M-Banking
Status	In use
License	Open source
Target users	Citizens, financial sector
Developer name	NTT Docomo Inc.

http://www.nttdocomo.co.jp/english/service/osaifu/index.html

http://www.nttdocomo.co.jp/english/service/osaifu/index.html

Description

Osaifu-Keitai refers to mobile phones equipped with a contactless IC card, as well as its useful function or services enabled by the contactless IC card. With this function, mobile phones can be utilized as electronic money, credit card, electronic ticket, membership card, airline ticket etc. The functions of items that users have kept in their wallets until now can all be combined and carried with you in one phone.

Among other things, users can place the functions of bills and coins as well as point cards, tickets, etc. in their mobile phones and carry them with them all the time. They can also check the credit balance, point totals, and purchase history on the mobile phone screen, and use the i-mode network to add e-money credit, download tickets, or pay for products and services. 🖎

Software product summary	**M-Pesa**
Country	Kenya
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Safaricom Limited

http://www.safaricom.co.ke/index.php?id=745

http://www.safaricom.co.ke/index.php?id=745

Description

M-Pesa is an innovative mobile transfer solution aimed at mobile phone customers who do not have a bank account. M-Pesa enables Safaricom customers to deposit, send, transfer and withdraw money, buy airtime, pay bills and manage their account. To transact, Safaricom customers need to deposit money in their M-Pesa account at an authorized M-Pesa agent. The authorized M-Pesa agent will send e-money to the Safaricom customer in exchange for cash. When e-money has been deposited, Safaricom customers can send, transfer and withdraw money, buy airtime, pay bills and manage their account by sending an SMS.

Currently, only Safaricom customers can register for M-Pesa. Other network subscribers will have to churn to Safaricom to register for M-Pesa. M-Pesa can be used for sending money both to persons that are Safaricom customers and persons that are not Safaricom customers. However, sending money to persons that are Safaricom customers is cheaper than sending money to persons that are not Safaricom customers. Currently, Safaricom only offers M-Pesa for money transfers between mobile phone users; however, in future Safaricom plans to offer M-Pesa for money transfers between banks and micro-finance institutions and their customers.

System requirements

M-Pesa is installed on a Safaricom SIM card and works on all mobile phones.

Software product summary	**PesaPoint ATM Cardless Service**
Country	Kenya
Focus	M-Banking
Status	In use
License	Open source
Target users	Citizens, financial sector
Developer name	Paynet

http://www.paynet.co.ke/swaward.php

http://www.paynet.co.ke/swaward.php

Description

Paynet Kenya has been awarded the 'Best Software Solution' for the cardless ATM service it is providing for M-PESA. The award was conferred to Paynet at the Wincor-Nixdorf Awards held in Muscat, Oman. The award recognizes technical innovation and excellence of product capabilities. Wincor Nixdorf is one of the world's leading providers of IT solutions and is the manufacturer of the PesaPoint ATMs.

Paynet Kenya developed a world's first software that allows cardless transactions at ATMs. Through this innovation, M-PESA customers now withdraw money from PesaPoint ATMs without the use of an ATM card or the need for a bank account.

M-PESA is a mobile-phone based money transfer service offered by Safaricom Limited. Prior to the service launch, M-PESA transactions were only available to customers at authorised M-PESA Agents. Agents hold stocks of cash and e-value to facilitate deposits and withdrawals are wideswad and in the majority follow standard operating hours.

This ATM offering guarantees M-PESA customers 24hour 7 days a week cash accessibility, including weekends when many Agents are closed. Additionally, cash liquidity is strengthened given that Agents can be limited in the cash available to serve customers.

In addition, the simplicity of using the service has facilitated demystification of the use of banking technology amongst unbanked users of mobile phones and helps to bring un-banked into the formal economy.

Software product summary	**M2U Mobile**
Country	Malaysia
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Maybank

http://www.maybank2u.com.my/

http://www.maybank2u.com.my/

Description

M2U Mobile is a mobile banking service that enables Celcom and Maxis subscribers with Maybank accounts to carry out a wide range of banking transactions from their mobile phones such as account enquiry, mobile transaction history, funds transfer, and bill payment.

To sign up for M2U Mobile, customers will first need to go to either Maybank2u.com or the nearest Kawanku ATM. Before enjoying the many banking services available via M2U Mobile, customers will first need to activate the service and configure their phone for mobile banking.

Software product summary	**MoTax**
Country	The Netherlands
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Central and Local Government
Developer name	WebIntegration

http://www.mobiledataplatform.nl/bedrijven/web-integration/
producten-diensten/motax-mobile-taxation.html

Description

MoTax is an application that Web Integration realized for the real estate market. For taxation of real estate, the outdoor staff uses a Windows Mobile PDA to input data regarding houses they visit to be able to estimate the value of the property. Via a mobile internet connection the information is automatically made available in the office. The administrative staff can generate taxation reports with one push on the button to enable their clients to amongst others get a mortgage from the bank.

Software product summary	**FlashMe Cash**
Country	Nigeria
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Finbank

http://www.finbankplc.com/products/products.asp

http://www.finbankplc.com/products/products.asp

Description

FlashMe Cash is a mobile payment solution aimed at both banked and unbanked mobile phone customers. FlashMe Cash offers the ability to make payments to third parties through the mobile phone or the internet using a virtual account. Various services are offered on this platform which includes money transfer, voucher purchase, bill payment, e-Network, e-Inquiry and e-Alerts.

To enjoy the full benefits of the product, the sender (flasher) must be a member of the FlashMe Cash or Sapphire Club. The recipient (flashee), however, does not necessarily need to be a member. Customers can subscribe to the FlashMe Cash or Sapphire Club either online by visiting https://www.firstinlandonline.net or via text message on their mobile phones.

Software product summary	**MoneyBoxAfrica**
Country	Nigeria
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	MoneyBox AfricaNigeria Limited (MNL)

http://p55857.typo3server.info/93.html

http://p55857.typo3server.info/93.html

Description

MoneyBoxAfrica is an innovative savings and payment system aimed at mobile phone customers who do not have a bank account. MoneyBoxAfrica is based on a scratch card and enabled by a mobile phone. MoneyBoxAfrica customers can open-up an account on the street, save money into the account, top-up the phone, pay utility bills, buy insurance, pay tithe, send money to friends and relatives, withdraw money at agent locations, any bank or ATMs, get access to credit and make investments.

