◆ <u>Business Analysis Report</u> ◆

◆ **<u>Prepared by Shubhamchandra Chaudhari</u>** ◆

◆ <u>Simplilearn CBAP Certification Project - 2</u> ◆

◆ INDEX ◆

- Task 1 - Identifying stakeholders – Create a list of stakeholders (as taught in Business Analysis Planning and Monitoring Knowledge Area)

- Task 2 - Identify the problem statement in this system.

- Task 3 - Identify objectives of the new Canteen Ordering System.

- Task 4 - Create as-is and future process map (using flowcharts). You can use any of the popular tools in the market like Microsoft Visio, Lucid Chart, Creately, Pidoco, or Balsamiq

- Task 5 - As a Business Analyst working on this project, find out the scope of the Canteen Ordering System. To find the scope you can use the case diagram (UML) or context diagram for the same.

- Task 6 - Write down the main features that need to be developed.

- Task 7 - Write the in-scope and out-of-scope items for this software.

- Task 8 - Draw an activity diagram for the system.

- Task 9 - Draw an ER diagram of the system.

- Task 10 - Write out the business requirements, both the functional and nonfunctional requirements.

- Task 11 - Draw wireframes or mock screens for any two of the features namely Menu Creation and any other feature as deemed fit by the student. (Use the technique prototyping or wire framing that is taught in the Training). You can use any of the wireframing tools like Microsoft PowerPoint, Microsoft Word, Balsamiq, Sketch, Adobe XD, Adobe Illustrator, Figma, UXPin, InVision Studio, InVision Freehand, or Moqups.

◆ Introduction

Unilever is a British-Dutch MNC FMCG company, headquartered in London, England. Unilever is one of the oldest FMCG companies, and its products are available in around 190 countries. In its UK offices, Unilever had around 1500 employees which were spread across 12 floors. They had 2 canteens to cater for these 1500 employees. Each canteen could seat around 150 employees at a time.

Most employees would prefer to have their lunch between 12 noon to 1 pm. This led to a huge rush in the canteen during lunch hours resulting in employees wasting a lot of time waiting for tables to be vacant. Management calculated that it took around 60 minutes for employees to go and come back from lunch. Almost 30-35 minutes were wasted waiting in a queue to collect their food and get a table to sit and eat. However, the time spent eating was barely 10-15 minutes. The remaining 10 minutes were spent reaching and coming back from the canteen using the elevators.

Employees don't always get the choice of food they want because the canteen runs out of certain items. The canteen wastes a significant quantity of food by throwing away what is not purchased.

Many employees have requested a system that would permit a canteen user to order meals online, to be delivered to their work location at a specified time and date.

