Princess Sumaya University for Technology

جامعة الأميـرة سميّـة للتكنولوجيا

Mostawdaakom

مستودعكم

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مستودعكم

"Bridging the Gap between Retailers and Supermarkets"

Contents

Project Selection and Adoption:

Executive Summary:

Mostawdaakom is a cutting-edge mobile app that bridges the communication gap between retailers and supermarkets, streamlining inventory management and order placement. By providing real-time inventory updates and easy-to-use features, it empowers supermarket owners to make informed purchasing decisions. The app's scalable and secure design caters to a growing user base while ensuring data privacy. Seamless integration with existing systems enhances operational efficiency and optimizes retail-supply chain collaboration, leading to increased profitability for all parties involved.

Problem Statement:

The Mostawdaakom project was selected based on its potential to resolve existing inefficiencies in the retail landscape. Key selection criteria include ease of use, realtime inventory updates, efficient order

management, scalability, security and data privacy, and integration

capabilities. By addressing these criteria, Mostawdaakom promises to

improve inventory management, reduce stock-outs and overstocking,

and increase profitability for both retailers and supermarkets.

Analysis
Market Target:

Supermarket Owners: With its user-friendly features and real-time force updates, the app is made to empower supermarket owners. They may use it to improve their force conditions, cut down on stock-outs, and make well-informed purchasing decisions.

Retailers: The application serves retailers who wish to enhance their operational efficiency in force management and order placement. It provides supermarkets with an ideal platform for working together and improves their entire force chain process.

Businesses Dealing with Inventory: Difficulties Businesses who struggle with stock-outs, overstocking, and hampered order operations should consider this approach. Mostawdaakom hopes to attract companies seeking to optimize their force procedures by tackling these concerns.

Technology-Driven Retailers: The software is especially appealing to retailers who prioritize technology-driven results for their operations because of its emphasis on real-time updates, scalability, and integration capabilities.

Market Trends:

Digital Transformation in Retail: Shops are adopting digital solutions less frequently to improve customer experiences and streamline operations.

Mobile applications that facilitate communication and cooperation among various realities throughout the retail supply chain are becoming increasingly fashionable.

Supply Chain Efficiency: The COVID-19 pandemic has highlighted the need for adaptable and efficient force chains. Companies are spending money on technology that improve the responsiveness and visibility of the force chain.

Optimization of the force chain is facilitated by operations dealing with force operation and order placement.

Real- Time Data and Analytics:

Businesses are placing a high value on real- time data analytics to make informed opinions. operations that give real- time force updates align with this trend.

Data Privacy and Security:

With the increasing amount of data being handled by retail applications, data privacy and security are paramount concerns. Users, especially in the retail sector, are becoming more conscious of data protection.

Remote Work and Mobility:

The capability to manage force and place orders ever is getting more important. Mobile operations that offer inflexibility and on- the- go access to critical information are in demand.

Competitive Advantage:

Real-Time Inventory Updates: Mostawdaakom has the potential to provide itself a competitive advantage if it fulfills its pledge to provide real-time inventory updates. Retailers can reduce stockouts and overstocking by making informed decisions based on timely and accurate information.

Ease of Use: Having an intuitive interface can be quite beneficial. Mostawdaakom may draw more users and see higher adoption rates among supermarkets and shops if it is user-friendly and straightforward.

Scalability: Being able to scale effectively is essential, particularly in a market that is expanding. Mostawdaakom will have a competitive advantage if it can adjust to the rising needs of an expanding user base without sacrificing performance.

Security and data sequestration: These two concepts are crucial in the current digital era. If Mostawdaakom can guarantee a high level of security and data protection, it will, nevertheless, build confidence among merchants and supermarkets, possibly providing it an advantage over rivals.

Integration Capabilities A key benefit is seamless integration with existing systems. However, if Mostawdaakom can smoothly connect into vibrant retail and supermarket systems, it may become a preferred

option for companies seeking to improve their operational efficacy without experiencing significant disruptions.

Survey Analysis

We conducted an online survey with two types of questions: an open question and a closed question. Which can be included in a survey of Mostawdaakom system serving sellers and distributors. These questions will help them understand their own needs and design a system that meets those needs.

We have asked users various key questions through our surveys about Mostawdaakom system, and the result is that Mostawdaakom will be easy and beneficial for the seller and distributor. They will also manage the purchasing and distribution system, easy communication, and quick response at the same time. And the consumer is satisfied with the presence and availability of the products he wants at any time without running out of stock.

Furthermore, the survey was that Mostawdaakom system will solve all the problems that occur in the ordering process, and when we asked about the most problems faced by the seller, there was an unstable time with the distributor, and the difficulty of ensuring the management of stock levels to make sure that the correct products are always available. As for the distributor, one of the problems was the cancellation of the order after it was processed, or the seller's failure to come to receive his order, as well as the lack of sufficient trucks for distribution, which makes the seller no longer deal with this distributor.
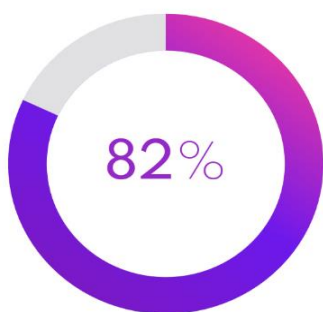
Survey result in percentage:

70%

• 70% of sellers and distributors believe that Mostawdaakom is an easy and new way to order than the traditional method

82%

• 82% of the seller and distributor

are satisfied that there are different

payment procedures.
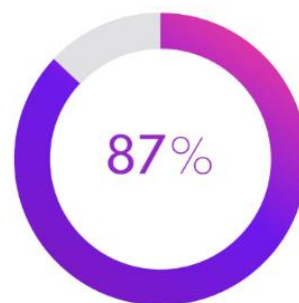
• 87% of sellers and distributors

 find tracking orders in your inventory

an important and distinct feature.

87%
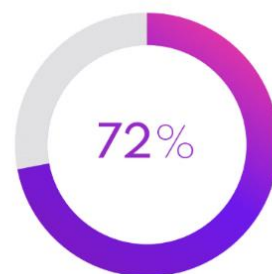
• 72% of sellers and distributors find that Mostawdaakom system will be effective inproviding real-time information about product availability and delivery.

72%

81%
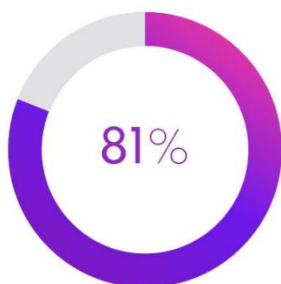
• 81% of sellers and distributors are satisfied that the customer support team handles system issues or concerns at any time.