For transactions of up to N50,000, end customers can benefit from MoneyBoxAfrica without registering by purchasing a MoneyBoxAfrica scratch card or e-voucher from any MoneyBoxAfrica agent. For higher value transaction, end customers can sign up for a MoneyBoxAfrica bank account at any MoneyBoxAfrica agent. MoneyBoxAfrica charges MoneyBoxAfrica customers on a pay-as-you-go basis every time you do a transaction. MoneyBoxAfrica customers are only charged for the transactions they have initiated. ✐

Software product summary	**Virtual Terminal Network (VTN)**
Country	Nigeria
Focus	M-Banking
Status	In use
License	Open Source
Target users	Citizens, financial sector
Developer name	LFR Communications

http://www.virtualterminalnetwork.com/pre_launch/ index_start.asp

Description

Virtual Terminal Network (VTN) is a virtual or mobile payment network designed solely for developing economies, keeping emerging markets in mind by not requiring expensive and impractical payment initiatives of the yester years. With initial deployment in Nigeria, the most practical and latest in mobile and web technology is used to help make transactions and accessing funds more convenient nationwide.

VTN allows merchants and retailers to process transactions safely and securely from any computer connected to the internet and GSM mobile phone. With a secure login, users can complete transactions rapidly within the VTN network and receive instant authorization in real time. For the eventual deployment in other countries, VTN can run both English, French and Spanish.

To register, users need to purchase a VTN reload card. VTN reload cards can be purchased from any reseller. To fund their VTN accounts, user can go to any of the participating banks. There is no limit to what users can do once their VTN accounts are funded. On the other hand, it's an opportunity for businesses to acquire more their clientele with automated account and transaction management.

VTN offers three types of accounts to general public. Account holders can fund their accounts via any participating financial institutions, agents and retailers in VTN's extensive network. Users can withdraw their funds easily and securely over the Internet or by using their GSM mobile phones, and then pick up their funds at any participating bank or financial institution whenever they like.

System requirements

In order to use VTN, users need to sign up or register as VTN users. ✍

Software product summary	**GCash**
Country	Philippines
Focus	M-Banking ◈
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Globe

http://www.g-cash.com.ph/

http://www.g-cash.com.ph/

Description	GCash is an award-winning (GSM Awards, Mobile News Asia, Global Messaging Awards, Marketing Communications Effectiveness Awards, Agora Awards) mobile phone banking service aimed at the low income class and the overseas workers. Globe or TM customers have access to a cashless and cardless method of facilitating money transfer with just one message text.
	The services that Globe and TM customers have access to includes services such as domestic and international remittances, micro-payments, micro-credit payments, bills and tuition fee payments and donations. The customers pay the transaction fee, service processing fee, rates and charges for the service as posted in the Cash-In or Cash-out Outlet.

Software product summary	**G-Cash Payment Platform**
Country	Philippines
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Globe

http://web.globe.com.ph/web/gcash?sid=1260304182202

http://web.globe.com.ph/web/gcash?sid=1260304182202

Description

GCASH, Globe's flagship M-Commerce service, was born from a simple goal of transforming a mobile phone into a wallet. With its launch in October 2004, GCASH has effectively given Globe and TM subscribers access to a cashless and cardless method of facilitating money remittance, donations, loan settlement, disbursement of salaries or commissions, and payment of bills, products and services, with just a text message.

GCASH requires only a mobile phone and a one-time registration, with a minimal charge of P1.00 per GCASH transaction. GCASH dramatically expands the menu of mobile commerce transactions, and has provided the low income economic class and overseas workers access to the relevant services below:

- **Domestic and International Remittances:** Sending of money via GCASH as supported by a wide cash-handling network, including leading local and international remittance companies backed by reputable settlement banks.
- **Micro Payments:** Payments for purchases from the growing list of merchant partners, including essentials such as government taxes, medicines, boat fares, food, mobile prepaid credits (load), and schools and office supplies.
- **Micro-Credit Payments:** Allows disbursement of loan principals and payment of loan interest and amortization payments to lower income consumers with limited access to banks.
- **Bills and Tuition Fee Payments:** Allows payment of bills of various utility companies, internet service providers, insurance companies, as well as schools and universities.
- **Donations:** Provides a quick and safe processing of GCASH donations to different institutions.

Software product summary	**Smart Money**
Country	Philippines
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Smart Communications, Inc.

http://smart.com.ph/money/

http://smart.com.ph/money/
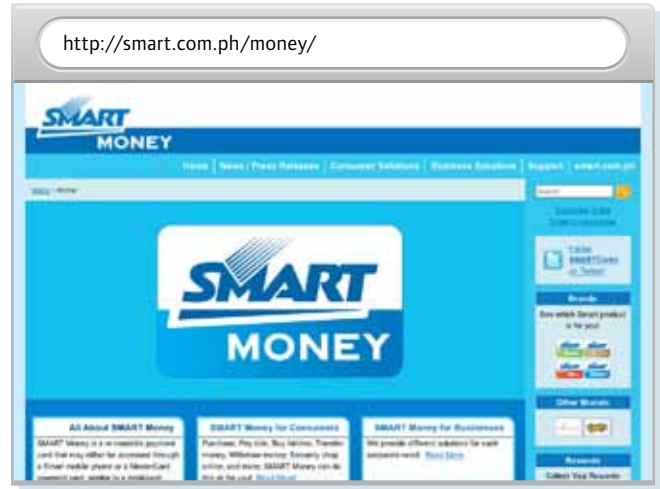
Description

Smart Money is a re-loadable payment card aimed at mobile phone customers who are either unbanked or underbanked. Smart Money may either be accessed through a Smart mobile phone or a MasterCard powered card, similar to a debit or a cash card. Smart Money enables users to purchase, pay bills, transfer money, reload airtime and withdraw money from ATMs from their mobile phones.

In order to get a Smart Money card, users need to download and activate a Smart Money account on their mobile phones. Once the Smart Money account has been downloaded and activated, users can apply for a Smart Money card either at a Smart Wireless Center or online. In order to be able to manage their money from their mobile phones, users need to deposit money in their Smart Money accounts.

Software product summary	**Upaid Mobile Payment Service**
Country	Serbia
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Upaid

http://www.upaid.net/index.asp

http://www.upaid.net/index.asp

Description

Upaid Mobile Payment Service is a mobile payment service that enables customers of all three Serbian mobile operators (Telekom Serbia (MT:S), Telenor and Vip mobile) who register their Visa cards to the service to recharge (top-up) their mobile phones, recharge (top-up) the prepaid phones of friends and family, and pay bills of utilities and other and other services. Upaid anticipates increasing the portfolio of its services with the operators in the future.

All customers of the MPS consortium of banks in Serbia who have Visa payment cards and a mobile phone service can sign up to the enhanced service at no cost, setting a new standard for recharge services in Serbia. The MPS consortium is currently made up of 10 banks and all three mobile operators in Serbia, and like the operators they represent, the consortium includes a mix of local and international banks. Together they represent over 75% of card holders, and more banks have applied to join.

