‘Solo’
Fresh Food Service

IS5540 S61

Team 8 Exquisite cattle and horses

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Executive Summary

Project Charter: The project charter for COMPANY A's online food ordering platform establishes the project's purpose, aligns with the company's mission to provide convenient and healthy food options, and outlines the roles and responsibilities of the project team. It identifies key stakeholders and defines the project manager's authority, serving as a foundational document for the project's governance.

Stakeholders Register: A comprehensive list of all key stakeholders involved in the development of COMPANY A's online platform, including internal teams, suppliers and regulatory bodies. This list is crucial for effective communication and engagement throughout the project lifecycle.

Project Management Plan: The project management plan details the execution, monitoring, and closure of COMPANY A's online food ordering platform project. It encompasses the project lifecycle, development approach, and change management strategies, providing a roadmap for the project's successful completion.

Scope Statement: The scope statement defines the boundaries of COMPANY A's project, including the development of a user-friendly online ordering website and mobile application. It specifies the features and functionalities that will be included in the platform, such as personalized ordering, payment options, and real-time order tracking.

Work Breakdown Structure (WBS): The WBS organizes the project deliverables into a hierarchical structure, breaking down the project into manageable components. For COMPANY A, this includes tasks such as platform design, development, testing, deployment, and user training.

Project Schedule: A detailed project schedule, presented in the form of a Gantt chart, illustrates the timeline for each task in the development of COMPANY A's online platform. It provides a visual representation of the project's progress and milestones.

Project Critical Path / Schedule Analysis Report: The critical path analysis identifies the sequence of tasks that directly impact the project's completion date. For COMPANY A, this includes key development and testing phases that must be completed on time to ensure the platform's timely launch.

Resource Management Plan: This plan outlines how COMPANY A will allocate, monitor, and control the resources required for the project. It includes human resources, technological assets, and any external vendors or contractors.

Cost Estimates: A cost management plan that estimates the financial resources needed for the project, including development costs, personnel expenses, and any outsourcing fees. It helps COMPANY A to budget effectively and manage financial risks.

Quality Assurance Plan: The quality assurance plan ensures that COMPANY A's online platform meets the highest standards of usability, functionality, and customer satisfaction. It includes quality control methods and continuous improvement processes.

A Risk Register with Response Planning & Probability/Impact Matrix: A risk management tool that identifies potential risks to the project, assesses their impact, and outlines mitigation strategies. It helps COMPANY A to anticipate challenges and plan for contingencies.

Communications and Stakeholder Management Plan: This plan details how COMPANY A will communicate with stakeholders throughout the project, ensuring that all parties are informed and engaged. It includes communication methods, frequency, and responsibilities.

Procurement and Outsourcing Plan: The procurement and outsourcing plan addresses the need for external resources and services. It outlines the process for selecting vendors, managing contracts, and ensuring deliverables meet COMPANY A's standards.

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1. Company and Project Background

This section introduces the background of the company and the project respectively,
and this is a small tip for a better reading experience.

1.1 Company Background:

COMPANY A is a local food chain in Hong Kong, focusing on 'Single-portion' fresh food service for community workers, singletons, healthy eaters, etc. Company A's mission is to help customers get healthy and nutritious food choices in a convenient way, thereby simplifying life and improving quality of life. It provides customers, especially those workers who work alone in Hong Kong, with all the fresh food with recipes they need for a meal and sells it through offline shops. With this kind of service model, COMPANY A saves consumers time and avoids the waste of food considering that the appetite of a lone worker does not require as much as the regular grocery shopping portions.

- **Leadership:**
  (a) Leadership Structure:
  Since the company is relatively small, the leadership is only the CEO and CFO.
  (b) Division of responsibilities:
  - CEO is fully responsible for the implementation of the company's strategy. He lets the company meet the needs of healthy eating through innovation and expansion of community networks. The CEO also communicates with the BOD and external stakeholders.
  - CFO manages the company's finances, including budgeting, cost control and planning. He ensures efficient use of resources, financial health, and regularly analyzes the market and cost structure to ensure the profitability of the "single-serve" food service model.
- **Style:**
  Transformational. By working with others to identify needed changes, these leaders empower others and guide changes through inspiration.
  - Collaborative identification of needs: Transformational leaders work with their teams to analyze the current situation, identify areas for improvement, and ensure that changes are feasible and meet actual needs through open communication.
  - Empowering members: They focus on exploring employees' potential, giving them the power to make independent decisions, and promoting personal growth.
  - Motivating and guiding change: By describing the vision and leading by example, they motivate employees to participate in the change, enhance team morale and work enthusiasm.
  - Support innovation: Create an atmosphere that supports innovation, provides emotional support, and helps team members cope with the pressure of change.

✧ **Company culture:**

- Mission: To provide fresh, healthy and tasty ingredients.
- Vision: To be the leading brand in Hong Kong in the 'one-person food' segment.
- Values: Customer first, win-win cooperation.

✧ **Existing systems:**

As a small business serving the community with a limited number of employees and no prior experience in online channels, WeChat/WhatsApp serves as Company A's primary communication tool at present.

1.2 Project Background:

As a result of market research, COMPANY A decided to expand its operations by developing an online food ordering website and its mobile application APP and applet. That is, customers order online and choose flexible pickup options and have access to the menu online as well. The aim is to provide healthy and moderate amounts of food to people living alone and reduce food waste while ensuring nutritional hygiene.

On the web/app side, users can easily order, pay and track delivery. Customers can choose their favorite dishes through personalized settings (e.g. keywords, cuisine, eating habits, calories, customer reviews, etc.) and can choose different payment methods (e.g. credit card, e-wallet, etc.); users can check the order status in real-time on the order page, including the progress of meal out, delivery progress, etc., to improve user experience.

On the delivery side, the project provides convenient delivery services by analyzing one-person food orders in a certain area, optimizing delivery routes, centralizing delivery, improving delivery efficiency and reducing operating costs. For example, by placing an order and paying for it online, customers can pick up the goods near their home/self-service machine in realizing timed delivery.

✧ **People:**

· Internal:

- CEO, A1 (sponsor)
- CFO, A2 (ensure the company's financial health and stability)
- Supply chain supervisor, B1 (responsible for managing suppliers, warehousing, logistics, etc.)
- Shop manager, B2 (in charge of the offline shops and sales, and other offline-related matters).
- Head of food development, B3 (develops the menu, determines the type and weight of raw materials).
- Other employees (general staff in various departments, not stakeholder)

· External:

- Head of Raw material supplier, S1 (responsible for the provision and transport of food raw materials)

- Head of Delivery service provider, TBP-1 (to be procured, responsible for delivery service)
- Head of Pick-up equipment service provider, TBP-2 (to be procured, responsible for Pick-up equipment service)
- Head of IT provider, TBP-3 (to be procured, responsible for IT service)
- Head of After-sales service provider, TBP-4 (to be procured)
- Project manager, P0

· Description of external people:

- Several other suppliers (takeaway services, pick-up equipment, IT), all of which need to be procured in the Online Food Ordering Platform Project. They are all potential stakeholders.
- For the sake of convenience, the naming format of these future partners is 'to-be-procured-number' abbreviated as TBP-1, TBP-2, TBP-3; these are code names, which will be replaced by their real name in the future after the supplier selection.

✧ **Reporting lines and decision-makers:**

· Internal:

- A1 (CEO, sponsor) is the decision-maker for the whole company, responsible for setting the strategy, controlling risk and reviewing the results of all departments.
- A2 → A1. CFO reports to CEO on the company's financial position and provides key financial information support for the company's business decisions.
- B1, B2, B3 → A1. B1, B2 and B3 are decision-makers for their departments and report directly to A. B1, B2, and B3 work on an equal footing with each other.

· External:

- S1 → B1 & B3. Head of Raw material supplier S1 reports to supply chain manager B1 on supply chain matters, and to dish development manager B3 on the raw materials themselves (type of dish, grammage, etc.).
- TBP-1 → B1. Head of Delivery service provider TBP-1 reports to supply chain supervisor B1 on supply chain-related matters.
- TBP-2 → B1. Head of Self-pick-up equipment service provider TBP-2 reports to B1 on supply chain-related matters.
- TBP-3 → A1. Head of IT supplier TBP-3 reports to CEO A1 on IT platform construction.
- TBP-4 → B1, B2 & S1, TBP-1, TBP-2, TBP-3. Any after-sales problems need to be reported to the relevant party responsible for the relevant raw materials or services in order to better solve the problem.

- TBP-1 & B2, TBP-2 & B2. Horizontal co-operation relationship: delivery business supplier TBP-1 coordinates with shop supervisor B2 on shop inventory, and self-pick-up equipment service provider TBP-2 coordinates with shop supervisor B2 on kiosk placement locations.

✧ **Challenges and opportunities about the project:**

· Challenge:

- The Hong Kong market has already seen large supermarkets develop their own delivery webpages and apps (e.g. Wellcome, Park'n Shop, etc.), and takeaway software such as Keeta has launched one-person meal packages such as ‘one-person meal halls’, and these well-established companies and apps have already captured a portion of the customer base.

· Opportunities:

- As a result of the market research, the business has decided to expand its operations and develop an online ordering program; suggesting that the current clientele is overall supportive of developing online ordering.
- There is currently no established ‘food for one’ platform in Hong Kong. Market research and corporate values indicate that the company focuses solely on ‘one-person’s fresh food kit services and provides recipes on a webpage/app, saving consumers time in selecting raw materials and thinking about recipes. Therefore, the project has advantaged that competitors don't have: healthier than takeaway apps, time-saving compared to fresh food supermarket platforms, etc.

✧ **Problems about the project:**

(a) Scope of software to deliver (how many releases)

- The software will be applicable to different types of platforms, including popular devices (computers, tablets and smartphones) and operating systems used (iOS, Android and Windows) as well as commonly used payment methods (Octopus, WeChat, Alipay, Visa, MasterCard, etc.) amongst commuters. Specific requirements should be determined through a survey.

(b) User Acceptance

- This is before the system goes live. The system must be user-friendly, where users can match the desired combination of ingredients based on taste, specific ingredients, cooking skills, forbidden foods and other factors. Customers should be able to place orders online, make deliveries, pay online, and write reviews of their orders. The system must be able to track customer usage patterns so that it can analyze the user's purchase history and preferences and come up with personalized recommendations. In addition, based on Hong Kong's international environment, we plan to provide information and services in multiple languages. Specific requirements on the above matters should be determined through surveys.

(c) User Support

- This is after the system goes live. The project needs to provide users with continuous support after the product is launched to help users solve problems during use and improve the user experience. This includes hotline support, FAQ, remote assistance and other services. For example, if there is a shortage of goods or is a problem with the dishes received, it is a question whether consumers call the offline store or the supplier of the pickup equipment. If there is a problem with the quality of the dishes, how to obtain evidence, subsequent refunds or additional delivery are all issues worth solving.

(d) Delivery Optimization

- The system shall make use of an intelligent computing system to analyze one-person food orders within a certain area, optimize delivery routes, centralize delivery, improve delivery efficiency and reduce operating costs. Users can also choose flexible deliveries (delivery time, delivery method, etc.) and the progress of deliveries can be viewed on the webpage. Detailed requirements are to be determined through a survey.

Appendix 1. Pre-market Entry Research Survey Questionnaire

I. Personal Basic Information

1. Your gender:
   A. Male
   B. Female
2. Your age:
   A. 18 - 25 years old
   B. 26 - 35 years old
   C. 36 - 45 years old
   D. 46 - 55 years old
   E. Over 55 years old
3. What is your current occupation?
4. Do you live alone for a long time (such as being single, an elderly person living alone, etc.)?
   A. Yes
   B. No
5. Which area in Hong Kong do you live in?

II. Diet-related Habits

1. Do you usually pay attention to the health and nutrition combination of your diet?
   A. Pay great attention. I will carefully select ingredients and reasonably match each meal.
   B. Pay relatively more attention. I will try to choose healthy foods.
   C. Generally, I don't care much about the health and nutrition aspects of the diet.
   D. Don't pay attention. I mainly consider convenience and taste.
2. How do you usually solve your three meals a day? (You can choose multiple options)
   A. Cook by myself after purchasing ingredients.
   B. Eat at nearby restaurants or food stalls.
   C. Order takeout.
   D. Buy ready-to-eat foods or cooked foods from supermarkets.
3. Do you feel that it is troublesome to prepare ingredients, or it is easy to cause food waste because you are eating alone?
   A. Often have this feeling.
   B. Occasionally.

C. Rarely.
D. Never.

4. Have you ever had the experience of cooking according to recipes?
   A. Often. I like to try new dishes according to recipes.
   B. Occasionally. I will try when I see an interesting recipe.
   C. Rarely. I hardly cook according to recipes.
   D. Never.

III. Online Food Ordering and Related Platform Usage

6. Have you used online food ordering platforms before (such as takeout apps, supermarket online delivery platforms, etc.)?
   A. Often use.
   B. Occasionally use.
   C. Rarely use.
   D. Have never used.
7. If you have used online food ordering platforms, which of the following factors would you usually choose to screen dishes? (You can choose multiple options)
   A. Keywords (such as dish names, ingredients, etc.)
   B. Cuisine types (such as Cantonese cuisine, Sichuan cuisine, etc.)
   C. Eating habits (such as light, heavy-flavored, etc.)
   D. Calories (whether low-calorie, for weight loss, etc.)
   E. Customer reviews.
8. When using online food ordering platforms, which payment methods do you prefer? (You can choose multiple options)
   A. Credit card.
   B. E-wallets (such as Octopus, WeChat Wallet, Alipay, etc.).
   C. Cash on delivery.
   D. Others (please specify) _____
9. Do you pay attention to the order status tracking function of online food ordering platforms (such as the progress of meal preparation, delivery progress, etc.)?
   A. Pay great attention. I will often check.
   B. Pay relatively more attention. I will occasionally check.
   C. Don't pay much attention. As long as I can receive the meal on time.
   D. Don't pay any attention.
10. Have you used multi-language interface online platforms (providing services in multiple languages such as Chinese, English, etc.)?
    A. Often use. I think it's very convenient.
    B. Occasionally use.
    C. Rarely use.
    D. Have never used.

IV. Expectations and Opinions on This Project's Platform

1. If there is a platform specifically designed for single people to provide "one-person portion" fresh ingredients with recipes and enable online food ordering, would you be interested?
   A. Very interested. I'm looking forward to trying it.
   B. Relatively interested. I would consider using it.
   C. So-so. I'm not sure if I would use it.
   D. Not very interested.
   E. Not interested at all.
2. For such a platform, what personalized setting functions would you like it to provide to help you screen dishes? (You can choose multiple options)
   A. According to personal taste preferences (such as sweet, sour, spicy, etc.).
   B. According to specific ingredient preferences or taboos (such as not eating coriander, liking beef, etc.).
   C. According to cooking skill levels (such as simple cooking, complex cooking, etc.).
   D. According to dietary health goals (such as weight loss, muscle building, etc.).
   E. Others (please specify) _____
3. In your opinion, what aspects should such a platform focus on in terms of user interface design to improve the user experience? (You can choose multiple options)
   A. Be simple and clear, with convenient and fast operation.
   B. Have an attractive and beautiful interface.
   C. Provide detailed dish descriptions and picture displays.
   D. Have clear order process guidance.
   E. Others (please specify) _____
4. In terms of delivery, what flexible delivery options would you like the platform to provide? (You can choose multiple options)
   A. Be able to choose the delivery time (such as specifying a certain time period for delivery).
   B. Be able to choose the delivery method (such as express delivery, picking up from a self-pickup point, etc.).
   C. Be able to view the delivery progress in real time.
   D. Provide delivery fee discounts or free delivery activities.
   E. Others (please specify) _____
5. If you encounter problems during the use of the platform (such as shortage of dishes, problems with the received dishes, etc.), what ways would you like to get help? (You can choose multiple options)
   A. Hotline support.
   B. Frequently Asked Questions (FAQ).

C. Remote assistance.
D. Contact the offline store.
E. Contact relevant suppliers (such as ingredient suppliers, delivery service suppliers, etc.).
F. Others (please specify) _____

6. What do you think about such a platform providing multi-language services (such as Chinese, English, etc.)?
   A. It is very necessary. It can meet the needs of different people.
   B. It is relatively necessary. It is convenient for some foreigners or people who know multiple languages to use.
   C. It doesn't matter. It has little impact.
   D. It is not necessary. I think one language is enough.
7. In your opinion, compared with existing takeout platforms and supermarket online delivery platforms, where should the biggest advantages of such a platform lie? (You can choose multiple options)
   A. Provide healthier "one-person portion" ingredient combinations and recipes.
   B. Pay more attention to saving users' time in preparing ingredients.
   C. Have more optimized delivery services with higher efficiency.
   D. Provide more personalized services and settings.
   E. Others (please specify) _____

Thank you for taking the precious time to fill out this survey questionnaire. Your answers will provide important references for the development of our project.

2. Project Charter

Project Title: 'Solo' Fresh Food Service Project
Project Start Date: 19/11/2024 **Projected Finish Date:** 19/10/2025
Budget Information: HKD1,300,000 is the estimated cost

Project Manager:

- Name: P0
- Phone: (852)88889999
- E-mail: P0@ExquisiteCH.hk

Project Objectives:

The 'Solo' Fresh Food Service Project will develop a convenient and practical online food ordering platform, including websites, mobile applications and applets. It will provide healthy and moderate amounts of food to people living alone and reduce food waste while ensuring nutritional hygiene.

Assumptions:

- The project aims to provide healthy and moderate amounts of food to people living alone, with a focus on reducing food waste. It is assumed that the platform will be able to achieve this by offering a range of meal options for individual portions and implementing features such as order tracking, customizable meal plans, and incentives to reduce food waste.
- Internal team members can work on projects for a significant portion of their time, estimated at about 60% of their normal working hours.
- Adequate resources can be utilized and are essential to ensure that the platform meets high standards in terms of user experience, functionality, and nutritional hygiene.

Main Project Success Criteria (Refer to industry standards):

- Basic criteria: Successfully develop and launch the platform within the preset timeline and budget, and complete the operational preparation of the systemic solution.
- Market share > 5% in the target market. It depends on the overall size of the market and the competition, but 5% is a relatively solid starting point.
- Gross profit margin > 30%. This is the average gross profit margin level of the fresh food distribution industry, and above this standard indicates that the project has strong profitability.
- Praise rate > 90%. The industry average rating is usually between 80%-90%, and above this standard indicates that the project has a high level of satisfaction in the minds of customers.

- Social media following: On major social media platforms, there are ≥500 new followers per month. This helps to increase the visibility and impact of the project.

