Project Plan

Version 1.2

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Version History

Version	*Date (dd/mm/yy)*	*Changes*	*Checked by*
0.1	07-02-23	First version of project plan; added context, organization info, methodologies, gantt chart & risk management	Alexander Clemencia
0.2	08-02-23	Refinements on assignment objective, organizational charts and stakeholders involved	Alexander Clemencia
1.0	09-02-23	First version created; completed timeline (Gantt chart) and glossary terms.	Izahir Clemencia
1.1	10-02-23	Minor changes made based on feedback from stakeholders.	Alexander Clemencia
1.2	13-02-23	Specific refinements made on sub-research questions and risk management	

Abstract

The purpose of this document is to inform readers of the agreements made in accordance with Obero B.V., which includes associated stakeholders, relevant scopes/topics to be explored and expected research strategies, methods to be conducted and end-deliverables to be made by the end of the project. The assignment will be approached within sprints of two-week periods, using a combination of Agile Scrum and Double Diamond, which are ideal for swift iterations, feedback, and incremental improvements during the design process.

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Glossary

Terms	Definition
Agile Scrum	Methodology for managing and completing complex projects in an efficient and flexible manner via collaborative iterations done in time phases (sprints).
AI	Artificial Intelligence — Simulation of human intelligence in form of machines designed to think and act like humans.
Angular	Open sources front-end framework used to build dynamic and complex single-page applications (updates content without the need to refresh).
Back-End	Portion of a software system that stores, processes and manages data.
Consumers	Customers that buy and consume goods sold within a restaurant.
CRM	Customer Relations Management — Practices and strategies that is used to manage and analyze customer interactions and data, with the goal of improving customer relationships and business performance.
Customer Experience/ Satisfaction	Overall impression of a customer within a company and its products/services, determined by interactions and journey within the company.
DOT Framework	Development Oriented Triangulation (DOT) Framework — A research method that helps to structure and communicate research processes using triangulation of different strategies in order to solidify ICT-based solutions.
Double Diamond	A design process methodology model that consists of four main stages: Discovery, Definition, Development and Delivery, which are combined within an iterative process used for better organization within creative processes.
Efficiency	The rate of how efficient something can be completed/achieved successfully; ability to do things well, successfully and without of any waste.
Foodservice	Businesses and organizations that prepare and serve food and beverages to customers outside of their homes (e.g. restaurants, cafes, catering services, etc.)
Front-End	A portion of a website or application that interacts with the user and presents the visual interface, mainly involving HTML, CSS and Javascript.
In-store	The physical location of a retail business, where customers can visit and purchase products or services.
Interface	A boundary or point of communication between two systems or components, allowing for the exchange of information and functionalities.
Iteration	The repetition of a process to execute a certain task/command until a desired outcome is reached.
Module	A self-contained unit that encapsulates specific functionality, which is reusable and separable from the rest of an application.
MoSCOW	Method used to prioritize and evaluate relative importance of tasks within a project.
Pain points	Specific area/point of difficulty, frustration or inconvenience that a user experiences with a product/service.

