**EXECUTIVE SUMMARY**

This Business Continuity/ Disaster Recovery Plan provides a strategic framework to ensure perseverance, continuity, and swift recovery of digital education services for the Eastern Cape Department of Education. It has been created in response to the growing reliance on digital platforms like Learning Management Systems (LMS) and real-time communication tools to support inclusive, low bandwidth learning in under-resourced rural communities.

The plan is designed to reduce the educational, operational, and financial impact of service disruptions caused by local risks like loadshedding, severe weather conditions, cyberattacks, and infrastructure theft, Its prioritizes fast recovery of crucial digital education functions while making sure that data is protected and there is operational compliance.

**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.