ISTM 6201 Information Systems Development And Applications
Fall 2022

Part I: Choose Problem Area

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Prepared for W. Lee Meeks
October 18, 2022

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SECTION I: INTRODUCTION AND PROBLEM AREA

1.1 Description Of Organization And Its Problem(s)

The Store was established on the tenets of faith, trust, and respect, and these ideals serve as the foundation for all that we do. In order to ensure that every student has the chance to achieve, our objective is to address student needs at GW by providing food and other resources.

The Store is a student-operated food pantry at the George Washington University that offers assistance and support to students experiencing food poverty. It was established in 2017 and is run by the The Store student organization and the Division for Student Affairs.The GW Pantry works to eliminate food insecurity among GW students, but it also welcomes any GW students who require assistance. Students in need of necessities like toiletries and feminine hygiene products will also receive assistance through GW Pantry along with cheap meal packages that they can order online.

The pantry can only assist GW students at this time. GWID is necessary to confirm your current affiliation with GW University. In order to identify the person who will be picking up the ordered items, we also require your name. We do not keep track of or disclose the names of students who place orders. A GW student can use the pantry at any time of the day with the materials we currently have available.

As there is no real time application that can notify students regarding the items available in the pantry, most students are not able to use the resources provided by the pantry efficiently, And at times this also leads to wastage of food meals/products.

1.2 Major Problems The Organization Is Facing

The current manual notification process is the root cause of two major issues that GW Pantry is facing:

1. Wastage of Food meals/products
2. Students not able to use the current resource efficiently and fairly
3. Missing out on real time notifications

Both of these issues lead to student dissatisfaction and the loss of resources, which will directly lead to loss of revenue for GW Pantry. GW Pantry needs to fix these issues fast.

1.3 Stakeholders Of The Existing System

The list of stakeholders that are currently impacted by the current system is:

1. Students
2. Owners/ Management
3. Employees
4. Suppliers
5. Community

The list of stakeholders that would be impacted by the future system is:

6. Students
7. Owners/ Management
8. Employees
9. Suppliers
10. Community

Students: These are each company's primary stakeholders. The mechanism of supply and demand is driven by students. The supply will expand along with an increase in clients. Every other stakeholder in the company will be affected in all of their roles as a result. Similar to how fewer students affects the stability or sustainability of a business, less students may also mean fewer staff and less goods ordered from suppliers. This has a negative impact on the company (Owners).

Owners/ Management: This stakeholder makes strategic decisions for the business. She is faced with the current business issue and is in the position of evaluating whether the proposed system solution is able to meet the business needs.

Employees: They are employed by the company and are in charge of entering items available into the system. They may also be tasked with handling student complaints. They are crucial to the success of the business since they decide the caliber of the services provided to the company.

Suppliers: These are the suppliers of ingredients to the company. In order to avoid experiencing either a shortfall or an overstock of inventory, the company should make sure they have good communication with its suppliers.

Community: This is the business's location; in our example, it is on a college campus, where there is little or no student traffic during the school year when classes are not in session. In such situations, the company will report minimal profit, which has an effect on all other stakeholders.

1.4 Issues Within the Organization And/Or With the System

Similar to any pantry, GW Pantry is stocked up with food and grocery products. Students can enter the store and pick the products that are available. There are numerous problems that arise because all orders are manually recorded.

Firstly, students don't usually write the items that they brought and there are no records of where and who took the items from the pantry and how many of them. This manual ordering system exposes the business to human errors. An Online Pantry System will allow the school to track the records of the food item purchased and taken for free by the students and the meal packages that were ordered by the students.

Second, students must regularly check social media to see if any new products have been added to the pantry. There is a chance that students may not be able to grab the things that are available during that period due to varied class schedules. Additionally, there might be significant food wastage if the students are not engaged and are unaware of the foods or items in the pantry. Implementing an automated online ordering system will ensure GW Pantry to mitigate the aforementioned risks associated with manual ordering systems and also help students find their perfect meal along with free food items.

1.5 Interfaces Between This System And Other Systems

Both internal and external systems will be interfaced within the first iteration of GW Pantry System. Below is a description of several supporting systems for interfaces.

1.5.1 Internal Inventory System

In order to prohibit students from ordering any food dishes that include an out-of-stock item, GW Pantry Online System will connect with GW Pantry's internal inventory system. The student won't be able to order a dish containing tomato paste as a component, for instance, if tomato paste runs out of stock as a result of an unanticipatedly high demand for tomato paste sandwiches that day. The system will notify students in real time about the new products available at the store.

The system also allows the student to reserve a certain product upto 3 hours before it's available for other students. Students can also order cheap meals that are available online.

In a future system upgrade, GW Store will notify customers when certain dishes contain components that are about to expire in order to encourage them to consume them as soon as possible and give discounts.

1.5.2 Internal Accounting and Finance System

In order to provide daily management reports on total sales, GW Pantry Store will also connect with GW Store's internal accounting and finance system. This will allow order receipts to be combined at the conclusion of each business day.

1.5.3 External Delivery Service System

The Store will interact with an external delivery service system run by a delivery service business that The Store has contracted with, DoorDash, in order to provide smooth, streamlined service for the client order. Due to the COVID pandemic, many customers are quarantined in their homes and unwilling to visit restaurants where there may be a large crowd, so it is crucial to provide safe meal delivery options. Instead of creating its own delivery system, The Store has opted to utilize the experience of DoorDash, a reputable and well-known company. Although The Store is thinking about working with more delivery providers in the future, the The Store will initially only interface with one delivery service system.

1.5.4 External Payment Processing System

When the student pays for the food order, The Store will interface with an outside payment processing system and take the credit card number. The student will be informed and the order won't be placed if the payment is unsuccessful. The student will also be informed if the payment has been approved by the payment processing system, and the order is then sent to The Store personnel for processing.