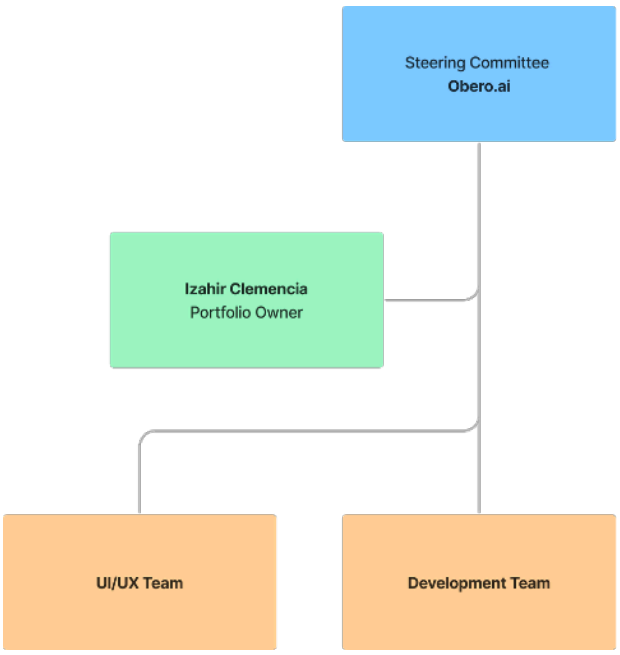
POS	Point of Sales — Time and place at which a retail-based transaction is completed; POS system is a solution used to manage transactions and track sales.
PWA	Progressive Web Application — A type of web application that provides native app-like experience, combining features of web and native apps and is accessible through a web browser.
Reliability	Ability of a system to perform its functions properly and consistently without failure over a period of time.
Restaurateurs	Person who manages a restaurant and its day to day operations.
Retrospective	Review or evaluation of past events, with the goal of identifying achievements, and areas that could be improved for the next event.
SaaS	Software as a Service — Model of delivering software applications over the internet, eliminating the need to install and run the software on local computers.
Scalability	Ability of a system to handle increasing demand by adding resources in a modular and efficient manner.
Sprint	Short focused time periods (1-4 weeks) within Agile environments during which teams work to complete a set of pre-determined goals.
Sprintplanning	A session at the start of a sprint where teams plan together the set of tasks needed to be finished within the sprint.
Stakeholders	Individuals, groups or organizations that have an interest or affiliation with the outcome of a project.
Streamlining	Process of simplifying and improving efficiency within a process.
UI	User Interface — A point of communication in which users can use to interact with a computer or machine via graphical display and input devices.
Usability	Ability of a product/system to be easy of use and to learn, with the main focus on improving user experience and satisfaction.
User-friendly	A product, service, or interface that is easy to use and navigate, providing a positive experience for the user.
UX	User Experience — A person's overall perception and attitude towards using a particular product/service.
VAS	Value Added Service — A feature or functionality that provides additional benefits and increasing customer satisfaction.
Vendor	Person that provides goods or services to another business.

The Company

1.1 Background Context

Obero is a Dutch software company that specializes in IT Services & Consultancy, providing Software as a Service (SaaS) solutions for the online ordering and delivery sector. Founded in 2020 by Alexander Clemencia, Izahir Clemencia, and Mohamed Dahou, the company's goal is to improve customer experiences within businesses by offering in-ordering solutions for enhanced sales efficiency. The company is headquartered in the Netherlands and currently employs 17 people.

1.2 Organizational Chart



1.3 Mission Statement

Obero’s long term mission is to empower businesses with advanced AI-powered solutions that drive operational efficiency and improvements on decision-making, providing unparalleled value to clients and contributing to the growth of technology.

The Assignment

2.1 Job Description

The CRM Platform

Obero offers a management platform for managing their subscribers; businesses operating within the foodservice industry, also known as restaurateurs. This platform has features to help Obero communicate and assist restaurateurs in managing their foodservice operations, including a module for creating digital menus, ordering systems and customer care. However, the current platform is not user-friendly; it requires high technical knowledge for a person to operate, leading to slow troubleshooting in-between subscribers. Hence to solve that issue, Obero is shifting focus towards a partner-relationship model, where intermediaries (hereafter, vendors) can offer an online food ordering system through Software as a Service (SaaS). With this new relationship model, vendors are able to offer Value Added Service (VAS) under their own brand, incorporating Obero's management platform with functionalities that offer state-of-the-art online ordering system, and using it to manage their own affiliated restaurateurs without requiring huge investments.

In-store Experience

Apart from the vendors and restaurateurs, Obero aims to also improve the in-store experience for customers by conducting field research on current pain points and opportunities within foodservice locations. This observation will help in implementing the redesign of the platform, and development of new features and tools to support the in-store experience. Obero wants to provide a comprehensive solution combining the best of online and in-store experiences for customers, so that vendors can offer the best values from their services.

