M-Agricultural information services in Zimbabwean libraries: drawbacks and opportunities in facilitating access to information to enhance agricultural production.

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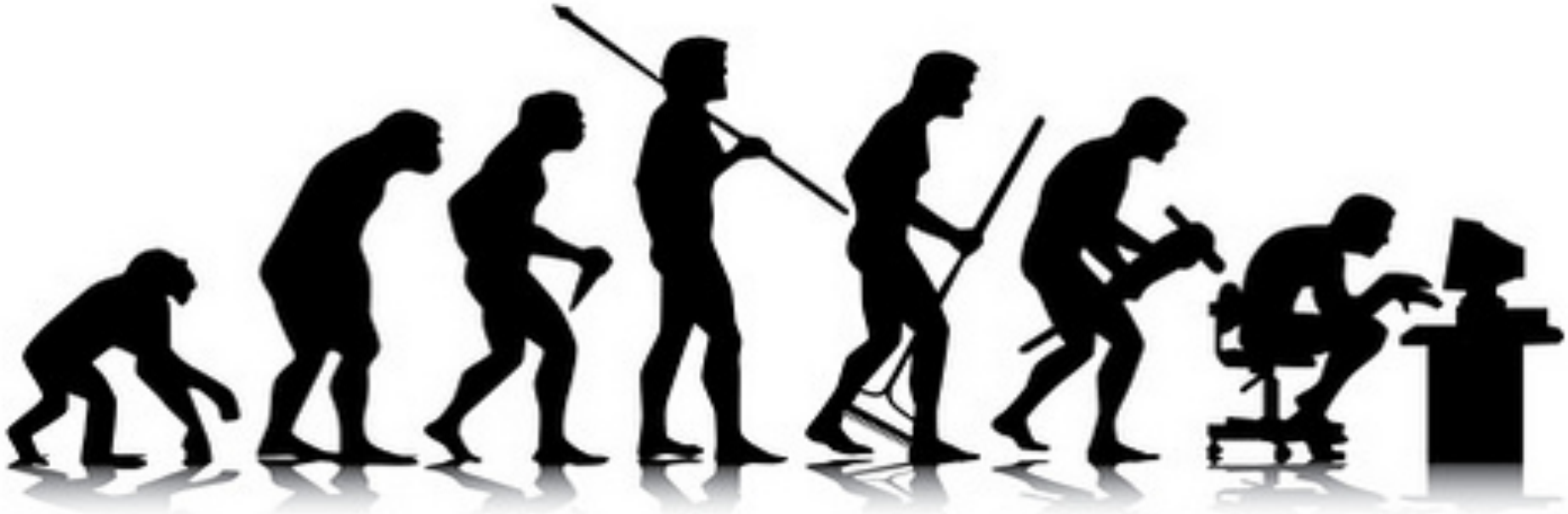
Introduction

- ICT revolution has pervaded every facet of human life
- ICT concept now encompasses the use of M-technologies to facilitate access to information
- Africa benefiting from use of M-technologies in education, research, governance, health and communication

Intro' continued…

- M-technologies broadening & democratizing horizons of education, learning & work.
- M-technologies ushering new services and contributions of libraries in education & other sectors of the economy
- Current use and development of M-technologies has precipitated a technological shift
- M-technologies provide an alternative way to communicate & work and opportunity to access, create and exchange resources from digital libraries



Mtechnologies in Use in Africa

Various models used in Africa for **mobile systems** leverage on :-

- Simple sms/text message platforms,[some times voice or calling]
- Any generation of handsets can be accommodated
- Phone credit becomes a medium of exchange [same as money-mobile cash]-Ecocash, Skwama –Telecel, OneWallet (Netone)
- Can be dependent or independent of the mobile telephone service provider.