◆ **Stakeholders Assessment**
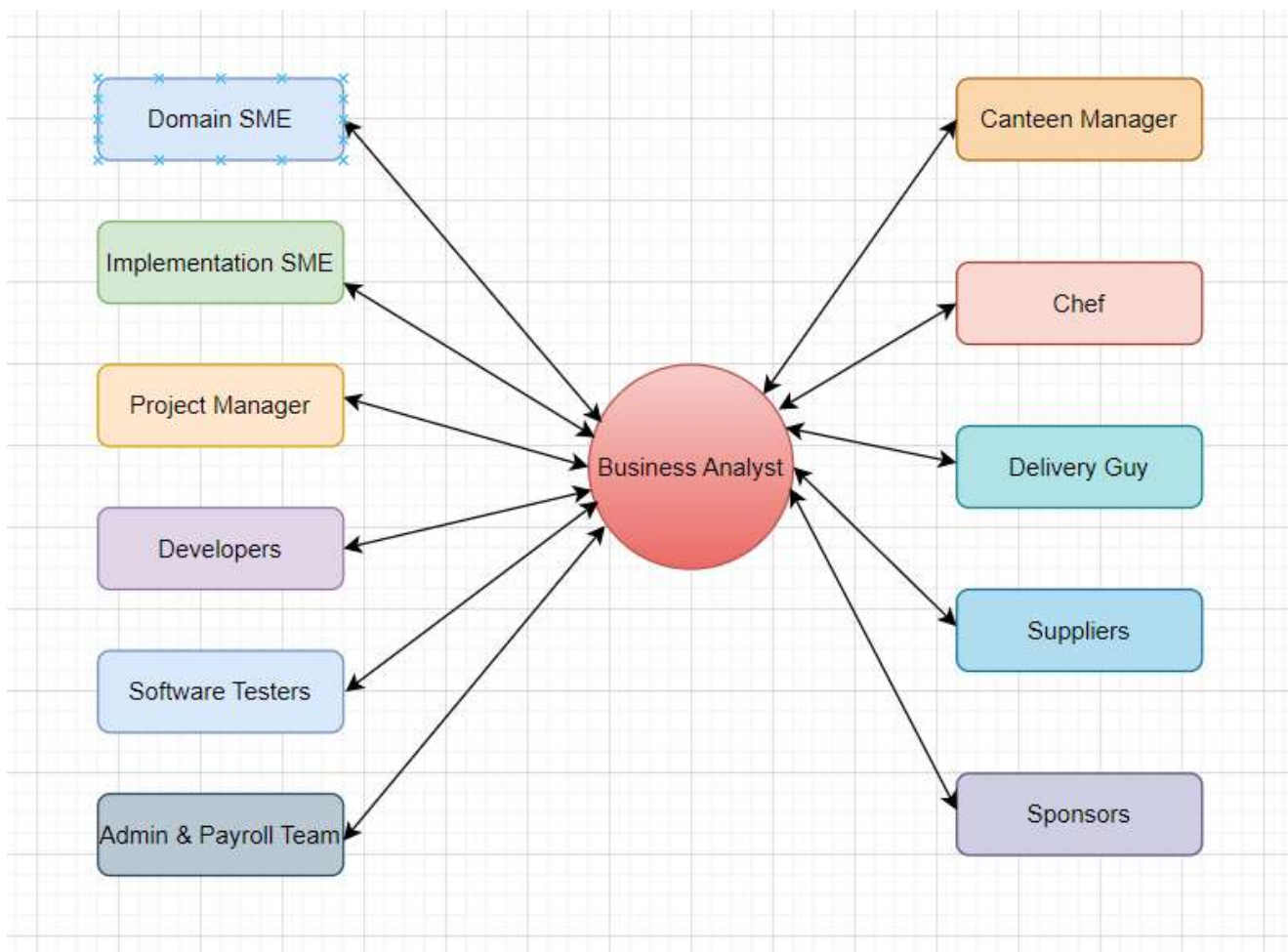
Internal Stakeholders: People who work for and own shares in Unilever Food Solutions and who are likely to want the company to be successful.

External Stakeholders: Anyone outside Unilever Food Solutions who is affected by its success or

failure. for example, customers, sponsors, suppliers, or banks that lend it money.

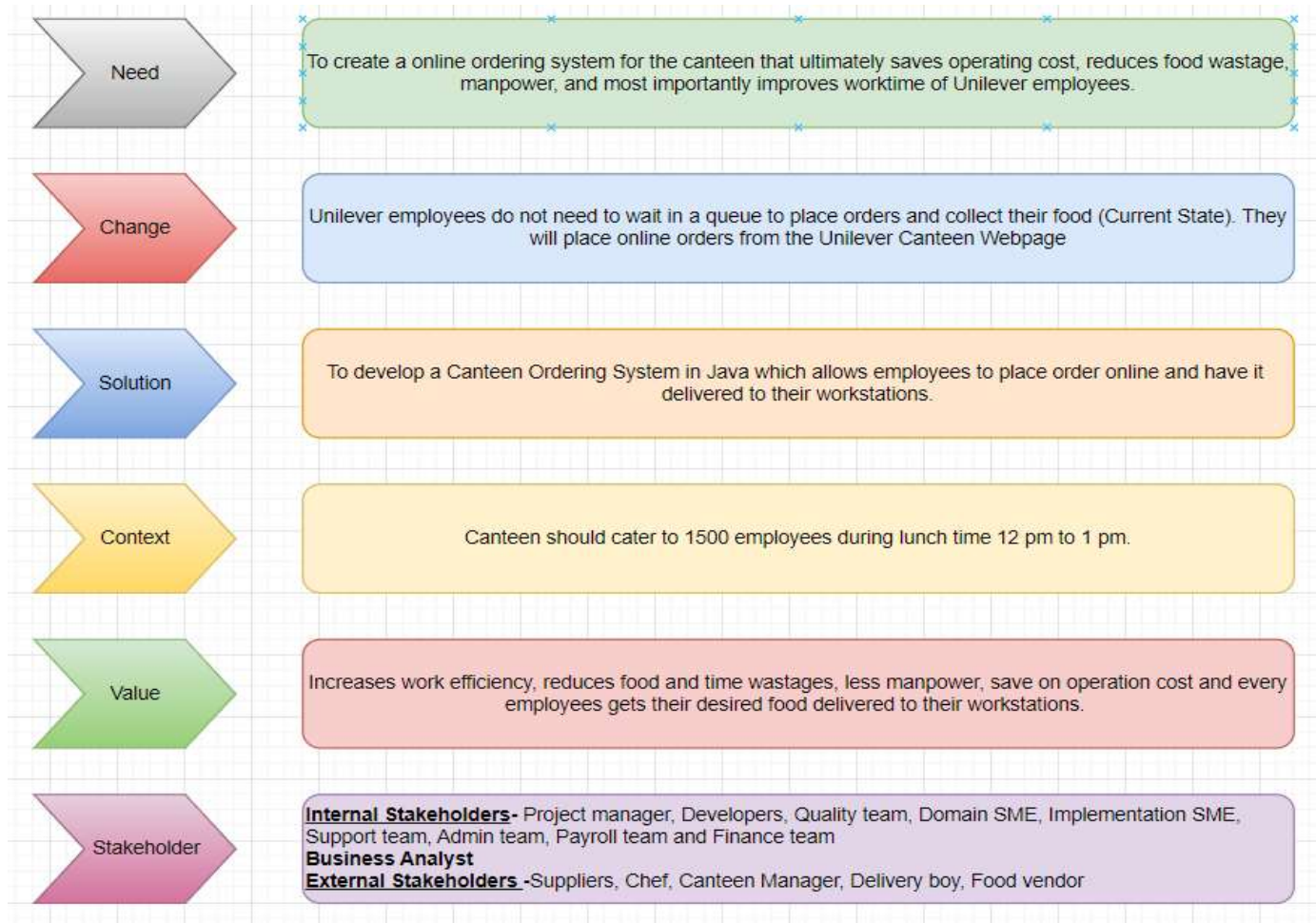## Problem Statement Identified in the Current System