2.2 Objective

Hence, the objective of this assignment is to improve the user experience (UX) of Obero's Customer Relations Management (CRM) Platform for vendors, and in-store operations for restaurateurs and consumers, so that an improved management and ordering platform as a Progressive Web App can be delivered by the end of the internship period (July 2023).

2.3 Research Questions

The proposed main research question is as follows:

What factors can Obero's Platform be improved on to allow better scalability, usability, reliability, and efficiency, for managerial & operational usage within the foodservice industry?

With several sub-research questions to further justify the definition of the assignment:

Sub-Research Questions	*Area of Interest*
What factors define the functionality of a CRM platform?	Customer Relations Management (CRM) Platform
What factors define a scalable and reliable SaaS model, and how is it incorporated within CRM platforms?	Software as a Service (SaaS) Technicalities & Implementation on CRM Platforms
What features define a smart and efficient in-store ordering system?	In-store Ordering Technicalities & Real-life Applications
How can streamlining in-store processes impact customer satisfaction and employee efficiency in foodservice operations?	Daily In-store Operations & Processes
What are the users involved in Obero's partner-relationship model, and their inter-related significance?	User & Target Group Definition
What contributions do PWAs offer in enhancing the user experience of CRM platforms?	Progressive Web Apps (PWA) Usage & Environment
Should Obero adapt a Point of Sales (POS) system for managing transactions?	Point of Sales (POS) Systems and Applications for In-store Ordering Operations

2.4 Requirements

Alongside the research questions, came also the requirements that have been requested and discussed together with the company. These requirements should be in parallel with and supported by the scope of the assignment:

Topic	*Expectations*	*Priority (MoSCOW)*
Redesign of Obero’s CRM platform.	A redesign of the current management platform to be usable for both vendors and restaurateurs.	Must
Redesign of Obero's ordering platform.	A redesign of the end-user ordering platform to be used for consumers to make orders within in-store operations.	Must
Data management & visual representation for in-store ordering processes.	User research on how data is processed and displayed properly for consumers within restaurants.	Must
Implementation of Obero’s CRM platform	Implementation of the management platform as a PWA using Angular framework.	Should
Implementation of Obero’s end-user (consumer) ordering interface	Implementation of the ordering platform as a PWA using Angular framework.	Should
Obero logo and site rebranding	Evaluation and redesign on Obero’s brand and site page.	Could

2.5 Scope

Inside Scope	*Outside Scope*
CRM Platform & Use Cases within In-store Processes Observe, evaluate and redesign Obero's current CRM Platform and user test changes to affiliated target audiences.	**Back-end Development & APIs** Creation and maintenance of database, and communication using APIs, achieved using certain server-side programming languages.
Consumer Ordering & POS Interface for In-store Daily Operations Observe, evaluate and redesign how data is displayed between the CRM platform and the end-user interface of ordering apps for consumers to conduct purchases.	**Obero's Branding Redesign** Rebranding of obero's current brand identity. Includes site refurbish and logo redesign.
Obero's Target Groups and User Relations Deeper insight on different entities involved within Obero's partner model, including significance and dependencies.	**Analysis on Obero's Market & Sales Strategy** Conducting in-depth analysis on Obero's current marketing strategy, resulting in an advisory report for long term sales growth.
Front-end Knowledge of Angular Framework Knowledge in creating design elements and components in Angular, with end goal delivery of a working PWA.	
Implementation of Solution into a Progressive Web App (PWA) Research and implementing designed solutions into a working MVP, that is expected to be a web-app.	

Approach

3.1 Methodologies

Project Management

This assignment will incorporate the usage of **Agile Scrum**, a well known methodology for handling collaborations and producing efficient deliverables per sprint.

Agile Scrum is a project management system that combines the Agile philosophy (‘incremental developments’) and the Scrum framework (‘breaking down projects into sprints’). According to Sean Peek (2023), features are built at a priority level, where the goal of each sprint is to build the most important features first, and to come out with a deliverable product; more features are then built into the product in subsequent sprints, based on adjustments made by stakeholders and customer feedbacks in between.