Cont'd…

Various models used in Africa for **mobile systems** leverage on :-

- New free text applications such as ***whatsapp*** lower end user cost in accessing services and communication.
- Video and MMS message enhances the services that can be offered.
- Internet, email or instant messaging on a mtechnologies

Rethinking Library Roles

- Clarion call to libraries to re-think with regards to their role, services and priorities
- Mtechnologies provision for sound , text &image links facilitate exchange of information and leveraging education
- Increase of mtechnologies precipitated new methods of learning, information access and exchange e.g. m-library services
- Mtechnologies ushering in a new model of egalitarian distribution of information

Rethinking library roles cont'd

- "**MOBILIZATION**" of library services likely to be most useful to a mobile user
- Libraries exploring mtechnologies connecting patrons through m-Web site;
- Access library hours
- View library account /catalogue search
- MOPACS
- Search databases/Locations & Hours
- Check Computer Availability/mReference Services/Links to institutional website

M-technologies: **APOGEE** of e-libraries

- Mtechnologies for agriculture critical in advancing development through access to information, markets, finance & governance systems.
- The climax
- M-technologies in library service provision altering library service provision, education and research.
- Removing barriers of time and distance

Central activities of M-technologies user

- communicate
- find and use information
- create /exchange content
- be entertained (edutainment)
- Flexibility in Mixing activities irrespective of time and space
- recreation

M-technologies for agriculture

- Mtechnologies transform agriculture in through providing for e-commerce
- Provide farmers with platforms to share agrometereological information, micro insurance schemes and opportunities to SMS
- Facilitating access to information at each stage of the farming process e.g. weather forecasts, pest attacks, inputs, cultivation practices, disaster preparedness and mitigation and disease management