- Unilever has around 1500 employees spread across 12 floors.

 - 2 canteens to serve all 1500 employees between 12 PM – 1 PM causing an enormous rush to get food.

- 150 seats in each canteen to accommodate all 1500 employees resulting in delay in time and affecting working hours of employees.

- Employees complain that they do not get what they feel like eating. Not satisfied with the current food catering system.

- Food wastage was noted due to 'N' number of orders and sometimes inventory runs short before 1 PM.

- High spending recorded on cost of operation leading to waste of money.

- Incompetent or untrained labour can also cause such down times in the canteen which could result in unsatisfied employees.
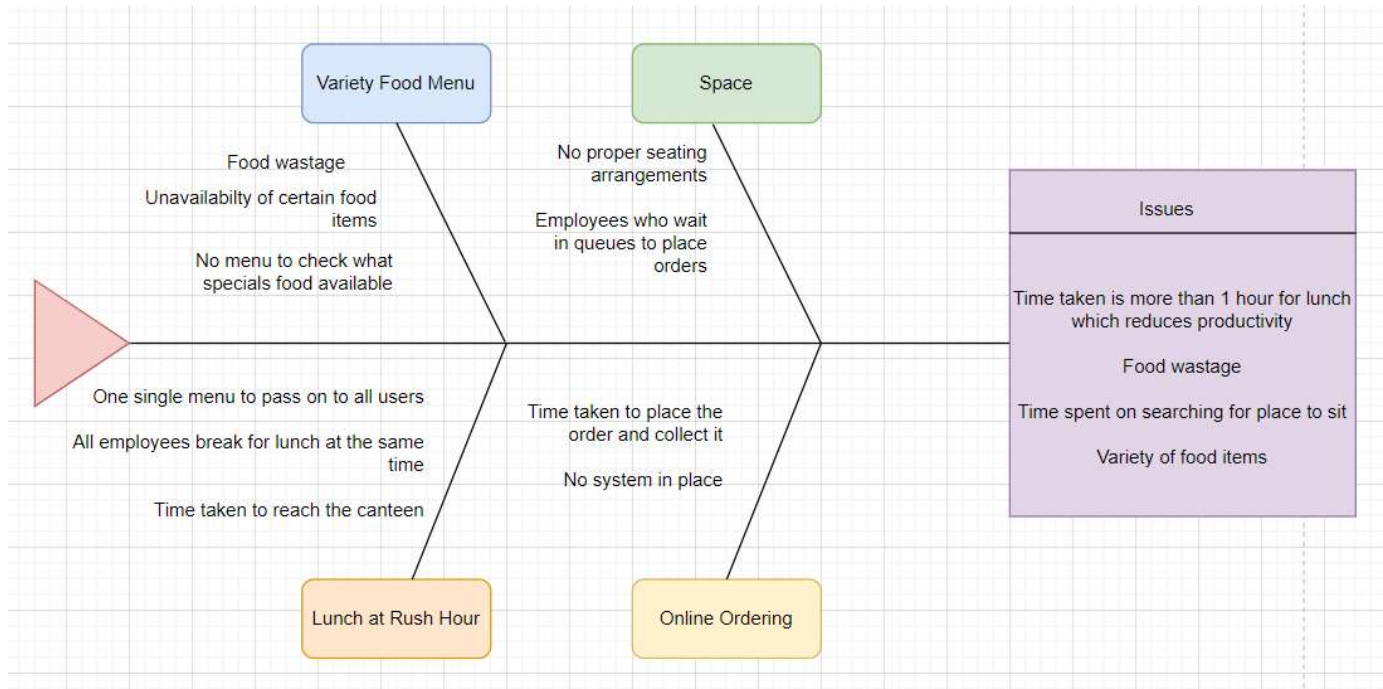
Objectives of Canteen Ordering System

