Briefly define the reasoning behind your choice, rough ideas around what you will do, any research you have performed in making your decision and your initial plan of action. Explain how your work will improve decision-making for your client. What other benefits will there be? (200-300 words)

All important information is inside huge spreadsheets and paper binders. The files are heavy, slow to open, and easy to break. One change often forces many manual edits. Bulk changes are risky. Two people cannot safely work on the same file. As the company adds three new stores, the amount of data and the speed of change go up, so errors, delays, and bad decisions become more likely.

We will move all core information into a structured database with clear tables for products, suppliers, orders, deliveries, stock levels, prices, staff, schedules, customers, baskets, sales, and payments. We will clean and load data from the old sheets into this single source. Daily activity like selling, receiving, and scheduling will be recorded directly into the database. Then we will build live reports on top of it. (could be a dashboard)

We reviewed how grocery chains run when they grow beyond a few stores. They all move off spreadsheets because spreadsheets cannot enforce rules, cannot stop duplicates, and cannot serve many users at once. A structured database fixes these exact failure points. It stores facts once, applies checks, and lets you update in one place and have every report see the change instantly. Research on grocery KPIs shows that faster access to clean data improves decisions on stock, pricing, labor, and supplier issues. This plan places the company on the same data footing as larger chains while staying simple to use for managers.

Dataset potential - ?
https://www.kaggle.com/datasets/salahuddinahmedshuvo/grocery-inventory-and-sales-dataset

https://www.mytotalretail.com/article/how-real-time-item-level-inventory-visibility-drives-retail-to-efficiency/?utm_source=chatgpt.com

https://www.pymnts.com/news/retail/2025/65percent-of-grocery-retailers-lack-real-time-supply-chain-data/?utm_source=chatgpt.com

https://www.retailinsight.io/blog/latency-in-data-kills-on-shelf-availability?utm_source=chatgpt.com

https://www.kaggle.com/datasets/pratyushpuri/grocery-store-sales-dataset-in-2025-1900-record/data-> THIS IS THE DATASET

https://www.kaggle.com/datasets/prasad22/retail-transactions-dataset

https://www.kaggle.com/datasets/willianoliveiragibin/grocery-inventory

https://www.kaggle.com/datasets/shreyanshverma27/online-sales-dataset-popular-marketplace-data

^ can use this for the online ordering idea we talked about

DRAFT:
We chose this project because ABC Foodmart's growth from two to five stores will make its current spreadsheet-based system unsustainable. All important information such as inventory, staffing, vendors, deliveries, and sales is stored in large spreadsheets and paper binders that are prone to errors. Two employees can't work on the same file and bulk updates are risky. As the company expands, the amount of data and updates will increase which makes delays and mistakes more likely to affect operations.

Our plan is to migrate all core business information into a centralized relational database with clearly defined tables. In our research on how grocery chains operate as they expand, we found that most move away from spreadsheets because they cannot enforce data integrity, prevent duplicates, or support multiple users. A structured database solves these issues. We plan to explore adding an online ordering system, which will create new tables customers, online orders, delivery schedules) and improve operational efficiency.

We are currently searching for a reliable dataset. Once we decide on that, we will examine the dataset and figure out the tables that can come from it and create them in the database. Additionally, we are thinking about adding an online ordering system, which will create new tables as well. This plan will give ABC Foodmart the same data capabilities as larger grocery chains which will make decision making easier and faster.