Design Process

With the Agile Scrum, the **Double Diamond** will be used as the main methodology for executing design processes, combined with the research methodologies and strategies offered by the **DOT Framework**.

The Double Diamond model consists of four main stages: Discovery, Definition, Development and Delivery, which are combined within an iterative process used for better organization within creative processes (Costa, R. 2018). The Development Oriented Triangulation (DOT) Framework, on the other hand, is a research method that helps to structure and communicate research processes using triangulation of different strategies in order to solidify ICT-based solutions (ictresearchmethods.nl, 2021).

When combined with the strategies derived from the DOT Framework, the design process will be ensured of its approachability, having the ability of exploring different perspectives while maintaining open-ended opportunities for associates to further iterate and collaborate. It helps to ensure that the design process is user-centered, with the goal being the successful creation of innovative solutions via justified strategies.

Research Methods & Strategies

The DOT Framework consists of 5 main research strategies:

1. *Library*
   Examining existing works and theories to further guide design processes.

2. *Field*
   Investigating the context of products and its usage to understand user needs, wants, limitations and other environmental factors.

3. *Lab*
   Testing concepts for validating and verifying certain functionalities of scenarios.

4. *Showroom*
   Assessing ideas against existing works through expert testing or evaluation against general standards/guidelines.

5. *Workshop*
   Explore opportunities via prototyping, designing and co-creation to gain insights into innovative possibilities.

Within each strategies, contains different methods of which can be used to gain answers and eventually solutions to the aforementioned problem. This project will be using ‘Method Triangulation’, a method of combining different appropriate research methods from the DOT framework in order to cover different views.

The methods and strategies that are outlined below serve as the basis for addressing the research questions posed and potentially developing an innovative solution that meets the stakeholders’ expectations, with the aim of gaining a deeper understanding of the research objectives.