- In record, the value of food wasted is 25% and inventory top up wasted 15%. The primary objective is to reduce canteen wastage by 30% within 6 months.
- Reduce canteen operating cost by 15% within 12 months by working with key suppliers, controlled inventory, delivery boy to deliver food to workstations, minimise food wastage and qualified chef to prepare desired meal.
- Significant increase in working hours from employees using the COS by avoiding wait timing and seating arrangements within 3 months.
- Canteen to operate with fewer manpower.

Business Analysis Core Concept Model (BACCM)

Need	To create a online ordering system for the canteen that ultimately saves operating cost, reduces food wastage, manpower, and most importantly improves worktime of Unilever employees.
Change	Unilever employees do not need to wait in a queue to place orders and collect their food (Current State). They will place online orders from the Unilever Canteen Webpage
Solution	To develop a Canteen Ordering System in Java which allows employees to place order online and have it delivered to their workstations.
Context	Canteen should cater to 1500 employees during lunch time 12 pm to 1 pm.
Value	Increases work efficiency, reduces food and time wastages, less manpower, save on operation cost and every employees gets their desired food delivered to their workstations.
Stakeholder	**Internal Stakeholders-** Project manager, Developers, Quality team, Domain SME, Implementation SME, Support team, Admin team, Payroll team and Finance team **Business Analyst** **External Stakeholders -**Suppliers, Chef, Canteen Manager, Delivery boy, Food vendor

Scope of New Canteen Ordering System

The requirement states that Unilever Food Solutions management needs a canteen ordering system in place which allows their employees to get the desired food delivered to their respective workstations. The proposed system includes the following.

1. Employees can register using their mobile number and employee ID (which is involved in the payroll deductions). After registration, they become existing users with an account to place online orders.

2. Lunch orders to be placed before 11 AM to avoid wastage of food, money, and time.

3. Order can be altered before the order confirmation process ONLY.

4. The canteen manager updates the menu daily to provide employee favourites and a new line of items.

5. Canteen manager assigned the delivery guy to orders and have them delivered on time.

6. Delivery guy to mark the order as 'completed' after successful delivery to the respective employees' workstations.

7. Employees submit feedback from the survey form to provide analytical information to Unilever management.

8. Employees should provide authorization to the payroll team to make the necessary deductions every month based on the data collected in the order repository of each employee.

9. Unilever Food Solutions will save on the cost of operations, reduce wastage, and increase the productivity of employees by using the dedicated Canteen Ordering System.

10. Management would like to have records of the following reports;

a. Most popular item from the menu.

b. Number of users/employees using the COS

c. Level of satisfaction of employees who are using the COS

d. Sales each day from the canteen.

e. Order forecasting f. Feedback from employees

The proposed Canteen Ordering System for Unilever Food Solutions swimlane visualisation is as follows;

