

Azaran Warehouse Executive Summary

There's not enough space, and we need more products, we are not selling enough items, how often are these words among businesses when they are trying to meet the needs of their consumers. We would be dealing with these phrases if we did not put together a plan of action to increase our revenue and build a new warehouse. In the last quarter, we have gone over what a feasibility analysis is, what a project plan is, what requirement models are, and a more in-depth look at data flow diagrams; we also learned what UML/ Object Models are. As we review each of the four main points we have learned this quarter, we will also be reviewing what our specific group did for these items and other diagrams and graphs we used to help solve our business issues.

Feasibility Analysis

The first step in creating a business plan is to incorporate a SWOT that stands for our strengths, weaknesses, opportunities, and threats. Before we can start any part of a project, we need to complete our SWOT. It is also recommended that we do a fishbone analysis because you cannot solve a problem without knowing the root cause of the mentioned problem. In our case, the biggest issue was that we did not have enough space to make the deliveries faster. We then move on to our feasibility analysis, a more in-depth version of our business plan and why we need to complete it. Operational feasibility: the proposed plan will be used effectively after it has been developed.

- Economic feasibility: the project benefits of the proposed system outweigh the estimated cost, usually considered the total cost of ownership.
- Technical feasibility: the technical resource needed to develop, purchase, install or operate the system.
- Schedule feasibility: the schedule can be completed in an acceptable time frame.

For each of these feasibility analyses, our group has come up with a system per our current project on building a new warehouse to confirm that our project can be completed based on our feasibility analysis. Our operational feasibility for our specific feasible analysis for this project is that our warehouse expansion projects respond to a long delivery time in a constant decrease in sales. It is not complicated, and we do not see any lack of feasibility in this area. We hired a construction company for our warehouse building; we also employ a team for this product that does not have any technical problems. For our economic feasibility, the tangible costs are the land licensing, training, hiring of construction companies, hiring new employees, safety costs, and consulting class. The intangible costs are loss of production and delivery. We are adapting our system to the new warehouse. The tangible benefit is the increase in sales and shorter delivery time. Our intangible benefits are increased market share, improved customer service, and increased brand recognition. For our scheduled feasibility, we cannot start the construction

project until the spring season, and we need to finish the warehouse construction before April of 2022.

Project Plan

The second main point we would like to touch on is the project plan. We learned this quarter, what shapes the project, how it continues, how we can eliminate it if needed. For our specific project plan, we developed a warehouse expansion project; then, we listed constraints that could hinder our project as well as the feasibility of four areas. As a part of our project plan, we had to learn about our critical paths and identify them. We should also identify ways to set critical paths and prevent them from being blocked or shut down. We were able to identify time constraints and prevent any delays from happening.

Requirements Models

The third main point we want to bring up is requirement models. There are many kinds of requirement models and diagram models that could be used to cover multiple areas of our research to meet as many consumers as possible. Zackman's framework is one that we chose as a fact-finding model to review our current system against our proposed system. The requirement models are super important because they help us evaluate what our consumers want, what they are needing, the who, the what, the when, the where, and the why of our project.

Data Flow Diagram

In this last quarter, we did a data flow diagram and learned about more detailed diagrams that we can use to help our project succeed. Our data flow diagram or DFD is very basic and goes over our primary goal and what we do to accomplish those goals. We also learned about the different styles of diagrams like a Context diagram, object relationship diagram, a use case diagram, activity diagram, and a few others. These various diagrams helped us understand from start to finish what we are trying to accomplish for our company and help us prevent any delays so that we can have all steps listed and completed in each diagram.

UML/Object Models

The final part we want to go over is the unified modeling language and object models. These were something that we had learned very basically from our data flow diagrams, but we never really went in-depth. We learned that more structural analysis models could analyze our system. These were all new diagrams that we had learned in this quarter that helped us see different steps and the reason for taking the steps that way. An example of helpful models is our superclass, class, subclass diagram.