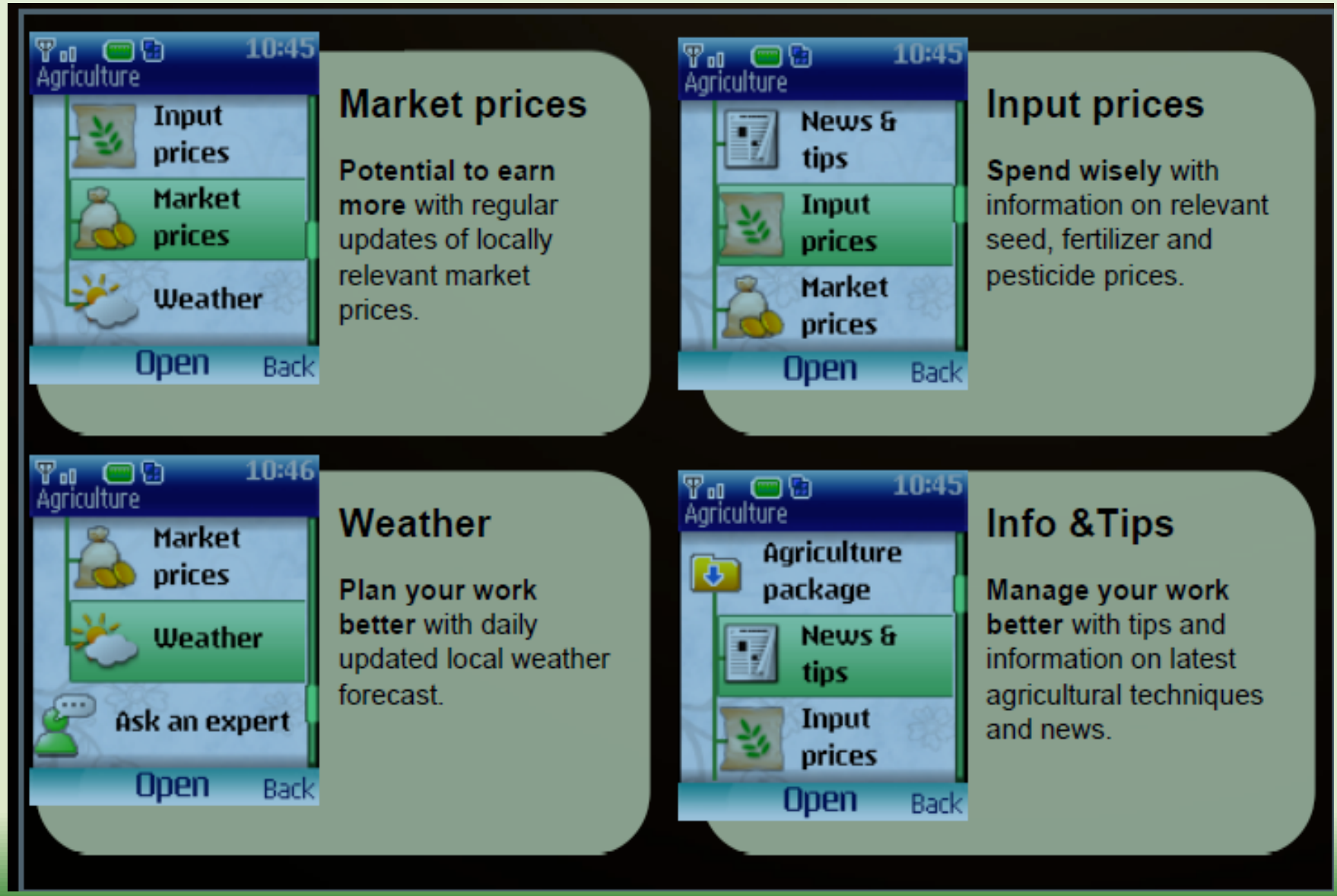
M-technologies in Higher Education

- use of mobile technologies to enhance learning e.g. conventional &ODEL
- e-infrastructure and e-learning
- m-technologies enabling access to internet
- use SMS as learner support service
- Mtechnologies supporting research, tutorial letters, and reminders, announcements, e-learning, in ODEL.
- ODEL library supporting mobile learning i.e. websites configured for use on mobile, tablet &desktop

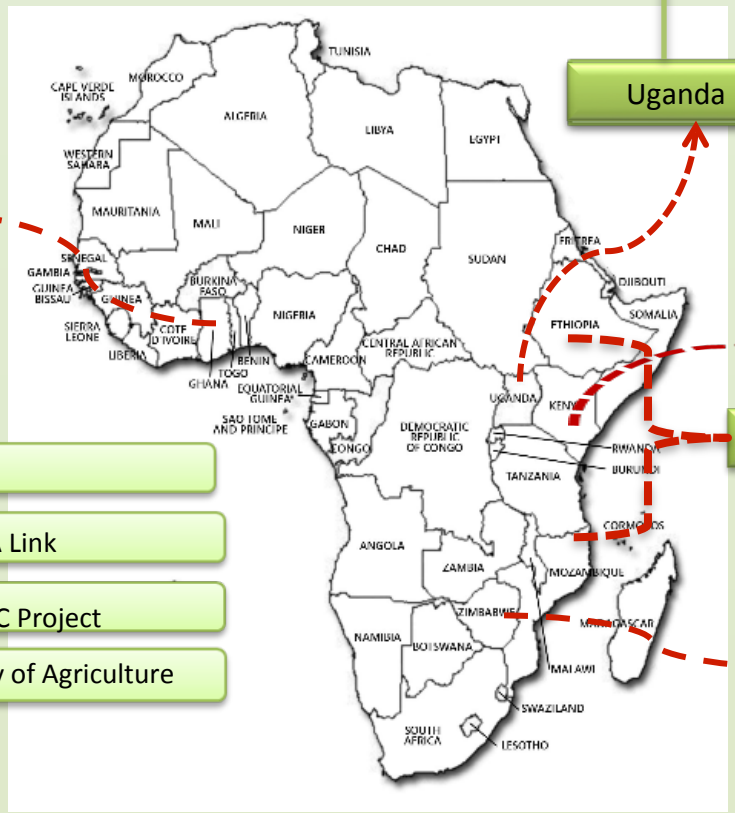
Cont'd

- Econet Wirelesses broadband enabling students to connect to the web
- technology as an enabler to provide service e.g. access to OPAC, Book Reservation and recalls and reminders
- EcoSchool Project provides access to e-resources to students at the UZ College of Health Sciences (CHS) on their mobile tablets
- Using mtechnologies to transforming ODEL through access to educational resources