Swimlane of Current Process
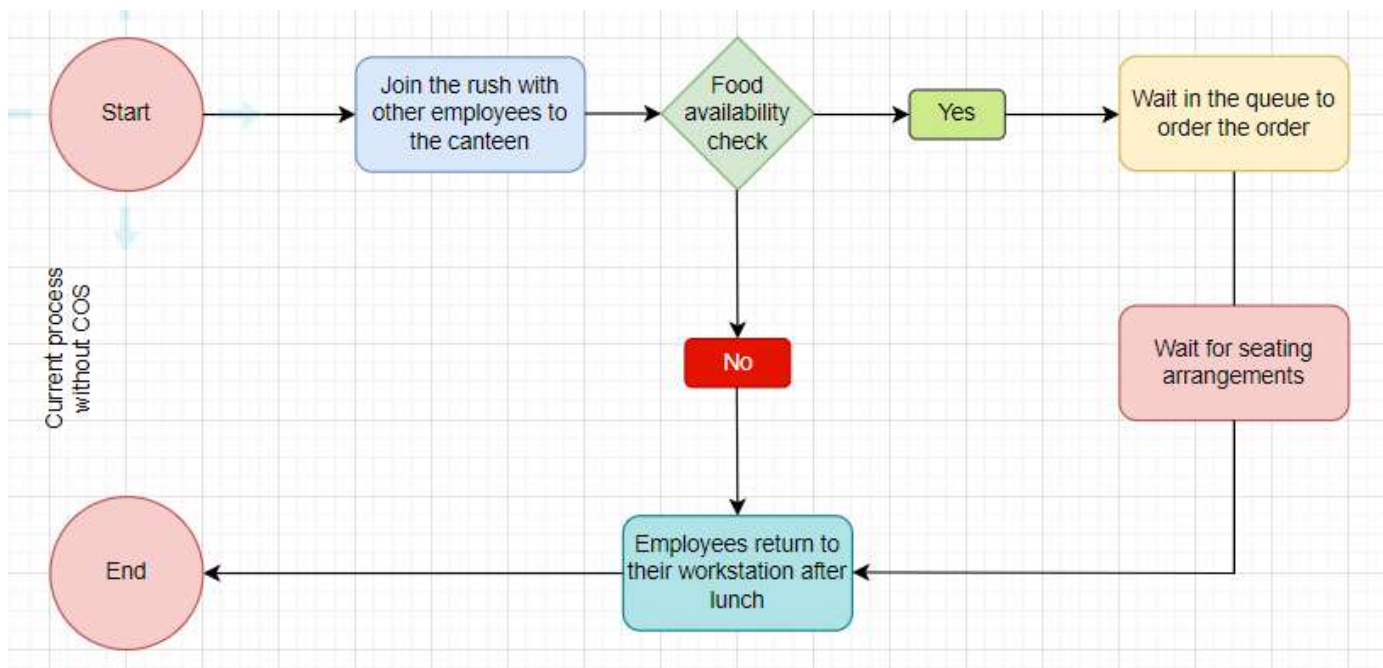
Swimlane of Future Process:-

New Canteen Ordering System
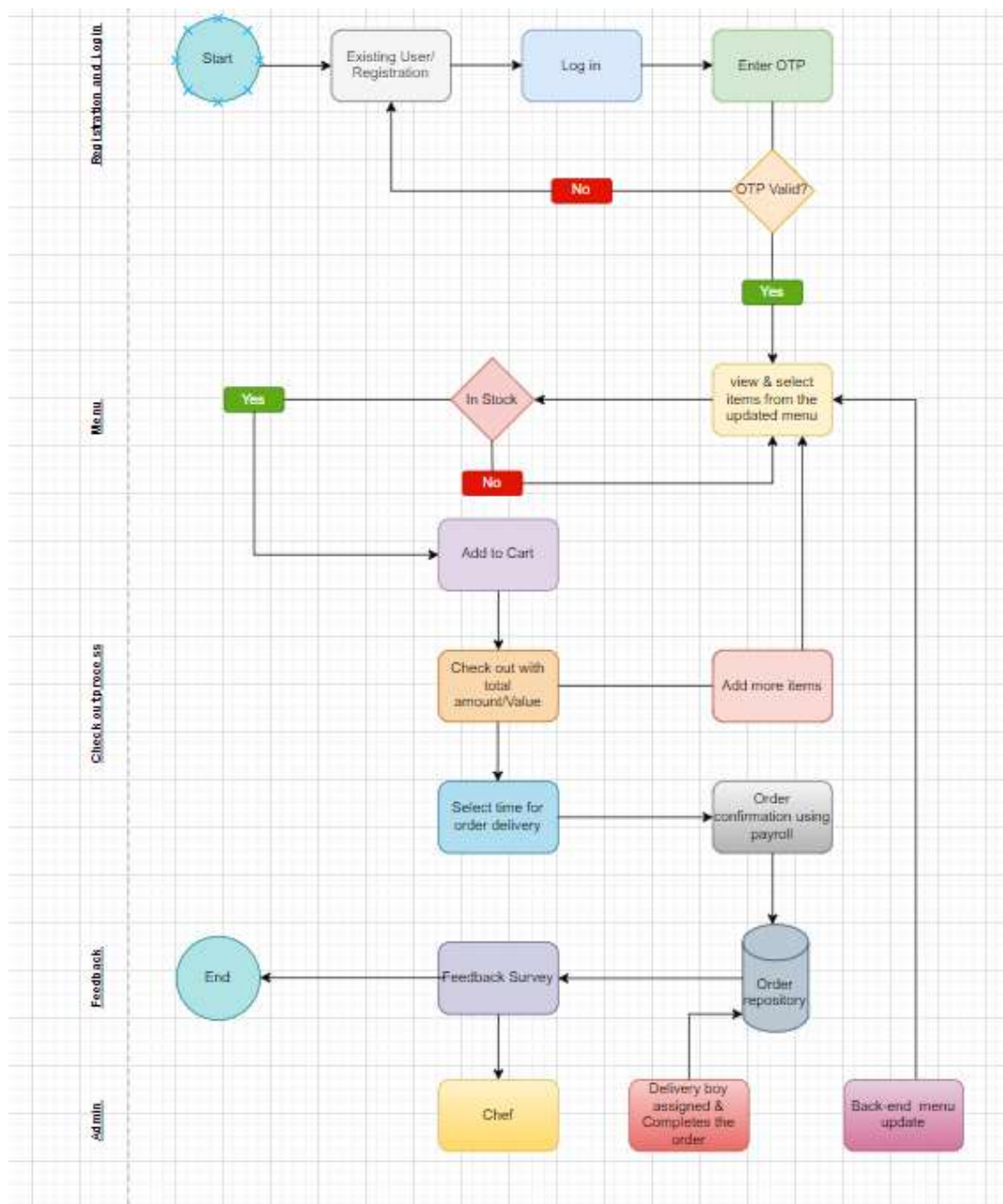
Main Features of the Canteen Ordering System:-