Software product summary	**MTN MobileMoney**
Country	South Africa
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	MTN Mobile Money SA (Pty) Ltd.

http://www.mtnbanking.co.za/site/MTNBanking/index2.html

http://www.mtnbanking.co.za/site/MTNBanking/index2.html

Description

A MTN MobileMoney account is a transactional bank account aimed at both banked and unbanked South Africans, primarily younger South Africans who expect low-cost, no-hassle service from their bank. A MTN MobileMoney account enables customers to send money to and receive money from relatives, pay for goods and services, check balances and settle utility bills. There are no monthly service fees and no minimum balance. All banking transaction SMSs are free while free SMS notifications are sent to clients on changes to the balance. All customer-initiated transactions (e.g. card and/or ATM transactions) are notified in real-time, irrespective of the day and time

Opening of a MTN MobileMoney account takes place remotely through an interactive process during which voice recordings are taken as biometric identifiers and the MTN MobileMoney menu is downloaded over the air to a 32k SIM card. Customers receive free MobileMoney CashCards enabling them to deposit and withdraw money at Standard Bank AutoBank machine and branch. The MobileMoney CashCard can be replaced with a MobileMoney MasterCard enabling customers to deposit cash or cheques at any Standard Bank AutoBank machine or branch, withdraw cash at any ATM in South Africa, and perform POS transactions.

Software product summary	**WIZZIT**
Country	South Africa
Focus	M-Banking
Status	In use
License	Proprietary
Target users	General public, financial sector
Developer name	WIZZIT

http://www.wizzit.co.za/

http://www.wizzit.co.za/

Description

WIZZIT is a low cost, transactional bank account aimed at mobile phone customers who are either unbanked or underbanked. WIZZIT is accessible via mobile phone and debit card. WIZZIT offers mobile phone functionality for paying a person, paying accounts, buying airtime and buying electricity. Furthermore, WIZZIT offers Maestro branded debit card for paying whereever there is a Maestro logo, shopping and getting cash back and getting cash at any ATM.

WIZZIT does not use mass media advertisements but relies instead on WIZZkids that are typically young, low-income individuals that are certified as sales agents. WIZZIT aims at partnering with either existing banks or microfinance institutions. WIZZIT has also been planning to acquire merchants as agents in the rural areas of South Africa, where the majority of its potential customers reside and where there is only an underdeveloped payments infrastructure available.

Software product summary	**Mobipay**
Country	Spain
Focus	M-Banking
Status	In use
License	Open Source
Target users	Citizens, financial sector
Developer name	Atos Origin

http://www.atosorigin.com/en-us/

http://www.atosorigin.com/en-us/
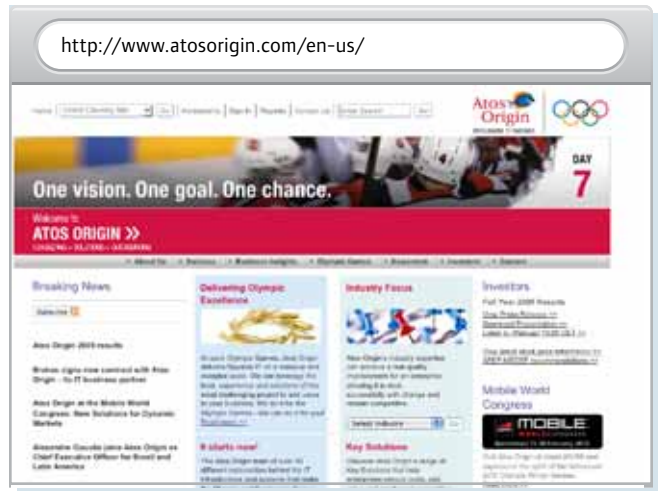
Description

Mobipay is an innovative mobile phone based payment system which has gathered together more than 90 financial entities, three leading Spanish telecommunications companies and the main payment cards of Spain to launch the system. The system is designed to carry out purchases through vending machines and the Internet, e.g. for purchasing cinema or concert tickets. Other uses for which the system is ideally suited include topping up of phone cards for mobile phones and carrying out payments at POS.

The basic operation in the first place, is based upon a mobile phone carrying a barcode on its back with data related to the user. The data is captured by a Metrologic IS4220 barcode scanner and automatically transmitted to a TPV which is connected to a bank. Once the data is processed, the transaction details are sent to the mobile phone and to the POS. The user receives the transaction and then validates the operation by typing a personal PIN number into the mobile phone.

Software product summary	**Sampath Mobile Cash**
Country	Sri Lanka
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Sampath Bank PLC.

http://www.sampath.lk/mobilecash.php

Description	Sampath Mobile Cash is an award-winning (National Best Quality Software Awards) banking product. Sampath Mobile Cash enables Sampath Bank A/C holders to send money through their mobile phones to other mobile phones or CDMA phones. Sampath Mobile Cash also enables Sampath Bank A/C holders to pay for products provided the merchant is equipped with a PoS machine.

Sampath Mobile Cash can be sent to any person having a mobile phone or a CDMA phone (any service provider), whether Sampath Bank A/S holders or non-Sampath Bank A/S holders. Currently, only Sampath Bank A/S holders can send money; however, in near future, also non-Sampath Bank A/S holders will be able to send money by depositing money at Sampath Bank A/C branches.

Software product summary	**Virtual Banking and Mobile Banking**
Country	United Arab Emirates
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Mi-Pay Ltd.

http://www.mi-pay.com/

http://www.mi-pay.com/

Description	Mi-Pays mobile banking system is designed to deliver mobile banking services to end users. In the Middle East, Mi-Pays mobile banking system is in particular aimed at the large amount of migrant workers to whom mobile banking services are popular means to send money back home. For users with a full bank account, Mi-Pay provides a comprehensive Mobile Banking service. Mi-Pay already interfaces directly into a number of core banking systems, and can interface with most systems in order to deliver secure Mobile Banking services to bank account holders.
	For users without a full bank account, Mi-Pay provides a simple Virtual Banking service that allows customers to manage a stored value account from their mobile phones. The stored value account allows customers to receive funds either domestically or from international sources, make payments to other users, pay utility bills, top up mobile accounts, and view their balance and transaction history. The stored value account can be funded with cash locally or by card where international remittances are used to credit the stored value account.

System requirements	In order to use Mi-Pays mobile banking system, users need a Mobile Java Application that works on 90% of mobile phones sold today.

