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## *Project Plan Document*

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1. Project Title: Digitalizing an inventory system.
2. Project description

The purpose of our research project is to come up with a system that will automate the inventory management process and make it easier, error resistant, and cost effective and aid in making better informed business decisions. This project is inspired by the need to reduced manufacturing company's carbon footprint and ensure sustainable production and consumption.

### 3. BACCM Framework

For the analysis and planning of this project we used the 6 core concepts of the BACCM framework.

#### 4.1 CHANGE

The system is going to benefit the following aspects of the business

- Costs: by minimizing excess inventory through accurate tracking of inventory levels.
- Improved customer service by having the right product available at the right time.
- Cash flow though improved analysis of inventory levels and dynamics reducing the amount of cash/assets tied up as cash flow.
- Forecast accuracy through real-time accurate data recordings of inventory.
- Reduced waste by reducing the number of inventory that outlive their shelf life in our inventory stores.

#### 4.2 NEEDS

Manual inventory management systems have a number of draw backs and these drawbacks often hinder the performance of businesses. These drawbacks may include:

- Vulnerabilities to human error.
- Difficulty to manage.
- Lack of real time tracking.
- High labor costs
- Data loss and redundancy often caused by not having centralized data storage areas.

#### 4.3 SOLUTIONS

The system offers the following solutions to the needs that are brought by traditional inventory management system:

- Reduce labor cost by reducing the number of employees required to manage the inventory.
- Increase automation which in turn reduces errors.
- Improve productivity by focusing more energy and resources to process that matter more.
- Improve inventory organization within the business by having clear and fixed formats and layout to record the inventory.
- Improve customer experience through more organized inventory.
- Improve coordination between different locations (for companies with multiple departments).

#### 4.4 STAKEHOLDER

The following is a list of all crucial stakeholder that may be

[https://github.com/Menzies01/CSC393\\_MIni\\_Project\\_repo.git](https://github.com/Menzies01/CSC393_MIni_Project_repo.git) needed for the digitalizing of the system

- Business analyst who will be able to study the current system and assess whether the project system is compatible with the organization (Domain subject matter expert).
- Warehouse manager as they are most like to use the system and know more about what is really required of the system.
- Finance team as they are involved in the inventory process thus their input and insight is needed.
- Production manager as they will be in charge of maintaining stock levels records and approving transactions.
- Project manager or a dedicated individual who will be responsible for ensuring business objectives are met.
- Customers who will be interested in knowing what the new systems will mean in terms of service delivery and cost.

#### 4.5 VALUE

- The system will provide management and decision makers with current, accurate, and timeliness information.
- Information processing, storage, and communication costs will drop dramatically.
- It will also allow personalized messages to be delivered to individuals as well as groups.
- It will also increase customer satisfaction through organized inventory and optimum supply.

#### 4.6 CONTEXT

The implementation of this system will mean that the movement of products in and out of the will be effectively regulated. This means controlling every step of the inventory management process, from the purchasing of goods from suppliers to storing and selling to customers (kissflow, 2024). This goes to say that all form of good bought in the company will be managed even those that are used in day to day operations.