77%
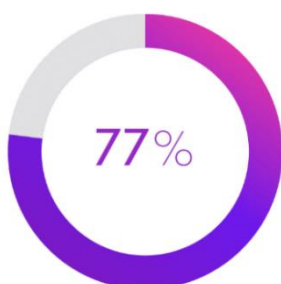
• 77% of sellers and distributors would recommend Mostawdaakom to other sellers or distributors

75%
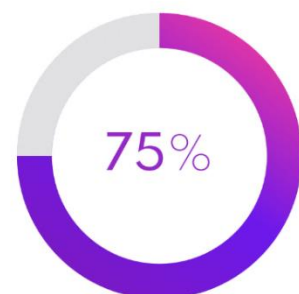
• 75% of sellers and distributors found it easy to get access to Mostawdaakom, such as being able to use it on mobile devices or remotely.

Analysis Tools

To examine their surrounding environment in terms of dangers, opportunities, competitiveness, buyer and supplier power, and many other crucial variables, analysts and team members can make use of a variety of tools.

The project team mostly employed two instruments to carry out these research for this project:

1) SWOT Analysis: A SWOT analysis is a technique for assessing the internal and external variables that may have an influence on a project or organization. It stands for strengths, weaknesses, opportunities, and threats. Increasing the number of internal and external aspects assessed aids in strategic planning. This method will assist the project team in understanding the current state of the project and the business.

2) Porter Model: One approach for assessing an industry's or market's level of competition is the Porter's Five Forces model. A Mostawdaakom software may recognize possible obstacles and possibilities by examining the market dynamics and creating competitive strategies.

Table 1: SWOT ANALYSIS

Strengths	Weaknesses
- Real-time Inventory Updates: Mostawdaakom's strength rests in its capacity to deliver real-time inventory information, preventing stock problems and aiding informed decision-making. - User-Friendly Interface: The ease of use of the application increases its adoption rate, making it suitable for a wide variety of users and facilitating effective inventory management. - Scalable and Secure Design: Mostawdaakom's design is scalable, allowing for expansion while maintaining security as a top priority, giving users confidence that their data is protected. - Smooth Integration: By integrating the app with current systems in a smooth manner, operational efficiency is increased and deployment interruptions are reduced.	- Dependency on Technology: The real-time operation of the app may be impacted by its susceptibility to technical interruptions, such as server outages or connectivity problems. - Initial Implementation Challenges: During the early adoption stage, obstacles such as reluctance to change, the need for training, and even technical issues might arise. - Data Privacy worries: Users may continue to have persistent worries about the security of sensitive information, even in the face of attempts to emphasize data privacy. - Cost of Implementation: Concerns about affordability might be a problem, especially for supermarkets or smaller stores with tighter resources.
Opportunities	Threats
- Market Expansion: Mostawdaakom has the chance to take advantage of this and increase its market share by entering unexplored markets and serving a wider range of supermarkets and retailers. - Integration of Data Analytics: By integrating sophisticated data analytics functionalities, the application may provide merchants with important market and customer behavior insights, hence enhancing inventory management tactics. - Partnerships with Suppliers: Mostawdaakom's value proposition may be strengthened by forming strategic alliances with suppliers, which will also benefit suppliers and retailers by fostering a more connected supply chain ecosystem.	- Competitive Environment: Mostawdaakom's market share is under danger from fierce competition from both established and new solutions. To stay ahead, you need to engage in smart marketing and ongoing innovation. - Regulatory Shifts: As laws governing data privacy and technology use change, compliance may become more difficult. It's important to navigate and adjust to these developments in order to prevent legal problems. - Economic Downturn: Shops and supermarkets may reduce their investments in technology when the economy is weak. Mostawdaakom must provide a definite return on investment in order to overcome any potential financial difficulties.

- Constant technical Improvements: Mostawdaakom can maintain its leadership in innovation in the cutthroat retail tech sector by keeping up with technical developments, which enables it to constantly improve its features.	- Quick Technological Obsolescence: If Mostawdaakom isn't updated frequently, the quick advancement of technology might make some of its features outdated. To lessen this vulnerability, future-proofing techniques and routine software upgrades are required.

Figure 2:Porter Model

|		
Threat of new entry	•	LOW: The difficulty of creating a comparable app with seamless connectivity and real-time inventory changes makes new competitors unlikely. The project's innovative features and safe layout put prospective rivals at a disadvantage.
Threat of substitution	•	MODERATE: The existence of replacement inventory management systems determines the threat posed by them. The hazard is minimal if Mostawdaakom turns out to be noticeably more effective and user-friendly than possible or current alternatives. Yet, ongoing innovation and shifting consumer preferences might bring in fresh alternatives.
Supplier power	•	LOW TO MODERATE: Depending on how many comparable applications are out there, suppliers may have different bargaining leverage. In the event that Mostawdaakom gains traction, providers could need to adjust to meet its demands. On the other hand, suppliers can have more negotiation leverage if there are substitutes.
Buyer power	•	MODERATE: Retailers and supermarkets have a moderate amount of negotiating leverage. Even if Mostawdaakom greatly improves inventory management and streamlines communication, customers may still be able to choose other options. The negotiating power will be determined by the value proposition and simplicity of usage.
Competitive rivalry	•	MODERATE TO HIGH: Competitive competition may range from mild to strong, depending on Mostawdaakom's rate of market penetration and acceptance. The competition will increase if the app becomes widely used. Mostawdaakom's constant improvements will be crucial to its success. capacity to stay ahead of the competition and make

Porter 5 forces

Project pre-initiation:

Business Case:

Before officially launching the plan, it's smart to set up the project's groundwork once it's begun. In the pre-initiation phase, decisions aren't made formally, but everything gets planned, a business case is prepared, and stakeholders get a chance to communicate. According to Rachel Samawi, a project manager, making these plans was very helpful. This ensures that when the project officially starts, her team will be prepared.

1.0 Introduction/ Background

Mostawdaakom is a cutting-edge mobile app that bridges the communication gap between retailers and supermarkets, streamlining inventory management and order placement. By providing real-time inventory updates and easy-to-use features, it empowers supermarket owners to make informed purchasing decisions. The app's scalable and secure design caters to a growing user base while ensuring data privacy. Seamless integration with existing systems enhances operational efficiency and optimizes retail-supply chain collaboration, leading to increased profitability for all parties involved.