1. Specifically designed webpage wherein employees can register with their employee ID and login using their credentials to place online orders.

2. The COS to be available only for Unilever employees who are available in the office location or reachable within the canteen delivery limits.

3. After login, the employees will be able to view the updated menu from the new COS where they can order their favourites and check the pricing of each item.

4. COS will stop taking online orders after 11 AM. This would give the Chef sufficient time to top up the inventory and prepare the meals.

5. After selecting the items from the menu, employees can confirm the total amount/value of the order and confirm the order via OTP.

6. There will be no payment gateway. In this case, the total amount/value from all orders within the month will be deducted from the employee's monthly wages. This would require the order history to be recorded and sent to the payroll team for the adequate deductions.

7. Canteen managers should be able to view the order and items within the order number and communicate the same with the Chef. The canteen manager hired a delivery guy who will make sure the meals arrive at the employees' workstations on time.

8. After delivery, the delivery guy should be able to close the order via mobile phone or webpage.

9. Post delivery, a feedback form should be triggered to all employees' email addresses in respect to the meals they have ordered.

10. Feedback form should provide Unilever management with several reports based on the orders, taste and quality of food, most ordered dishes, order forecasting, employee satisfaction levels and number of employees using the COS.

Scope Assessment:-

In Scope	Out of Scope
New user registration and login web page	New user registration and login web page
Menu and price to be updated by the Canteen Manager	Recommended or Suggested food items to place orders quickly.
Last order to be received by 11 AM	Canteen staff management webpage for Canteen Manager
User can edit the order before confirmation	Outside delivery is not allowed
No cancellation or edit after order is placed	Refund option not available
Canteen Manager to check inventory and send orders to chef	Will the delivery person use the mobile version of the COS to close the orders?
Confirm location for delivery (only to workstations)	No flexible payment options available for employees
Delivery boy to complete the order after delivery	
Feedback form if user not happy with food	
No payment gateway. Order value to be deducted from salary.	
Payroll team to have records/history of orders from each employee for deductions	
Management would like analytics based on feedback and orders such as; - Most popular dish - Number of employees use the canteen ordering system - Feedback to result in how many users are satisfied with the COS - Order forecasting	

Activity Diagram of the Canteen Ordering System

Unilever Management	Employee	Canteen Management	Payroll Team
Start	Employee sign up & sign in	Update menu for pricing	Employee Database
Canteen food ordering Application	Food menu	order closed by 11 AM	Receiving the order details from database
Receiving Feedback	Select food & check out the order	Order confirmation	Deduct the canteen expenses from monthly salary for the respective employees
Storing all the order related date	Food received at workstation	Food preparation	
Extracting the required reports	Providing feedback	Delivery the food to the to the workstation	
Publish the stats to the management		Close the online order	
End			