Software product summary	**Magex Mobile Phone Payments**
Country	United Kingdom of Great Britain and Northern Ireland
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Magex Limited

http://www.magex.com/content/clients.html

http://www.magex.com/content/clients.html

Description

Magex Mobile Phone Payments consists of a range of mobile phone payment solutions facilitating Person-to-Person (P2P) and Person-to-Merchant (P2M) suite of products via Interactive Voice Response (IVR), SMS and WAP. The IVR, WAP, and SMS payments modules are available individually or in combination, so a consumer could use all three services from the same mobile phone during the course of a day.

The IVR service enables users to initiate a payment by calling a designated telephone number and keying in their password, the amount they wish to send, and the recipient's mobile number following voice prompts. The payment is processed and an SMS message is immediately sent to the recipient. In order to use the IVR service, the user must register their mobile phone number on their account.

The SMS service enables users to initiate a payment by sending a single text message to a designated telephone number. The message need only contain the sender's password, the amount they wish to send, and the mobile phone number of the recipient. The user also has the option to include a short message. In seconds, the payment is processed and the recipient is notified via SMS.

The WAP service is a menu driven application which enables users to initiate a payment, check their balance, and view past transactions via a WAP connection. The account holder visits the WAP site via their mobile phone and scrolls the menu for the actions that they wish to take. On completion, the payment is quickly processed and the recipient is notified.

Software product summary	**Mobile Microfinance**
Country	United Kingdom of Great Britain and Northern Ireland
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Mi-Pay Ltd.

http://www.mi-pay.com/Products/microfinance/microfinance.html

http://www.mi-pay.com/Products/microfinance/microfinance.html

Description

It's now a well understood principle that providing micro-finance facilities to those poorest members of society is a tremendously powerful means of improving the lives of literally billions of people across the planet.

However, most of the current schemes are largely paper based (due to the problems providing computer technology locally) which limits their effective reach in the remotest areas and requires a degree of literacy that may difficult to meet locally. In addition the use of paper can additional problems in maintaining accurate records as it can be difficult to input written records into the computer systems running the micro-finance service.

These all unnecessary levels of cost and inefficiency that impact the overall effectiveness of tThe mobile phone is a key technology that can be easily deployed to remote locations (subject to network coverage). In addition to being used for voice and SMS texting, the average mobile phone is also capable of having a localised version of our SecureLink Java applet loaded to provide simple loan management and data capture facilities.

The applet communicates with a modified version of our pre-pay top-up service that provides a complete loan management and risk analysis / fraud management service as well as a multi-level service portal that enables the local management team to monitor the whole loan system from end to end. The system can also provide comprehensive reports for the officers of the NGO or other body financing the whole system.the whole service.

Software product summary	**Amazon TextPayMe**
Country	United States of America
Focus	M-Banking
Status	In use
License	Open Source
Target users	Citizens, financial sector
Developer name	Amazon.com company

http://payments.amazon.com/sdui/sdui/home
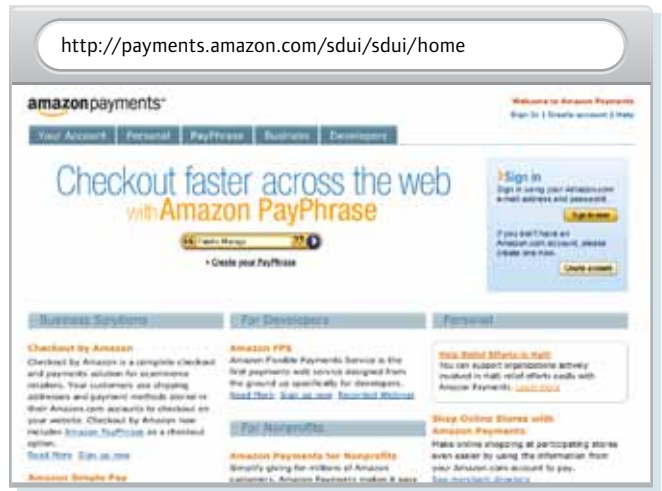
Description

Amazon TextPayMe enables users to send and receive money using their mobile phones. Users can send and request mobile payment, check account balance, and perform other account management functions. Users must activate their mobile phone numbers before they can take advantage of all of the mobile payment features.

Using Amazon TextPayMe, customers can send and request a payment with their text-enabled mobile phones. A payment can be sent to or requested from an e-mail address or a mobile phone number. There is no additional charge to send money using Amazon TextPayMe. Standard text messaging rates may apply from mobile carriers.

Software product summary	**CellTrust Secure Mobile Government Solution**
Country	United States of America
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	CellTrust Corporation

http://www.celltrust.com/Solutions/Government/
CellTrust-Solutions-Government.html

http://www.celltrust.com/Solutions/Government/CellTrust-Solutions-Government.html

Description

CellTrust Mobile Government Solution aims to manage the complexity of governmental mobile communications across a variety of stakeholders constituents, administrators, executives, partner agencies, and networks requires strategic planning and robust, secure technology.

CellTrust Mobile Government Solution could provide:

- Two-way mobile communication for administrators, physicians, healthcare providers, insurers, patients.
- Reduction of administration costs.
- Secure, reliable and robust emergency information channel.
- Mobile transactions, LBS and contactless payment.
- SecureWallet mobile depository for multiple types of governmental information.
- Global coverage with virtually any phone number across 700 carriers in over 218 countries ✍

Software product summary	**CellTrust SecureSMS**
Country	United States of America
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	CellTrust Corporation

http://www.celltrust.com/Solutions/MobileBanking/
CellTrust-Solutions-Mobile-Banking.html

http://www.celltrust.com/Solutions/
CellTrust-Solutions-Mobile-Banking.html

Description

CellTrust SecureSMS provides de-facto two-factor authentication with a combination of the device ID (something you have) and a secure PIN sent via AES encrypted SecureSMS representing a cutting-edge, disruptive technology which makes the need for today's commonly used two-factor authentication scenarios obsolete. By using CellTrust's Mobile Banking and Finance solution, no longer is security an obstacle and no longer are multiple technology providers or an expensive infrastructure required. The Secure Mobile Banking and Finance Solution from CellTrust provides an automatic, transparent and comprehensive audit trail meeting most major compliancy requirements.