Approach:

1. Market research and demand analysis - Define requirements by performing surveys on the food market, organizing focus group and interviewing.
2. Cost optimization and distribution efficiency improvement - Reduce operating costs and improve distribution efficiency through data analysis and simulations.
3. Platform customization and development - The platform will be customized based on current products and past operating results, developed by the outsourced IT supplier.
4. Continuous service optimization and data analysis - Implement ongoing service tracking and leverage big data analysis to understand customer needs, preferences, and feedback.

Constraints:

- The project has to be completed in one year.
- Company A has no IT team so it has to work with an external IT supplier.
- This platform must be customized because of the different devices used.
- Different ingredients need to be reasonably distributed and dispatched in a certain area, which requires a strong supply chain system algorithm.

Roles and Responsibilities

Role	Name	Organization/Position	Contact Information
Project manager	P0	Project manager	P0@ExquisiteCH.hk
Sponsor	A1	CEO	a1@companyA.com
Financial Supervisor	A2	CFO	a2@companyA.com
Supply chain supervisor	B1	Supply department manager, internal	b1@companyA.com
Shop manager	B2	Sales department manager, internal	b2@companyA.com
Head of Food development	B3	R&D department manager, internal	b3@companyA.com
Head of Raw material supplier	S1	Raw material supply department, external	s1@companyS1.com
Head of Delivery service provider	TBP-1	Logistics department, external	Potential stakeholder, Contact Information to be determined
Head of Pick-up equipment service provider	TBP-2	Service department, external	Potential stakeholder, Contact Information to be determined
Head of IT provider	TBP-3	IT department, external	Potential stakeholder, Contact Information to be determined
Head of After-sales service provider	TBP-4	After-sales service department, external	Potential stakeholder, Contact Information to be determined

Table 2-1 Stakeholders Register

Sign-off:

PO A1 A2 B1 B2 B3 S1 CBP-1 CBP-2 CBP-3 CBP-4

Comments:

As a sponsor of this project, I strongly believe that this project will bring significant value growth to the company and look forward to seeing the team successfully achieve all of their goals within the established timeline and budget.

3. Stakeholders Register

for 'Solo' Fresh Food Service Project

Name	Position	Internal/ External	Project Role	Contact Information
A1	CEO	Internal	Sponsor Coordinate and manage employees Oversight of departments	a1@companyA.com
A2	CFO	Internal	Primarily responsible for the company's financial management and financial reporting	a2@companyA.com
B1	Supply chain supervisor	Internal	Responsible for managing suppliers	b1@companyA.com
B2	Shop manager	Internal	Coordinate kiosk drop-off locations with TBP-2 Work with B1 to determine the quantity of raw materials to be sold Other offline business-related matters	b2@companyA.com
B3	Head of Food development	Internal	Development of menu content (web/app) Determination of raw material types and grammage weights	b3@companyA.com
S1	Head of Raw material supplier	External	Understand the basic situation of the project and adjust the subsequent supply of raw materials	s1@companyS1.com
TBP-1	Head of Delivery service provider	External	Build a takeaway supply chain	Potential stakeholder, Contact Information to be determined
TBP-2	Head of Pick-up equipment service provider	External	Launching of kiosks	Potential stakeholder, Contact Information to be determined
TBP-3	Head of IT provider	External	Build websites and applications	Potential stakeholder, Contact Information to be determined
TBP-4	Head of After-sales service provider	External	Responsible for managing and optimizing the overall operation of after-sales service to ensure customer satisfaction and loyalty	Potential stakeholder, Contact Information to be determined
P0	Project manager	Internal	Responsible for planning, implementation and closure of projects	P0@ExquisiteCH.hk

Table 3-1 Stakeholders Register

4. Project Management Plan

4.1 Management and Technical Processes

4.1.1 Project Lifecycle Description

Knowledge Areas	Project management process groups				
	Initiating Process Group	**Planning Process Group**	**Executing Process Group**	**Monitoring and Controlling Process Group**	**Closing Process Group**
1. Project Integration Management	1.1 Develop Project Charter	1.2 Develop Project Management Plan	1.3 Direct and Manage Project Work 1.4 Manage Project Knowledge	1.5 Monitor and Control Project Work 1.6 Perform Integrated Change Control	1.7 Close Project or Phase
2. Project Scope Management		2.1 Plan Scope Management 2.2 Collect Requirements 2.3 Define Scope 2.1 Create WBS		2.2 Validate Scope 2.3 Control Scope	
3. Project Schedule Management		3.1 Plan Schedule Management 3.2 Define Activities 3.3 Sequence Activities 3.1 Estimate Activity Durations 3.2 Develop Schedule		3.3 Control Schedule	
4. Project Cost Management		4.1 Plan Cost Management 4.2 Estimate Costs 4.3 Determine Budget		4.1 Control Costs	
5. Project Quality Management		5.1 Plan Quality Management	5.2 Manage Quality	5.3 Control Quality	
6. Project Resource Management		6.1 Plan Resource Management 6.2 Estimate Activity Resources	6.3 Acquire Resources 6.1 Develop Team 6.2 Manage Team	6.3 Control Resources	
7. Project Communications Management		7.1 Plan Communications Management	7.2 Manage Communications	7.3 Monitor Communications	
8. Project Risk Management		8.1 Plan Risk Management 8.2 Identify Risks 8.3 Perform Qualitative Risk Analysis 8.1 Perform Quantitative Risk Analysis 8.2 Plan Risk Responses	8.3 Implement Risk Responses	8.4 Monitor Risks	
9. Project Procurement Management		9.1 Plan Procurement Management	9.2 Conduct Procurements	9.3 Control Procurements	
10. Project Stakeholder Management	10.1 Identify Stakeholders	10.2 Plan Stakeholder Engagement	10.3 Manage Stakeholder Engagement	10.1 Monitor Stakeholder Engagement	

Table 4-1 Project management process group

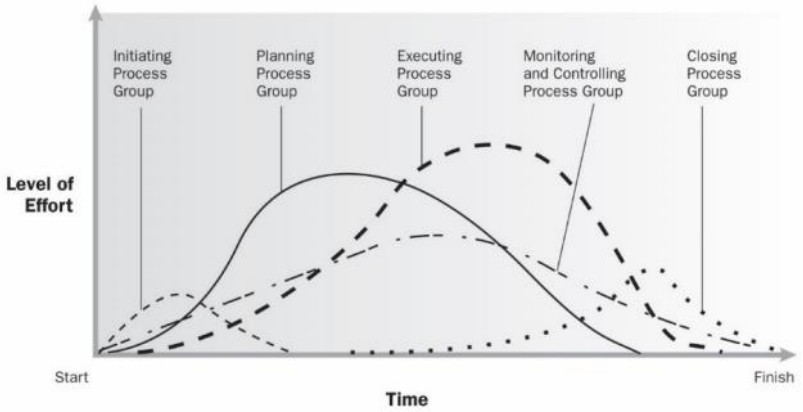


Table 4-2 Level of effort (Ref - An Introduction to Project Management, Seventh Edition)

4.1.2 Development Approach

✧ **Company A better use the PREDICTIVE development approach.**

- Requirements are defined in up-front: Company A's business objectives and user needs have been clearly defined. The project aims to provide healthy, moderate meals for single people and community workers, so they can reduce waste and improve quality of life. Since the initial requirements of the project are already defined, there is no need to change the requirements frequently during the development phase.

- One-time deliverable: Company A's project is mainly to develop a new online order system and APP, which includes online ordering, payment and real-time tracking of delivery status. Instead of frequently phased deliverables, it is possible to plan for the overall project and ultimately deliver a complete system.

- Change control: In a predictive approach, change is avoided as much as possible. Since Company A has already been determined through preliminary market research, there is less need for frequent adjustments during the project development process. This helps the project to be completed within a fixed budget and time. This is especially true for a small company such as Company A, where the CEO and sponsor are the same person, which makes it particularly necessary to reduce the additional costs and risks caused by the change.

- Clear milestones: Company A project can identify milestones (Website, Applet, and Mobile Application; Payment Security Module, etc.) before development, and evaluate the progress of the project through milestones.

- Key Stakeholder Engagement at a specific point in time: Company A's project can be reviewed by key stakeholders at different milestones in the design, development and testing phases without requiring their frequent involvement throughout the development process. This can effectively reduce communication costs and improve development efficiency.

4.1.3 Management and Technical Processes

✧ **Management Processes**

- Management Review Process: The project steering committee will convene monthly to assess project progress, address any emerging issues and provide guidance. The committee will offer insights based on the current state of the project to ensure alignment with strategic objectives.

- Progress Measurement Process: Project progress will be monitored regularly. The steering committee will review updates provided in project meetings and check progress reports generated from the project management software. Additionally, post-project assessments will measure if project outcomes meet established goals, such as reducing operational costs or increasing customer satisfaction.

- Change Approval Process: Any changes to project scope, budget or timeline will be approved following corporate standards for change management. This process ensures that all changes are evaluated for impact on the project objectives, risks and resources before implementation.

- Supplier Management Process: The project team will manage supplier relationships as per corporate guidelines. Supplier contracts, performance and compliance with terms will be monitored regularly.

✧ **Technical Processes**

- Enterprise Project Management Software: All project-related tasks, budgets, resource allocation and risk assessments will be tracked using enterprise project management software. Data will be updated weekly, allowing for real-time tracking and ensuring that all stakeholders have access to the latest project information.

- Supplier Evaluation: The project team will coordinate with the procurement department. This includes assessing supplier performance, adherence to contractual terms and the quality of goods/services provided.

4.2 Requirements & Scope Management Plan

Name	Position	Requirement gathering methods							Frequency	Requirements gathered
		Interviews	Questionnaires and Surveys	Focus Groups	Observation	Prototyping and Document Analysis	Other Specific Methods	Meetings		
A1	CEO	✓						✓	1. Detailed interviews in the initiating phase 2. Quarterly review meetings 3. Review of milestones	Requirements for the overall objectives of the project and the company's strategy
A2	CFO	✓						✓	1. Discuss the budget in the initiating phase 2. Participate in a financial review meeting every quarter	1. Understand financial viability and budget constraints; 2. Ensure that the project's resource allocation meets the company's financial requirements
B1	Supply chain supervisor			✓	✓			✓	1. Detailed interviews in the initiating phase 2. Monthly update with suppliers and warehouse management team	1. Understand the supply chain process requirements 2. Optimize the supplier management and material management, considering the price issues including the freshness of ingredients and the comprehensive consideration of transportation costs
B2	Shop manager		✓		✓			✓	1. Questionnaire survey in the initiating phase 2. Conduct feedback and follow-up with the store sales team once a month	Get the actual operational needs of the store, such as inventory management, sales records, customer preferences, and more
B3	Head of Food development			✓		✓			1. Interview with the menu and ingredient needs at the beginning of the project 2. Participate in a food update seminar every quarter	Confirm the type of food and the fulfillment of nutritional needs
S1	Head of Raw material supplier				✓	✓		✓	1. Conduct a supply chain assessment on a quarterly basis 2. Communicate immediately when there is a supply problem	Ensure supply chain stability, discuss ingredient availability, lead times, quality standards, etc
TBP-1	Head of Delivery service provider				✓		Contract negotiation and distribution evaluation	✓	1. Sign the contract when the project starts 2. Quarterly delivery evaluation	Ensure the timeliness and accuracy of the delivery of services
TBP-2	Head of Pick-up equipment service provider				✓		Preliminary selection and commissioning of equipment	✓	1. Close cooperation in the initial equipment commissioning and integration stage of the project 2. Quarterly maintenance and update	Ensure that the self-pickup machine meets the user's ease of use and arrival, and checks that it meets food preservation standards
TBP-3	Head of IT provider					✓		✓	1. Collect requirements and discuss system design at the beginning of the project 2. Participate in a progress meeting once a week during the development and testing phase	Ensure that the technical implementation of the platform and application meets the project requirements
TBP-4	Head of After-sales service provider	✓	✓	✓			Regular customer feedback and maintenance reports	✓	1. After the system is launched, a maintenance report will be provided once a month 2. Communicate immediately when there is a problem	Ensure the ecological balance of the overall ingredients, equipment, supply and other aspects
P0	Project manager							✓	Participate in all communication and evaluation meetings throughout the project	Take full responsibility for requirements gathering, scope management, and schedule control. At the same time, coordinate the needs and feedback of all stakeholders

Table 4-3 Requirements Gathering & Define Scope

4.3 Change Management Plan

4.3.1 Change Control Board (CCB) (Refer to 9.5)

4.3.2 Roles and Responsibilities

Role	Responsibility	Examples
CEO (A1)	Approves major changes that affect the project's overall direction or scope.	If the project team proposes a new feature that allows customers to rate the store experience online. A1 will assess whether this is in line with the company's brand positioning, or if it affects reputation.
CFO (A2)	Approves changes from a financial perspective, particularly those requiring budget adjustments.	If a new feature needs to be added to the supply chain management system, the CFO will decide whether to allocate funds to cover the additional costs of developing and implementing this feature.
Supply Chain Supervisor (B1)	Assesses the feasibility of changes impacting supply chain, warehousing and logistics.	When a project proposes a change in raw material suppliers, B1 assesses the impact of this change on warehousing and logistics to ensure that supply chain operations are not disrupted.
Project Manager (P0)	Manages the overall change control process, including coordinating with stakeholders and gathering documentation.	P0 will coordinate with all relevant stakeholders upon receipt of a change request for the delivery timeline and collect detailed documentation of the requirement change.
	Tracks, documents, and communicates changes to all relevant stakeholders.	When a change request is approved, the project manager updates the information in the project management system and notifies internal employees and relevant external vendors.
Head of Food Development (B3)	Evaluates the impact of proposed changes on food development and preparation processes.	When changing ingredient suppliers, B3 will evaluate the specifications and quality of the new ingredient to ensure that no issues arise during food development and preparation.
IT Provider (TBP-3)	Manages configuration control for all software and hardware components related to the project.	If the project proposes to modify the interface design of the online ordering system, TBP-3 is responsible for version management and system configuration to ensure that the updated system does not affect the existing functionality.

Table 4-5 Roles and Responsibilities

In the change management process for this project, there is a clear division of roles between the roles. Each role reviews and approves changes based on their area of expertise, working together to keep the project running smoothly.

4.3.3 Change Control Process

Step	Description	Responsible Party	Key Activities
1 Change Request Initiation	Any stakeholder can submit a change request through a Change Request Form.	Any internal/external stakeholder	Complete and submit the Change Request Form with details of the proposed change.
2 Initial Review by Project Manager	Project Manager conducts an initial assessment to determine if the change is minor or major.	P0	Evaluate the relevance and feasibility of the change; decide if it requires escalation.
2.1 Minor Change Approval	If the change is minor, the Project Manager approves and implements it directly.	P0	Approve and execute minor changes without escalation to CCB.
2.2 Major Change Analysis	For major changes, the Project Manager coordinates with relevant stakeholders to assess impacts.	CEO P0 CFO B1	Conduct a detailed analysis of the change's impact on deliverables, budget, schedule, and resources.
3 CCB Review and Decision	The CCB reviews the impact analysis and decides to approve, reject, or defer the change.	CCB	Discuss and vote on change approval, rejection, or deferral based on project impact.
4 Document Decision	Document the decision made by the CCB	P0	Record the CCB decision in project documentation, noting reasons for rejection if applicable.
5 Implement Approved Change	For approved changes, the Project Manager coordinates the necessary adjustments to the project.	P0	Update project plan, budget, and schedule as needed; implement the change with relevant teams.
6 Communicate Change	Communicate details of the approved change to all stakeholders, ensuring alignment.	P0	Notify internal and external stakeholders, update project management software with the changes.
7 Update and Monitor	IT Provider manages configuration control and the Project Manager monitors the change impact.	P0 TBP-3 CEO	Ensure version control, track change implementation, and monitor impact on project deliverables and schedule.

Table 4-6 Change Control Process

A change management plan is like a compass that guides the way, providing a clear framework for addressing all change-related aspects that arise during the project lifecycle. Not only does it outline the process for approving and managing changes, but it also details strategies for closely monitoring progress so that the project can move forward as planned and aligned with goals.

5. Scope Statement

Project Title: 'Solo' Fresh Food Service Project

Project Justification:

Based on market research and the company's growth, the owners of the Company decided to expand their business by developing an online food ordering platform. This project aims to provide healthy and moderate amounts of food to people living alone.

Product Characteristics and Requirements:

✧ **Product Characteristics are as follows**

- The platform must be user-friendly.
- The platform must handle customer ordering and payment for fresh food kits through a website and mobile application.
- The platform will be available in multiple languages to cater to the international environment of Hong Kong.
- The platform should be available for different operating systems (iOS, Android, Windows) and devices (computers, tablets and smartphones).

✧ **The main requirements of the platform are to**

- Provide a secure payment function and easy-to-use shopping cart feature supporting multiple payment methods (credit card, e-wallet, etc.)
- Track order information, including real-time order status, meal preparation, and delivery progress
- Allow customers to personalize settings (keywords, cuisine, eating habits, calories, customer reviews, etc.)
- Include search features to allow customers to search for meals by personal preferences, specific ingredients, cooking skills, and dietary restrictions
- Provide flexible delivery options, including timed delivery and self-service pickup
- Display personalized recommendations based on purchase history and preferences
- Track customer usage patterns to analyze and improve services
- Implement intelligent algorithms to analyze data of orders and optimize delivery routes, thereby improving efficiency.

Summary of Project Deliverables

✧ **Project management-related deliverables:**

- Project Charter
- Key Stakeholders List
- Project Management Plan
- Scope Statement
- Work Breakdown Structure
- Project Schedule
- Critical Path
- Resource Management Plan

- Cost Estimates
- Quality Assurance Plan
- Risk Register
- Communications and Stakeholder Management Plan
- Procurement and Outsourcing Plan

✧ **Product-related deliverables:**

1. Requirements Documentation: Requirements will be defined through a variety of methods, including surveys of potential customers.
2. Procurement: all documents and contracts required to work with new suppliers (documents including, but not limit to: Preliminary Supplier Assessment, Supplier Evaluation Matrix, etc.). The new suppliers include delivery services, pick-up equipment services and information technology services.
3. Website, Applet, and Mobile Application: Fully functional online food ordering platform that is compatible with a wide range of devices and operating systems.
4. Back-end Systems:
   a. Order Management System
   b. Supply Chain Management System
   c. Distribution Optimization System
   d. Customer Analytics System
5. Payment Security Module: To secure payment systems that support multiple methods of payment.
6. Database Design: Centrally store customer info, order and supply chain data.
7. Testing Documentation: Test plans, cases, and results.
8. User Manuals: For customers, staff, and administrators.
9. Training Materials: For internal staff and external partners.
10. Marketing Materials: To promote the new online ordering platform and the concept of Solo Dining.