Unilever Canteen Ordering System

ER or UML Diagram
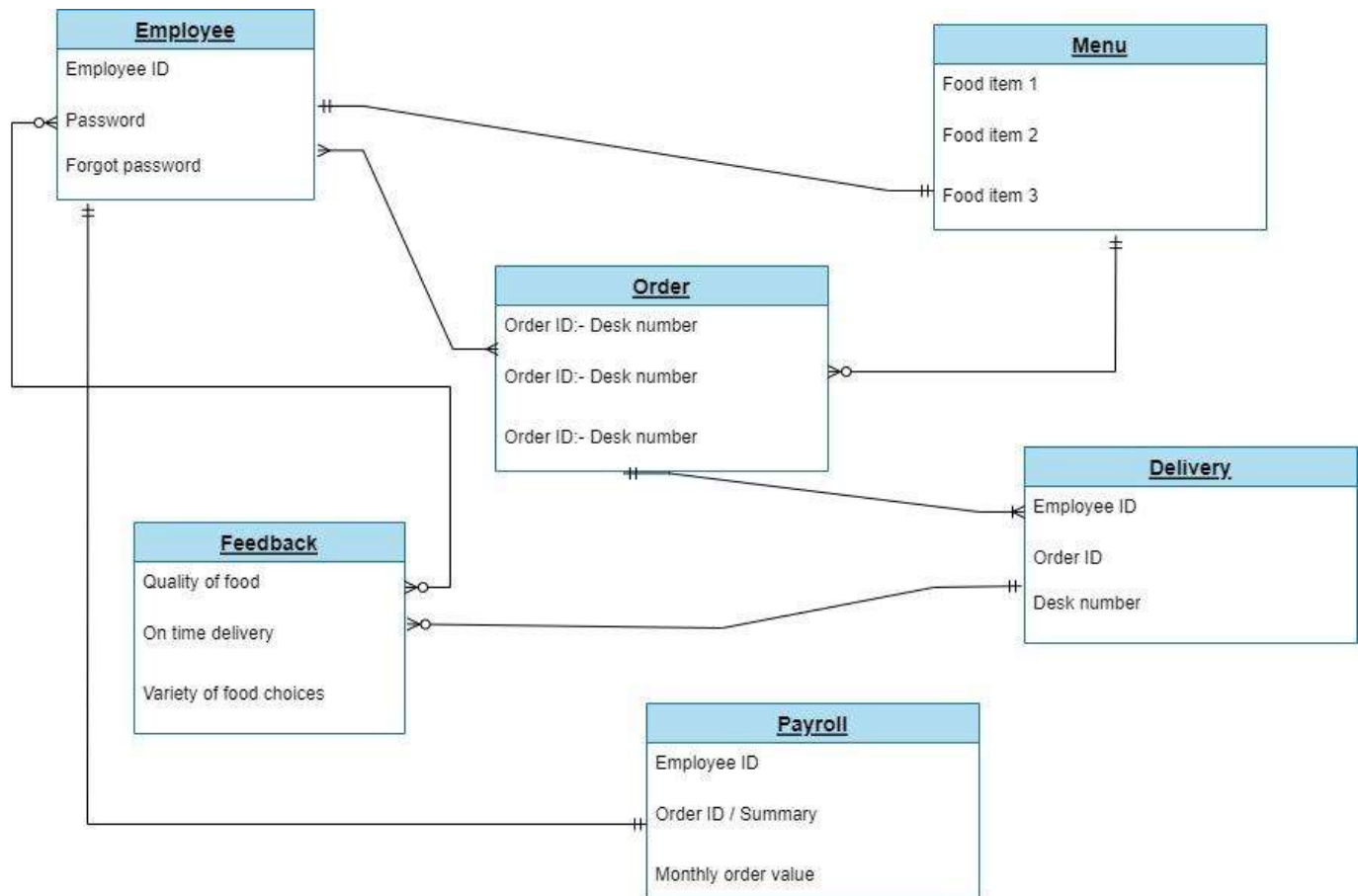
Functional Requirements Analysis

- All end users (employees) to have a login page of the Canteen Ordering System (COS)

- Canteen Manager to update the menu daily from an admin login page.

- Lunch orders to be placed before 11 AM daily.

- Once a lunch order is placed, users will not be allowed to cancel or make changes to the existing order.

