



ImpalaDigiLib

A solar-powered digital library for schools in rural areas

06.2023, M. Mbaga
ImpalaBridge

Martin Mbagha – D4D Expert / Project Manager



Africa

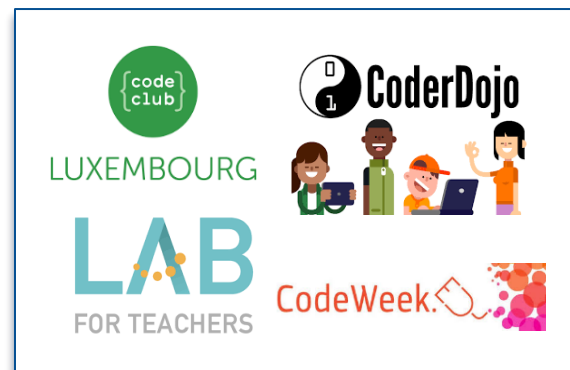
Young refugee



ICT engineer



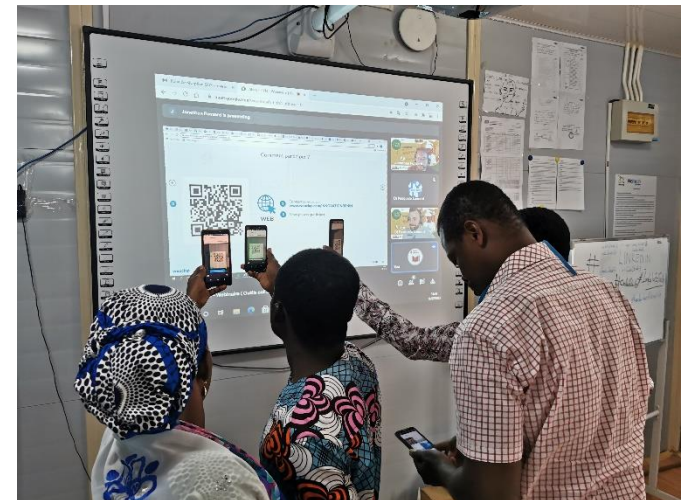
Volunteer Tech Educator



Infrastructure and Connectivity

One of the major challenges facing EdTech in Africa is the lack of reliable infrastructure and limited internet connectivity in many regions. **It's a barrier to online education, access to digital content and learning platforms !**

- Internet is **too expensive** (mainly rural schools)
- **Lack of electricity** <-> Availability and Reliability
- Existing infrastructures don't provide **robust and reliable connection** needed for educational purposes.



ImpalaDigiLib = Digital Library.