Uses of Mtechnologies in agriculture



Examples of m-agricultural information projects in the continent

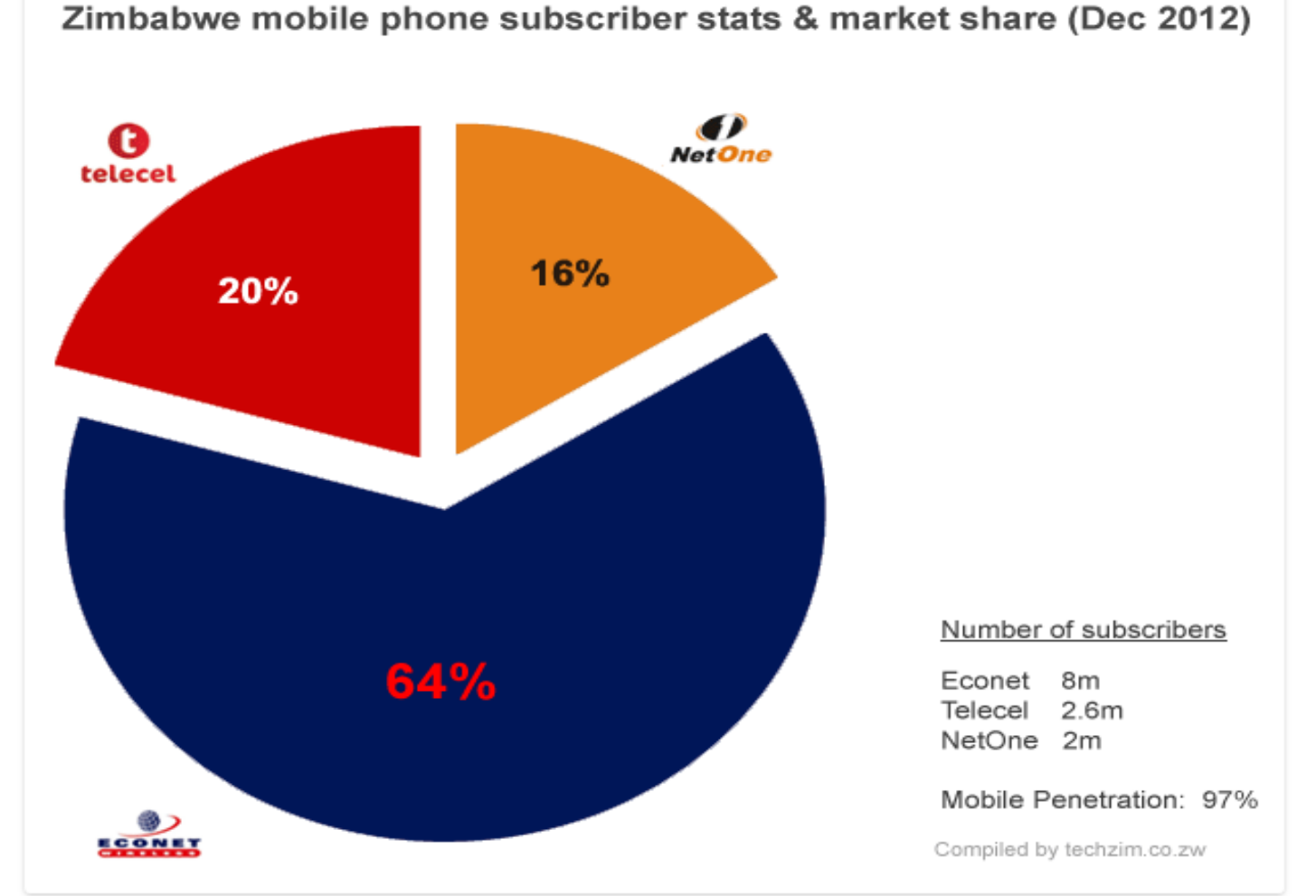


- InforTrade
- Uganda
  - iCOW
  - M-farm
  - Kilimo
  - KUZA doctor
  - SALI
- Ghana
  - ESOKO
  - COCOA Link
  - ECAMIC Project
  - Ministry of Agriculture
- Kenya
- East Africa
  - SANGONet
- Zimbabwe
  - Remote livestock marketing system

