Research Methods for Engineers: 04701-A

Workshop 2 – Writing Problem Statements

Research Background: Explain clearly what problem your research focuses on. Describe how things would be better if this problem didn't exist.

Research Significance: Explain who will benefit from solving the problem, thus demonstrating the relevance of the research and its contribution to the existing knowledge

Solution: Describe the research objective and the expected solution or results.

Highlight the relevant sections using the colours above.

1.

Despite the recognized potential of blockchain, such as enhancing security, reducing costs, and speeding up transactions, its adoption still poses significant challenges for individuals and institutions in East Africa. It remains difficult for individuals and financial institutions to adapt, as they might be unfamiliar with blockchain technology, alongside other potential factors hindering its adoption. This scenario highlights a pressing issue of the barriers encountered in East Africa in embracing blockchain for financial purposes, despite its ability to offer affordable money transfer solutions with short delivery times. Through a systematic analysis of technological advancements, regulatory frameworks, and economic conditions, the research aims to clarify the barriers preventing the widespread utilization of blockchain technology in East Africa.

2.

Maternal mortality is a critical global health challenge, disproportionately affecting low- and middle-income regions where access to healthcare information and services is limited. In these areas, language barriers further complicate the situation, as health information is often not available in the native languages of expectant mothers. This leads to reliance on incomplete or incorrect information, increasing health risks for both mothers and their newborns. To address this issue, the development of "Mama AI" that will use natural language conversations aims to break down linguistic barriers and bridge the information gap, offering a cost-effective solution to improve maternal health outcomes in Swahili-speaking communities.