Mostawdaakom project was selected based on its potential to resolve existing inefficiencies in the retail landscape. Key selection criteria include ease of use, real time inventory updates, efficient order management, scalability, security and data privacy, and integration capabilities. By addressing these criteria, Mostawdaakom promises to improve inventory management, reduce stock-outs and overstocking, and increase profitability for both retailers and supermarkets.
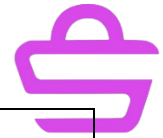
2.0 Business Objective

Real-time inventory updates: Supermarket owners gain access to accurate and up-to-date inventory information, enabling them to make informed purchasing decisions and optimize stock levels.

Efficient order management: Mostawdaakom streamlines the order placement and tracking process, reducing manual efforts and errors, and ensuring timely deliveries, providing an efficient and transparent platform for managing. product inventory and orders.
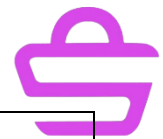
Cost savings: By optimizing inventory levels and streamlining the order process, Mostawdaakom can help both retailers and supermarkets reduce operational costs and increase profitability.

Enhanced communication: Connecting retailers with supermarkets in one software system that makes both updated at the same time.

Addressing Late Deliveries: Solving the late time deliveries which may be cause by the company storehouse or drivers.

3.0 Current Situation and Problem/Opportunity Statement

The current retail system is suffering from inefficient communication and lack of transparency between retailers and supermarkets; retailers often struggle to keep their inventory updated and visible to supermarket owners, on the other hand supermarkets face difficulties in reaching retailers in a timely and cost-effective manner which may lead to being out of stock, overstocking and reduce profitability for both parties.
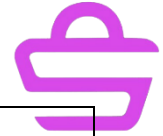
Mostawdaakom can potentially face a lot of weaknesses: Convincing retailers and supermarkets to adopt this new method and integrate it into their daily operations may be challenging, especially if they are accustomed to traditional methods of managing inventory. Also, the app may face a lot of technical difficulties such as bugs, crashes or slow performance which could impact the user experience and discourage retailers and supermarkets from relying on Mostawdaakom.

4.0 Critical Assumption and Constraints

The current retail system is suffering from inefficient communication and lack of transparency between retailers and supermarkets; retailers often struggle to keep their inventory updated and visible to supermarket owners, on the other hand supermarkets face difficulties in reaching retailers in a timely and cost-effective manner which may lead to being out of stock, overstocking and reduce profitability for both parties.

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impact the user experience and discourage retailers and supermarkets from relying on Mostawdaakom.

Mostawdaakom may struggle from integration challenges, integrating the app with retailors and supermarkets may be challenging with all the existing inventory management and point of sale (POS) systems used by retailers and supermarkets.

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5.0 Analysis of Options and Recommendation

1. Make a basic "Mostawdaakom" version with limited features and capabilities. Despite keeping development costs low, we want users to be impressed and willing to try out the app.

2. Start with a simple "Mostawdaakom" version and gradually add more features and capabilities. This will incur higher long-term development costs, but we can adapt based on user feedback.

3. Develop an advanced application with many features. Although the development cost will be higher, the final product will look better.

Our stakeholders favor the second option, considering it the most profitable and suitable choice. User opinions are crucial in this decision.
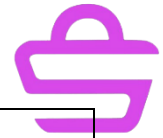
6.0 Preliminary Project Requirements

Here are some of the necessary requirements that must be met to complete Mostawdaakom successfully:

User-Friendly Design:

Ensure the app is easy for both retailers and supermarkets to use.

Real-Time Updates:

Provide instant updates on inventory to keep information current.

Efficient Order Management:

Streamline the process of placing and managing orders within the app.

Scalability:

Design the app to handle growth, accommodating more users over time.

Security and Data Privacy:

Implement strong measures to protect user data and ensure privacy.

Integration Capabilities:

Enable seamless integration with existing systems for smooth operation.

7.0 Budget Estimate and Financial Analysis

The cost of developing an application and web based relies on a number of factors, including the type of application (mobile games, business, social networking, lifestyle, etc.), the platform
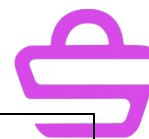
(iOS, Android, Windows phone, etc.), the design (basic, single, custom), the number of pages, the features, and the infrastructure.

Estimated cost: $20,000 including base costs such as mobile application, website application, and salary. Excluding marketing, social media, and (advertising). Total budget: $35,000.

8.0 Schedule Estimate

Initiated on October 1st, 2023, and estimated to close January 5th 2024.

9.0 Potential Risks

Technical Issues:

Problems with app functionality or bugs

The app might not work correctly or could have errors.

User Adoption:

Users may not use the app as much as expected.

People might not find the app useful or easy to use.

Data Security:

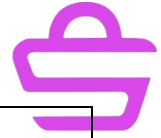Possibility of data being accessed by unauthorized people.

Information in the app could be at risk of being seen by the wrong people.

Integration Challenges:

Difficulty in making the app work with existing systems.

The app may not connect smoothly with other tools or software.

Market Competition:

Other similar apps gaining popularity.

There could be other apps doing similar things that people might prefer.

Budget Overruns:

Spending more money than planned.

Costs might go beyond what was initially estimated for development.

Changing Requirements:

 The need for features may change during the project.

What users want from the app might shift, causing adjustments in the development process.

Project Innitiation:

Statement of work:

The Mostawdaakom project was selected based on its potential to resolve existing inefficiencies in the retail landscape. Key selection criteria include ease of use, real time inventory updates, efficient order management, scalability, security and data privacy, and integration capabilities. By addressing these criteria, Mostawdaakom promises to improve inventory management, reduce stock-outs and overstocking, and increase profitability for both retailers and supermarkets.

Kick-Off Meeting:

Having a kick-off meeting isn't a must, but the team wants to have one. It's a chance to meet the project manager, Bana barghouthi and start assigning tasks, like the ones listed below.

Kick-Off Meeting:

6/12/2023

Project Name: Mostawdaakom

Meeting Objective: Get the project off to an effective start by introducing key stakeholders, reviewing project goals, and discussing future plans

Agenda:

- Introductions of attendees
- Review of project background
- Review of project-related documents (i.e. business case, project charter)
- Discussion of project organizational structure
- Discussion of project scope, time, and cost goals
- Discussion of other important topics
- List of action items from meeting

| Action Item	Assigned To	Due Date
Reasearch the equipment needed	Zaid Mohammad Ibrahim Ajlouni	9/12/2023
Calender schedule	Bana Barghouthi	11/12/2023
Reasearch the market	Rachel Samawi	14/12/2023