Project Success Criteria:

Basic criteria: Successfully develop and launch the platform within the preset timeline and budget, and complete the operational preparation of the systemic solution.

Market share > 5% in the target market. It depends on the overall size of the market and the competition, but 5% is a relatively solid starting point.

Gross profit margin > 30%. This is the average gross profit margin level of the fresh food distribution industry, and above this standard indicates that the project has strong profitability.

Praise rate > 90%. The industry average rating is usually between 80%-90%, and above this standard indicates that the project has a high level of satisfaction in the minds of customers.

Social media following: On major social media platforms, there are ≥500 new followers per month. This helps to increase the visibility and impact of the project.

6. Work Breakdown Structure

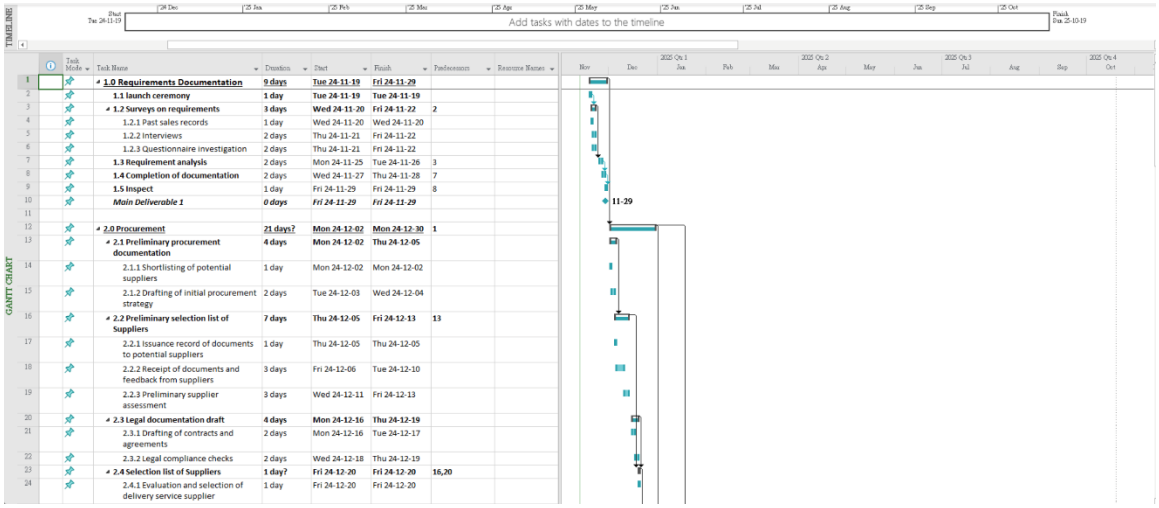
for ‘Solo’ Fresh Food Service Project

1.0 Requirements Documentation
- 1.1 launch ceremony
- 1.2 Surveys on requirements
  - 1.2.1 Past sales records
  - 1.2.2 Interviews
  - 1.2.3 Questionnaire investigation
- 1.3 Requirement analysis
- 1.4 Completion of documentation
- 1.5 Inspect

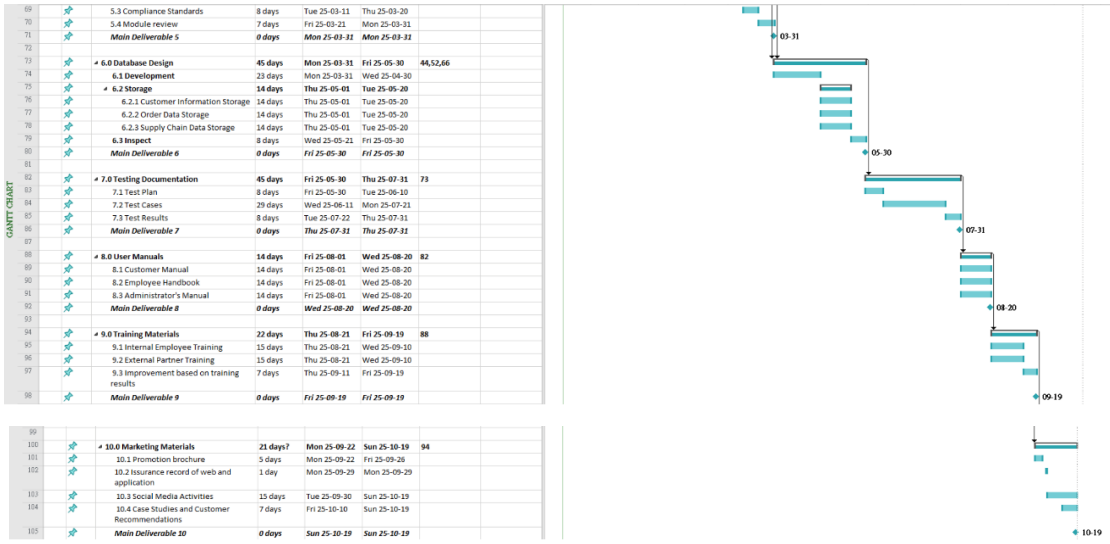
2.0 Procurement
- 2.1 Preliminary procurement documentation
  - 2.1.1 Shortlisting of potential suppliers
  - 2.1.2 Drafting of initial procurement strategy
- 2.2 Preliminary selection list of Suppliers
  - 2.2.1 Issuance record of documents to potential suppliers
  - 2.2.2 Receipt of documents and feedback from suppliers
  - 2.2.3 Preliminary supplier assessment
- 2.3 Legal documentation draft
  - 2.3.1 Drafting of contracts and agreements
  - 2.3.2 Legal compliance checks
- 2.4 Selection list of Suppliers
  - 2.4.1 Evaluation and selection of delivery service supplier
  - 2.4.2 Evaluation and selection of pick-up equipment service supplier
  - 2.4.3 Evaluation and selection of IT service supplier
  - 2.4.4 Evaluation and selection of after-sales service supplier
- 2.5 Contract signing
  - 2.5.1 Negotiation of delivery service supplier
  - 2.5.2 Negotiation of pick-up equipment service supplier
  - 2.5.3 Negotiation of IT service supplier
  - 2.5.4 Negotiation of after-sales service supplier
  - 2.5.5 Contract signing of delivery service supplier
  - 2.5.6 Contract signing of pick-up equipment service supplier
  - 2.5.7 Contract signing of IT service supplier
  - 2.5.8 Contract signing of after-sales service supplier
- 2.6 Onboarding and Integration into Project

7. Project Schedule

This schedule organizes the WBS into MPP files and adds milestone after each segment as the point in time when each segment is submitted deliverable. Below is the MS Project screenshot:



	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1		**1.0 Requirements Documentation**	**9 days**	**Tue 24-11-19**	**Fri 24-11-29**		
2		**1.1 launch ceremony**	**1 day**	**Tue 24-11-19**	**Tue 24-11-19**		
3		**1.2 Surveys on requirements**	**3 days**	**Wed 24-11-20**	**Fri 24-11-22**	2	
4		1.2.1 Past sales records	1 day	Wed 24-11-20	Wed 24-11-20		
5		1.2.2 Interviews	2 days	Thu 24-11-21	Fri 24-11-22		
6		1.2.3 Questionnaire investigation	2 days	Thu 24-11-21	Fri 24-11-22		
7		**1.3 Requirement analysis**	2 days	Mon 24-11-25	Tue 24-11-26	3	
8		**1.4 Completion of documentation**	2 days	Wed 24-11-27	Thu 24-11-28	7	
9		**1.5 Inspect**	1 day	Fri 24-11-29	Fri 24-11-29	8	
10		***Main Deliverable 1***	***0 days***	***Fri 24-11-29***	***Fri 24-11-29***		
11							
12		**2.0 Procurement**	**21 days?**	**Mon 24-12-02**	**Mon 24-12-30**	1	
13		**2.1 Preliminary procurement documentation**	**4 days**	**Mon 24-12-02**	**Thu 24-12-05**		
14		2.1.1 Shortlisting of potential suppliers	1 day	Mon 24-12-02	Mon 24-12-02		
15		2.1.2 Drafting of initial procurement strategy	2 days	Tue 24-12-03	Wed 24-12-04		
16		**2.2 Preliminary selection list of Suppliers**	**7 days**	**Thu 24-12-05**	**Fri 24-12-13**	13	
17		2.2.1 Issuance record of documents to potential suppliers	1 day	Thu 24-12-05	Thu 24-12-05		
18		2.2.2 Receipt of documents and feedback from suppliers	3 days	Fri 24-12-06	Tue 24-12-10		
19		2.2.3 Preliminary supplier assessment	3 days	Wed 24-12-11	Fri 24-12-13		
20		**2.3 Legal documentation draft**	**4 days**	**Mon 24-12-16**	**Thu 24-12-19**		
21		2.3.1 Drafting of contracts and agreements	2 days	Mon 24-12-16	Tue 24-12-17		
22		2.3.2 Legal compliance checks	2 days	Wed 24-12-18	Thu 24-12-19		
23		**2.4 Selection list of Suppliers**	**1 day?**	**Fri 24-12-20**	**Fri 24-12-20**	16,20	
24		2.4.1 Evaluation and selection of delivery service supplier	1 day	Fri 24-12-20	Fri 24-12-20		
25		2.4.2 Evaluation and selection of pick-up equipment service supplier	1 day	Fri 24-12-20	Fri 24-12-20		
26		2.4.3 Evaluation and selection of IT service supplier	1 day	Fri 24-12-20	Fri 24-12-20		
27		2.4.4 Evaluation and selection of after-sales service supplier	1 day	Fri 24-12-20	Fri 24-12-20		
28		**2.5 Contract signing**	**5 days**	**Mon 24-12-23**	**Fri 24-12-27**	23	
29		2.5.1 Negotiation of delivery service supplier	4 days	Mon 24-12-23	Thu 24-12-26		
30		2.5.2 Negotiation of pick-up equipment service supplier	4 days	Mon 24-12-23	Thu 24-12-26		
31		2.5.3 Negotiation of IT service supplier	4 days	Mon 24-12-23	Thu 24-12-26		
32		2.5.4 Negotiation of after-sales service supplier	4 days	Mon 24-12-23	Thu 24-12-26		
33		2.5.5 Contract signing of delivery service supplier	1 day	Fri 24-12-27	Fri 24-12-27		
34		2.5.6 Contract signing of pick-up equipment service supplier	1 day	Fri 24-12-27	Fri 24-12-27		
35		2.5.7 Contract signing of IT service supplier	1 day	Fri 24-12-27	Fri 24-12-27		
36		2.5.8 Contract signing of after-sales service supplier	1 day	Fri 24-12-27	Fri 24-12-27		
37		**2.6 Onboarding and Integration into Project**	**1 day**	**Mon 24-12-30**	**Mon 24-12-30**	28	
38		2.6.1 Onboard record of delivery service supplier	1 day	Mon 24-12-30	Mon 24-12-30		
39		2.6.2 Onboard record of equipment service supplier	1 day	Mon 24-12-30	Mon 24-12-30		
40		2.6.3 Onboard record of IT service supplier	1 day	Mon 24-12-30	Mon 24-12-30		
41		2.6.3 Onboard record of after-sales service supplier	1 day	Mon 24-12-30	Mon 24-12-30		
42		***Main Deliverable 2***	***0 days***	***Mon 24-12-30***	***Mon 24-12-30***		
43							
44		**3.0 Website, Applet, and Mobile Application**	**44 days**	**Tue 24-12-31**	**Fri 25-02-28**	12	
45		**3.1 Development**	**38 days**	**Tue 24-12-31**	**Thu 25-02-20**		
46		3.1.1 Function development	24 days	Tue 24-12-31	Fri 25-01-31		
47		3.1.2 Compatibility development	15 days	Sat 25-02-01	Thu 25-02-20		
48		3.1.3 Design	24 days	Tue 24-12-31	Fri 25-01-31		
49		**3.2 Detection**	7 days	Thu 25-02-20	Fri 25-02-28		
50		***Main Deliverable 3***	***0 days***	***Fri 25-02-28***	***Fri 25-02-28***		
51							
52		**4.0 Back-end Systems**	**65 days**	**Tue 24-12-31**	***Mon 25-03-31***	12	
53		**4.1 Systems development**	**54 days**	**Tue 24-12-31**	**Fri 25-03-14**		
54		**4.1.1 Order Management System**	44 days	Tue 24-12-31	Fri 25-02-28		
55		**4.1.2 Supply Chain Management System**	**54 days**	**Tue 24-12-31**	**Fri 25-03-14**		
56		4.1.2.1 Define pick-up equipment type and locations	15 days	Tue 24-12-31	Mon 25-01-20		
57		4.1.2.2 Optimize supply chain processes	39 days	Tue 25-01-21	Fri 25-03-14		
58		**4.1.3 Delivery Optimization System**	**54 days**	**Tue 24-12-31**	**Fri 25-03-14**		
59		4.1.3.1 Analyze delivery range and routes	15 days	Tue 24-12-31	Mon 25-01-20		
60		4.1.3.2 Optimize delivery schedules	39 days	Tue 25-01-21	Fri 25-03-14		
61		**4.1.4 Customer Analysis System**	39 days	Tue 25-01-21	Fri 25-03-14		
62		**4.2 Inspect**	5 days	Mon 25-03-17	Fri 25-03-21		
63		**4.3 Operation of systems**	6 days	Mon 25-03-24	Mon 25-03-31		
64		***Main Deliverable 4***	***0 days***	***Mon 25-03-31***	***Mon 25-03-31***		
65							
66		**5.0 Payment Security Module**	**51 days**	**Mon 25-01-20**	**Mon 25-03-31**	12	
67		5.1 Support for multiple payment methods	15 days	Mon 25-01-20	Fri 25-02-07		
68		5.2 Encryption and Security Protocol	21 days	Mon 25-02-10	Mon 25-03-10		



69	5.3 Compliance Standards	8 days	Tue 25-03-11	Thu 25-03-20	
70	5.4 Module review	7 days	Fri 25-03-21	Mon 25-03-31	
71	***Main Deliverable 5***	***0 days***	***Mon 25-03-31***	***Mon 25-03-31***	
72					
73	**6.0 Database Design**	**45 days**	**Mon 25-03-31**	**Fri 25-05-30**	**44,52,66**
74	**6.1 Development**	23 days	Mon 25-03-31	Wed 25-04-30	
75	**6.2 Storage**	**14 days**	**Thu 25-05-01**	**Tue 25-05-20**	
76	6.2.1 Customer Information Storage	14 days	Thu 25-05-01	Tue 25-05-20	
77	6.2.2 Order Data Storage	14 days	Thu 25-05-01	Tue 25-05-20	
78	6.2.3 Supply Chain Data Storage	14 days	Thu 25-05-01	Tue 25-05-20	
79	**6.3 Inspect**	8 days	Wed 25-05-21	Fri 25-05-30	
80	***Main Deliverable 6***	***0 days***	***Fri 25-05-30***	***Fri 25-05-30***	
81					
82	**7.0 Testing Documentation**	**45 days**	**Fri 25-05-30**	**Thu 25-07-31**	**73**
83	7.1 Test Plan	8 days	Fri 25-05-30	Tue 25-06-10	
84	7.2 Test Cases	29 days	Wed 25-06-11	Mon 25-07-21	
85	7.3 Test Results	8 days	Tue 25-07-22	Thu 25-07-31	
86	***Main Deliverable 7***	***0 days***	***Thu 25-07-31***	***Thu 25-07-31***	
87					
88	**8.0 User Manuals**	**14 days**	**Fri 25-08-01**	**Wed 25-08-20**	**82**
89	8.1 Customer Manual	14 days	Fri 25-08-01	Wed 25-08-20	
90	8.2 Employee Handbook	14 days	Fri 25-08-01	Wed 25-08-20	
91	8.3 Administrator's Manual	14 days	Fri 25-08-01	Wed 25-08-20	
92	***Main Deliverable 8***	***0 days***	***Wed 25-08-20***	***Wed 25-08-20***	
93					
94	**9.0 Training Materials**	**22 days**	**Thu 25-08-21**	**Fri 25-09-19**	**88**
95	9.1 Internal Employee Training	15 days	Thu 25-08-21	Wed 25-09-10	
96	9.2 External Partner Training	15 days	Thu 25-08-21	Wed 25-09-10	
97	9.3 Improvement based on training results	7 days	Thu 25-09-11	Fri 25-09-19	
98	***Main Deliverable 9***	***0 days***	***Fri 25-09-19***	***Fri 25-09-19***	
99					
100	**10.0 Marketing Materials**	**21 days?**	**Mon 25-09-22**	**Sun 25-10-19**	**94**
101	10.1 Promotion brochure	5 days	Mon 25-09-22	Fri 25-09-26	
102	10.2 Insurance record of web and application	1 day	Mon 25-09-29	Mon 25-09-29	
103	10.3 Social Media Activities	15 days	Tue 25-09-30	Sun 25-10-19	
104	10.4 Case Studies and Customer Recommendations	7 days	Fri 25-10-10	Sun 25-10-19	
105	***Main Deliverable 10***	***0 days***	***Sun 25-10-19***	***Sun 25-10-19***	

Table 7-1 Project Schedule

Structure of the schedule:

- 1.0 is the initial phase of the project and involves completing a series of meetings and surveys to set the stage for later tasks.

- 2.0 is the procurement phase of the project, which involves finding a suitable supplier for subsequent tasks.

- 3.0-7.0 is the whole process of designing, implementing and testing the whole system of the project.

- 8.0-9.0 is internal and external training.

- Finally, 10.0 is the official launch of the system and subsequent marketing.

Timing of the tasks:

There are a total of 64 tasks in the entire schedule (meeting the 50-100 requirement), spanning from 2024/11/19-2025/10/19 (from Project Charter). The specific duration of each internal task is referenced to the IT project development duration with the aid of GPT (Moonshot AI). Due to the task time constraints, the predecessors, including dependencies, and which of these tasks can be carried out concurrently are considered:

- In the main categories, the concurrent ones are: 3.0, 4.0, and 5.0, because the front-end and back-end can be developed simultaneously.

- In the subcategories, there are also many simultaneous tasks, for example these are carried out almost in parallel, i.e. the selection, negotiation and contracting of the various suppliers, the respective development of different types of systems.

- For a more detailed example, 3.1.1 and 3.1.3 are carried out almost in parallel, as it is also possible to synchronize the UI and UX design during the functional development phase of the software.

The dependencies will show more on the critical path.

