**PROJECT CONCEPT NOTE**

1. **PROJECT TITLE:**

Developing IOT based bridge monitoring system.

**PROBLEM STATEMENT:**

We hear a lot of cases in Malawi people get injured and sometimes dead due to road accidents as a result of unexpected conditions such as collapsing bridges in many districts. For example, this year we have experienced cases like M2 Peter Muthalika road bridge damaged due to incessant rains, Lisungwi bridge damaged due to vibrations caused by cyclones and also two people were washed away together with the bridge in Machinjiri due to raging rains. This is so because there are no ways to inform or alert people in Malawi on the heathy of our bridges at a specific point in time. It is very important to solve this problem because we can save a lot of lives, helps to schedule maintenance works hence enhancing the development of the country and also helps to save time for Malawians to plan for other available roads after bridge collapses.

**PROJECT FOCUS:**

To solve the highlighted problem, it is necessary to support the construction of an efficient bridge health system that should be capable of tracking and monitoring bridge heathy in real time. The data collected will be sent to the road’s authorities and the people if the bridge is safe to use or not.

**RELEVANCE**:

This project will help to ensure safety of Malawians, preventing the bridge collapse affairs, protecting people lives, environment, and reducing unexpected finance expenses.

**TARGET BENEFICIARIES:**

* Malawians
* Roads Authority Malawi

**KEY STAKEHOLDERS:**

* University Of Malawi: Computer Science Department and Roads Authority Malawi.
* University Of Malawi: Physics Department: Mr. Paul Macheso.