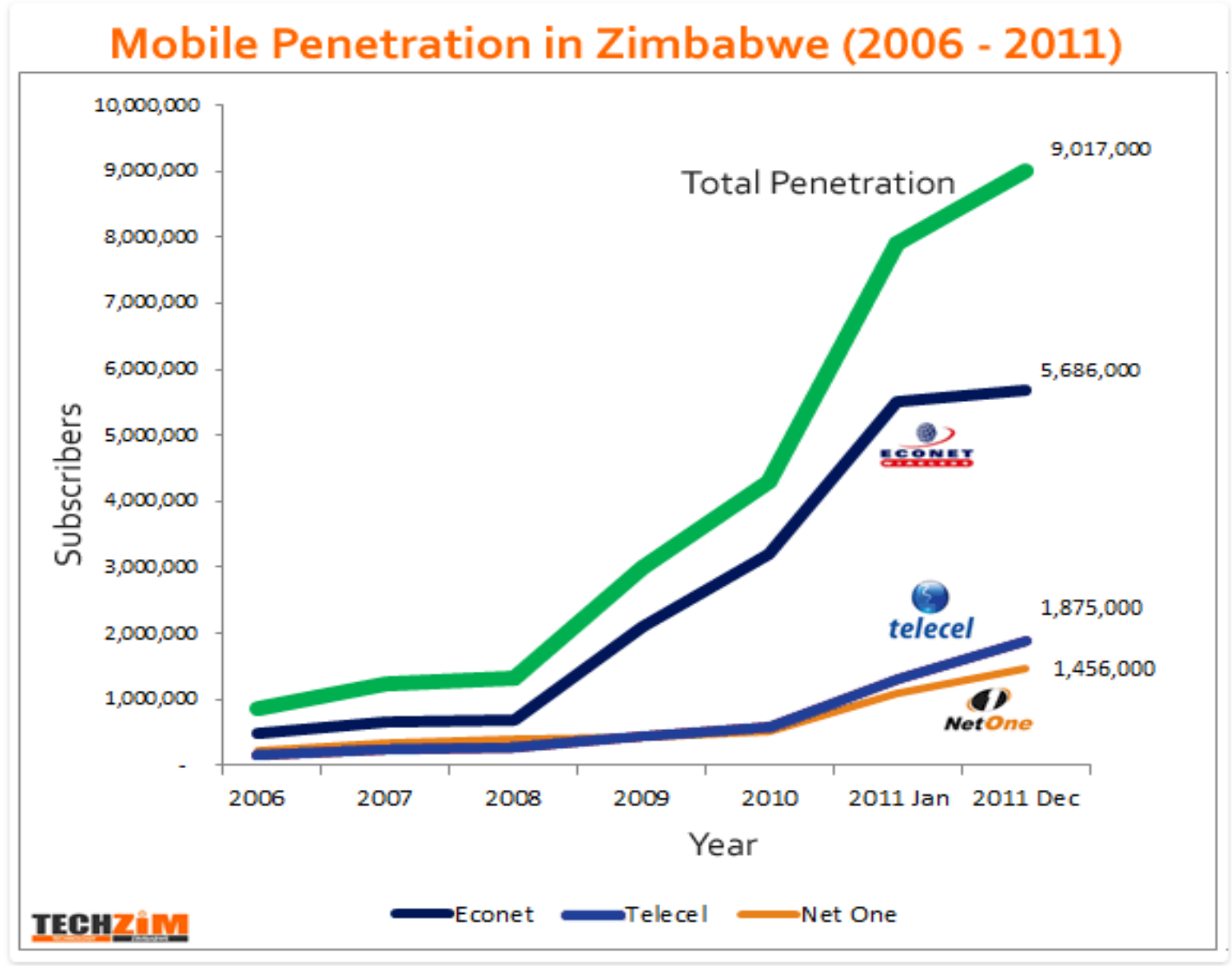
Data from http://www.oafrica.com/mobile/list-of-african-mobile-agriculture-services-and-applications/