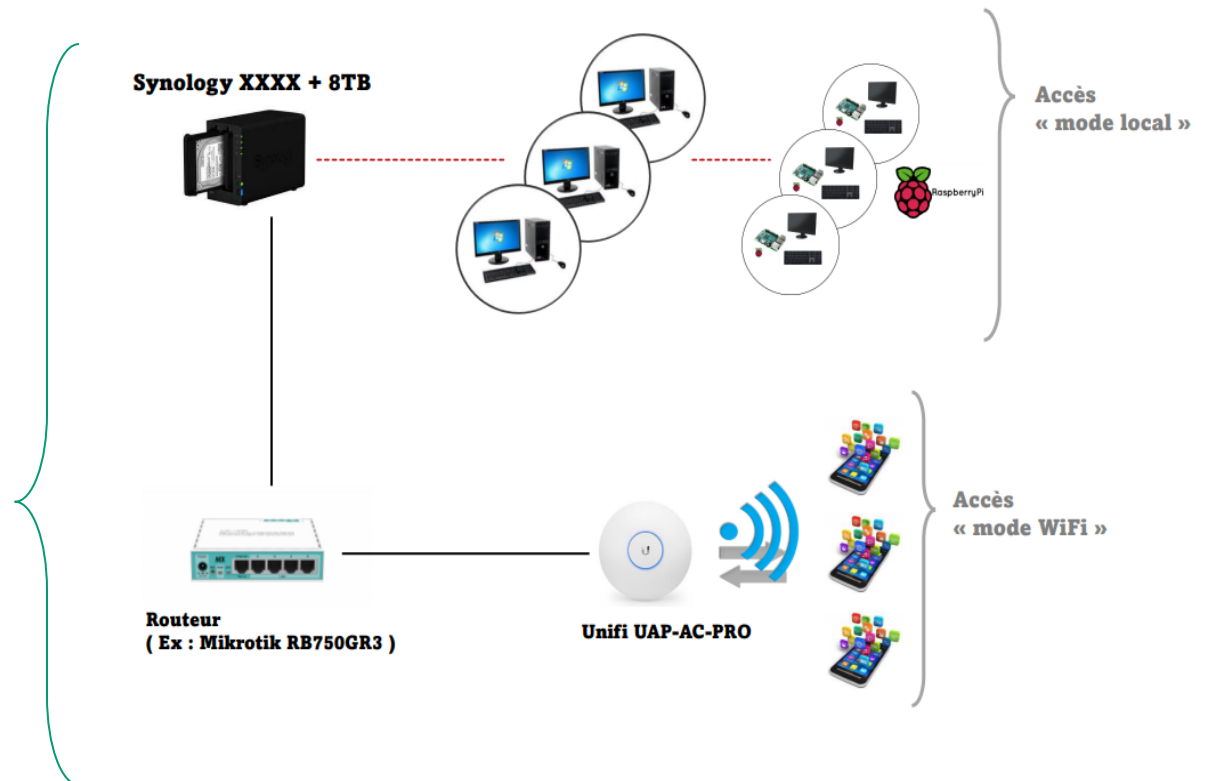


A pilot scalable solution

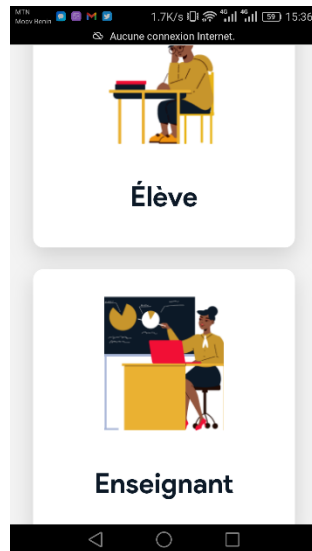
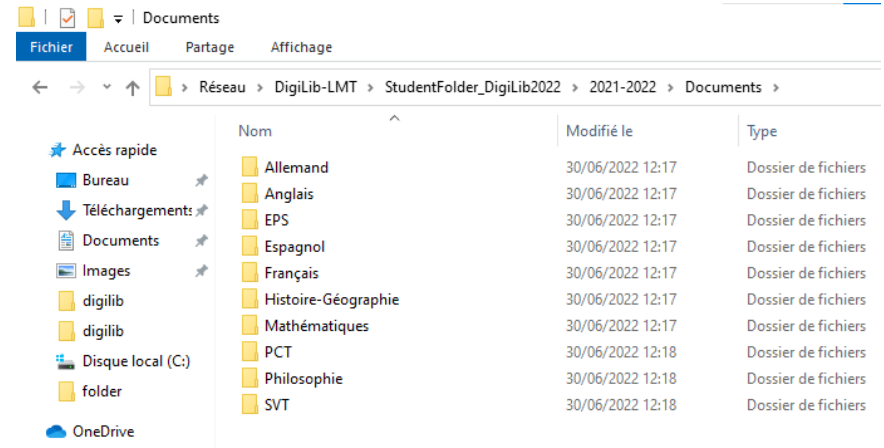
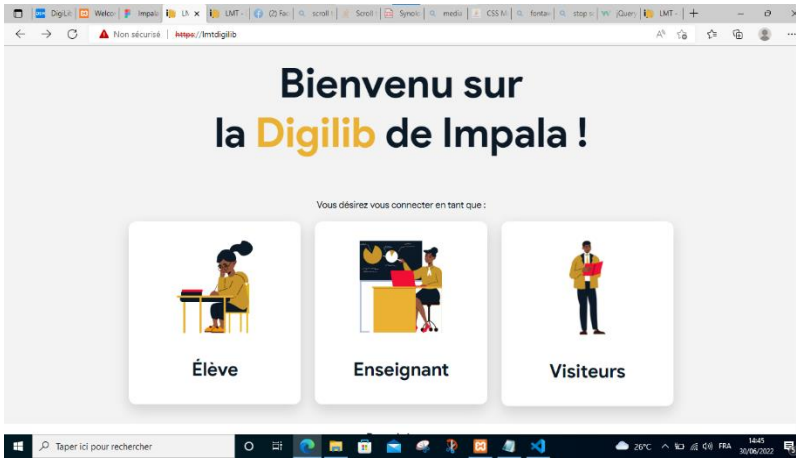
- Solar-powered
- Digital educational resource access point (Wifi / Local)
- Adaptable to other sectors : Healthcare, Administration, ...
- Made with COTS (commercial off-the-shelf) products.
- Financially affordable
- ...