CellTrust SecureSMS provides de facto two-way authentication, mobile anti-fraud security, secure mobile depository for all types of financial information and significantly reduces transaction cost. ✐

Software product summary	**ESE Enterprise Server Software**
Country	United States of America
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	SourceTrace

http://www.sourcetrace.com/platform.php?sta=1

Description	**ESE Enterprise Server Software** is the industry's premier middleware server for reliable and scalable *bi-directional, facilitated, transactional* (BFT) communications, intermediating between handsets in the field and the back office. Cost-effective, scalable and reliable, the Enterprise Server is secure, with best-of-breed encryption technologies, as well as highly available – ESE's five 9s uptime lead the industry. ESE Enterprise Server Software also processes data to generate reports and with sophisticated analytics:

- Intermediates between handsets and back-office systems & databases
- Tracks transactions with five 9s uptime – 99.999% – even if back-office system or database is down
- Provides complete transaction visibility, reports, analyses including –
- Transaction information
- Audit and security information
- Fraud detection information
- Market segmentation information

Software product summary	**ESE Management Console**
Country	United States of America
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	SourceTrace

http://www.sourcetrace.com/platform.php?sta=1

http://www.sourcetrace.com/platform.php?sta=1

Description	The **ESE Management Console** is an administration and control tool providing control of any number of remote handheld devices from a central location via a Web browser. Using the ESE Management Console, an organization can closely manage third-party agents and business correspondents thousands of miles away, turning third-party devices on or off as necessary and immediately detecting fraudulent activity. Remote code configuration on all devices – without having to touch them – provides unprecedented security, interoperability and flexibility – and offers significant cost savings, as well.

Software product summary	**ESE Mobile Designer**
Country	United States of America
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	SourceTrace

http://www.sourcetrace.com/platform.php?sta=1

http://www.sourcetrace.com/platform.php?sta=1

Description

The **ESE (E Service Everywhere) Mobile Designer** allows customization of an organization's entire ESE product suite to meet the dynamic and changing requirements of a vertical or a region, as well as the practices of the business itself. A bank can use the Mobile Designer to introduce new products or services. With the ESE Mobile Designer, customizations take days or hours rather than weeks or months. For instance, if a bank partners with an insurance company and begins to offer insurance, the institution will have to modify its deployed handset software to allow insurance transactions. With the Mobile designer, however, the changes are quickly and easily configured by the organization – rather than programmed.

This non-programmatic configuration feature dramatically cuts costs and time to market, and keeps the system safe from bugs – because the Mobile Designer does not touch any program code.

The Mobile Designer also keeps up with an organization's requirements so that the ESE evolves with the business – and helps the business evolve with the market.

Software product summary	**E*Trade Mobile Pro**
Country	United States of America
Focus	M-Banking
Status	In use
License	Proprietary
Target users	
Developer name	E*Trade Financial Corp.

http://www.etrade.com/mobile

Description	E*Trade Mobile Pro, an integrated mobile software solution promising users direct remote access to their E*Trade accounts from their BlackBerry smartphones. The free mobile application promises a secure trading and banking experience closely modeled on the E*Trade desktop interface, complete with real-time mobile access to information and transactions including free streaming stock and options quotes, equity and options trading, brokers and bank account transfers, and live watchlists and portfolios.

Software product summary	**MasterCard PayPass**
Country	United States of America
Focus	M-Banking
Status	In use
License	Proprietary
Target users	MasterCard PayPass is aimed at both developed and emerging markets
Developer name	MasterCard

http://www.mastercard.com/us/personal/en/aboutourcards/paypass/

http://www.mastercard.com/us/personal/en/aboutourcards/paypass/

Description	MasterCard PayPass is a contactless way to pay that allows customers to 'tap and go' with their mobile phones. MasterCard PayPass can be used on any contactless payment reader that displays the MasterCard Paypass symbol including in fast food restaurants, at gas stations, in convenience stores, at pharmacies, in movie theatres etc. Only for larger purchases, customers are required to sign.
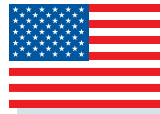
MasterCard PayPass uses a hidden embedded computer chip and radio frequency antennae. After customers tap their PayPass at checkout, payment details are sent wirelessly to the MasterCard network. Moments after they tap, they will receive payment confirmation. With secure encryption technology and Zero Liability+ protection, MasterCard PayPass is as safe as a regular card.
System requirements	In order to use MasterCard PayPass, customers need a MasterCard PayPass SIM card.

Software product summary	**Obopay mobile money**
Country	United States of America
Focus	M-Banking
Status	In use
License	Free
Target users	Citizens, financial sector
Developer name	Obopay

http://www.obopay.com/

http://www.obopay.com/

Description	Obopay mobile money is a mobile payment service that lets customers get, send and receive money from their mobile phones. Obopay mobile money works on all mobile phones. There are three ways that customers can use Obopay mobile money from their mobile phones. Either they can download Obopay, use text messages, or get on the internet from their mobile phones and that go to wap.obopay.com.

Customers can add money to their Obopay accounts from either their bank accounts or their debit or credit cards. To withdraw money from their Obopay accounts customers can either move money from their Obopay accounts to their bank accounts, or get an Obopay Prepaid MasterCard which will allow them to get instant access to the money in their Obopay accounts at ATMs.

Software product summary	**PayPal Mobile**
Country	United States of America
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	PayPal Inc.

http://www.paypal.com/

Description	PayPal Mobile is an online payment solution allowing customers to use their mobile phones to pay for eBay items, check their PayPal Balance, send money to friends and family, and buy things from mobile websites. In order to use PayPal Mobile, customers need a mobile phone and a PayPal account. Although customers do not need it, they may want to consider getting a data plan, too.

There are three ways to use PayPal Mobile, that is, by mobile web, by text or by phone. PayPal Mobile is a secure online payment solution, since credit card and bank account numbers are never exposed. Transactions are confirmed by a PIN or a password.

Software product summary	**The Remote Transaction System (RTS)**
Country	United States of America
Focus	M-Banking
Status	In use
License	Open Source
Target users	Citizens, financial sector
Developer name	Sevak Solutions

http://www.sevaksolutions.org/docs/RTS%20HP%20Solution%20Brief.pdf

http://www.sevaksolutions.org/docs/RTS%20HP%20Solution%20Brief.pdf

Remote Transaction System
Solution brief
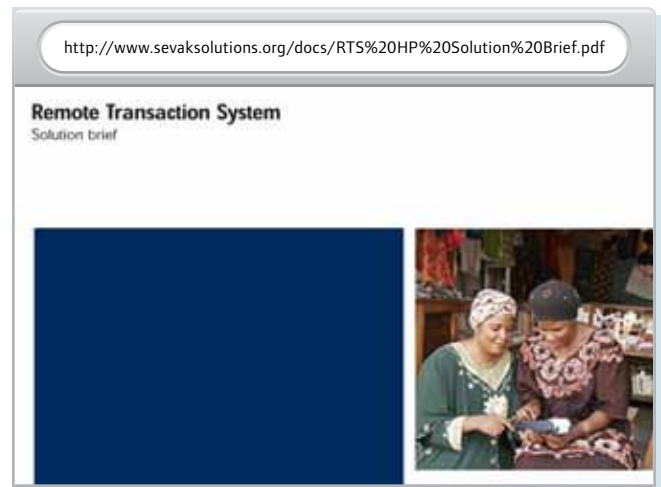
Description	The RTS was developed from the ground up using a combination of wireless technologies, smart cards, standards-based software, commodity PCs and business processes. It enables loan payments, cash deposits and withdrawals by microfinance clients through a network of agents that can either be microfinance staff or independent third-parties.