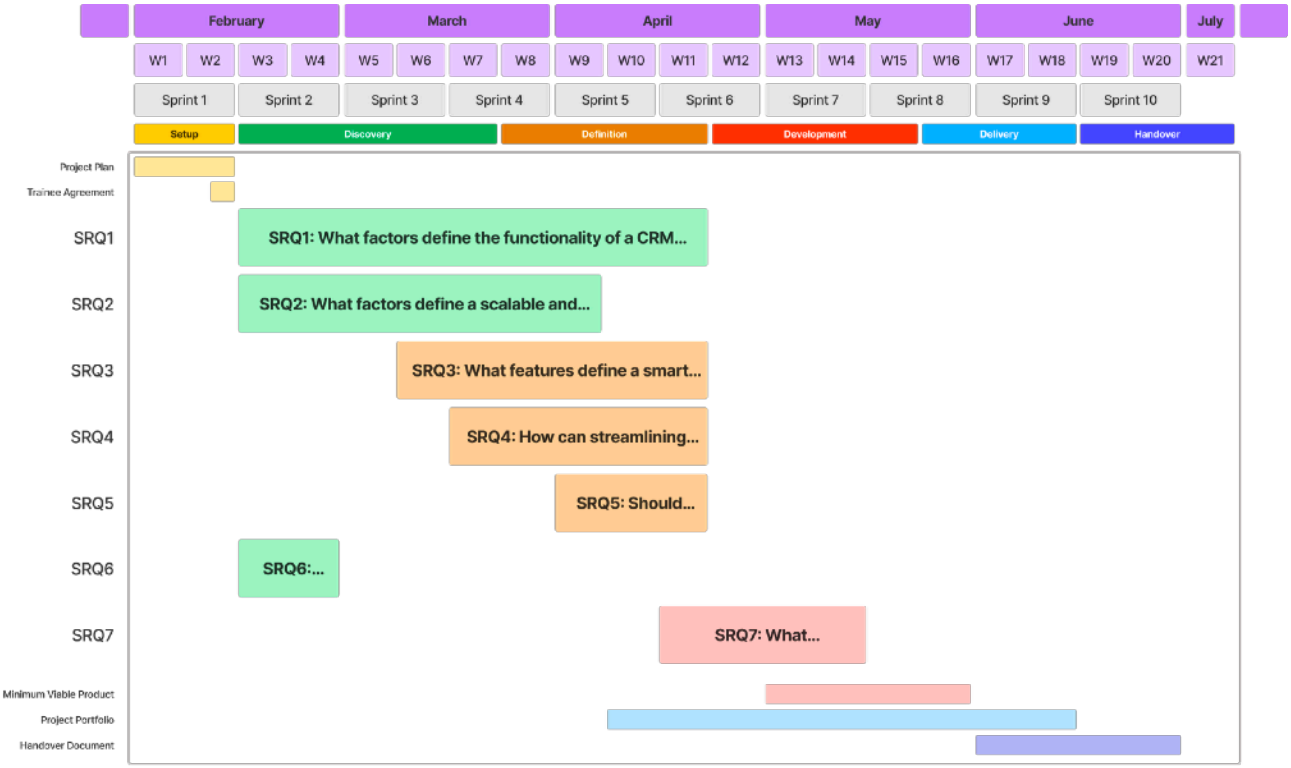
Research Questions	*Strategies*	*Methods*	*Explanation*
SRQ1: What factors define the functionality of a CRM platform?	1. Library 2. Showroom 3. Field 4. Workshop 5. Lab	• Literature Study • Best, good & bad practices • Expert Interview • Heuristic Evaluation • Co-reflection • Peer review • Card sorting • Focus group • Morphological chart • Usability testing • A/B testing	Research on CRM fundamentals, existing competitors and real-life usage for management within the foodservice industry. Evaluate and design final MVP to be tested for vendors, and analyze results altogether to determine the usability rate of such factors.
SRQ2: What factors define a scalable and reliable SaaS model, and how is it related to CRM systems?	1. Library 2. Field 3. Workshop	• Literature study • Expert interview • Best, good & bad practices • Design pattern research • Card sorting • Focus group • Prototyping	Research on Software as a Service (SaaS) fundamentals, real-life applications, and relevance with CRM systems.
SRQ3: What features define a smart and efficient in-store ordering system?	1. Library 2. Showroom 3. Workshop 4. Lab	• Literature study • Competitive Analysis • Co-reflection • Prototyping • Co-creation • Usability Testing • A/B Testing	Investigate existing ordering systems and identify points of improvement and opportunities, bringing them for collective discussion and eventually set as a standard for design and ideation phases.
SRQ4: How can streamlining in-store processes impact customer satisfaction and employee efficiency in foodservice operations?	1. Library 2. Field 3. Workshop 4. Lab	• Literature study • Expert interview • Participant observation • Interview • Survey • Ideation • Morphological chart • Prototyping • Usability testing • A/B testing	Observing in-store day-to-day operations, and gathering user inputs from affiliated persons (restaurateur, employees and consumers). Test designed prototype in a field environment to gather and iterate according to user feedbacks.
SRQ5: Should Obero adapt a Point of Sales (POS) system for managing transactions?	1. Library 2. Showroom 3. Workshop	• Literature study • Co-reflection • Prototyping • Co-creation	Investigate technicalities of POS systems and observe whether it suits with the solution's requirements from a use case perspective.
SRQ6: What are the users involved in Obero's partner-relationship model, and their inter-related significance?	1. Library 2. Showroom	• Literature study • Expert interview • Peer review	Research on associated target groups and their correlation within Obero's partner model.
SRQ7: What contributions do PWAs offer in enhancing the user experience of CRM platforms?	1. Library 2. Showroom 3. Workshop 4. Lab	• Literature study • Expert interview • Proof of Concept • Prototyping • Co-creation • Co-reflection • Usability testing • A/B testing	Investigate the capabilities and potential of Progressive Web Applications (PWA) as a technology for delivering user-centric, reliable and fast experiences on the web. Exploring the current state of PWA development, its limitations and opportunities, and its impact on businesses, developers and end-users.

3.2 Planning

The Double Diamond methodology involves dividing the project scope into four distinct stages, referred to as 4D: Discovery, Definition, Development, and Delivery. This design process will be spread over a 5-month period, spanning 20 weeks, during which Agile Scrum will be utilized, resulting in a total of 10 sprints to reach completion.