ImpalaDigiLib - Architecture

- **NAS (Network Attached Storage) Synology** - Main Equipment "Hardware"
- **User / Admin Interface** - "Software"/Operating System
- **WIFI hotspot**
- **Solar energy kit**



ImpalaDigiLib - Interfaces



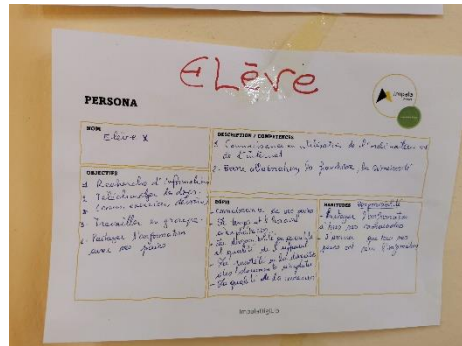
Use case - Tenkodogo (Burkina)



- As part of “Paas Panga” Enabel initiative
- 3 schools equipped
- +/- 15 users / administrators trained
- ...

- ✓ **Requirement Analysis** - Ideation and Design Thinking workshops
- ✓ **SELFIE survey** (EC tool) - Understand how digital technologies are being used to support teaching and learning.
- ✓ **Equipment Installation** and Testing
- ✓ **Educational Content upload** - "do.doc", Wikipedia, past exams, textbooks, EduLab Videos, etc.
- ✓ **Train the trainers** - Key user facilitators Training
- ✓ **Sustaining the Initiative**

Use case - Tenkodogo (Burkina)



Ideation Sessions Design Thinking Workshops



Use case - Tenkodogo (Burkina)