Date and time of next meeting:3/12/2023 12:00 pm

Stakeholder Register

| Name	Position	Internal/ External	Project Role	Contact Information

Bana Barghouthi	Project Manager	Internal	Ban20200080@std.psut.edu.jo	Ban20200080@std.psut.edu.jo
Rachel Samawi	Team member	Internal	Financial Manager prepares the income statements, balance sheets, and statements of cash flows.	Rac20200109@std.psut.edu.jo
Ibrahim Ajlouni	Team member	Internal	Application developer and designer- Programming and designing to develop application	Ibr20201149@std.psut.edu.jo
Zaid Mohammad	Team member	Internal	Quality Assurance manager - Controlling quality of application and maintaining reliability of the system.	Zai20201105@std.psut.edu.jo
Luay Aanaya	Project sponsor	External	Sponsor- Guides and coordinates throughout the project, while also giving financial support	l.anaya@psut.edu.jo
Oracle Cloud	Supplier	External	Provide cloud services to store and manage data and	Call 1.800. 223.1711
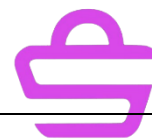
			support its functionality	
User	Customer	External	Uses the application after signing up	Cust@gmail.com
Jordanian Local	Supplier	External	Supplies the application with data	Sup@gmail.com
Local government	Supplier	External	A source of data or information for the app, or may provide funding or other support for its development.	localGov@gmail.com

Project Charter

Project Title: Mostawdaakom
Project Start Date: October 1st,2023   **Projected Finish Date:** January 5th,2023
Budget Information: $20,000 including primary costs such as mobile application, website application and salaries. Excluding marketing and social media leads and (advertisement) Overall budget: $35,000
Project Manager: Bana barghouthi, 0772720321, Ban20200080@std.psut.edu.jo
Project Objectives: Real-time inventory updates: Provide accurate and current inventory info for smart purchasing decisions and stock optimization.
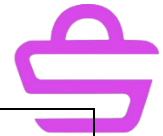
Efficient order management: Simplify order placement, tracking, and delivery, minimizing errors and manual efforts.

Cost savings: Optimize inventory and streamline orders to cut operational costs and boost profitability.

Enhanced communication: Connect retailers and supermarkets in a single system, ensuring simultaneous updates.

Addressing Late Deliveries: Resolve issues with delayed deliveries caused by company storehouses or drivers.

Success Criteria:

By the finish date, the application must be created and made accessible.

No errors and delays detected.

 Develop user-friendly application

An increase in customer sign-ups.

Approach:

-Follow the project management strategy.

- Strengthen your teamwork, leadership, and communication skills to build a strong team.

- Conduct regular meetings to ensure progress.

- Ensure all resources are available.

- Continuously gather data and feedback from users to ensure their satisfaction.

Roles and Responsibilities

| Name and Signature	Role	Position	Contact Information
Dr. Luay Anaya	CEO	Project Sponsor	l.anaya@psut.edu.jo
Bana Barghouthi	PMO Director	Project Manager	Ban20200080@std.psut.edu.jo
Rachel Samawi	Financial Manager	Team member	Rac20200109@std.psut.edu.jo
Ibrahim Ajlouni	Application debeloper and designer	Team member	Ibr20201149@std.psut.edu.jo
Zaid Mohammad	Quality Assurance Manager	Team Member	Zai20201105@std.psut.edu.jo

Project Planning:

Determining the direction and course of action are the primary objectives of planning. Several steps must be taken to prepare the groundwork for implementation during the planning stage.

Scope statement:

Project Title: مستودعكم
Date: January 9th, 2024
Prepared by: Bana Barghouthi

Project Justification:
Mostawdaakom is a cutting-edge mobile app that bridges the communication gap between retailers and supermarkets, streamlining inventory management and order placement. By providing real-time inventory updates and easy-to-use features, it empowers supermarket owners to make informed purchasing decisions. The app's scalable and secure design caters to a growing user base while ensuring data privacy. Seamless integration with existing systems enhances operational efficiency and optimizes retail-supply chain collaboration, leading to increased profitability for all parties involved.

Product Characteristics and Requirements:
1. The application must offer personalized recommendations based on the user's interests and preferences.
2. The application must be user-friendly and accessible, with support for multiple languages.
3. The application must be mobile-responsive.
4. The application must be secure.
5. The application must have an interactive map.
6. The application must be applicable to both iOS and Android.

Product User Acceptance Criteria:
Prior to accepting the models, the client must sign a Deliverable Acceptance form indicating their approval.
The customer Letter of Acceptance must next be approved by the customer to demonstrate his acceptance of the completed application design and all project deliverables.

The project stakeholders and executive sponsors must also approve the deliverables.

Summary of Project Deliverables Project management-related deliverables:
business case, charter, team contract, scope statement, WBS, schedule, cost baseline, status reports, final project presentation, final project report, lessons learned report, and any other documents required to manage the project.
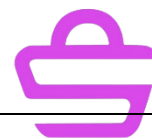
Product-related deliverables:
1. Software code.
2. Design Documents.
3. Research Reports.
4. Development Prototypes.
5. Testing.
6. User Experience

Work Breakdown Structure:

Project Name: مستودعكم Mobile Application.

Date: January 9th, 2024

 0.0 PROJECT SELECTION AND ADOPTION:

    0.1. Executive Summary

    0.2. Problem statement

1.0 ANALYSIS

    1.1.Market target

    1.2. Market trends

    1.3. Competitive advantage

    1.4. Survey Analysis 30

    1.5 Analysis Tools

    1.6 SWOT analysis

    1.7 Porter Model

2.0 PROJECT PRE-INITIATION

    2.1. Business Case

3.0 PROJECT INITIATION

    3.1. Statement of work

    3.2. Kick-off Meeting

    3.3 Stakeholder register

    3.4 Project charter

4.0 PROJECT PLANNING

       4.1. Scope statement

       4.2 Work breakdown structure

       4.3 Gantt chart 4.4 Critical path

       4.5 Requirement Analysis

       4.6 Requirement Structure - Use Case

       4.7 Possible risk

       4.8 Costs and resources

5.0 PROJECT EXECUTION

       5.1. Application interface design

       5.2 Milestone Report 31

6.0 MONITORING AND CONTROLLING

7.0 CLOSING

       7.1. Problems faced

       7.2 Solutions

       7.3 Factors of Project Success

Every extracted deliverable and work package will be handled as a separate task. To facilitate quicker and more efficient work completion, each task will be assigned to a team member and come with an estimated time and cost.

Gant chart:

In the diagram below, the light bar shows the duration it took for our project, the thick black bars show the summary tasks, and the colored bars show the duration of each task and done by whom. All the orange diamond shapes represent milestones. For example, writing the business case is considered a milestone, because we can start working and divide the work between our team members.