8. Project Critical Path / Schedule Analysis Report

Project Overview:

- Project Title: ‘Solo’ Fresh Food Service Project

- Project Duration: November 19, 2024, to October 19, 2025

- Budget: HKD 1,300,000

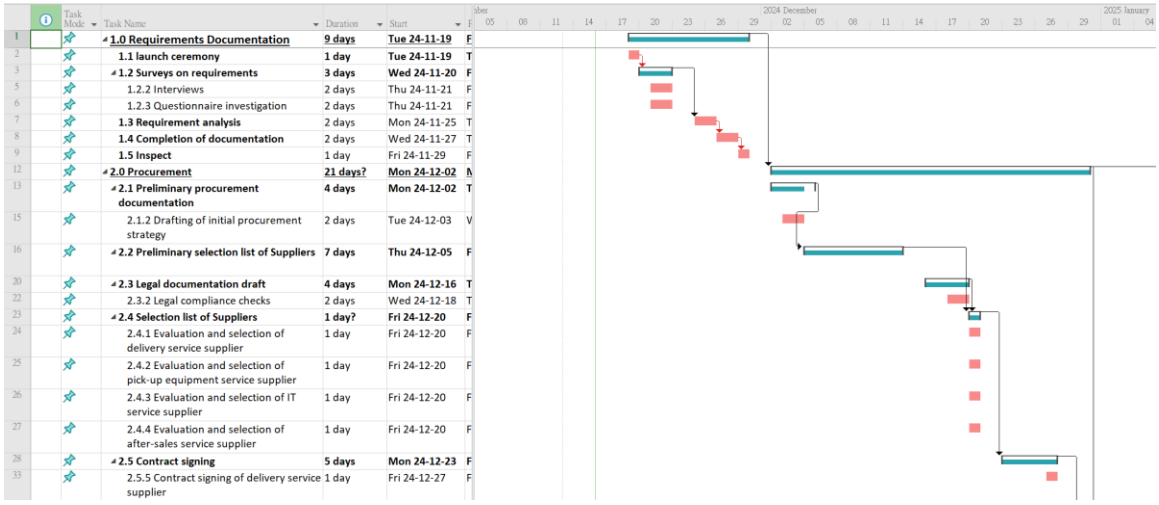
- Project Manager: P0

Executive Summary:

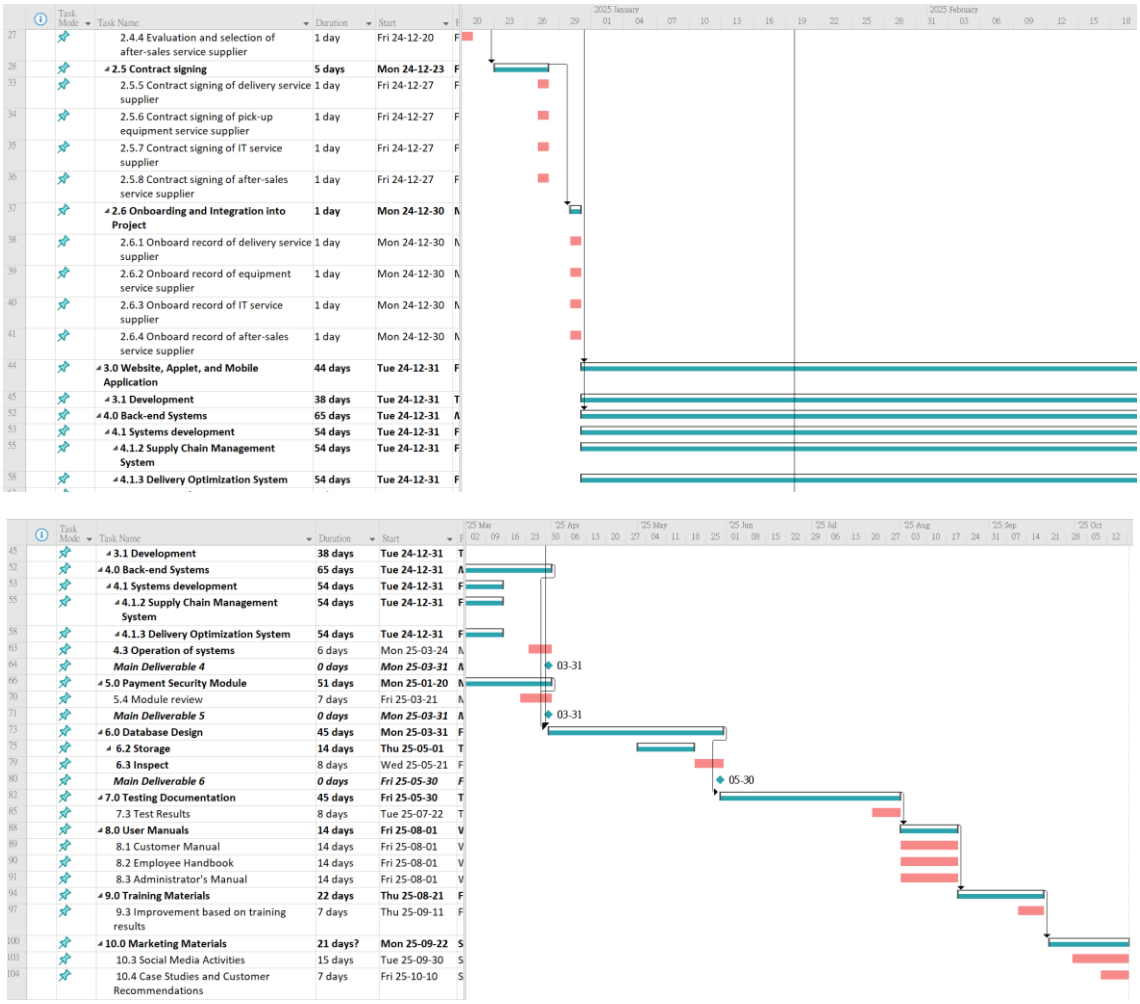
This report provides a critical path and schedule analysis for the ‘Solo’ Fresh Food Service Project. The analysis identifies potential issues and suggests actions to address them, with the aim of delivering results faster, reducing costs, or mitigating risks.

8.1 Critical Path Analysis

The critical path is the sequence of project activities that are essential to complete the project on time and determines the longest duration from start to end. If delayed, it will impact on the overall project timeline.



	Task Mode	Task Name	Duration	Start
1		**1.0 Requirements Documentation**	**9 days**	**Tue 24-11-19**
2		**1.1 launch ceremony**	**1 day**	**Tue 24-11-19**
3		**1.2 Surveys on requirements**	**3 days**	**Wed 24-11-20**
5		1.2.2 Interviews	2 days	Thu 24-11-21
6		1.2.3 Questionnaire investigation	2 days	Thu 24-11-21
7		**1.3 Requirement analysis**	2 days	Mon 24-11-25
8		**1.4 Completion of documentation**	2 days	Wed 24-11-27
9		**1.5 Inspect**	1 day	Fri 24-11-29
12		**2.0 Procurement**	**21 days?**	**Mon 24-12-02**
13		**2.1 Preliminary procurement documentation**	**4 days**	**Mon 24-12-02**
15		2.1.2 Drafting of initial procurement strategy	2 days	Tue 24-12-03
16		**2.2 Preliminary selection list of Suppliers**	**7 days**	**Thu 24-12-05**
20		**2.3 Legal documentation draft**	**4 days**	**Mon 24-12-16**
22		2.3.2 Legal compliance checks	2 days	Wed 24-12-18
23		**2.4 Selection list of Suppliers**	**1 day?**	**Fri 24-12-20**
24		2.4.1 Evaluation and selection of delivery service supplier	1 day	Fri 24-12-20
25		2.4.2 Evaluation and selection of pick-up equipment service supplier	1 day	Fri 24-12-20
26		2.4.3 Evaluation and selection of IT service supplier	1 day	Fri 24-12-20
27		2.4.4 Evaluation and selection of after-sales service supplier	1 day	Fri 24-12-20
28		**2.5 Contract signing**	**5 days**	**Mon 24-12-23**
33		2.5.5 Contract signing of delivery service supplier	1 day	Fri 24-12-27



	Task Mode	Task Name	Duration	Start
27		2.4.4 Evaluation and selection of after-sales service supplier	1 day	Fri 24-12-20
28		**2.5 Contract signing**	**5 days**	**Mon 24-12-23**
33		2.5.5 Contract signing of delivery service supplier	1 day	Fri 24-12-27
34		2.5.6 Contract signing of pick-up equipment service supplier	1 day	Fri 24-12-27
35		2.5.7 Contract signing of IT service supplier	1 day	Fri 24-12-27
36		2.5.8 Contract signing of after-sales service supplier	1 day	Fri 24-12-27
37		**2.6 Onboarding and Integration into Project**	**1 day**	**Mon 24-12-30**
38		2.6.1 Onboard record of delivery service supplier	1 day	Mon 24-12-30
39		2.6.2 Onboard record of equipment service supplier	1 day	Mon 24-12-30
40		2.6.3 Onboard record of IT service supplier	1 day	Mon 24-12-30
41		2.6.4 Onboard record of after-sales service supplier	1 day	Mon 24-12-30
44		**3.0 Website, Applet, and Mobile Application**	**44 days**	**Tue 24-12-31**
45		**3.1 Development**	**38 days**	**Tue 24-12-31**
52		**4.0 Back-end Systems**	**65 days**	**Tue 24-12-31**
53		**4.1 Systems development**	**54 days**	**Tue 24-12-31**
55		**4.1.2 Supply Chain Management System**	**54 days**	**Tue 24-12-31**
58		**4.1.3 Delivery Optimization System**	**54 days**	**Tue 24-12-31**

	Task Mode	Task Name	Duration	Start
45		**3.1 Development**	**38 days**	**Tue 24-12-31**
52		**4.0 Back-end Systems**	**65 days**	**Tue 24-12-31**
53		**4.1 Systems development**	**54 days**	**Tue 24-12-31**
55		**4.1.2 Supply Chain Management System**	**54 days**	**Tue 24-12-31**
58		**4.1.3 Delivery Optimization System**	**54 days**	**Tue 24-12-31**
63		**4.3 Operation of systems**	6 days	Mon 25-03-24
64		***Main Deliverable 4***	***0 days***	***Mon 25-03-31***
66		**5.0 Payment Security Module**	**51 days**	**Mon 25-01-20**
70		5.4 Module review	7 days	Fri 25-03-21
71		***Main Deliverable 5***	***0 days***	***Mon 25-03-31***
73		**6.0 Database Design**	**45 days**	**Mon 25-03-31**
75		**6.2 Storage**	**14 days**	**Thu 25-05-01**
79		**6.3 Inspect**	8 days	Wed 25-05-21
80		***Main Deliverable 6***	***0 days***	***Fri 25-05-30***
82		**7.0 Testing Documentation**	**45 days**	**Fri 25-05-30**
85		7.3 Test Results	8 days	Tue 25-07-22
88		**8.0 User Manuals**	**14 days**	**Fri 25-08-01**
89		8.1 Customer Manual	14 days	Fri 25-08-01
90		8.2 Employee Handbook	14 days	Fri 25-08-01
91		8.3 Administrator's Manual	14 days	Fri 25-08-01
94		**9.0 Training Materials**	**22 days**	**Thu 25-08-21**
97		9.3 Improvement based on training results	7 days	Thu 25-09-11
100		**10.0 Marketing Materials**	**21 days?**	**Mon 25-09-22**
103		10.3 Social Media Activities	15 days	Tue 25-09-30
104		10.4 Case Studies and Customer Recommendations	7 days	Fri 25-10-10

Table 8-1 Critical Path

For this project, the critical path likely includes:

1.1 Launch ceremony + 1.1.2 Interviews + 1.1.3 Questionnaire investigation + 2.1.2 Shortlisting of potential suppliers + 2.3.2 Legal compliance checks + 2.4.1 Evaluation and selection of delivery service supplier + 2.4.2 Evaluation and selection of pick-up equipment service supplier + 2.4.3 Evaluation and selection of IT service supplier + 2.4.4 Evaluation and selection of after-sales supplier + 2.5.5 Contract signing of delivery service supplier + 2.5.6 Contract signing of pick-up equipment service supplier + 2.5.7 Contract signing of IT service supplier + 2.5.8 Contract signing of after-sales supplier + 2.6.1 Onboard record of delivery service supplier + 2.6.2 Onboard record of equipment service supplier + 2.6.3 Onboard record of IT service supplier + 2.6.4 Onboard record of after-sales service + 4.3 Operation of systems + 5.4 Module review + 6.3 Inspect + 7.3 Test Results + 8.1 Customer Manual + 8.2 Employee Handbook + 8.3 Administrator's Manual + 9.3 Improvement based on training results + 10.2 Social Media Activities + 10.3 Case Studies and Customer Recommendations

We can look at this critical path in five phases.

- **Project Initiation Stage:**
  Starting from the "1.1 Launch ceremony", through a series of publicity-related activities such as "1.1.2 Interviews" and "1.1.3 Questionnaire investigation", the project will lay a preliminary publicity and information collection foundation to understand the expectations of all parties for the project.
- **Outsourcer Selection and Identification Phase:**
  Includes a series of activities from "2.1.2 Shortlisting of potential suppliers" to "2.6.4 Onboard record of after-sales service". This stage focuses on the comprehensive screening of all types of potential outsourcers, from the initial screening, compliance checks, evaluation and selection to the final contract signing and other processes, which is a key part of ensuring that the follow-up operation of the project has a reliable service support system.
- **System and operation preparation stage:**
  "4.3 Operation of systems" marks the beginning of the actual operation preparation of the system, providing technical and platform support for subsequent specific business development.
- **Project Improvement and Documentation Phase:**
  "5.4 Module review" and subsequent activities to "8.3 Administrator's Manual" mainly focus on reviewing each module of the project, and at the same time compiling various manuals so that personnel in different roles can clearly understand the operation process and specifications of the project. Because company A is a small company and does not have the role of risk management manager or quality management manager, it can be seen how important the manuals are as deliverables.
- **Continuous Improvement and Promotion Stage:**
  "9.3 Improvement based on training results" reflects the process of improving and optimizing the project based on training feedback, while "10.2 Social Media Activities" and "10.3 Case Studies and Customer Recommendations" focus on the external promotion of the project. Raise awareness of your project through social media campaigns and customer testimonials.

Suggest actions

✧ **Outsourcer selection and identification phase**

- Strengthen the preliminary research of the potential outsourcer market: Before "2.1.2 Shortlisting of potential suppliers", invest more resources to conduct detailed research on the reputation, service quality, and price of various outsourcers in the market. This avoids wasting money, time and resources by discovering non-compliant outsourcers during subsequent assessments. The project is risky because the company is small, the financial risk is borne by the CEO alone, and the multi-

faceted outsourcing makes this part of the content an important milestone.

- Conduct some compliance checks and evaluations in parallel: for "2.3.2 Legal compliance checks" and "2.4.1 Evaluation and selection of..." For example, while initially assessing the outsourcer's business capabilities, a preliminary review of its legal compliance can be initiated at the same time to prevent legal risks.

✧ **System & Operations Readiness Phase**

- Pre-test the system in advance: Before the official launch of "4.3 Operation of systems", a small pre-test phase of the system can be arranged, and some internal employees or relevant professionals can be invited to conduct an initial trial of the system. This can help to detect possible system vulnerabilities, inconvenient operation and other problems in advance, so that they can be repaired and optimized in time.

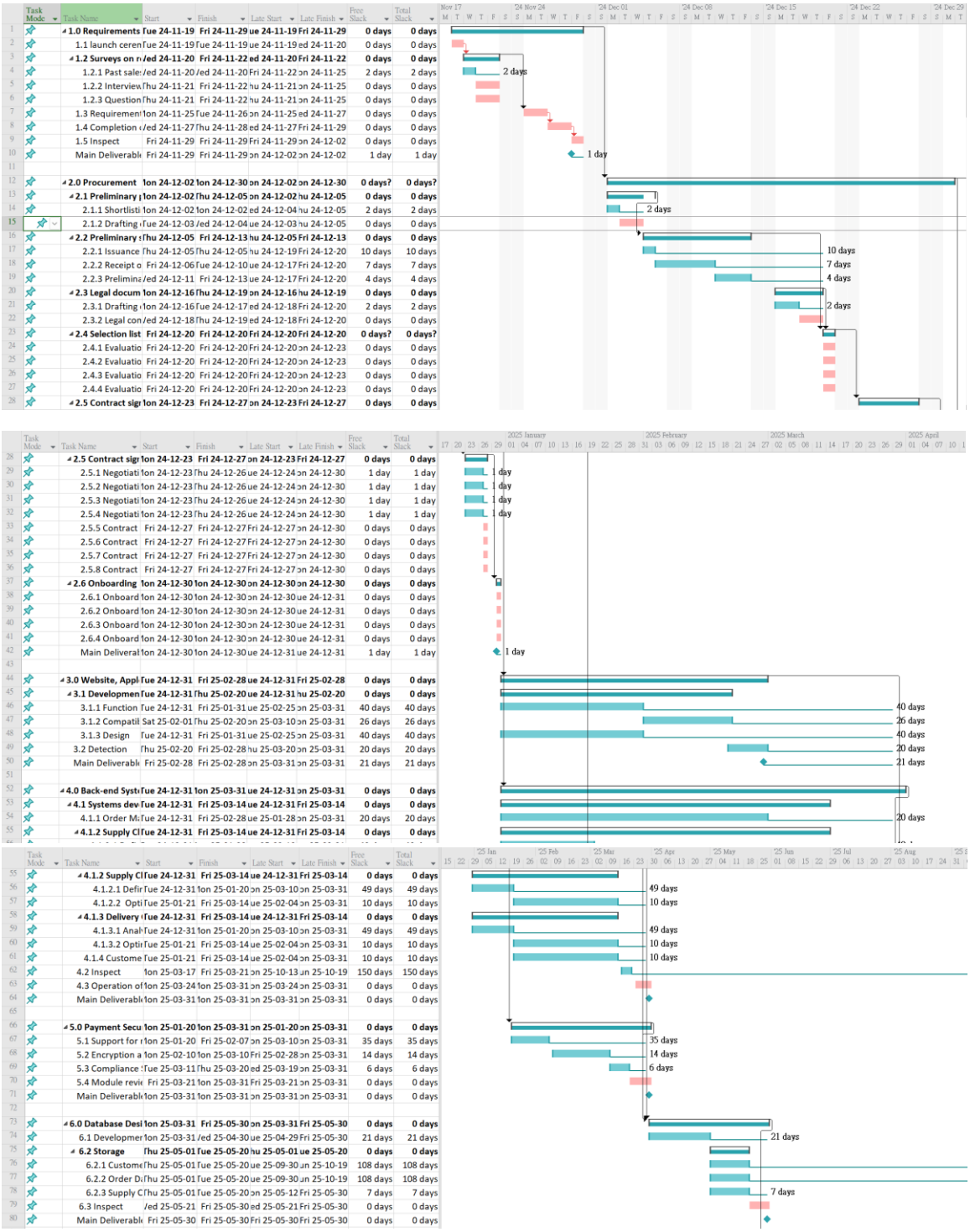
✧ **Project refinement and documentation phase**

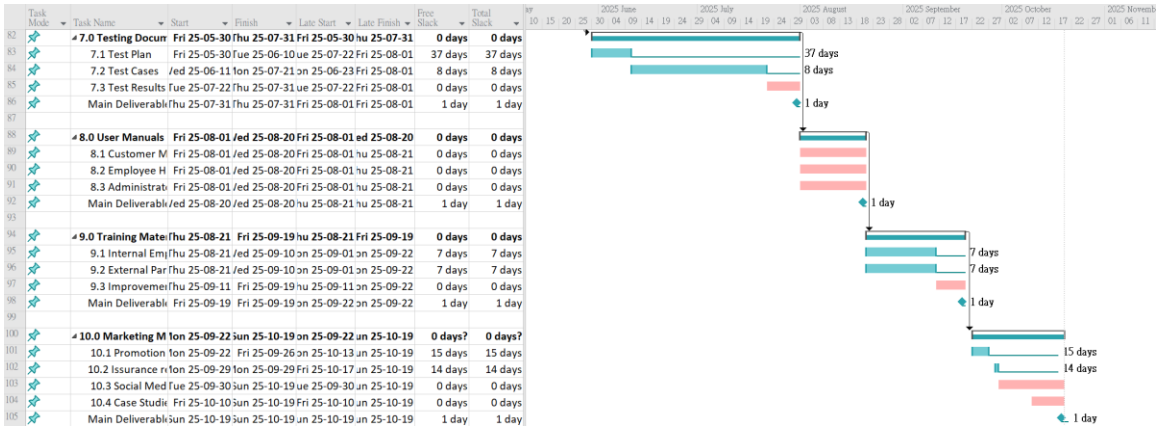
- Establish a document review team: Establish a dedicated document review team for the preparation of "5.4 Module review" and various manuals ("8.1 Customer Manual", "8.2 Employee Handbook", "8.3 Administrator's Manual"). This ensures that the resulting document is of high quality and can effectively guide the work of different people.
- Conduct document training: After the documentation is completed, conduct specialized document training for people in different roles (customers, employees, management, etc.) to familiarize them with how to quickly and accurately find the information they need in the document.