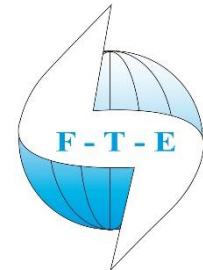
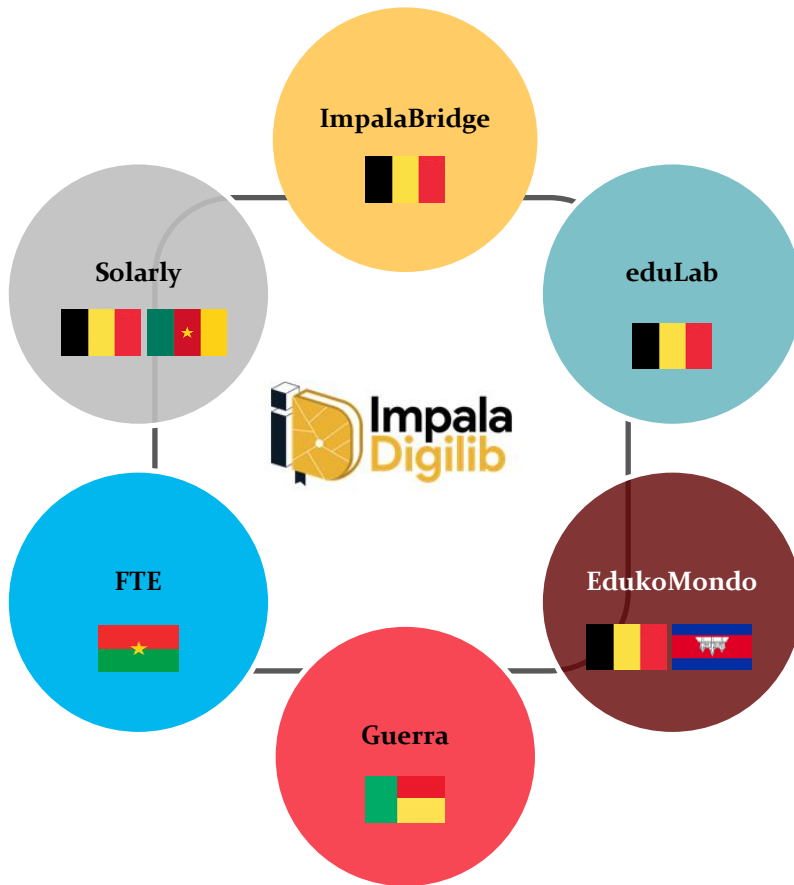
The screenshot displays the ImpalaDigiLib mobile application interface, which is a digital library platform. The interface is organized into a grid of content cards across several columns. The columns are labeled as follows: Parties prenantes, Agenda, Présentations, Documents, Ressources, Persona, Remarques / Observations, Photos / Vidéos, and Actualité. Each card contains text, images, or video thumbnails. The top of the screen features a header with the application name 'ImpalaDigiLib' and a subtitle: 'Mise en place de bibliothèques numériques pour les lycées Municipals (Tenkodogo), Rôlé (Tenkodogo) et Kourita (Koupele de la Région du Centre Est et du Burkina)'. The 'Actualité' column on the right is titled 'NEWS & INFO' and contains several news items with social media-style sharing icons. The 'Photos / Vidéos' column shows a grid of images and video thumbnails. The 'Ressources' column includes a 'eduLAB TV' section with a video player and a 'Questionnaire sur l'utilisation des TICE' section with a PDF icon. The 'Documents' column features a 'Questionnaire sur l'utilisation des TICE' section with a PDF icon and a 'Recueil des données sur l'intégration des TICE dans les CCG et Lycées' section with a PDF icon. The 'Persona' column includes a 'Super Admin' section with a list of users and a 'Groupe LKK' section with a list of users. The 'Remarques / Observations' column includes a 'TRAORE Adama' section with a text description and a 'DJKNO Marie Brigitte' section with a handwritten note. The 'Parties prenantes' column includes a 'ImpalaBridge Burkina' section with a text description and a 'Lycée Municipal de Tenkodogo (LMT)' section with a photo of a building. The 'Agenda' column includes a '16-17.11.21 - Atelier de cadrage' section with a calendar icon and a '05 - 09.12.22 - Implantation et formation des points focaux' section with a calendar icon. The 'Présentations' column includes a 'TRAORE Adama. Formation ImpalaDigiLib, Enabel/Tenkodogo. Sur les bibliothèques numériques' section with a photo of a man and a 'Bikienga Damien DREPP Centre Est' section with a photo of a man. The 'Ressources' column includes a 'eduLAB TV' section with a video player and a '[eduLab TV] - Tutoriel Padlet 01' section with a video player. The 'Persona' column includes a 'Super Admin' section with a list of users and a 'Groupe LKK' section with a list of users. The 'Remarques / Observations' column includes a 'TRAORE Adama' section with a text description and a 'DJKNO Marie Brigitte' section with a handwritten note. The 'Photos / Vidéos' column shows a grid of images and video thumbnails. The 'Actualité' column is titled 'NEWS & INFO' and contains several news items with social media-style sharing icons.

Use case - Tenkodogo (Burkina)



Train the trainer workshops

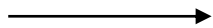
Use case – Co-Creation : Connecting the dots / people



EdukoMondo



Sustaining the Initiative



Bénin - Albarika



TVET Schools



EdTech Clubs Network



Q&A



www.ImpalaBridge.com

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