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FEMHACKERS

FinTech

Project Proposal

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# About Us

# Team Name: FemHackers

Team Members

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# Problem Statement

Small businesses are talked about as a way of transforming the economy of South Africa, however, we are experiencing the opposite. More than 20% of small businesses fail in their first year, and another 30% fail in their second year.

SMEs confront issues such as growing competition, the ability to adapt to rapidly changing market demand, technological change and knowledge, innovation and creativity capacity restrictions. However, many SMEs' potential is generally unrealized.  
The contributing factors are

* Lack of funds (capital) and securing funding for expansion
* Lack of skills to implement and build a solid support system in order to maintain profitability
* Lack of financial management skills to increase revenue
* The unpredictability of economic conditions
* lack of resources (finance, technology, skilled labor, market access, and market information)
* lack of networks that can contribute to a lack of information
* Increased market competition

# Industry Focus

Our main sector of focus is FinTech, commerce & the e-commerce industry.   
That is also experiencing the impact of the mentioned factors including competition, customer experience and more.

# Our Objective

# Thought Process behind the Project

# Proposed Solution

In order for us to reach our objective by helping SME’s better manage their finances, get access to economic market information and help adjust their businesses according to economic needs and value chains in their specific industries, we developed SME-Aid, an application that makes use of Internet of things and Artificial Intelligence to ensure the growth of small and medium enterprises.

Through the use of Internet of Things, SME-Aid will provide entrepreneurs with economic market information based on the kind of industry they belong to, to keep them knowledgeable about new technology trends as technology is constantly changing and about what’s happening in their external environments as to help them create better business processes and improve or adjust any strategies they have implemented for their businesses.

The application will enable entrepreneurs track their monthly expenditures and allow them to set budgets based on their given limits. The application will alert the user when their limits are reached and give them tips on how to better manage those finances as the company’s goals for the month would have not been met. The application will not just give them tips but also the risks the company becomes vulnerable to if their financial management does not improve. The objective of this is to help them really focus on improving their financial management skills and also make them aware that their company might not succeed due to such factors.

The application will however, make it easier for the company to track whether they are indeed improving on their financial management as the app will show their financial management skill progress in a form of a progress bar or a graph.

Another feature in the application, which will be making use of Artificial Intelligence is, Business-Success-Rate. This feature is to help these small businesses better understand where their business stands in the economy and if their business processes and value propositions they have implemented will indeed help them gain competitive advantage and generate revenue.

The manager will have to fill an AI-survey based form that will consist of questions about the businesses strategies, value propositions and so forth so that the AI system, upon submission will be able to distinguish whether the data entered by the manager matches the data it has learned through machine learning about what makes a business have a good competitive advantage and have a great chance of succeeding and thereafter be able to provide feedback to the manager about the success rate of the company and provide tips on which strategies they can adjust if improvement is needed.

# List of Tech Stack Used

The Technologies we have used:

* Figma for the prototype of our application
* Data Banks for data about economic conditions

Technologies to be used for further development of our application

* TensorFlow for AI integrated system
* ReactJs, Ionic for App development
* Firebase for Backend development
* Data Banks for data collection
* API’s for location detection

# URL Of Working environment

[Fin-Tech App Deign – Figma](https://www.figma.com/file/iwLxb7QXIxl9wyLn2wQ7NQ/Fin-Tech-App-Deign?node-id=87%3A14)