✧ **Continuous improvement and roll-out phase**

- Establish a continuous feedback mechanism: In the "9.3 Improvement based on training results" process, establish a continuous feedback mechanism to encourage all participants in the project to provide feedback on questions and suggestions at any time during their daily work or use of the project's products/services.
- Develop a detailed promotion strategy: For "10.2 Social Media Activities" and "10.3 Case Studies and Customer Recommendations", a more detailed promotion strategy should be developed. For example, through the social software APP often used by office workers, and the common commuting locations (work buildings, subway entrances and exits, and subway cars) are publicized and displayed, so that workers can order good meals on the way to work, and achieve the original goal of this project - to provide convenient and healthy food for one person.

8.2 Potential Issues





	Task Mode	Task Name	Start	Finish	Late Start	Late Finish	Free Slack	Total Slack
82		**7.0 Testing Docum**	**Fri 25-05-30**	**Thu 25-07-31**	**Fri 25-05-30**	**Thu 25-07-31**	**0 days**	**0 days**
83		7.1 Test Plan	Fri 25-05-30	Tue 25-06-10	Tue 25-07-22	Fri 25-08-01	37 days	37 days
84		7.2 Test Cases	Wed 25-06-11	Mon 25-07-21	Mon 25-06-23	Fri 25-08-01	8 days	8 days
85		7.3 Test Results	Tue 25-07-22	Thu 25-07-31	Tue 25-07-22	Fri 25-08-01	0 days	0 days
86		Main Deliverable	Thu 25-07-31	Thu 25-07-31	Fri 25-08-01	Fri 25-08-01	1 day	1 day
87								
88		**8.0 User Manuals**	**Fri 25-08-01**	**Wed 25-08-20**	**Fri 25-08-01**	**Wed 25-08-20**	**0 days**	**0 days**
89		8.1 Customer M	Fri 25-08-01	Wed 25-08-20	Fri 25-08-01	Thu 25-08-21	0 days	0 days
90		8.2 Employee H	Fri 25-08-01	Wed 25-08-20	Fri 25-08-01	Thu 25-08-21	0 days	0 days
91		8.3 Administrat	Fri 25-08-01	Wed 25-08-20	Fri 25-08-01	Thu 25-08-21	0 days	0 days
92		Main Deliverable	Wed 25-08-20	Wed 25-08-20	Thu 25-08-21	Thu 25-08-21	1 day	1 day
93								
94		**9.0 Training Mate**	**Thu 25-08-21**	**Fri 25-09-19**	**Thu 25-08-21**	**Fri 25-09-19**	**0 days**	**0 days**
95		9.1 Internal Em	Thu 25-08-21	Wed 25-09-10	Mon 25-09-01	Mon 25-09-22	7 days	7 days
96		9.2 External Par	Thu 25-08-21	Wed 25-09-10	Mon 25-09-01	Mon 25-09-22	7 days	7 days
97		9.3 Improvemer	Thu 25-09-11	Fri 25-09-19	Thu 25-09-11	Mon 25-09-22	0 days	0 days
98		Main Deliverable	Fri 25-09-19	Fri 25-09-19	Mon 25-09-22	Mon 25-09-22	1 day	1 day
99								
100		**10.0 Marketing M**	**Mon 25-09-22**	**Sun 25-10-19**	**Mon 25-09-22**	**Sun 25-10-19**	**0 days?**	**0 days?**
101		10.1 Promotion	Mon 25-09-22	Fri 25-09-26	Mon 25-10-13	Sun 25-10-19	15 days	15 days
102		10.2 Issurance r	Mon 25-09-29	Mon 25-09-29	Fri 25-10-17	Sun 25-10-19	14 days	14 days
103		10.3 Social Med	Tue 25-09-30	Sun 25-10-19	Tue 25-09-30	Sun 25-10-19	0 days	0 days
104		10.4 Case Studi	Fri 25-10-10	Sun 25-10-19	Fri 25-10-10	Sun 25-10-19	0 days	0 days
105		Main Deliverable	Sun 25-10-19	Sun 25-10-19	Sun 25-10-19	Sun 25-10-19	1 day	1 day

Table 8-2 Schedule Analysis

Based on the above, we can clearly clarify the free slack (Amount of time an activity can be delayed without delaying the early start of any immediately following activities) and total slack (Amount of time an activity may be delayed from its early start without delaying the planned project finish date). The potential issues are as follows.

Timeline Tightness Issues:

The total time difference for some activities is relatively short. For example, the total time difference of "2.5.1 Negotiation of delivery service supplier" is only one day. This means that any unexpected delay in the event, even if it is just a little more than a day, is likely to affect the overall progress of the project. Because it doesn't have much buffer able time to deal with unexpected situations.

Some sequential sequences of activities with limited total time difference, such as "2.2.1 Issuance of documents to potential suppliers" (10 days), "2.2.2 Receipt of documents and feedback from suppliers" (7 days), "2.2.3 Preliminary supplier assessment" (4 days). If one of these activities is delayed, subsequent activities may not be able to flow smoothly as originally planned due to time constraints, which in turn will affect the progress of the entire procurement process and other project parts that rely on the procurement results.

Resource Allocation & Coordination Risk:

During the selection and related operations involving multiple service providers (e.g., 2.4 Selection list of Suppliers and its subsequent related tasks), it may be necessary to deploy multiple resources, including human resources, time resources, etc. There may be resource competition between different vendors for related tasks. For example, it may be necessary to evaluate and contract different types of service providers (IT, equipment, after-sales services) at the same time. Improper allocation of resources may lead to delays in the inadequacy of resources for certain tasks.

Specific technical and storage space resources may be required for sections like database design (6.0 Database Design) that involve a variety of data storage-related tasks (e.g., 6.2.1

Customer Information Storage, 6.2.2 Order Data Storage, 6.2.3 Supply Chain Data Storage). Resource shortages can occur if these resources are not properly planned and allocated during the project. This affects the progress of data storage-related tasks, which in turn affects the entire database design process.

Difficulty and uncertainty of technical implementation:

In 3.0 Website, Applet, and Mobile Application related tasks, such as "3.1.2 Compatibility development" (26 days) and "3.1.3 Design" (40 days), it is necessary to ensure compatibility with different devices and operating systems. There may be technical difficulties, such as the difficulty of implementing compatibility with some new technologies. If it is not effectively addressed, it may lead to a longer development time and affect the overall progress of the project.

For the 5.0 Payment Security Module, it is necessary to meet multiple requirements such as support for multiple payment methods (35 days), compliance with encryption and security protocols (14 days), and compliance standards (6 days). If problems are encountered during the technical implementation, it can lead to delays in module development and affect the go-live time of the entire project, because the payment process is usually one of the key parts of the project's proper operation.

8.3 Alternative solutions to potential problems

✧ **Faster Delivery**

Parallel Development/Fast tracking

For the deliverables related to front-end development under "3.0 Website, Applet, and Mobile Application," which includes "3.1 Development" (encompassing "3.1.1 Function development" for 40 days, "3.1.2 Compatibility development" for 16 days, and "3.1.3 Design" for 40 days) as well as "3.2 Detection" for 20 days, these can be carried out in parallel with the back-end system development deliverables under "4.0 Back-end Systems," such as "4.1 Systems development" (including "4.1.1 Order Management System" for 20 days, "4.1.2 Supply Chain Management System," "4.1.3 Delivery Optimization System," and "4.1.4 Customer Analysis System" for 10 day).

While undertaking the functional design and development of the front-end application (3.1.1 Function development), the development of the back-end Order Management System (4.1.1 Order Management System) can also be initiated. This approach allows for the full utilization of time and reduces the overall duration required for development.

Since the total time needed to sequentially carry out these tasks would be longer, working in parallel can effectively shorten the project timeline.

Incremental Releases

For the overall project outcome of "3.0 Website, Applet, and Mobile Application", you can adopt an incremental release strategy. First, build on the core functionality for the first release, such as making sure that the key business features in "3.1.1 Function development" are working properly and released.

Then, as the project progresses, additional features are gradually added. For example, in a later phase, the compatibility features on different devices and operating systems involved in "3.1.2 Compatibility development" and some optimized design elements in "3.1.3 Design" are added. This allows users to get in touch with the core parts of the product earlier, and at the same time, they can adjust and improve the development of new features in a timely manner based on user feedback, and accelerate the overall project delivery and marketing process.

✧ **Cost Reduction**

Open-Source Solutions

In the development of "3.0 Website, Applet, and Mobile Application" and "4.0 Back-end Systems", open source solutions can be leveraged for some of the basic technical frameworks and tools, if feasible. For example, in the development of database design (6.0 Database Design), for the data storage (6.2 Storage, including "6.2.1 Customer Information Storage" 180 days, "6.2.2 Order Data Storage" 180 days, "6.2.3 Supply Chain Data Storage" 70 days), If there is a suitable open source database management system that can meet the needs of the project, it can be adopted, which can significantly reduce the cost of software licensing, and thus the cost of the project.

Efficient Resource Management/Crashing

For example, the preparation of "9.0 Training Materials" allows those involved in 9.1 Internal Employee Training and 9.2 External Partner Training to assist each other and take on more diverse tasks. Consider the cost-effectiveness of internal and external personnel to optimize resource allocation and reduce costs.

✧ **Risk Reduction**

Regular Progress Reviews

Progress reviews should be conducted on a weekly basis for all of the deliverables enumerated above. Taking the sub-tasks in "3.1 Development" as an example, you can check the progress of tasks such as "3.1.1 Function development" for 40 days, "3.1.2 Compatibility development" for 26 days, and "3.1.2 Design" for 40 days in the weekly progress review, so as to find out whether there are problems such as development progress lag and technical problems.

Similarly, for "2.5 Contract signing" and its associated series of deliverables, weekly progress reviews provide a timely understanding of whether there are disagreements, delays, etc. in the negotiation and signing process. In the end, it will be resolved in a timely manner to ensure that the overall progress of the project is not affected.

9. Resource Management Plan

9.1 Project Organization Chart

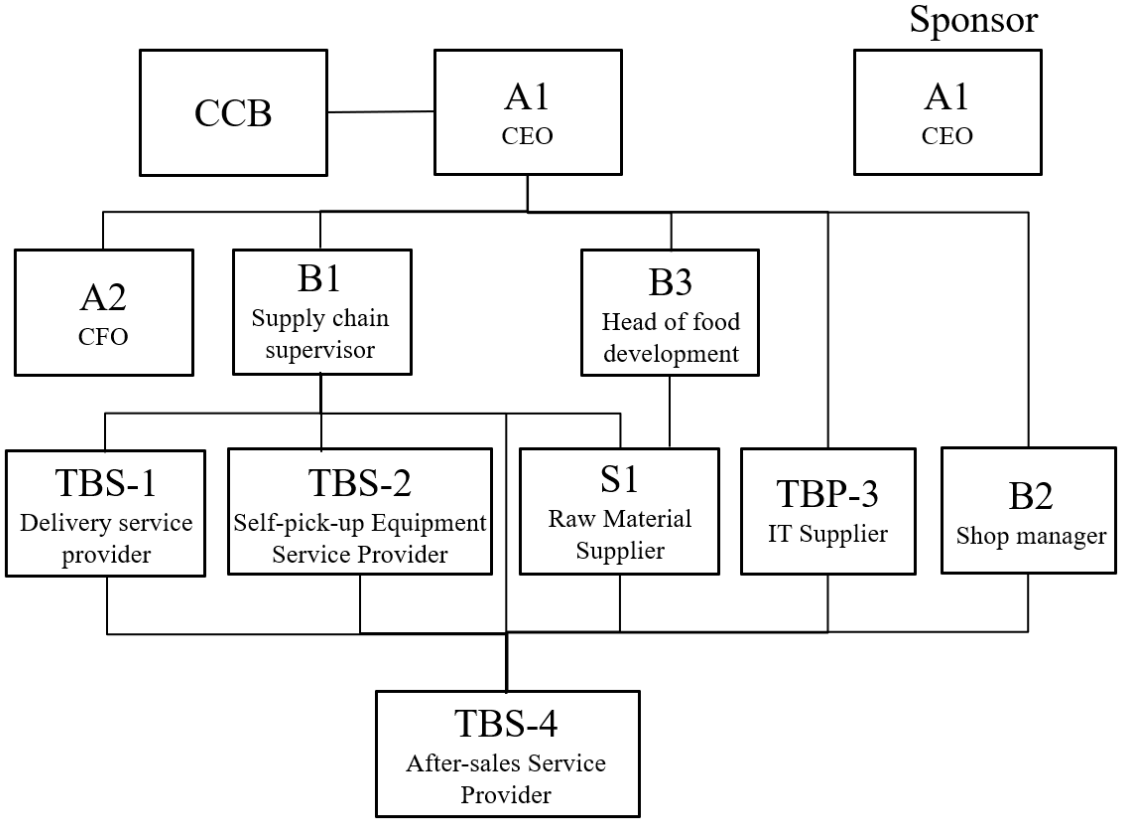


Table 9-1 Project organization chart

9.2 Resource Assignment

Here we use RAM, which is RACI Chart.

Tasks	A1	A2	B1	B2	B3	S1	TBP-1	TBP-2	TBP-3	TBP-4
Requirement Analysis	R A	C	I	C	C	I	I	I	C	I
Budget Planning	C	R A	C	C	I	I	I	I	I	I
Contract Negotiation with Suppliers	A	I	R	I	I	I	C	C	C	I
Systems Development (Order Management, SCM, Delivery Optimization, Customer Analysis)	A C	C	I	I	I	I	I	I	R	I
Payment Security Module	I	A C	I	I	I	I	I	I	R	I
Database Design	A C	C	I	I	I	I	I	I	R	I
Testing and Quality Assurance	A	C	I	C	I	I	I	I	R	I
User Manuals and Training Materials	A C	C	I	R	I	I	I	I	I	I
Marketing and Promotion	C	R A	I	I	I	I	I	I	I	C

Table 9-2 RACI Chart

9.3 Staffing Plan

Project Name: 'Solo' Fresh Food Service Project

Introduction:

Staffing Requirements: This project will require the following internal staff:

- Project manager (PM, A1)
- Project team member of Financial Officer (FO, A2) to help ensuring the company's financial health and stability.
- Project team members from Supply chain department (SC, leading by B1) to help with developing supply chain storage system.
- Project team members from Shop department (Shop, leading by B2) to help with the offline shops and sales, and other offline-related matters.
- Project team members from Food Development department (FD, leading by B3) to help create recipes and decide raw materials.
- This project will require the following external staff which is important:
- IT service supplier (IT, leading by TBP-3) staff to develop IT services and platform.

Staff Assignments:
The project manager will liaise with functional managers to allocate personnel to the project. The project manager will conduct interviews with potential candidates to ascertain suitability. If specific expertise is required for a portion of the project, the functional managers will arrange for experts to be made available. Employees will be compensated for overtime work as necessary.

Training, Rewards, and Reassignment:
Those assigned to this project should have the requisite experience or be willing to learn the necessary skills rapidly on the job. The project manager will endeavor to provide a challenging and enjoyable work environment. Please note that assignment to the project will not affect an individual's salary. However, the project manager will write a performance evaluation and recommend appropriate rewards. Should an individual's performance fall below the expected standard, the project manager will collaborate with the relevant functional manager to ascertain whether adjustments can be made or if reassignment is the most appropriate course of action.