Software product summary	**Sybase mPayments 365**
Country	United States of America
Focus	M–Banking
Status	In development
License	Open Source
Target users	Citizens, financial sector
Developer name	Sybase Adaptive Server Enterprise

http://www.sybase.com/mobileservices

http://www.sybase.com/mobileservices

Description

In January 2009 Sybase announced the integration of Paybox, the global market leader in mobile payment solutions, into Sybase 365, the global market leader in SMS, MMS and GRX mobile messaging interoperability, the delivery and settlement of SMS and MMS content, mobile commerce and enterprise-class messaging services.

The integration of Paybox into Sybase 365 allows Sybase to provide mobile operators, financial institutions and merchants with a full suite of mobile payment solutions enabling their customers to undertake person-to-person remittances, make payments for goods and services, top-up mobile airtime and pay bills from a mobile device, in both developed and emerging markets.

Software product summary	**Celpay**
Country	Zambia
Focus	M-Banking
Status	In use
License	Proprietary
Target users	Citizens, financial sector
Developer name	Celpay Zambia Limited

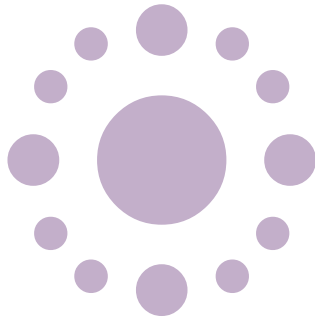*http://www.zm.celpay.com/*

http://www.zm.celpay.com/

Description

Celpay is an independent mobile enactment platform that facilitates banking services and payment solutions using cellular network infrastructure providing a vehicle to effect immediate transfers and complete these in real-time, while also acting as an accounts payment engine. Celpay facilitate person-to-person payments, person to merchant payments, person to corporate payments, balance inquiry, mini statements, reversals, prepaid airtime purchases for third parties and prepaid airtime purchases for individuals.

Customers registering for Celpay receive a new secure SIM card, adding a menu to their mobile phones that facilitates the payments and provides access to their Celpay accounts. Money can be added to Celpay accounts via transfers from a bank account, or by depositing cash or a check at any participating Celpay partner bank. Celpay has the single biggest distribution network available in Zambia comprising of 100 agents, 6 major banks, and over 200 post offices and postal agents allowing customers to pay for goods and services from cash points nearest to their homes and offices.

M-Procurement

Software product summary	**CellBazaar**
Country	Bangladesh
Focus	M-Procurement
Status	In use
License	Open source
Target users	Merchants
Developer name	Grameenphone

http://corp.cellbazaar.com/index.html

http://corp.cellbazaar.com/index.html

20 million Grameenphone users in Bangladesh

Description

CellBazaar is a service from Grameenphone that allows users to buy or sell over their mobile phones. CellBazaar can be accessed via different platforms, that is, via either SMS, WAP, WEB or IVR. Items posted by WEB, WAP or SMS are instantly visible to users of any platform. WEB platform also makes the local mobile-based market available to an international audience.

If users want to sell something, they can post the information on CellBazaar through Grameenphone, and buyers will contact them. If they are looking for something to buy, or a service, they can look for it on CellBazaar and contact the seller directly. When buyers see an item they like, they can call the seller, get additional information, and meet the seller to complete the transaction.

Software product summary	**Flanders**
Country	Belgium
Focus	M-Procurement
Status	In use
License	Proprietary
Target users	Business community
Developer name	Multiple developers

*http://www.investinflanders.com/en/sectors_activities/
ict/default.aspx*

http://www.investinflanders.com/en/sectors_activities/ict/default.aspx

Description

Driven by innovation, creativity, technological expertise and entrepreneurship, ICT firms in Flanders have acquired European as well as global leadership positions. In Flanders' open business culture, ICT companies can rely on a hi-tech ecosystem in which to develop tomorrow's technologies. This high density of ICT businesses, research centers and knowledge clusters provides them with a stimulating environment. This helps them greatly in taking the lead in their specific niche. ✐

Software product summary	**Computrace Mobile**
Country	Canada
Focus	M-Procurement
Status	In use
License	Proprietary
Target users	Public administration institutions
Developer name	Absolute Software

http://www.absolute.com/products/computrace-mobile

http://www.absolute.com/products/computrace-mobile

Description

Computrace® Mobile by Absolute® Software allows you to manage all of the handheld devices in your organization using the same technology and security as you use for your computers. You no longer have to switch to a different server or application to keep track of these assets. Features include:

- **IT Asset Management**
  Enjoy the ease of a single interface to manage all of your IT assets within the Absolute Customer Center. You can manage your entire deployment regardless if a device is on or off your company network.

- **Data & Device Security**
  Remotely sensitive data on missing devices and produce an audit log of the d files to prove your compliance with government and corporate privacy regulations.

- **Geo-location Tracking**
  Use GPS technology to track your assets on an internet map. You will be able to see current and historical locations within about 33 feet.

Software product summary	**Nokia Life Tools Agriculture**
Country	Finland
Focus	M-Procurement
Status	In use
License	Proprietary
Target users	Citizens, agricultural sector
Developer name	Nokia corporation

http://europe.nokia.com/explore-services/extras/ nokia-life-tools

http://europe.nokia.com/explore-services/extras/nokia-life-tools

Description

Nokia Life Tools Agriculture is one component of **Nokia Life Tools**, which is a range of services which includes Agriculture, Education and Entertainment services designed specially for the consumers in small towns and rural areas of the emerging markets. The service provides timely and relevant information customized to the user's location and personal preferences directly on their mobile phones.

- **Nokia Life Tools Agriculture** services aim to plug the information gaps and needs of farmers, by providing information on seeds, fertilizers, pesticides, market prices, and weather (temperature, rainfall, wind conditions) via their mobile phones.

- **Features:** Receive information on weather, agriculture tips & techniques, as well as market prices to improve your productivity and earnings. You'll be empowered with tailored and reliable information in synch with the cropping cycles delivered regularly to your mobile phone.

