BUSINESS CONTINUITY AND INTEGRATION

**Integration with EA**

* **Capability Layer:** continuity is supported by capabilities like offline access, local data storage that allow the platform to function even when connectivity is unavailable such as in instances where there is loadshedding.
* **Data Architecture:** data is duplicated locally and backed up to encrypted cloud storage.
* **Technology Architecture:** The use of edge computing devices, like solar-powered local servers, enables students to continue learning even through power outages or internet downtime. Mesh networks provide a backup connectivity route, while community hotspots extend the reach of the platform.
* **Application Architecture:** The platform is designed utilizing offline-first principles, thus viewing lessons, study materials, and completing assessments is accessible without needing a constant internet connection.

**Components Related to the Solution**

* **Disaster Recovery Protocols:** the local community centre is equipped with backup routers, solar chargers, and offline resource packs which are supported by the community’s well-trained technician.
* **Redundant learning Channels:** students have access to mobile apps, community hubs, and pre-loaded USB or SD cards to ensure various learning channels
* **Local Alerts and Support:** sms-based notifications make users aware of system downtimes.

**Community Training and Preparation**

* **Teacher Training:** Teachers receive training on how to switch to offline modes and guide learners during disruptions.
* **Technician Protocols:** The local technician is trained on how to restore the service and retrieve backup data.
* **Student Guidance:** Students are taught how to save their work offline.

**Testing and Continuous Improvement**

* Frequent simulation exercises are performed to test the system, its backup restoration, and recovery procedures
* Feedback loops from the community help improve protocols and identify new risks.