

# The role of open source in ICT for a Multilingual Knowledge Society

ET1 Panel  
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Alberto Escudero [aep@it46.se](mailto:aep@it46.se)

# Questions

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- Why is language important to development?
- What are the trends in localisation in the world?
- What does (open) localisation bring to ICT4D?
- What does, (open) localisation for knowledge societies?

# Answers

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- Inclusiveness
- Open and common standards
- Inclusiveness
- More knowledge

L10N

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Common way of  
exchanging diversity to  
increases common  
knowledge

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increases  
diversity  
knowledge

Answer

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L10N

Common way

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Answer

L10N

Common

knowledge

Starting point...

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Common and open  
standards to ensure  
diversity

# Agenda



- Experiences from open source localization
  - The Open Swahili Localization Project
  - Lessons Learned
- The PANlion, PAN African localization project

# The Open Swahili Localization Project (2004-2005)



- In Tanzania (DSM) but for all Swahili Speakers
- Joint effort UDSM and IT +46
- Funded by SIDA

# Challenges

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- Concrete tangible challenge:
  - OpenOffice.org,
  - Firefox
  - Technical Glossary
  - Spellchecker
  - Technical Dictionary
- The ultimate goal:
  - Document a working and replicable methodology to localize open source software with the “community” in Africa

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# 1 Lesson Learned

The “code”

# 1 Lesson Learned

- Working with Open Source...
  - Open Source Software releases the underlying programming code available to the users so that they may read it, understand it, make changes to it, and build new versions of the software incorporating their changes.

# 1 Lesson Learned

- Working with Open Source...
  - The freedom to run the program, for any purpose
  - The freedom to study how the program works, and adapt it to your needs
  - The freedom to redistribute copies so you can help your neighbour
  - The freedom to improve the program, and release your improvements to the public, so that the whole community benefits

# Lessons Learned (1)

- Is also about:
  - Transparent development (we share also our mistakes!)
  - Building and Sharing results with a community (welcome anyone to join!)
  - Giving away as the "reputation mechanism"

## **Collision with traditional education/business models**

## 2 Lesson Learned

The “tools”

## 2 Lesson Learned

Localization as a “pure” technical issue:

- Displaying characters in native languages
- Inputting characters in native languages
- Handling file formats written in popular encodings
- Printing out characters in native languages
- Using characters of native languages for file names and other items

## 2 Lesson Learned

- Displaying messages by the program in native languages
- Formatting input and output of numbers, dates, money. Swahili Locale
- Classifying and sorting characters!!! Bantu languages (prefixes).
- Using typesetting and hyphenation rules
- Adapt graphical interfaces to local preferences

## 2 Lesson Learned

- Localization is not just a “pure” technical issue.
- Localization requires a big amount of “related” tools and processes to support the work.

## 2 Lesson Learned

Second lesson learned:

- 35% Management
- 25% New tools development
- 25% “Translation itself (the typing...)”
- 15% Dissemination

# 3 Lesson Learned

The “policy”

# 3 Lesson Learned



## 3 Lesson Learned

- Having the software is required but not sufficient!
- “Media coverage” does not guarantee more than that...
- The software needs to reach the people!

# If I Only Knew Then... Learning from mistakes.

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- We need a Method, open method, Method
- We need Tools, open tools, tools
- We need Community, open  
Community, Community

## We need a network

# Building a network

The PAN lion African  
Localization Network

# Vision

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- To empower Africans to participate in the digital age by:

removing the last inch limitations imposed on language usage by the limitation of technology.

# Background



- Enhancing Capacities for ICT in Arabic and African Languages, 2005-2008
- Funded by IDRC
- Project hosted by Kabissa and coordinated by Don Osborn
- Workshops:
  - Tshwane, South Africa, 2007/11/5-7
  - Marrakech, Morocco, 2007/2/24-27
  - Casablanca, Morocco, 2005/6/13-15
- Website: <http://www.panafril10n.org>

# Conclusions of this work period



- Localization is done in isolated areas and in unsustainable forms
- Mostly by African working overseas and other interested parties
- Lack of sustainable network
- Lack of skills
- Lack of awareness

# What do we want to find out?



- Can localisation increase
  - the use of ICTs, and
  - the content creation in African languages
- Will the creation of skills, resources and lowering of barriers to localisation lead to the:
  - increase in localization activity
  - creation of wider localisation network
  - beginning of a sustainable process

# PANL1ON Goals

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- Build an African network of localisers
- Lower and eliminate participatory barriers
- Increase technology and skills to facilitate localisation
- Enhance localisation technology
- Influence policy

# PANL1ON Actions

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- Create and Integrate Tools
- Provide training
- Study and Influence policy
- Support localisation practitioners
- Support knowledge transfer

# Selection of languages

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- Which languages will be selected?
  - Languages to enable regional collaboration
- Re-usability
  - Language groups
- Script
  - Latin Based Script

# PANL1ON Outcomes

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- Enhance and integrate with existing technology
- Applied research (implementation)
- Emphasis in re-usability
- Open results

# Partnership Model



- NGO
  - Translate.org.za, Bisharat, Kamusiproject.org
- Company
  - Open-Craft, IT +46, Arabize, Alt-I, Kasahorow
- Academic Institution
  - University of Nairobi
- Institutional
  - ACALAN
- Individuals

# Conclusion

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When spider webs  
unite, they can tie up  
the lion