- **Market prices:** Stay up-to-date and have the potential to earn more with regular s of locally relevant market prices

- **Weather:** Plan your work better by receiving forecasts which include temperature, rainfall and wind conditions in advance.

- **Info & Tips:** Manage your work better with tips and information on the latest agricultural techniques and news.

- **About Nokia Life Tools:** Nokia Life Tools is an icon-led, graphically rich application. The service is easy to use with the capability to display two different languages simultaneously on the same screen, thereby enhancing usability. The service is not dependant on the customer's ability to complex settings or have access to GPRS on their mobile phones. Once the Nokia life Tools application is activated, the customer can begin to use the service seamlessly. ✐

Software product summary	**TradeNet**
Country	Ghana
Focus	M-Procurement
Status	In use
License	Open source
Target users	Agricultural sector
Developer name	BusyLab

http://www.tradenet.biz/

Description

TradeNet developed by the Ghanian software research and development business, BusyLab, is an innovative agricultural market software that targets the agriculture sector across Africa. TradeNet allows users to sign-up for SMS alerts for whatever commodities and areas they are interested in. Users can request prices which are provided in realtime on the network from many market enumerators that are active throughout 380 markets spread across the continent. Users can also indicate their areas of business and receive instant SMS alerts for offers to buy or sell as soon as anyone else on the network has submitted an offer via their mobile phones.

The service online allows analysts to plot trends of historical price data comparing markets and commodities. Countries can add international commodity prices, and generate special market reports that can be printed and pasted in local cybercafes and community markets. Individual users can setup their own free website with their own custom internet address to advertise their goods and offers. And farmer and producer groups can setup free websites to manage all these services and content for their members. Powerful integration with mobile phone operators allows anyone to target users and publish specific content to thousands of mobile phones across the continent. ✍

Software product summary	**KMDP mobile market finder**
Country	Kenya
Focus	M-Procurement
Status	In use
License	Open source
Target users	Farmers, agricultural sector
Developer name	ACDI/VOCA

http://www.acdivoca.org/acdivoca/portalhub.nsf/ID/kenyaKMDP

http://www.acdivoca.org/acdivoca/portalhub.nsf/ID/kenyaKMDP

Description

A major problem for smallholder farmers in Kenya is lack of access to timely and accurate market information. To address this problem, Kenya Maize Development Programme (KMDP) has established a network of market information centers that serve as locations for prices and trade information within local and regional markets. Through these market information centers, buyers are able to post purchase bids while farmers can review offers and sell their stocks to willing buyers.

Farmers can access the market information gathered at the market information centers either by sending text messages on their mobile phones. To access the market information by mobile phone, they need to send text messages including the commodity and the market information center of interest. Instantly they will receive the latest. The mobile phone network works in concert with radio and newspaper coverage of market rates. 🖋

Software product summary	**b2bpricenow**
Country	Philippines
Focus	M-Procurement
Status	In use
License	Open source
Target users	Farmers, agricultural sector
Developer name	N/A

http://www.b2bpricenow.com/contents/mainpage.asp

http://www.b2bpricenow.com/contents/mainpage.asp

Description

The initiative aims of b2bpricenow are to help farmers achieve prosperity by lowering the transaction costs of marketing and trading (primarily by supporting the e-commerce efforts of cooperatives affiliated to the Land Bank) and by getting rural people and farmers into the banking system.

Software product summary	**Turkcell**
Country	Turkey
Focus	M-Procurement
Status	In use
License	Proprietary
Target users	General public
Developer name	Turkcell

www.turkcell.com.tr/en/services/Information

Description

Turkcell Mobile Signature enables customers to make transactions which is equivalent to their original signature on a hard copy, but which identifies customers digitally instead. Turkcell can be used for transactions not only in the area of banking, but also in areas such as Turkcell online services, informatics, e-Commerce, finance, government, publishing and public.

Turkcell Mobile Signature subscription consists of three stages: pre-application (banks or Turkcell call center), application (Turkcell ekstra) and activation (Turkcell call center) during which the signature data, which is customized for the owner of the signature provided by the Qualified Digital signature obtained after the Turkcell Mobile Signature subscription, is saved on the SIM card.

Software product summary	**Mobileframe**
Country	United States of America
Focus	M-Procurement
Status	In use
License	Proprietary
Target users	Public administration institutes
Developer name	Mobileframe

www.mobileframe.com

| Description | MobileFrame has a unique software platform that allows users with no IT background to develop and deploy complex mobile applications, enabling data collection and managed workflow to be seamlessly integrated from the field to backend systems. MobileFrame customers can connect to backend enterprise systems in real-time and capture rich data types such as documents, digital photos, voice notes, bar code scans, digital signatures, etc.,

MobileFrame's Smart Architecture seamlessly integrates a GUI Desktop, any-to-any relational client/server databases, intelligent Client device rendering and autonomous network synchronization all into one seamless platform. Using MobileFrame's Smart Architecture, novice computer users can build and deploy sophisticated mobile applications, and make changes on-the-fly, without the need for professional IT services. Business administrators use the MobileFrame Desktop and MobileFrame Database to define and maintain business processes and data access. When the MobileFrame Monitor autonomously senses network availability, it transmits those processes to selected remote client devices across any wired or wireless TCP/IP connection (WAN, LAN, 802.11, GPRS, dock). The MobileFrame Client operates on any .NET enabled handheld device, including Pocket PC PDA's, Tablet PC's or Laptops. |

Software product summary	**Mobile Solutions for asset and equipment modules**
Country	United States of America
Focus	M-Procurement
Status	In use
License	Proprietary
Target users	Public administration institutions
Developer name	Datasplice

www.datasplice.com/SolutionsProducts/ConditionMonitoring

www.datasplice.com/SolutionsProducts/ConditionMonitoring

Description

Equipment condition monitoring helps companies manage preventative, predictive, and/or reliability centered maintenance practices. Key data is collected and assessed for trends in equipment behavior, and greatly reduces unpredicted downtime.
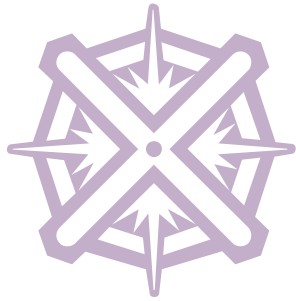
Equipment condition monitoring and meter reading rounds can also be extremely redundant and labor-intensive for workers. This often sacrifices data integrity, and affects overall operation efficiency. DataSplice empowers maintenance technicians to deliver real-time measurement values to the CMMS, improving the accuracy of technician readings and drastically reducing human error.