In general, the Gantt Chart holds great significance as it shows the start and end dates of all activities in a calendar format. This aids in the project team's ability to monitor the timeline.
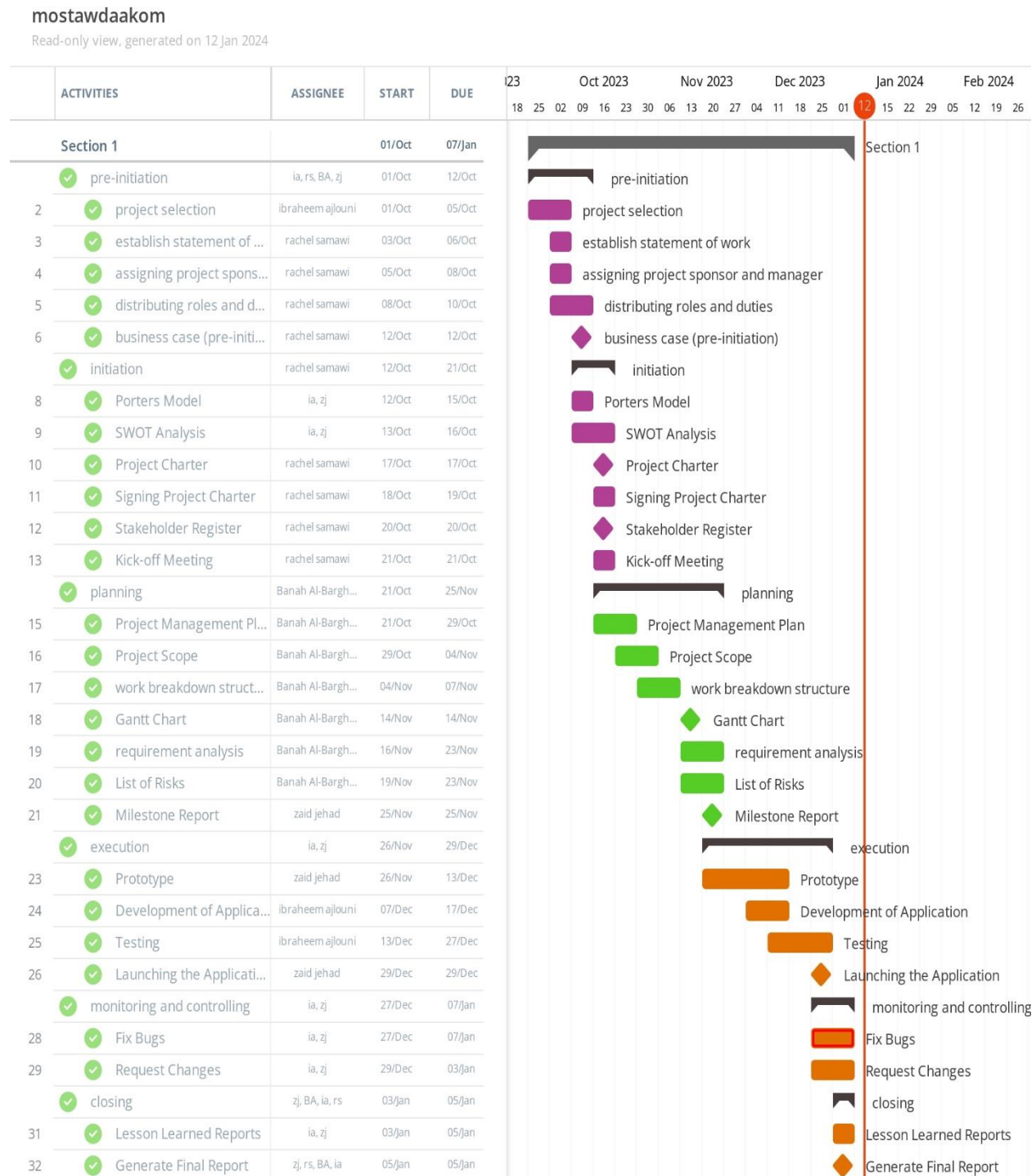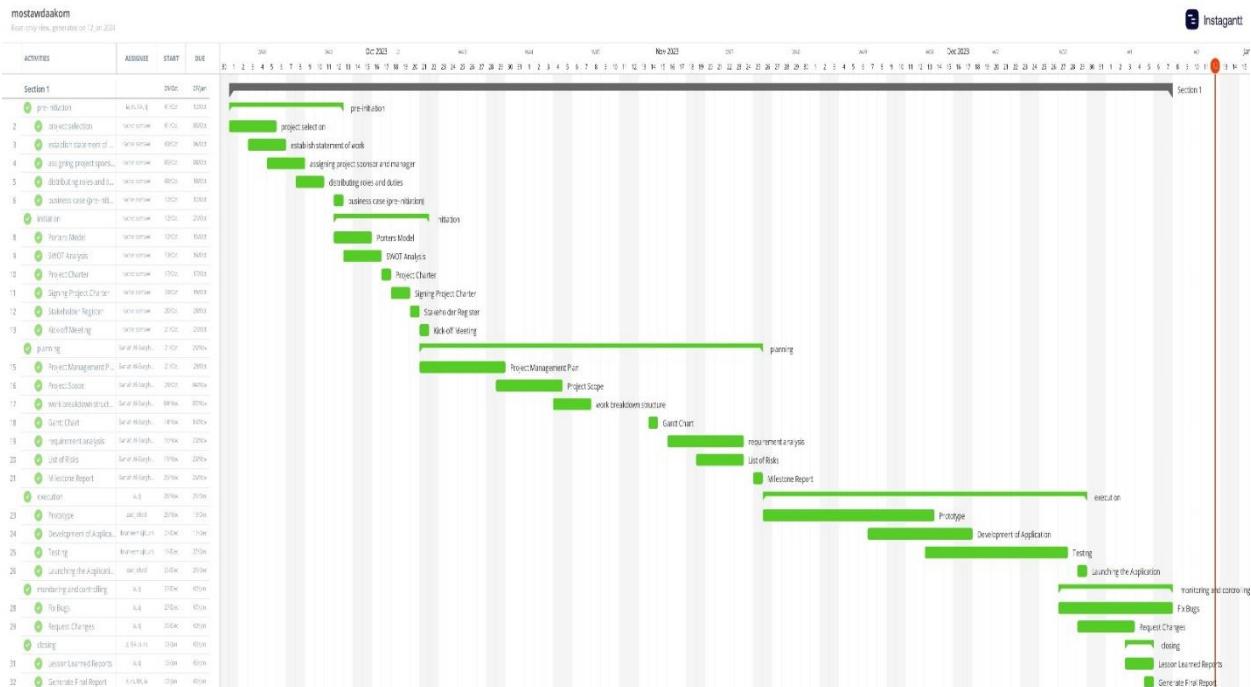

Figure 3: Gantt Chart

Critical Path:

1. Research and content creation: This task entails researching local points of interest, supermarkets, and retailers, and creating content for the app. This may include researching local supermarkets, gathering information on them, and writing descriptions and reviews.