- The delivery boy will have to close or 'mark' the order as 'completed' after delivering to the

respective workstations.

- Users can have optional feedback depending on the quality and taste of the Canteen Food.

- Order value/amount for the month will be accessible to the payroll team for appropriate deductions from the salary.

- Management will have the accessibility to view the following reports generated from the Canteen Ordering System.

• Most popular dish

• No. of the employees using the system

• Employee satisfaction feedback or complaints

• Daily sales/revenue report

• Order forecasting report

Non-functional Requirements Analysis

- Scalability and Performance: Scalable for 1500 employees at a time.

Performance based on the capabilities of the Canteen Manager, Chef and Delivery Guy.

- Availability: COS webpage should be fast and light. pg. 13

- Usability: User friendly and self-explanatory ordering concept.

- Maintenance: Software development made in Java language.

- Accuracy: Reports generated from the COS should be based on the input from the Canteen Manager and end users/employees.

- Security: The system to be secured with login ID and password generated by the end user/employee.

Onion Diagram

Regulators
Suppliers
Entrance Security
External Sources

Domain SME
Implementation SME
Payroll Dept.
HR Dept.
Sponsors

Canteen Manager
Chef
Delivery guy
End User

Business Analyst Directors
Project Managers
Developers
Quality Testers
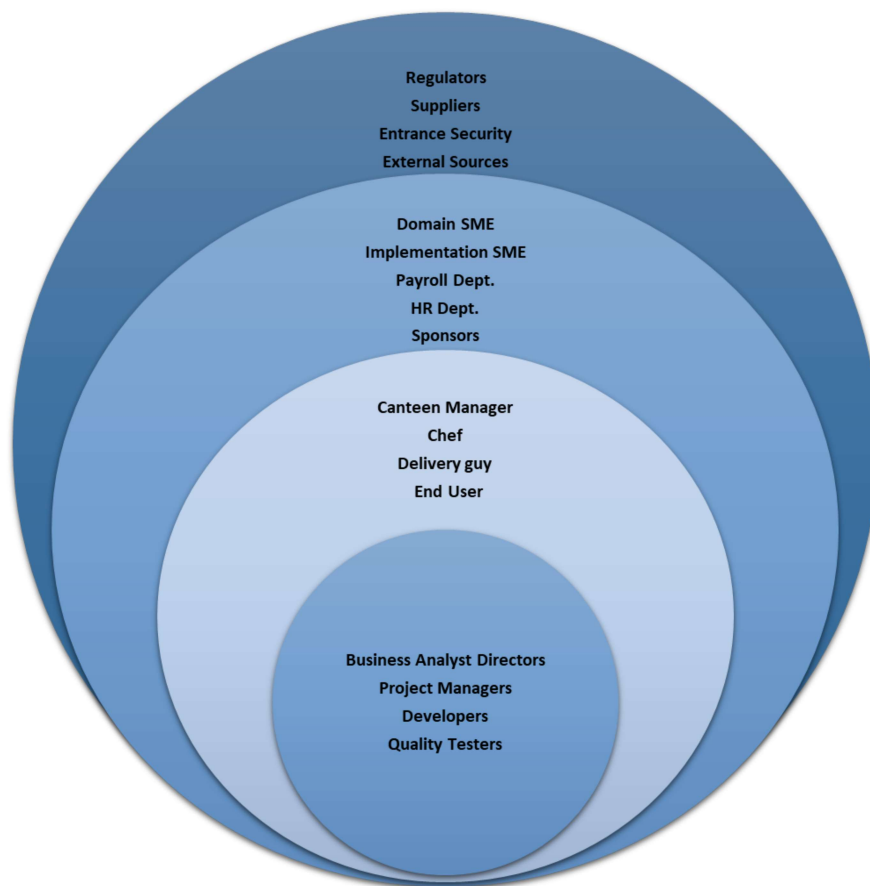
RACI Matrix

	RESPONSIBLE	ACCOUNTABLE	CONSULTED	INFORMED
BUSINESS ANALYST	✓			
PROJECT MANAGER		✓		
DEVELOPER				✓
QUALITY TESTER				✓
DOMAIN SME	✓			
IMPLEMENTATION				

SME	✓			
CANTEEN MANAGER	✓			
CHEF	✓			
DELIVERY GUY	✓			
PAYROLL DEPT				✓
HR DEPT				✓
SUPPLIERS	✓			
CUSTOMERS				
SPONSORS			✓	

Mock Screen

Screen 1- Log in

Screen 2- Menu

Screen 3 - Feedback