

Deliverables

Links to Models

- Context Map and Architectural Models:
<https://www.figma.com/proto/KIF3wYfh54AgHbXd7y0Pwe/Digital-Divide?node-id=1-2&t=hSFjdkTlVEYeWKwV-1>
- Comic strip:
https://www.canva.com/design/DAGikKmAMtU/Zzj8Kn74SSOCUKuutlffxw/edit?utm_content=DAGikKmAMtU&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton

Brief

EA Components

The digital comic strip showcases the journey of a student (Lindiwe) from a rural area (Dwesa) that is introduced to a new digital education platform. Throughout her journey the comic strip highlights EA components, cost-effective infrastructure and scalable connectivity solutions.

EA Components

Capability Model

- Supports essential educational functions like offline access and content delivery.
- Community engagement features which indicates more participation and support for the solution beyond students.

Technology Architecture

- The system uses local storage solutions which allow students to have access to materials offline.
- The community Wi-Fi zones provide access to online resources.
- Solar-powered kiosks and long-range Wi-Fi antennas provide a wider range of connectivity.

Data Architecture

- Local storage ensures that students can save progress offline and cloud synchronization allows them to sync it once online.
- Progress tracking and analytics helps teachers give students support based on their performance.

Application Architecture

- Offline Educational applications give students uninterrupted learning.
- WhatsApp communication channels ensure ongoing teacher-student interactions.

Narrative Choices & Design Considerations

Character Development & Stakeholder Representation

- The student, Lindiwe, represents students that are struggling with a lack of digital access.
- The teacher, Mr Ndlovu, represents teachers who are trying to incorporate ICT into their teaching.
- The technician, Sipho, represents the role of ICT support in maintaining connectivity.
- The NGO representative, Mrs Khumalo, represents the role of driving digital literacy initiatives by external stakeholders.

Storyline Integration with EA Solutions

- Beginning: Lindiwe faces challenges with digital devices due to the lack of reliable internet and expensive data.
- Middle: EA solutions like local storage, community WiFi, and mobile accessible education improves her learning experience.
- End: Lindiwe does well with regards to her studies which shows how successful and cost effective digital education strategies are.

Visual & Business Considerations

- We made use of minimal text and strong visual storytelling to ensure accessibility for those who are at a low level of literacy.
- We also used consistent visual style and relatable rural settings to enhance engagement.
- We ensured that the platform's scalability and sustainability is reinforced through NGO, government and community adoption.