Mobile telephony in Zimbabwe

- 4,5 million subscribers spread across ,3 mobile network providers;



Mobile penetration



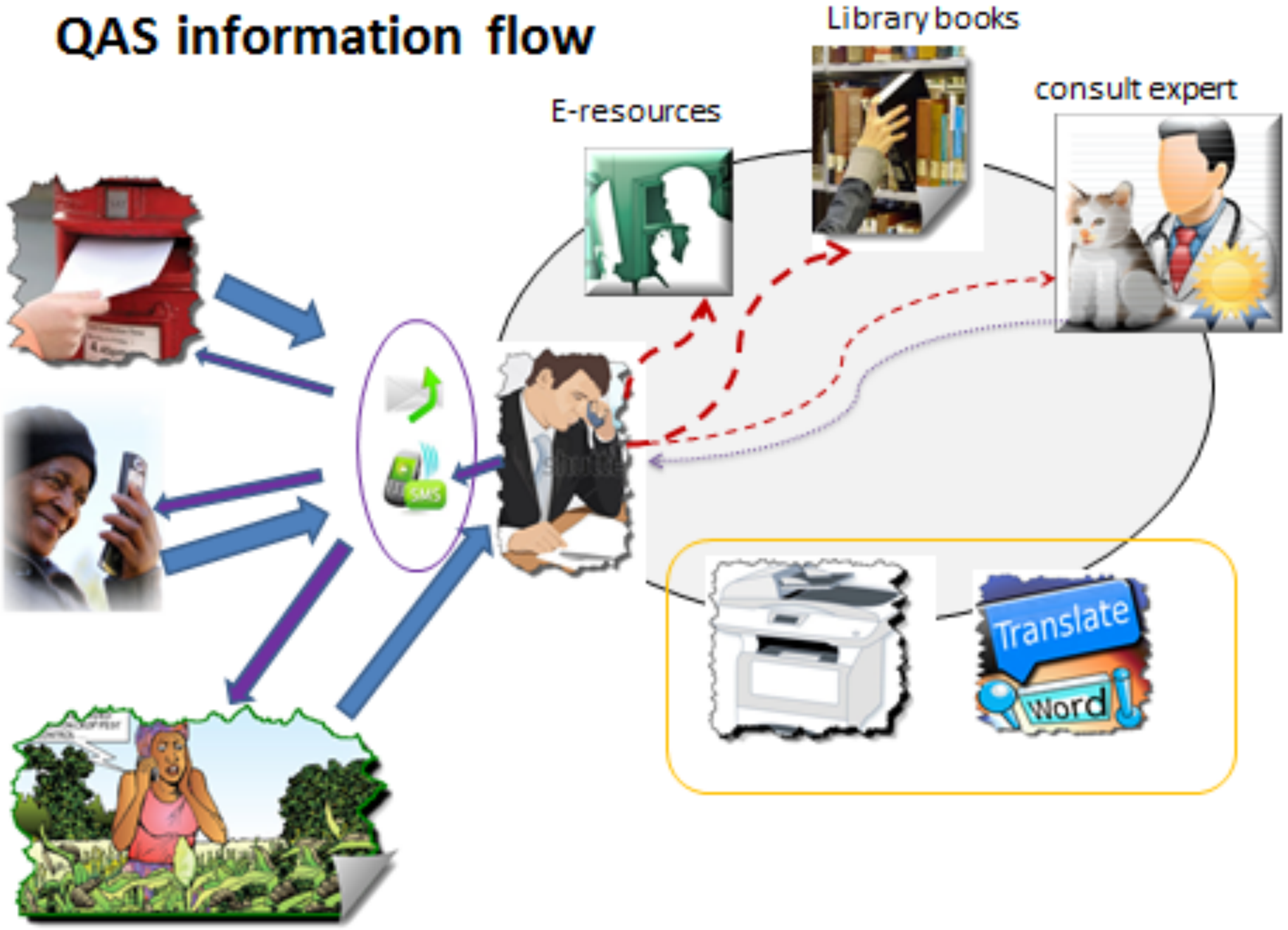
M-agricultural information services in Zimbabwe