9.4 Resource Histogram

		Month											
Type of resource	**Meaning**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
PM	Project Manager	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
FO	Financial Officer	0.75	1	0	0	0.5	0	0.15	0.15	0	0	0.25	0.5
SC	Supply Chain	0.25	0	0	0	0.25	0.75	1	0.25	0.25	0.15	0.5	0.5
Shop	Shop	1	0.15	0.15	0.15	0.25	0	0	1	1	1	0.5	0.5
FD	Food Development	0.25	0	0	0	0.25	0	0	0	0	0.25	0.5	0.5
IT	IT Service Supplier	0	0.15	1	1	1	1	1	0.25	0.25	0	0	0

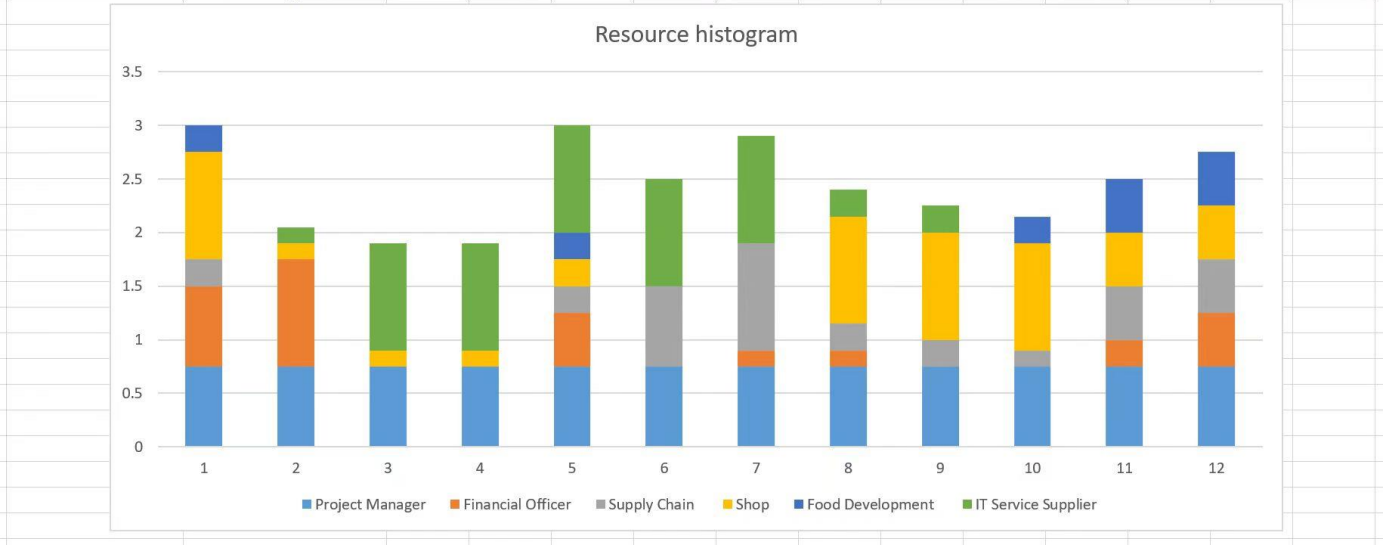


Table 9-3 Resource Histogram

9.5 Change Control Board (CCB)

CCB, a formal group of people responsible for approving or rejecting changes to a project. CCBs provide guidelines for preparing change requests, evaluating change requests, and managing the implementation of approved changes. Here includes key stakeholders in the 'Solo' Fresh Food Service Project.

Name	Position	Change Control Board Role	Contact Information
A1	CEO	Board Chair	a1@companyA.com
A2	CFO	Board Member	a2@companyA.com
B1	Supply Chain Supervisor	Board Member	b1@companyA.com
P0	Project Manager	Board Co-Chair	P0@ExquisiteCH.hk
B3 (as needed)	Head of Food Development	Board Member	b3@companyA.com
TBP-3 (as needed)	Head of IT Provider	Board Member	To be determined

Table 9-4 CCB

The CCB will meet every Wednesday to review all change requests submitted by project team members or stakeholders.

The Project Manager, P0, will record each request in a designated change log upon submission. Approval of a change request requires agreement from ≥ 3 members (Except for the change proposer himself) of the CCB.

However, if Chairperson A1 opposes the request, it will not be approved, regardless of the majority vote. If additional information is needed, the request will be delayed and returned to the originator for clarification.

In cases of urgent or critical changes, particularly those that could influence the project's overall success, the Chairperson may convene an ad hoc meeting of the Board to address the matter promptly.

9.6 Resource Issue

Here gives some potential resource issues that might happened during project, and the way to address them.

1. Communication and Coordination:

- Issue: Ineffective communication between internal and external stakeholders can lead to delays, misunderstandings, and misalignment of goals.
- Solution: Implement a clear communication plan with regular meetings, status updates, and a centralized project management platform. Assign a project manager responsible for coordinating between all parties and ensuring everyone is on the same page.

2. Budget Constraints:

- Issue: The project may exceed the allocated budget due to unforeseen costs or scope creep.
- Solution: Conduct a thorough cost analysis at the beginning of the project and establish a contingency fund for unexpected expenses. Regularly review the budget and make adjustments as needed. Prioritize features based on their importance and cost-effectiveness.

3. Time Constraints:

- Issue: The project may not be completed on time due to delays in development, testing, or integration with external systems.
- Solution: Create a detailed project timeline with realistic deadlines. Break the project into smaller, manageable tasks with clear milestones. Regularly monitor progress and identify potential bottlenecks. Implement agile methodologies to allow for flexibility and adaptability.

4. Technical Expertise:

- Issue: The company may lack the necessary technical skills to develop and maintain the online platform.
- Solution: Hire experienced developers and designers or partner with a reputable IT company. Invest in training and development for existing employees. Utilize open-source technologies and third-party solutions to reduce development time and costs.

5. Integration with External Systems:

- Issue: Integrating the online platform with existing systems like supply chain management, inventory management, and payment gateways can be complex and time-consuming.
- Solution: Work closely with the IT provider and external service providers to ensure seamless integration. Develop APIs and data exchange protocols to facilitate communication between systems. Conduct thorough testing to identify and resolve any integration issues.

6. Scalability:

- Issue: The platform may not be able to handle increased traffic and user demand as the business grows.
- Solution: Design the platform with scalability in mind. Use cloud-based solutions and scalable infrastructure to accommodate future growth. Regularly monitor performance and make necessary upgrades to ensure optimal performance.

7. Customer Acquisition and Retention:

- Issue: Attracting and retaining customers in a competitive market can be challenging.
- Solution: Develop a comprehensive marketing strategy to promote the online platform and its unique value proposition. Offer incentives for first-time users and referral programs. Focus on providing exceptional customer service and a seamless user experience. Use analytics tools to understand customer behavior and preferences and tailor the platform accordingly.

10. Cost Estimates / Cost Baseline

WBS Categories	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total Cost
1.0 Requirements Documentation													
1.1 launch ceremony	$1,000.00												$1,000.00
1.2 Surveys on requirements													
1.2.1 Past sales records	$500.00												$500.00
1.2.2 Interviews	$1,500.00												$1,500.00
1.2.3 Questionnaire investigation	$1,000.00												$1,000.00
1.3 Requirement analysis	$1,500.00												$1,500.00
1.4 Completion of documentation	$1,000.00												$1,000.00
1.5 Inspect	$500.00												$500.00
Main Deliverable 1													
2.0 Procurement													
2.1 Preliminary procurement documentation													
2.1.1 Shortlisting of potential suppliers		$5,000.00											$5,000.00
2.1.2 Drafting of initial procurement strategy													
2.2 Preliminary selection list of Suppliers													
2.2.1 Issuance record of documents to potential suppliers		$5,000.00											$5,000.00
2.2.2 Receipt of documents and feedback from suppliers		$7,000.00											$7,000.00
2.2.3 Preliminary supplier assessment		$8,000.00											$8,000.00
2.3 Legal documentation draft													
2.3.1 Drafting of contracts and agreements		$20,000.00											$20,000.00
2.3.2 Legal compliance checks		$10,000.00											$10,000.00
2.4 Selection list of Suppliers													
2.4.1 Evaluation and selection of delivery service supplier		$15,000.00											$15,000.00
2.4.2 Evaluation and selection of pick-up equipment service supplier		$10,000.00											$10,000.00
2.4.3 Evaluation and selection of IT service supplier		$10,000.00											$10,000.00
2.4.4 Evaluation and selection of after-sales service supplier		$10,000.00											$10,000.00
2.5 Contract signing													
2.5.1 Negotiation of delivery service supplier		$1,000.00											$1,000.00
2.5.2 Negotiation of pick-up equipment service supplier		$1,000.00											$1,000.00
2.5.3 Negotiation of IT service supplier		$1,000.00											$1,000.00
2.5.4 Negotiation of after-sales service supplier		$1,000.00											$1,000.00
2.5.5 Contract signing of delivery service supplier		$1,000.00											$1,000.00
2.5.6 Contract signing of pick-up equipment service supplier		$1,000.00											$1,000.00
2.5.7 Contract signing of IT service supplier		$1,000.00											$1,000.00
2.5.8 Contract signing of after-sales service supplier		$1,000.00											$1,000.00
2.6 Onboarding and Integration into Project													
2.6.1 Onboard record of delivery service supplier		$10,000.00											$10,000.00
2.6.2 Onboard record of equipment service supplier		$12,000.00											$12,000.00
2.6.3 Onboard record of IT service supplier		$10,000.00											$10,000.00
2.6.4 Onboard record of after-sales service supplier		$10,000.00											$10,000.00
Main Deliverable 2													
3.0 Website, Applet, and Mobile Application													
3.1 Development													
3.1.1 Function development		$1,666.67	$38,333.33										$40,000.00
3.1.2 Compatibility development				$30,000.00									$30,000.00
3.1.3 Design		$1,250.00	$28,750.00										$30,000.00
3.2 Detection				$30,000.00									$30,000.00
Main Deliverable 3													

4.0 Back-end Systems													
4.1 Systems development													
4.1.1 Order Management System		$1,818.18	$41,818.18	$36,363.64									$80,000.00
4.1.2 Supply Chain Management System													
4.1.2.1 Define pick-up equipment type and locations		$2,666.67	$37,333.33										$40,000.00
4.1.2.2 Optimize supply chain processes			$11,538.46	$25,641.03	$12,820.51								$50,000.00
4.1.3 Delivery Optimization System													
4.1.3.1 Analyze delivery range and routes		$1,333.33	$18,666.67										$20,000.00
4.1.3.2 Optimize delivery schedules			$4,615.38	$10,256.41	$5,128.21								$20,000.00
4.1.4 Customer Analysis System			$9,230.77	$20,512.82	$10,256.41								$40,000.00
4.2 Inspect					$10,000.00								$10,000.00
4.3 Operation of systems					$250,000.00								$250,000.00
Main Deliverable 4													
5.0 Payment Security Module													
5.1 Support for multiple payment methods			$13,333.33	$6,666.67									$20,000.00
5.2 Encryption and Security Protocol				$42,857.14	$17,142.86								$60,000.00
5.3 Compliance Standards					$10,000.00								$10,000.00
5.4 Module review					$10,000.00								$10,000.00
Main Deliverable 5													
6.0 Database Design													
6.1 Development					$4,347.83	$95,652.17							$100,000.00
6.2 Storage													
6.2.1 Customer Information Storage							$30,000.00						$30,000.00
6.2.2 Order Data Storage							$20,000.00						$20,000.00
6.2.3 Supply Chain Data Storage							$10,000.00						$10,000.00
6.3 Inspect							$20,000.00						$20,000.00
Main Deliverable 6													
7.0 Testing Documentation													
7.1 Test Plan							$2,500.00	$17,500.00					$20,000.00
7.2 Test Cases								$12,068.97	$12,931.03				$25,000.00
7.3 Test Results									$15,000.00				$15,000.00
Main Deliverable 7													
8.0 User Manuals													
8.1 Customer Manual										$15,000.00			$15,000.00
8.2 Employee Handbook										$10,000.00			$10,000.00
8.3 Administrator's Manual										$15,000.00			$15,000.00
Main Deliverable 8													
9.0 Training Materials													
9.1 Internal Employee Training										$18,666.67	$21,333.33		$40,000.00
9.2 External Partner Training										$14,000.00	$16,000.00		$30,000.00
9.3 Improvement based on training results											$20,000.00		$20,000.00
Main Deliverable 9													
10.0 Marketing Materials													
10.1 Promotion brochure											$5,000.00		$5,000.00
10.2 Issurance record of web and application											$10,000.00		$10,000.00
10.3 Social Media Activities											$1,071.43	$13,928.57	$15,000.00
10.4 Case Studies and Customer Recommendations												$10,000.00	$10,000.00
Main Deliverable 10													
Total	$7,000.00	$158,734.85	$203,619.45	$202,297.71	$329,695.82	$95,652.17	$82,500.00	$29,568.97	$27,931.03	$72,666.67	$73,404.76	$23,928.57	$1,307,000.00

11. Quality Assurance Plan

11.1 Quality requirements of the project

Based on the project introduced in the project background and the quality of the actual IT project requirements, we give the following points:

Scope aspects of IT projects

Functionality - User-friendliness:

Untrained users should be able to complete the order within 5 minutes according to the user manual. This ensures that the operation meets the goal of providing users with convenient online ordering experience in the project background.

Performance - Responsiveness:

To ensure seamless user experience, over 90% of transactions, categorized into query and update types, should achieve an average response time of no more than 2 seconds, with consideration given to system load.

Performance - Availability:

The system should maintain an availability rate exceeding 95% during the initial 6 months, with the goal of reaching over 99.5% thereafter. Additionally, the Mean Time to Repair (MTTR) should be less than 1.5 hours during the first 6 months and less than 1 hour in the subsequent periods. High availability is essential to ensure that users can reliably access the online food ordering platform when needed.

Reliability - No. of Bugs:

Critical errors, classified as severity level 1, should be strictly avoided. Errors of severity level 2 must be addressed and resolved within a timeframe of 15 days. Having clear definitions for different severity levels of bugs helps to establish the acceptable range of system errors and ensures the stability of the system's operation.

Features - Scope of software to Deliver:

The software needs to be compatible with popular devices including computers, tablets and smartphones, as well as operating systems such as iOS, Android and Windows. It also needs to support payment methods commonly used by commuters (Octopus, WeChat, Alipay, Visa, MasterCard, etc.), and specific requirements are determined through surveys. Ensure that the software is available on a wide range of platforms and payment methods to cover more users.

System outputs - User Acceptance:

Before the system goes online, users can match the required ingredient combinations based on factors such as taste, specific ingredients, cooking skills, and dietary taboos.

Ability to place orders, deliver, pay online, and write order reviews online. The system can also track user usage patterns to provide personalized recommendations and plans to provide multilingual information and services. Specific requirements are determined through surveys. Meet the diverse needs of users in the ordering process and improve the user experience.

Maintainability - User Support:

After the system goes online, it needs to provide users with continuous support, including hotline support, FAQs, remote assistance and other services to solve problems encountered by users during use, such as product shortages and food problems. Ensure that problems encountered by users during the use of the platform can be solved in a timely manner.

Other requirements - Delivery Optimization:

The system uses intelligent computing systems to analyze single-person food orders in a specific area and optimize delivery routes. Centralized delivery improves delivery efficiency and reduces operating costs. Users can also choose flexible delivery methods and check delivery progress on the web page.

11.2 Quality Measurement Method

Quality Requirement	Measurement Method	Expert Judgment	Data Collection Techniques
User-friendliness	User operation testing	Evaluate design and functionality	User testing, satisfaction surveys
Responsiveness	Transaction response time	Assess system architecture	System monitoring, response time statistics
Availability	System uptime records	Reliability engineer assessment	Uptime tracking, MTTR recording
No. of Bugs	Defect management system	Quality assurance expert evaluation	Defect logging, severity categorization
Software Delivery Scope	Compatibility testing	Compatibility expert assessment	Target platform and payment method testing
User Acceptance	User Acceptance Testing (UAT)	UX expert insights	User operation simulation, feedback collection
User Support	User support request records	Customer service expert assessment	Support request count, type, resolution time logging
Delivery Optimization	Delivery route, time, cost data	Logistics and operations research expert assessment	Pre- and post-optimization data comparison

Table 11-1 Tools Used in Planning Quality

11.3 Quality Management Plan

To ensure that the project delivers the desired results, we have set up several activities to deal with it. Several quality assurance plan walk-throughs and review points were set up in the project, including 1.5, 3.2, 4.2, 5.4, 6.3, 7, 9.3 and so on in WBS. Inspections and reviews are carried out at these critical points to ensure that each task meets quality requirements.

QC Activities

- Testing Documentation: Develop detailed test plans (7.1), test cases (7.2), and check test results (7.3) to identify and resolve issues through comprehensive testing.
- 2.3.2 Legal compliance checks is to review relevant laws and regulations thoroughly. This helps verify all business operations and documentation to ensure full compliance and avoid potential legal risks

QA Activities

- User Manuals: Write user manuals (8.1 - 8.3) to ensure that users understand how to use the system, and to identify potential problems in the user interface and operating processes through the process of writing manuals.
- Training Materials: Prepare internal staff training (9.1) and external partner training materials (9.2) and make improvements based on the training results (9.3) to ensure that relevant personnel can operate and maintain the system correctly.
- Continuous Monitoring and Feedback: During the operation of the project, continuously monitor the performance indicators of the system, collect user feedback, and find and solve problems in a timely manner.

11.4 Control Quality

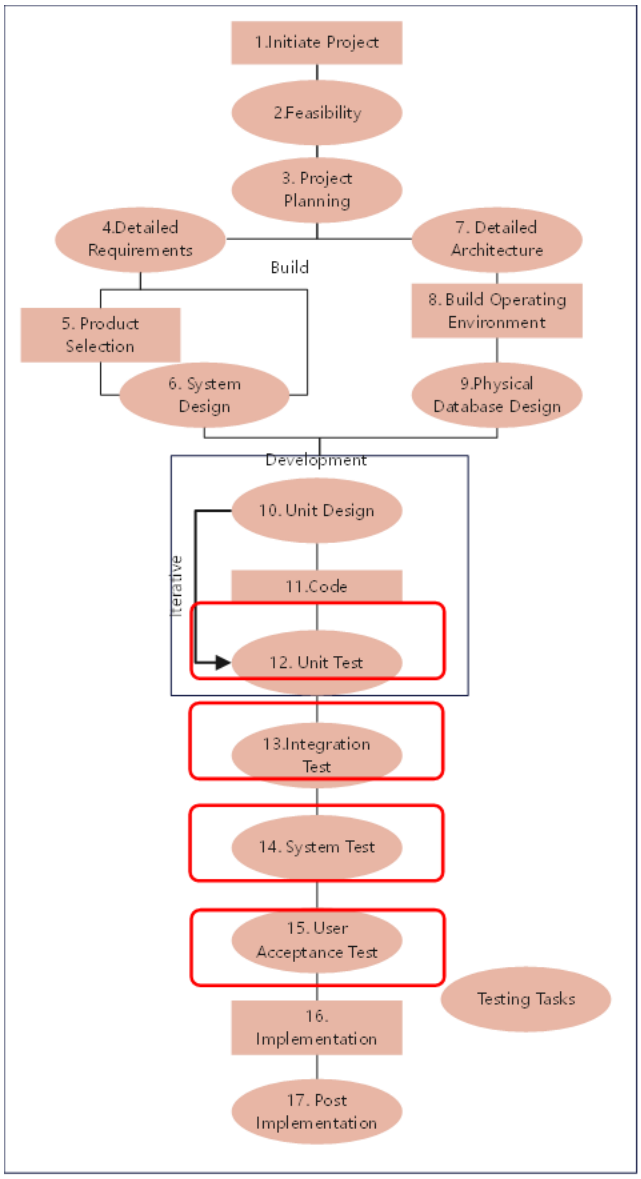


Table 11-1 SDLC

11.5 Quality deliverables

- **1.5 Inspect** (Requirements Document Stage): Check whether the requirements document contains content related to quality requirements such as user-friendliness and software delivery scope, so as to avoid unclear requirements or non-compliance with quality requirements in the subsequent development process.
- **2.3.2 Legal compliance checks**
- **3.2 Detection** (website, Mini Program and mobile application development stage):

After the development of websites, Mini Programs and mobile applications is completed, the inspection is carried out, mainly to check whether their functions meet the design requirements, whether they meet the quality standards such as user-friendliness and responsiveness. For example, a hands-on test is used to check whether the user is able to complete the order and search within the allotted time, and that the app's response time is acceptable.