2. Design and development: This task entails creating the app's user interface and overall user experience as well as building it in accordance with the guidelines. This could entail coding the app, making wireframes and mockups, and testing its functionality and performance.

3. Testing and quality assurance: This task entails testing the application to make sure it satisfies the required quality standards and is operating as intended. This could involve activities like bug fixes, beta testing, and user testing.

4. Marketing and promotion: This job entails spreading the word about the app to prospective partners and users as well as increasing awareness and interaction. This could involve activities like partnerships, public relations, and social media advertising.

5. App launch and continuous maintenance: This job entails starting the app and giving it regular upkeep and updates to keep it up-to-date and useful. Tasks like feature updates, bug patches, and content updates may fall under this category.

To develop a realistic and efficient critical path, it is crucial to carefully analyze the dependencies between jobs as well as the resources and talents needed to complete them.

Requirement Analysis:

A requirement analysis is an important step in the development of mostawdaakom application. This involves identifying and evaluating the specific needs and goals of the app, as well as the requirements that must be met for the app to be successful.

Some potential requirements that may need to be considered in a requirement analysis for mostawdaakom could include:

- **Data and content:** The app will need to have accurate and up-to-date data on local points of interest, supermarkets, and retailers to be useful to users. This may require gathering and organizing data from a variety of sources, such as local stores, supermarkets, and retailers.

- **User experience:** For the app to be successful, it must have an intuitive user interface that is simple for users to use. This can necessitate taking usability, design, and layout into account.

- **Compatibility:** To reach a wide audience, the software must work with a range of hardware and operating systems. This can necessitate taking into account elements like platform compatibility, screen size, and resolution.

- **Performance:** For the app to be beneficial to consumers, it must be quick and dependable. It could be necessary to take into account elements like caching, server infrastructure, and optimization strategies.

- **Security:** In order to earn users' trust, the app must safeguard user privacy and data. This can necessitate taking into account elements like user authentication, access controls, and data encryption. In general, it's critical to thoroughly evaluate the requirements for our software to make sure it satisfies the demands and objectives of the intended user base and succeeds in the marketplace.
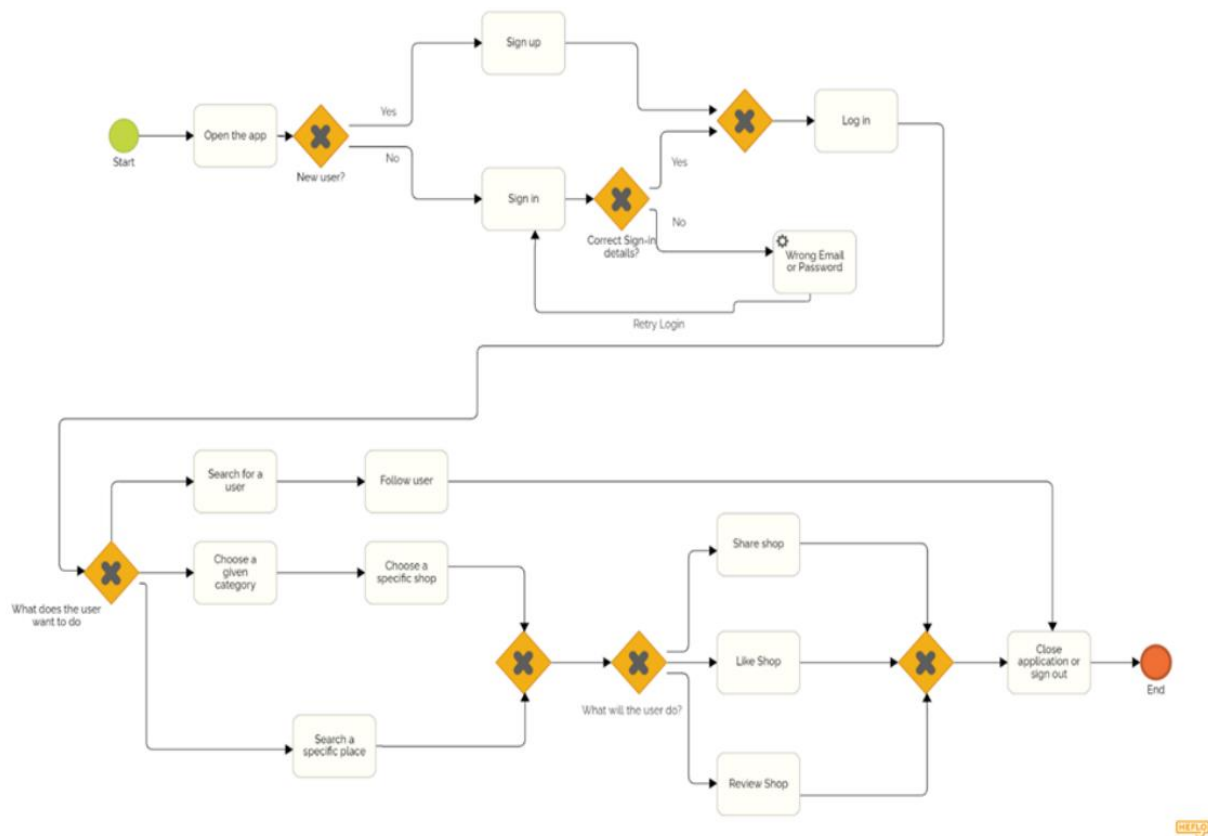
Requirement Structure:

Figure 4: Business process model

When the user first launches the app, the user is given the choice to sign up or sign in. If the user is not familiar with the application, they can register by entering personal data and setting up a username and password. If the user already has an account, they can access it by entering their login information. The user can search for users, and supermarkets, or explore categories after logging onto their account and verifying that their credentials are correct.

The user will be requested to attempt again if the login credentials are not entered correctly. Following their login, users can select a category to peruse or search for a particular user or shop. The user can follow a user and read their profile if they are specifically searched for.

The user is shown a list of accessible stores and can select one to examine its profile if they want to search for a specific shop or browse a category. The user has the option to share, like, or review the shop on its profile.

Possible Risk:

There are several risks that may be involved in developing and launching the application. Some potential risks that could impact the success of the app include:

- Data accuracy: For the app to be beneficial to users, it must have accurate and current information on nearby attractions, supermarkets, and shops. The app's credibility and reputation can be impacted if the data is erroneous or out of date.

- User adoption: For the app to be profitable, it must draw in a substantial amount of users. Insufficient user activity may make it difficult for the app to make money and ultimately unsustainable.