- Question and Answer Service , introduced to the UZ Library through CTA has remained a key information services to rural communities.
- Project entails receiving information request from farmers and farming community through:-
  1. Telephone requests
  2. Mail requests
  3. SMS requests
  4. Beeping or call back requests

M-agricultural information services in Zimbabwe Cont'd

- QAS information expert at the UZ Library looks at the requests and searches information to satisfy the request. In some case cases, the expert:-
  1. Liaises with the relevant specialists in the Faculty of Agriculture or Veterinary Science
  2. Arranges for translation of materials into local languages if requested
  3. Photocopies relevant materials
  4. Uses CTA Collection and University resources
  5. Document these requests
  6. Send response by mail or email. Confirms by sms

QAS information flow



Access to information & MDG's

- Zimbabwe committed itself to realisation of MDG's by prioritising goals, 1, 3 and 6
- Pursuit of MDG's implies knowledge based economy
- M-library services leveraging access to intangible capital to spur innovation and contribute towards realisation of MDG's
- Information/Knowledge central to achieving MDG's
- Mtechnologies enhancing receipt, creation, sharing and access to research and best practices, weather information, market prices via SMS, IVR or call centers

Agriculture: Benefits of mlibraries

- Enabling farmers to access current market prices and avoid unnecessary middlemen
- Access to regular weather updates
- Timely access to accurate and reliable information enhance decision making
- Monitoring rainfall using mtechnologies e.g flood enhancing early warning systems
- e-Agriculture integrating knowledge and culture, to improve communication and learning processes

Information and Development

- Development as the sum total of all actioning driving society towards an organized system of individual and collective living conditions relating to desirable values.
- Pragmatic nature of “actioning” is anchored on provision and equitable access to information
- Information/knowledge & communication *“inseparable trinity "of development.*
- Viable and vibrant economies effectively utilise knowledge and its applications for development(Aubert and Reiffers, 2003)

Challenges

- Digital divide
- Inadequate ICT infrastructure
- Power cuts & Poor connectivity density
- High cost of mobile gadgets and infrastructure
- Poor download & upload speed i.e. Zimbabwe is inland the greater distance from the sea leads to higher the costs
- Design robust affordable and sustainable m-agricultural information platforms for all types of handsets

Opportunities

- Information/knowledge/wisdom economy
- Democratising learning through m-libraries
- More value added service on m- infrastructure
- Increased participation of agricultural information services to farming communities.
- Promoting growth & Enlarging citizenry choices
- Positioning Library &Information services in the context of MDGs through national knowledge system

Conclusions

- Libraries adapting mtechnology for modernization and ensuring unlimited access.
- Configure Websites & OPACS function in mobile-based browser.
- Adapting m-technologies to empower the profession to own the future.
- Transforming digital divide into digital dividend “the library in the pocket” the gift that keeps giving”

Conclusions cont'd

- Libraries integrating physical spaces with virtual spaces and services Libraries through configuring Websites to the Mtechnologies
- Train both tutors and students on the technologies for lifelong learning e.g. innovative ways of using Mtechnologies
- Develop mobile Web site to allows patrons to access information pertaining to library operations and services

"[the] tipping point for African research innovation and development—will not be merely the ability to fully access and use the new abundance of global knowledge and ideas, but to make an active and significant contribution to its creation" (SARUA, 2008).

The End!!!!!!!!

THANK YOU

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