3.3 Gantt Chart

The Gantt Chart below reflects the overview of the phases within the project:



For full viewing of the chart, alongside other planning products, it can be viewed via an external link, which can be accessed here.

It is important to keep in mind that the chart presents a rough estimate of the entire project timeline, which does not account for the detailed outcomes outlined within each phase. The Agile Scrum approach allows for flexibility, as deliverables and objectives may evolve during each sprint.

Other Requirements

4.1 Stakeholders

Name	*Role and Functions*	*Availability*
Alexander Clemencia	Scrum Master Company Supervisor	Mondays to Fridays 09:00 — 17:00
Izahir Clemencia	Portfolio Owner	Mondays to Fridays 09:00 — 17:00
Mohamed Dahou	Technical Advisor	Mondays to Fridays 09:00 — 17:00
Deep Patel	Lead Developer Team	Mondays to Fridays 06:30 — 16:00
Lin Yuzhong	University Supervisor Graduation Project Advisor	Mondays to Fridays
Nathanael William Biantoro	UI/UX Designer Graduate Intern	Mondays to Fridays

4.2 Communication Agreements

Communications	*Aim/Purpose*	*Organizer*	*Frequency*
Daily Scrum	Providing a daily checkpoint for agile teams to review progress, plan next steps, and identify impediments to ensure smooth completion of tasks.	Scrum Master	Daily (09:30 every morning)
Check-up Meeting (with University Supervisor)	Evaluate progress, provide feedback, and ensure that the supervisor is updated on current tasks, goals, and objectives.	Graduate Intern	Weekly — Bi-weekly (flexible availability between both parties)
Sprintplanning	Define and prioritize work tasks for the upcoming sprint.	Scrum Master	Bi-weekly (at the start of sprint)
Sprint Demo & Retrospective	Showcase completed tasks, solicit feedbacks and identify areas for improvement for the next sprint.	Scrum Master	Bi-weekly (at the end of sprint)

4.3 Tools to be Used

Tools	*Aim/Purpose*
Azure DevOps	Main program for sorting out features, epics, and user stories within the scope of the project.
Confluence	Documentation hub for storing important disclosed deliverables for internal use.
Figma	Main design tool used for the design and development of solutions. Used for creating media products throughout the project.
Figjam	Collaborative brainstorming tool for creating visual diagrams and charts.
Jira Work Management	Productivity tool used for personal updates and creation of own timeline separated from the company's. Used for self-updates and checkpoints in relation to general progress.
MS Teams & Office 365	Used for day-to-day internal operations for general communication purposes, serving storage for project tasks and notes via plugins, calendar and email hub for notifying tasks and other stakeholders of meetings.

4.4 Risk Management

Risks	*Probability* *(Least / Unlikely / Likely / Most)*	*Severity* *(Low / Medium / High / Severe)*	*Mitigation Plan*
Unclear or changing requirements from stakeholders/peers	*Likely*	*Low — Medium*	Conduct co-reflection and peer review sessions for better adjustment of requirement.
Insufficient time for completing user stories/feature tasks	*Likely*	*Medium*	Put tasks in backlog, address issue in retrospective and encourage sprintpoints to be used within each sprints for time tracking.
Identifying topics during research, that are not within the scope of the project	*Likely*	*Medium*	Report to stakeholders via documentation/research report to store information that can be used for the company.
Dependency on key stakeholders for user research	*Unlikely*	*High*	Set up an early arrangement plan for sessions with stakeholders; periodically send reminders.
Task bottlenecks due to completion dependency on others	*Likely*	*Medium — High*	Early identification of bottlenecks by regular progress tracking and applying knowledge-sharing to associates for better team dynamic and capacity.
No development/ implementation phase due to time-constraint & unfinished investigation	*Unlikely*	*Severe*	Assist in creation of Obero's management and ordering paltform via co-creation with development team, with goals being setup of lite MVP.

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