- Technological issues: Technical problems like bugs, malfunctions, or server outages could affect the app and affect its usability and functionality.

- Legal risks: The app may carry legal concerns, including those related to copyright infringement, defamation, and privacy. It is crucial to give these hazards significant thought and to take the necessary precautions to lessen them.

- Financial risks: The creation and release of the software could come with financial risks, such as unforeseen costs or budget-busting delays. To reduce these risks, it's critical to thoroughly plan and oversee the project's financial components.

It is crucial to thoroughly identify and handle any potential risks that may exist throughout the development and launch of the app in order to maximize the likelihood of success. It is feasible to raise the likelihood of success and guarantee the app's commercial success by skillfully controlling the risks related to its release.

Costs and resources:

| Resources		Cost
Development Costs.	App Developers, designers, and other specialists.	3,000 JD
Technology Resources.	Need to consider the ongoing technology resources to maintain and update the app.	6,000 JD
Staff Time.	Either full-time hires or freelance contractors.	300 JD per month

Marketing and Promotion.	Will depend on the scale of the marketing promotion and the channels we use to promote the app.	2,500 JD
Hardware and Equipment.	Need to invest in hardware and equipment such as laptops, phones, and other technology resources, depending on the size and complexity of the app.	2,500 JD

Project Execution

Application interface design:

Figure 5:Mostawdaakom UI
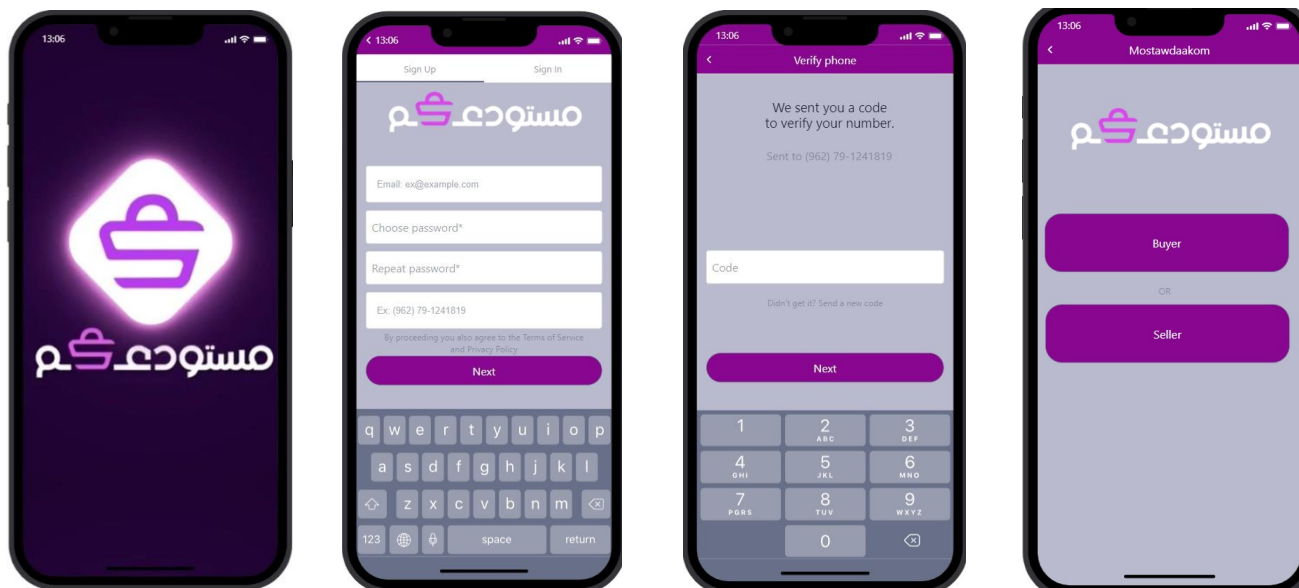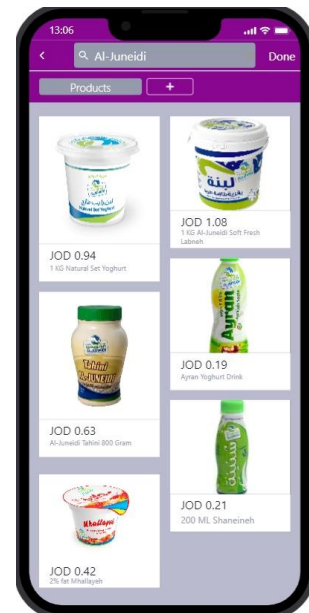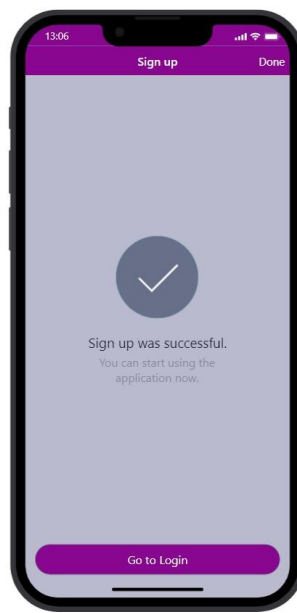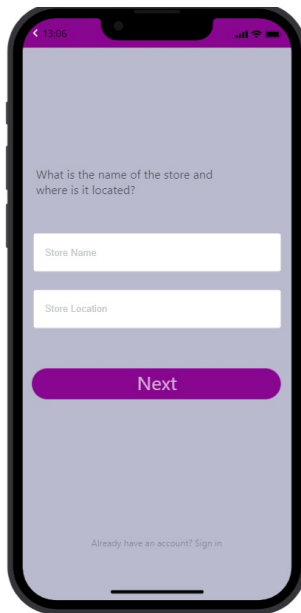
Milestone Report:

Milestone	Date	Status	Responsible	Issues/Comments
Business Case	Sep 29	Completed	Rachel	
Statement of Work	Oct 08	Completed	Rachel, Ibrahem	
Project Charter	Oct 11	Completed	Rachel	Approved by Project Manager.
Stakeholder Register	Oct 16	Completed	Rachel	Approved by Project Manager.
Scope Statement	Oct 21	Completed	Zaid, Bana	
WBS	Oct 25	Completed	Bana	
Gantt Chart	Nov 01	Completed	Bana	
Requirement Analysis	Nov 03	Completed	Bana	Approved by Project Manager.
Milestone Report	Nov 06	Completed	Zaid	
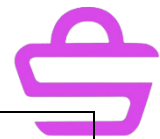
Launching the Application	Nov 09	Completed	Zaid	

Monitoring & Controlling:

1- Fix bugs

In managing Mostawdaakom, effective monitoring and control are pivotal, particularly for bug resolution and handling change requests. For bug fixing, the focus is on real-time detection through continuous monitoring, prioritizing bugs based on their impact, and implementing dedicated sprints within the development cycle for timely resolution. This is bolstered by robust testing and quality assurance protocols, ensuring early detection and minimization of bugs.