With a mobile device, employees have the power to quickly alert key personnel while still out in the field, and help to an emergency team to handle critical situations. This benefit alone is priceless in terms of equipment cost and shelf-life.

Managers feel more secure when they can clearly track if and when employees are hitting critical check points, and that a task was actually completed. Overall, the DataSplice condition monitoring solution provides peace of mind and ensured system reliability.

M-Trade

Software product summary	**Proximus M-Pay**
Country	Belgium
Focus	M-Trade
Status	In use
License	Open source
Target users	Merchants, financial sector
Developer name	Belgacom

ict.belgacom.be/EN/homepage.asp

ict.belgacom.be/EN/homepage.asp

Description

Proximus M-Pay is a mobile payment system for buying products online via either mobile phone or Internet. In order to buy products online, customers need either to browse a site hosted by a vendor that supports the Proximus M-Pay service with their GSM or to send an SMS to a short number, and then the desired product and click on the Proximus M-Pay icon to pay for their purchase.

The amount for which customers buy online products via Proximus M-Pay is either deducted from their Pay& Go card, if they have a Pay& Go card, or mentioned on their bills, if they have a subscription. For payments via SMS, customers do not need a specific device. For payments via Internet on a mobile phone, the mobile phone needs to support the WAP function to browse the GPRS network.

Software product summary	**Alert2Transaction**
Country	Israel
Focus	M-Trade
Status	In use
License	Proprietary
Target users	Financial sector
Developer name	Classifeye

www.classifeye.com/Solutions/Alert2Transaction/tabid/76/Default.aspx

www.classifeye.com/Solutions/Alert2Transaction/tabid/76/Default.aspx

Description

In the current market environment, financial institutions and service providers need to have a fast, secure and interactive way to communicate with their customers, thereby enabling mobile transactions anytime, anywhere. The most prevalent solutions are SMS alerts. By the use of those means, customers can be informed about changes happening in their portfolio or account. However, in order to respond, customers still need to type several characters they will then receive a lot of irrelevant information and eventually – since they don't really trust the mobile network – they will need to call the bank or access the eBanking website.

As a result, financial institutions and service providers lose money from transactions that could have occurred.

ClassifEye brings new dimensions mobile finance, thereby helping banks making more out of their customer base: Its unique, patented technology enables banks to provide new services that are suitable to the mobile experience and thereby helps customers respond to SMS- and other alerts in a a simple, fast and secure manner.In addition to allowing end users to securely approach the banks – they also allow the bank to securely prompt end users to conduct activities with the bank.

Software product summary	**Mi Send Money Transfer**
Country	United Kingdom of Great Britain and Northern Ireland
Focus	M-Trade
Status	In use
License	Proprietary
Target users	Merchants, financial sector
Developer name	Mi-Pay

www.mi-pay.com/index.php?option=com_content&task=blogcategory&id=18&Itemid=84

Description

The international remittances market is estimated to be worth approximately $250 billion per annum. Mi-Pay provides mobile operators, banks and money exchange bureaus with the ability to generate new revenues in this valuable market.

Customers register for the service, and use the web or their phone to fund and send payments to friends and relatives abroad. An online portal reduces the need for a complex infrastructure for sending customers, saving cost. For card transactions Mi-Pay takes responsibility for collecting the payments, managing the foreign exchange, and making the transfer to the recipient agent network.

Mi-Pay's solution offers a number of benefits:

- Low operational overhead through Mi-Pay providing hosting and operational support
- Helps avoid some financial risks by handling the foreign exchange management and settlement to the receiving country
- Supports regulatory requirements by providing comprehensive fraud screening service to support anti money laundering (AML) and knowing customer (KYC) processes as required by government regulation
- Wide variety of payment methods and channels supporting increased take up of the service
- Lower cost per transaction allowing competitive pricing for consumers
- Mobile channels available as a complement to Internet, providing for further market penetration

Software product summary	**Mobfinance Worldwide Edition**
Country	United Kingdom of Great Britain and Northern Ireland
Focus	M-Trade
Status	In use
License	Proprietary
Target users	Investors, financial sector
Developer name	Imoblife

www.imoblife.com/customize_mf.html

www.imoblife.com/customize_mf.html

Description	MobFinance Worldwide Edition is a powerful mobile international stock ticker & worldwide stock tracker that enables international stock investors to monitor stock portfolios traded on 57 worldwide stock exchanges by retrieving stock quotes, live charts, and related business headlines directly to your mobile phone & Blackberry.

Software product summary	**Datasplice Clear – Contractor Labor and Equipment**
Country	United States of America
Focus	M-Trade
Status	In use
License	Proprietary
Target users	Public administration institutions
Developer name	Datasplice

www.datasplice.com/SolutionsProducts/clear
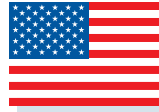

Description	DataSplice Contractor Labor and Equipment Account Reconciliation Software (CLEAR) is an innovative record-keeping and data entry software product. CLEAR helps collect, manage, reconcile, and monitor daily labor, equipment, and per diem costs associated with a large temporary workforce of contractors and subcontractors. CLEAR integrates directly with maintenance management system so the collected data can be analyzed immediately using familiar project reports. It provides the followings:

- Improves project management by electronically collecting and integrating labor and equipment costs directly into plant maintenance management or accounting system – eliminates paper.
- Reduces accounting staff costs and eliminates temporary data entry staff.
- Automatically reconciles data and highlights discrepancies.
- Ensures contractors get paid the right amount, on time and without any additional cost or effort.

Software product summary	**Mobile Inventory Module**
Country	United States of America
Focus	M-Trade
Status	In use
License	Proprietary
Target users	Public administration institutions
Developer name	Datasplice

www.datasplice.com/SolutionsProducts/Inventory

Description	The DataSplice Inventory Control Client enables companies to incorporate bar code scanning to manage parts inventory. All inventory functions can be accomplished from a handheld terminal with an integrated bar code scanner, making the process faster and far more accurate than manual data entry.

The DataSplice bar coding solution can be configured for CMMS to track the inventory critical to an organization. The solution includes easy-to-use screens for handhelds, hardware, software, implementation services, and user support that work together to provide a reliable inventory option.

Purchase order items can also be received directly from the delivery truck. Spare parts lists and inventory search views can speed up the process of locating and collecting parts, which helps to get people out to jobs faster with the proper materials.

With the DataSplice Inventory Control Client, organizations can reduce duplicate items, and enable people to track or locate key inventory items. The search criteria can be configured to search every store room across an organization for a specific part, and then arrange it for transfer to a job location.

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 2 of the Compendium, the second in the series, focuses on m-technology software products and applications in the areas of human security and business development 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.