- **4.2 Inspect** (Backend System Development Phase): Check the availability of the backend system under high load and whether there are any errors that may affect the normal operation of the system.
- **5.4 Module review:** Check whether the payment security module can securely process the user's payment information and prevent information leakage and payment risks.
- **6.3 Inspect** (Database Design Phase): Check after the database design is completed to ensure that the database can correctly store and manage user information, order data, and meet data integrity and security requirements.
- **7** (Test Documentation Stage): Includes the examination of test plans, test cases, and test results. The test plan (7.1) ensures that the individual functional and quality requirements of the project are fully covered, the test cases (7.2) provide specific operational steps and expected results for the test, and the test results (7.3) are used to assess whether the project meets the quality standards. Through a rigorous review of test documentation, potential issues in the project can be effectively identified and resolved.
- **9.3 Improvement based on training results:** If employees are found to be confused about certain operating processes during the training process, the training materials can be modified and improved in time. At the same time, we can also find out the possible quality problems of the project from the training feedback and solve them.

12. A Risk Register with Response Planning & Probability/Impact Matrix

12.1 Risk Register & Five Sample Risks

No.	Rank	Risk	Description	Category	Root Cause	Triggers	Potential Responses	Risk Owner	Probability	Impact	Status
R1	1	Competition from Existing Players	The project faces competition from well-established companies and apps in the Hong Kong market that already have a significant customer base for delivery meal packages.	Market	Established players with strong market presence	Launch of similar services or products by competitors	Continuously innovate and improve offerings. Enhance customer loyalty through personalized services and promotions. Monitor competitor moves and adjust strategies accordingly.	A1 (CEO)	High	High	Outstanding
R2	2	Technical Implementation Failures	Due to technical complexities, the development of the online ordering system, mobile app, and related technical components may experience delays or defects.	Technical	Complexity in system development and integration	Technical challenges during development or integration phases	Conduct thorough testing and quality assurance. Utilize agile development methodologies for flexibility. Have a contingency plan for alternative technical solutions.	TBP-3 (Head of IT Provider)	Medium	High	Outstanding
R3	3	Inadequate Supplier Management	The project relies on multiple suppliers for raw materials, delivery services, and equipment, and any failure in supplier performance can affect the project timeline and quality.	Supply Chain	Dependency on external suppliers	Poor performance or delay by suppliers	Establish strict supplier evaluation and selection criteria. Monitor supplier performance regularly. Maintain alternative supplier options.	S1 (Head of Raw Material Supplier) , TBP-1 (Head of Delivery Service Provider) , TBP-2 (Head of Pick-up Equipment Service Provider)	Medium	Medium	Outstanding
R4	4	Payment Security Breaches	The online payment system can be vulnerable to security breaches, resulting in potential financial loss and company reputation damage.	Financial	Vulnerability in payment systems	Hacker attacks or system bugs	Implement robust encryption and security protocols. Conduct regular security audits and updates. Provide timely communication to customers in case of a breach.	TBP-3 (Head of IT Provider)	Low	High	Outstanding
R5	5	Customer Resistance to New Technology	Customers may be resistant to adopting the new online ordering system, preferring traditional methods of ordering food.	Customer	Resistance to change or unfamiliarity with technology	Lack of customer awareness or trust in the new system	Conduct marketing campaigns to educate customers about the benefits of the new system. Offer incentives for early adoption. Collect customer feedback and make necessary improvements.	A1 (CEO) , B2 (Shop manager)	Low	Medium	Outstanding

Table 12-1 Risk Register

12.2 Probability/Impact Matrix

Probability/Impact Matrix for
'Solo' Fresh Food Service

Probability	low	medium	high
high			risk 1
medium		risk 3	risk 2
low		risk 5	risk 4

Impact

Table 12-2 Probability/Impact Matrix

13. Communications and Stakeholders Management Plan

13.1 Communications Management Plan

1. Introduction

Communications Management Plan systematically plans communication management during the project development process, enabling stakeholders to receive timely and accurate information, which is a guarantee of efficiency.

2. Collection and filing structure for gathering and storing project information

standardized templates and tools (e.g. progress reports, meeting minutes, risk logs)
centralized location (e.g. shared drive, project management software)

3. Distribution structure (what information goes to whom, when, and how)

A1 (CEO): Monthly executive summary via email.
A2 (CFO): Monthly financial report via email.
B1 (Supply Chain Supervisor): Bi-weekly procurement report via email.
P0 (Project Manager): Daily risk log via project management tool.

4. Format, content, and level of detail of key project information

Executive Summary: PDF, high-level project overview (for A1).
Financial Report: PDF, detailed financial breakdown (for A2).
Procurement Report: Excel, supplier performance and inventory levels (for B1).
Risk Log: Word or project management tool, detailed risks, mitigations, and owners (for P0).

5. Production schedule and resources for producing key project information

Executive Summary: Produced by Project Manager (P0), reviewed by A1.
Financial Report: Produced by Finance Team, reviewed by A2.

Risk Log: Updated daily by Project Manager (P0) and reviewed by key stakeholders.

6. Technologies, access methods, and frequency of communications

Project Management Tool (e.g. Jira): Daily status updates and risk logs.

Video Conferencing (e.g. Zoom): Weekly or monthly meetings.

Shared Drive (e.g. OneDrive): Centralized storage of reports and meeting minutes.

7. Method for updating the communications management plan

Quarterly Review: Led by Project Manager (P0)

Stakeholder Input: Collected via surveys or meetings

Documented Changes: Published on shared drive

8. Escalation procedures

Notify Project Manager (P0).

If unresolved within 24 hours, escalate to Steering Committee.

If unresolved, escalate to A1 (CEO) or A2 (CFO) for executive intervention.

9. Stakeholder communications analysis

Stakeholders	**Document Name**	**Document Format**	**Contact Person**	**Due Date**
A1 (CEO)	Executive Summary	PDF/Email	P0 (Project Manager)	Monthly
A2 (CFO)	Financial Report	PDF/Email	Finance Officer	Monthly
B1 (Supply Chain Supervisor)	Procurement Report	Excel/Email	Procurement Team	Bi-weekly
B2 (Shop Manager)	Operational Update	Word/Email	Operations Team	Monthly

B3 (Head of Food Development)	Product Development Update	Word/Email	Product manager	Monthly
S1 (Raw Material Supplier)	Supply Chain Schedule	Excel/Email	Procurement Team	Bi-weekly
TBP-1 (Delivery Service Provider)	Delivery Schedule	Excel/Email	Logistics Team	Weekly
TBP-2 (Pick-up Equipment Provider)	Equipment Maintenance Report	Word/Email	Operations Team	Monthly
TBP-3 (IT Provider)	System Status Report	PDF/Email	IT Team	Weekly
TBP-4 (After-Sales Service Provider)	Customer Feedback Analysis	Excel/Email	Customer Support Team	Monthly
P0 (Project Manager)	Risk Log	Word/Project Tool	P0	Daily

10. Glossary of terms

Executive Summary: Overview of progress, risks, and financial status.

Risk Log: A document tracking project risks and strategies.

Project Management Tool: Software used to manage tasks, timelines, and resources, such as Jira.

13.2 Stakeholders Management Plan

Name	Level of Interest	Level of Influence	Potential Management Strategies
A1 (CEO)	High	High	A1 believes that the project needs to maintain a high degree of consistency with the long-term goals. A1 advocates relatively simple and data-driven business analysis and promotion. The project team needs to have regular face-to-face briefings with A1.
A2 (CFO)	Medium	High	A2 is an experienced professional financial officer with a high level of rigor in budgeting and cost control. Meanwhile, A2 also has a relatively open attitude towards the various needs of project development. When submitting a reasonable request for additional expenses to A2, the project team needs to provide a well-reasoned and logical document.
B1 (Supply Chain Supervisor)	High	Medium	B1 has extensive experience in supply chain management. The project team needs to ensure that B1 receives supplier performance reports on time.
B2 (Shop Manager)	Medium	Medium	B2 is more concerned about the information density and practicality of plans in reports.
B3 (Head of Food Development)	High	Medium	B3 supports the development of project products, but may resist changes that may compromise quality. The project team needs to involve B3 relatively deeply in the process of updating the

Table 13-1 Stakeholders Management Plan

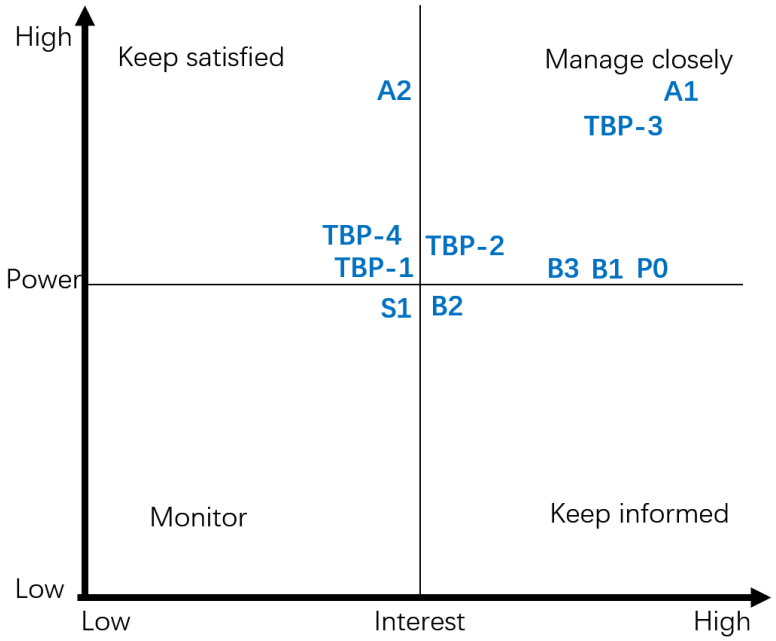


Table 13-2 Stakeholders Matrix

14. Procurement and Outsourcing Plan

Project Name: 'Solo' Fresh Food Service

Guidelines on Types of Contracts:
To minimize the company's risk during an office software upgrade project, we recommend using Firm-Fixed Price (FFP) as much as possible. A fixed-price contract means that the supplier will offer a fixed total price for a well-defined product or service, and this type of contract is the least risky for my company.

If the FFP contract is not so attractive to suppliers in the current market that we cannot select the right supplier in the planned timeframe, we can choose the Fixed Price Economic Price Adjustment (FP-EPA) method for encouraging the supplier to achieve the goal that we select the right supplier and that the supplier performs well during the work period.

The Fixed Price Incentive (FPI) method can be used if the cost of our year-long project changes due to inflation, etc.

Standard procurement documents or templates:
Global Construction's intranet site includes many sample documents and templates for project procurement. The project team will review these documents and templates and use them as often as possible.

Guidelines for creating procurement documents:
Global Construction's intranet site provides guidelines for creating many procurement documents. The Just-In-Time Training project team should review their current work breakdown structure and scope statement to provide the basis for contract work breakdown structures and statements of work.

Roles and responsibilities:
Project manager will lead the whole process of procurement, CEO will have the decision in selecting the supplier, CFO will control the cost of the procurement process.
In addition, according to the reporting line, B1(Supply chain supervisor) will be involved in the introduction process of Delivery service provider, Pick-up equipment service provider, and after-sales service provider. B2(Shop manager) will be involved in the introduction process of after-sales service provider.

Selection of supplier:
In selecting suppliers, we will follow the steps and criteria below:

1. Preliminary procurement documentation and selection list of Suppliers:
   writing RFI documents to understand internal requirements and list potential suppliers.
2. Preliminary supplier assessment:
   Evaluate the qualifications and capabilities of potential suppliers through tools such as the supplier assessment matrix, including but not limited to their financial stability, technical expertise, past performance and project management experience.

3. Request for Proposal (RFP):

   Send a request for proposal to potential suppliers, asking them to provide solutions and quotes to meet the project requirements.
4. Evaluation and selection:

   Evaluate the proposals submitted by vendors to ensure that they understand the project requirements and can provide products and services that meet the criteria. Based on the results of the evaluation, select the vendor that best meets the project needs and budget.
5. Negotiation& contract signing:

   Negotiate and sign a contract with the selected supplier, clarifying the rights and obligations of both parties to ensure the smooth implementation of the project.

Through the above steps, we can ensure that the procurement management of the Efficient Office Software upgrade project is both efficient and in line with the company's risk management strategy.

The RFP document is below, combining the previous sections such as WBS, project schedule, etc., and will explain in more detail how to select suppliers:

Appendix 2. Request for Proposal (RFP) Outline for Online Food Ordering Platform Project

I. Purpose of RFP

Soliciting proposals from eligible suppliers to help develop an online platform for Hong Kong local food company A.

II. Organization's Background

COMPANY A is a local food chain in Hong Kong, focusing on 'one-person' fresh food service for community workers, singletons, healthy eaters, etc..

III. Basic Requirements

The system shall make use of an intelligent computing system to analyze one-person food orders within a certain area, optimize delivery routes, centralize delivery, improve delivery efficiency and reduce operating costs. Users can also choose flexible deliveries (delivery time, delivery method, etc.) and the progress of deliveries can be viewed on the webpage. All the most specific needs should be derived from surveys and data analysis.

IV. Hardware and Software Environment

The software will be applicable to different types of platforms of our customer, including popular devices (computers, tablets and smartphones) and operating systems used (iOS, Android and Windows) as well as commonly used payment methods (Octopus, WeChat, Alipay, Visa, MasterCard, etc.) amongst commuters.

V. Description of RFP Process

- Submission of proposals from interested suppliers.
- Evaluation and selection of proposals.
- Negotiation & contract signing.

VI. Statement of Work and Schedule Information

Objective：

Successfully develop and launch the platform within the preset timeline and budget, and complete the operational preparation of the systemic solution.

Deliverables：

- Delivery service supplier: Defination of pick-up equipment type and locations（in the task of Back-end Systems）
- Pick-up equipment service supplier: Defination of delivery range and routes（in the

task of Back-end Systems）

- IT service supplier: Website, Applet, and Mobile Application, Back-end Systems, Payment Security Module, Database Design, Testing Documentation
- After-sales supplier: User Manuals, Training Materials, Marketing Materials

Milestone：

- Website, Applet, and Mobile Application: 2025/02/28
- Back-end Systems: 2025/03/31
- Payment Security Module: 2025/03/31
- Database Design: 2025/05/30
- Testing Documentation: 2025/07/31
- User Manuals: 2025/08/20
- Training Materials: 2025/09/19
- Marketing Materials: 2025/10/19

VII. Possible Appendices

A. Current System Overview
B. System Requirements
C. Volume and Size Data
D. Required Contents of Vendor’s Response to RFP
E. Model Contract

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Part II

1. Project Resource Plan

In order to ensure the efficient operation of our team and the smooth progress of the project, we have assigned roles and corresponding responsibilities to each member.

Person	Roles	Responsibilities
Jie GAO	Product Manager	1. Propose and participate in product design and innovation. 2. Lead agile project teams and manage team collaboration and task assignments. 3. Organize daily agile meetings, review meetings. 4. Maintain communication with stakeholders (in this case, professors and TA). 5. Monitor project progress and quality. 6. Prepare and refine project reports. 7. Drive continuous improvement and risk management.
Yeyu WU	Scrum Master	Focus on facilitates the Scrum process. 1. Supports the team in following Scrum practices. 2. Removes obstacles impeding the team's progress. 3. Encourages collaboration and continuous improvement.
Qinshu DU	Change Manager	1. Communication: communicate with the professor to ensure the project is realized in the right direction. - At the beginning of the project, organized the instruction file (from Canvas) and confirmed the details with the teacher; - During the project, together with the team leader, seek guidance from the professor after class to confirm the project details. 2. Documentation: some of the documentation works - Take notes during the Zoom meetings with the TA, and upload them to the WeChat group in time. - Record the key points of the project mentioned by the professor during class, and share them in the WeChat group (our group leader also done this part of the work). 3. Organization and Arrangement: - Took the initiative to organize the time and link of the first online kick-off meeting. As the management roles within the team were not yet

		clear at that time.
Ziyue HAN	Communications Manager	1. Attend team meetings and assist team leader and Scrum master in identifying details of project processes and guideline. 2. Compile the deliverables by referring to project guideline and prior documents, and adjust the content of deliverables based on the requirements of subsequent documents
Xiyuan MAI	Resource Manager	1. Develop resource plans to ensure timely completion of projects and optimize resource utilization efficiency. 2. Promote best practices in resource management and enhance the overall resource management capabilities of the organization.
Xiasi QI	Risk Manager	1. Identify and classify various risks that may affect organizational goals, conduct regular risk assessments and audits to ensure that new risks are identified in a timely manner. 2. Establish emergency response plans and management procedures to respond to unexpected events.

In addition, we also create a responsibility assignment matrix (RACI) based on the content learned in class.

Responsibility Assignment Matrix (RACI)

R: Responsible A:Accountable C:Consulted I:Informed						
Deliverables	**Jie GAO**	**Qinshu DU**	**Xiyuan MAI**	**Yeyu WU**	**Ziyue HAN**	**Xiasi QI**
Executive Summary	R	I	C	A	I	C
Company and Project Background	A	R	R	I	I	R
Project Charter	A	C	C	R	I	I
Key Stakeholders List	A	R	I	C	I	I
Project Management Plan	R	I	C	A	I	C
Scope Statement	A	C	I	C	R	C
Work Breakdown Structure	A	C	I	R	C	I
Project Schedule	A	R	C	C	I	I
Critical Path	R	C	I	A	C	C
Resource Management Plan	I	I	R	A	I	C
Cost Estimates	A	I	C	R	R	I
Quality Assurance Plan	R	I	C	A	I	R
Risk Register	I	I	R	A	I	I
Communications and Stakeholder	I	I	C	C	R	C

Management Plan						
Procurement and Outsourcing Plan	I	R	C	A	I	I
Bibliography	R	I	C	A	I	R

2. Project approach, schedule, and continuous update

2.1 Project approach

The project will follow an **Agile methodology** to ensure flexibility and adaptability, while utilizing the **Scrum framework** for iterative and collaborative team management. Below is the detailed project approach:

1. Framework Overview

- **Agile**: Emphasizes iterative development, collaboration, and continuous feedback.
- **Scrum**: Divides the project into Sprints (time-boxed iterations) with clear goals and deliverables. The Scrum Master facilitates the process to ensure productivity and alignment.