2-Request Changes:

When it comes to change requests, a structured process is essential. This involves a systematic approach for submission, assessment, and integration of changes. Key to this is conducting a thorough impact analysis to understand how these changes affect the project's scope, resources, and timeline. Agile methodologies play a crucial role here, providing the flexibility to adapt while maintaining progress. Clear communication with stakeholders and meticulous documentation of changes ensure transparency and traceability, essential for smooth project evolution.

Main Points:

Real-Time Bug Detection: Implement continuous monitoring for early bug identification.

Bug Prioritization: Classify and prioritize bugs based on impact and severity.

Dedicated Bug-Fixing Sprints: Allocate specific periods for focused bug resolution.

Robust Testing and QA: Strengthen testing processes for early bug detection.

Structured Change Request Process: Formalize the submission and review process for change requests.

Impact Analysis for Changes: Assess how changes affect project scope, resources, and timeline.

Agile Methodologies: Utilize agile approaches for adaptable and efficient change integration.

Stakeholder Communication: Maintain transparency with stakeholders about changes.

Change Documentation and Tracking: Keep detailed records of all changes and their impacts.

Closing:

Problem faced and challenges:

Implementing a project like Mostawdaakom, while promising, can encounter various challenges. Here's an exploration of potential hurdles and corresponding strategies to navigate them effectively:

Potential Challenges:

Adoption Resistance: Convincing traditional retailers and supermarkets to transition to a digital solution might be challenging. They may be accustomed to their current systems and resistant to change.

Technical Integration Complexities: Integrating Mostawdaakom with a variety of existing inventory and POS systems could be technically intricate and require significant customization.

Scalability Concerns: As the user base expands, maintaining app performance and handling larger data volumes can become increasingly complex.

Data Security and Privacy: Safeguarding user data, especially sensitive inventory and transaction information, is crucial and challenging.

User Interface (UI)/User Experience (UX) Discrepancies: Ensuring the app is intuitive and user-friendly for all types of users is essential but can be challenging, given the diversity in tech-savviness among users.

Market Competition: Standing out in a market possibly crowded with similar solutions requires continuous innovation and clear differentiation.

Budget and Resource Constraints: Managing the project within budgetary limits while ensuring quality can be challenging, especially for startups.

Solutions:

Engagement and Education Initiatives:

We've implemented targeted marketing and educational campaigns, showcasing the ease of use and benefits of our app. To encourage adoption, we're offering trial periods and clear demonstrations of the return on investment.

Flexible Integration System:

Our team has built a highly adaptable integration framework. It's designed to seamlessly connect with various existing systems through APIs and a modular approach, making integration smoother for every retailer.

Scalable Infrastructure Strategy:

We've invested in scalable cloud solutions and efficient data management practices. Our proactive approach in regularly updating our system architecture ensures we can handle increased user loads without a hitch.

Enhanced Security Protocols:

Recognizing the importance of data security, we've implemented cutting-edge encryption and robust security protocols. We're committed to regular security audits and updates to protect our users' sensitive information.

User-Centric Design Process:

We're constantly gathering user feedback and employing an iterative design process to refine our app's UI/UX. Our focus is on accommodating the diverse technological comfort levels of our users.

Continuous Innovation and Differentiation:

Our team is dedicated to ongoing innovation, adding unique features that address specific market needs. We clearly communicate our unique selling points to stand out in a competitive landscape.

Agile Project Management:

To manage our resources effectively and stay within budget, we've adopted agile methodologies. This approach helps us prioritize features based on user demand and potential ROI, ensuring we deliver quality while managing costs.

Comprehensive Support and Regular Updates:

Post-deployment, we're providing robust customer support and regularly releasing updates. This not only enhances functionality but also shows our commitment to addressing user feedback and evolving needs.

Localization and Cultural Adaptation:

We've ensured that our app caters to the local markets and cultural nuances, especially important in diverse geographic regions. This approach helps in better serving the specific needs of each market.

Through these strategies, we're navigating the implementation phase of Mostawdaakom with confidence, paving the way for a successful market entry and a lasting positive impact on our users.

Factors of project success:

For the Mostawdaakom project to succeed, several crucial elements need to align. At the core is the app's user-friendliness; it must be intuitive enough for all users, including those less familiar with digital tools. Equally important is its ability to integrate smoothly with existing retail management systems, ensuring minimal disruption for users. The accuracy of real-time data is vital for effective inventory management, aiding supermarket owners in making informed decisions.

Scalability is another key aspect, allowing the app to grow efficiently with its user base while remaining adaptable to market changes. Ensuring the security and privacy of user data through advanced protocols fosters trust and reliability. Continuous improvement, driven by user feedback and technological advancements, keeps the app relevant and ahead in the market.

Effective marketing and clear brand positioning help establish a strong market presence, and robust customer support enhances user engagement and loyalty. Lastly, a well-informed market strategy and prudent financial management ensure sustainable growth and innovation, positioning Mostawdaakom for long-term success in the competitive retail landscape.

Tareq answers:

How often do you face shortages and delays in receiving products from suppliers?

Not frequently, about 10 to 15%

What are the challenges you face when getting products for your supermarket?

The challenges we face are about the finding the products and I good prices.

How do you find new products and suppliers for your supermarket?

Normally by looking for contact information on google or any social media platform.

Have you ever used any applications or websites to manage your orders before?

Yes, we are using an application called orderat.

Do you think mostawdaakom can help with solving the challenges you face as a supermarket owner?

Yes, in my opinion this application will solve a lot of challenges because the order process is fast and easy and I can get all the products I need from one place.

As a supermarket owner would you recommend using mostawdaakom?

Yes, I would definitely recommend and use mostawdaakom.

Fadi's answers:

How often do you face shortages and delays in receiving products from suppliers?

About 10 to 15%

What are the challenges you face when getting products for your supermarket?

Mostly the challenges we face are when we receive all the products at the same day and

How do you find new products and suppliers for your supermarket?

Normally by looking for contact information on google or any social media platform.

Have you ever used any applications or websites to manage your orders before?

Yes, we are using an application called orderat.

Do you think mostawdaakom can help with solving the challenges you face as a supermarket owner?

Yes, in my opinion this application will solve a lot of challenges because the order process is fast and easy and I can get all the products I need from one place.

As a supermarket owner would you recommend using mostawdaakom?