2. Key Roles

- **Scrum Master**: Responsible for guiding the team, removing roadblocks, and ensuring adherence to Scrum principles.
- **Product Owner**: Represents stakeholders, prioritizes deliverables, and ensures project objectives are met.
- **Scrum Team**: A cross-functional group of individuals responsible for developing and delivering high-quality outputs.

3. Iterative Development

The project will be divided into **five Sprints**, each with specific deliverables aligned to the overall project schedule:

Sprint	Date Range	Tasks
Sprint 1	September 2nd - September 16th, 2024	2. Company and Project Background 3. Project Charter 4. A List of Key Stakeholders
Sprint 2	September 16th - September 30th, 2024	5. Project Management Plan 6. Scope Statement 7. Work Breakdown Structure
Sprint 3	September 30th - October 27th, 2024	8. Project Schedule 9. Schedule Analysis 10. Resource Management Plan 11. Cost Estimates 12. Quality Assurance Plan

Sprint 4	October 27th - November 15th, 2024	13. A Risk Register with Response Planning 14. Communications and Stakeholders Management Plan 15. Procurement and Outsourcing Plan 16. Bibliography 1. Executive Summary

4. Agile Principles

- **Collaborative Decision-Making**: Team members and stakeholders participate in prioritizing tasks during Sprint Planning.
- **Daily Standups**: Brief daily meetings to sync progress, address blockers, and plan for the day.
- **Sprint Reviews**: At the end of each Sprint, progress is reviewed, and feedback is collected from stakeholders.
- **Retrospectives**: After each Sprint, the team reflects on what went well and identifies areas for improvement.

5. Tools and Documentation

- **Task Management**: Tools like Jira to track progress and manage tasks.
- **Communication**: Wechat or Microsoft Teams for team collaboration.
- **Progress Tracking**: Burndown charts to monitor Sprint completion and team productivity.

By combining Agile's flexibility with Scrum's structured processes, this approach ensures continuous delivery of high-quality results, effective risk management, and stakeholder satisfaction throughout the project lifecycle.

2.2 Project schedule and continuous update

Sprint	**Date**	**Agile Communications**	**Key Points**
sprint0	9.2	sprint planning	1. Team formation 2. Get to know team members 3. Familiarize with the project 4. Create Jira
	9.16	Jira training	1. Determine Jira site name 2. Decide on using Scrum
	9.23	daily scrum	1. How to collect requirements? Surveys, questionnaires, etc. 2. Deliverables are important 3. Change control process worth 3 marks

	9.25	daily scrum	1. Each person speaks about their understanding of the task + questions, while summarizing. 2. Discuss questions and provide solutions/our internal views. 3. Interpret task requirement documents and form a question document to ask the teacher
	9.26	sprint review	Ask the professor (stakeholder) for their views on related questions 1. Topics can be self-created, such as creating an e-commerce project for Company A
	9.26	sprint retrospective	Backlog Refinement
sprint1	9.27	sprint planning	2. Company and Project Background 3. Project Charter 4. A List of Key Stakeholders
	9.28	daily scrum	1. Choice of the project 2. Create deliverables on Jira
	9.29	daily scrum	1. Company and Project Background 2. A List of Key Stakeholders
	9.3	daily scrum	1. Invite professor, TA (stakeholder) to join Jira platform 2. Determine how we manage our tasks in Jira to complete the final report
	10.1	daily scrum	1. Remove the warehouse manager from stakeholders. The warehouse is part of the supply chain, and the warehouse manager is under the supply chain manager
	10.3	daily scrum	1. Clarify that the company does not have a web/app 2. Update project charter
	10.4	sprint retrospective	Compared to the time set on Jira, our actual sprint1 was delayed, but there are no deliverables to be moved to the next sprint and no new backlogs to create
sprint2	10.5	sprint planning	5. Project Management Plan 6. Scope Statement 7. Work Breakdown Structure
	10.14	daily scrum	1. Cost needs to use Bottom-up estimates
	10.18	daily scrum	1. Discuss Work Breakdown Structure
	10.21	sprint review	Discuss with TA about the issue of Missing backlog items, which is because we did not put them into the sprint, and they will disappear once marked as done
	10.21	sprint retrospective	No deliverables need to be moved to the next sprint and no new backlogs to create
sprint3	10.22	sprint planning	8. Project Schedule 9. Schedule Analysis 10. Resource Management Plan 11. Cost Estimates 12. Quality Assurance Plan

	10.23	daily scrum	1. Discussion and creation of Gantt chart 2. Use of MS Project
	10.24	daily scrum	1. All 16 items to backlog 2. Items 2-7 need to be in a closed state, according to normal progress 3. Scoring (table as shown), with corresponding points under each section Tips for final - 1. Check the consistency between different content, otherwise score would be deducted in the inconsistent one even if like WBS is right but the scope management is incorrect. Tips for final - 2. Don't miss a single point in the group assignment requirements. Check through the list.
	10.25	daily scrum	LLM template
	10.28	daily scrum	1. Minor adjustments to stakeholder functions: CEO: Supervise all departments Shop: All other offline related matters 2. Complete the LLM form (Tencent document, see previous chat records) 【Questions】 1. For Gantt chart and cost-related MS Project items, is a textual description needed in the report stage? Or just include images? (Ask the teacher during/after class today) 2. Item 12 not yet written Other issues have been resolved for now
	10.28	sprint retrospective	Due to incomplete tasks by team members, 12 (Quality Assurance Plan) needs to be moved to the next sprint
sprint4	10.28	sprint planning	12. Quality Assurance Plan 13. A Risk Register with Response Planning 14. Communications and Stakeholders Management Plan 15. Procurement and Outsourcing Plan 16. Bibliography 1. Executive Summary
	10.31	daily scrum	1. Summarize questions, prepare to ask TA, schedule a meeting
	11.4	daily scrum	On Tuesday night, everyone should organize their current parts of the document (word, images, excel, and other relevant materials) to the final version. On Wednesday morning, integrate the current content into a complete word document, have a meeting with the TA in the evening, and after the meeting, we will divide the remaining tasks. Finish the remaining parts of your tasks by this Sunday. Next week is for integration and creating PPT, as well as checking for consistency.

	11.5	daily scrum	Discussion on how to write Prompt Engineering
	11.6	daily scrum	Summarize issues 13-15
	11.9	sprint review	Zoom discussion with TA (stakeholder) on related issues
	11.11	daily scrum	Add procurement-related deliverables to WBS, and also change the corresponding Gantt chart, cost estimate, critical path analysis
	11.12	daily scrum	Uniform font and formatting
	11.13	daily scrum	Merge and adjust documents
	11.14	daily scrum	Jira summary and screenshots

3. Tools and Techniques

3.1 Backlog

During the development of part I, our team use Scrum methodology and Jira tool to support us. Jira is a very convenient and excellent tool. It supports real-time communication and collaboration among team members, such as task allocation, commenting, file sharing, etc., greatly improving our collaboration efficiency. Based on the client's situation and needs in Part I, we have created a backlog of all tasks for the client, as shown in the following pictures.

2. Company and Project Background	REVIEW		XM Xiyuan Mai
3. Project Charter	REVIEW		YW Yeyu Wu
4. List of Key Stakeholders	REVIEW		DQ Du Qinshu
5. Project Management Plan	REVIEW		JG Jie Gao
6. Scope Statement	REVIEW		ZH Ziyue Han
7. Work Breakdown Structure	REVIEW		YW Yeyu Wu
Group Project Document Request Discussion	REVIEW		YW Yeyu Wu
Ask questions about professors/TAs	REVIEW		DQ Du Qinshu
Brainstorming-Project Confirmation	REVIEW		JG Jie Gao

8. A Project Schedule	REVIEW		DQ Du Qinshu
9. Schedule Analysis	REVIEW		JG Jie Gao
10. Resource Management Plan	REVIEW		XM Xiyuan Mai
Sprint1 review	REVIEW		ZH Ziyue Han
Sprint2 review	REVIEW		齐遐思
11. Cost Estimates	REVIEW		YW Yeyu Wu
12. A Quality Assurance Plan	REVIEW		齐遐思
Sprint3 review	REVIEW		DQ Du Qinshu
13. A Risk Register with Response Planning	REVIEW		XM Xiyuan Mai
14. Communications and Stakeholders Management Plan	REVIEW		ZH Ziyue Han
15. Procurement and Outsourcing Plan	REVIEW		JG Jie Gao
16. Bibliography	REVIEW		JG Jie Gao
1. Executive Summary	REVIEW		JG Jie Gao
Sprint4 review	REVIEW		YW Yeyu Wu
Improve sprint review and retrospective	REVIEW		XM Xiyuan Mai
Sprint 1 Retrospective Meeting	REVIEW		ZH Ziyue Han
Change to the predictive method instead of the hybrid meth...	REVIEW		齐遐思
Tips for Resource Management Plan	REVIEW		YW Yeyu Wu
Sprint 2 Retrospective Meeting	REVIEW		JG Jie Gao
Feedback on 1st milestone	REVIEW		ZH Ziyue Han
Burndown chart for Sprint 1&2	REVIEW		DQ Du Qinshu
Discussion on Cost Estimates / Cost Baseline	REVIEW		齐遐思
Difficulties on using Microsoft Project	REVIEW		XM Xiyuan Mai
Postpone deliverables ralated to MS Project	REVIEW		JG Jie Gao
W4 - Weekly meeting	REVIEW		DQ Du Qinshu
Startup meeting for sprint 3	REVIEW		YW Yeyu Wu
W5 - Weekly meeting	REVIEW		XM Xiyuan Mai

W6 - Weekly meeting	REVIEW		ZH Ziyue Han
W7 - Weekly meeting	REVIEW		齐遐思
Postpone Sprint 3 due to the midterm exams/presentations ...	REVIEW		DQ Du Qinshu
W8 - Weekly meeting	REVIEW		YW Yeyu Wu
Make an appointment for professor zoom meeting in Week 9	REVIEW		JG Jie Gao
W8 - Feedback from professor (Important!!!)	REVIEW		ZH Ziyue Han
Tips for final - 1. Check the consistency between different co...	REVIEW		DQ Du Qinshu
Tips for final - 2. Don't miss a single point in the group assig...	REVIEW		XM Xiyuan Mai
Sprint 3 Retrospective Meeting	REVIEW		YW Yeyu Wu
Sprint 4 Retrospective Meeting	REVIEW		JG Jie Gao
LLM Prompt Application	DONE		ZH Ziyue Han

Among these tasks, the ones with serial numbers at the beginning are the proposal contents that we need to submit to the client. In addition to these main contents, we have also created various tasks that will help complete the project, such as weekly meetings, retrospective meetings, sprint reviews, and seeking advice from professors and teaching assistants.

It is necessary to prioritize the completion of these tasks to ensure the smooth implementation of the project.

For the tasks in the main text of the proposal, the first tasks that should be completed are tasks numbered 2, 3, and 4, which are the company background, project charter, and stakeholder list. They are the most fundamental and important part of this proposal, so they need to be completed as a top priority.
Then we can proceed with the progress of points 5 (Project Management Plan), 6 (Scope Statement), and 7 (Work Breakdown Structure).
Next is point 8 (Project Schedule), which is also a very important part. Only on this basis can we successfully complete the 9 (Schedule Analysis), 10 (Resource Management Plan), 11 (Cost Estimates), and 12 (Quality Assurance Plan).
Then we steadily advanced to complete points 13-16. Finally, there is the executive summary with reference number 1. As the executive summary is a highly comprehensive summary of the entire project process, we have placed it at the end of the project, even though it is at the beginning of the content.

Therefore, in order to efficiently complete the task in a planned manner, we created four sprints.

Sprint 1:
Date - September 2nd, 2024 - September 16th, 2024
Tasks: 2 (Company and Project Background), 3 (Project Charter) and 4 (A List of Key Stakeholders)

Sprint 2:
Date - September 16th, 2024 - September 30th, 2024
Tasks: 5 (Project Management Plan), 6 (Scope Statement), and 7 (Work Breakdown Structure)

Sprint 3:
Date - September 30th, 2024 - October 27th, 2024
Tasks: 8 (Project Schedule), 9 (Schedule Analysis), 10 (Resource Management Plan), 11 (Cost Estimates), and 12 (Quality Assurance Plan)

Sprint 4:
Date - October 27th, 2024 - November 15th, 2024
Tasks: 13 (A Risk Register with Response Planning), 14 (Communications and Stakeholders Management Plan), 15 (Procurement and Outsourcing Plan), 16 (Bibliography) and 1 (Executive Summary)

For tasks not included in the proposal, it is important to review the meeting. We need to rigorously review the content of our proposal during the retrospective meetings to ensure consistency. Communication with professors and teaching assistants cannot be ignored, as it is an important help in improving our project. Next is the weekly meetings, where we share and help each other.

3.2 Burndown Charts


Sprint
ECH Sprint 2
Estimation field
Issue count
Date - September 16th, 2024 - September 30th, 2024
Remaining work
Number of issues left to complete this sprint
Guideline
Ideal burn rate
Planned end
Issue count
0
1
2
3
Sep 17
Sep 21
Sep 25
Sep 29
Oct 01
Oct 05
Oct 09
Oct 13
Oct 17
Oct 21
Date


Sprint
ECH Sprint 3
Estimation field
Issue count
Date - September 30th, 2024 - October 27th, 2024
Remaining work
Number of issues left to complete this sprint
Guideline
Ideal burn rate
Planned end
Issue count
0
1
2
3
4
5
Oct 01
Oct 05
Oct 09
Oct 13
Oct 17
Oct 21
Oct 25
Oct 29
Nov 01
Nov 05
Nov 09
Date


Sprint
ECH Sprint 4
Estimation field
Issue count
Date - October 26th, 2024 - November 15th, 2024
Remaining work
Number of issues left to complete this sprint
Guideline
Ideal burn rate
Issue count
0
1
2
3
4
Oct 27
Oct 29
Oct 31
Nov 01
Nov 03
Nov 05
Nov 07
Nov 09
Nov 11
Nov 13
Nov 15
Date

Sprint Burn Down Chart Analysis

Sprint 1 (September 2 - September 16, 2024)

- **Observation**: The burn-down chart shows a flat line of remaining work (no reduction) until a sudden increase at the end of the Sprint.
- **Interpretation**: This indicates poor task management and delayed completion of issues. Tasks were likely not addressed during the Sprint and piled up instead of being closed incrementally.
- **Recommendation**: Ensure daily standups to track progress, and break down tasks into smaller increments for steady progress.

Sprint 2 (September 16 - September 30, 2024)

- **Observation**: The chart shows some reduction in tasks initially but later exhibits an increase in remaining work before reaching a plateau.
- **Interpretation**: While some issues were addressed early, the sudden increase suggests new issues were added mid-Sprint, causing disruption. This could be due to scope creep or incomplete backlog grooming.
- **Recommendation**: Avoid adding new issues during a Sprint. Ensure backlog refinement is done before Sprint Planning to avoid mid-Sprint changes.

Sprint 3 (September 30 - October 27, 2024)

- **Observation**: The chart fluctuates significantly, with tasks being closed inconsistently, and the remaining work not aligning with the ideal guideline.
- **Interpretation**: This indicates poor task prioritization and inconsistent effort allocation. The fluctuation suggests the team faced interruptions or shifting priorities.
- **Recommendation**: Focus on prioritizing tasks during Sprint Planning and enforce task ownership. Monitor task progress closely to ensure steady progress toward completion.

Sprint 4 (October 26 - November 15, 2024)

- **Observation**: The chart shows better alignment with the guideline. However, there is a noticeable spike in remaining work just before the Sprint end.
- **Interpretation**: This suggests improved progress tracking and task closure early on, but the spike indicates either late addition of new tasks or misestimation of effort for the remaining issues.
- **Recommendation**: Conduct a retrospective to analyze why tasks were added late. Emphasize accurate effort estimation during Sprint Planning.

General Insights:

1. **Task Addition Mid-Sprint**: This is a recurring issue across multiple Sprints, causing disruptions.
    - Action: Avoid mid-Sprint changes unless they are absolutely critical.
2. **Effort Misalignment**: Progress often deviates from the ideal burn-down guideline.
    - Action: Focus on task estimation and distribute work evenly across the Sprint.
3. **Team Collaboration**: Late spikes suggest communication issues or bottlenecks in specific areas.
    - Action: Increase collaboration and assign a Scrum Master to resolve blockers quickly.

By addressing these issues, future Sprints can achieve more consistent and predictable progress.

4. Group project communication plan and Execution

PERSON	ROLE	PRIORITY	PREFERRED WAY TO COMMUNICATE	METHODS	TIMING
Jie GAO	Product Manager	High Priority	In-person Meeting	1. Workshops with team 2. Email, Wechat, Zoom 3. Project Status Meeting	Frequently when needed
Yeyu WU	Scrum Master	High Priority	In-person Meeting	1. Daily Stand-up 2. Sprint Planning 3. Sprint Review 4. Sprint Retrospective	Daily, Every Sprint
Qinshu DU	Change Manager	Medium Priority	Conference Call	1. Change Control Meetings 2. Email, Wechat, Zoom 3. Workshops with team	Weekly
Ziyue HAN	Communications Manager	Medium Priority	Online Conference	1. Communications Plan Updates 2. Email, Wechat, Zoom 3. Workshops with team	As needed
Xiyuan MAI	Resource Manager	Medium Priority	E-mail	1. Resource Allocation Meetings 2. Email, Wechat, Zoom 3. Project Status Meeting	Weekly
Xiasi QI	Risk Manager	Medium Priority	In-person Meeting	1. Risk Assessment Meetings 2. Email, Wechat, Zoom 3. Workshops with team	Bi-weekly

Communication Type	Objective of Communication	Medium	Frequency	Owner	Format	Execution
Kickoff Meeting	Discuss project topics, determine what the team needs to do, and establish communication norms	Face to Face	Once	Jie GAO (Product Manager)	1. Soft copy 2. Meetings	2024/9/2
Daily Stand-up	Daily summary of progress, plan for the day, and identify any blockers	In-person/Online	Daily	Yeyu WU (Scrum Master)	1. Soft copy 2. Meetings	Every Day
Change Control Meeting	Review and manage changes to the project scope, schedule, budget, or quality	Conference Call	As needed	Qinshu DU (Change Manager)	1. Soft copy 2. Reports	On Change Request
Communications Meeting	Discuss and coordinate all communication aspects of the project	Face to Face/Online	Weekly	Ziyue HAN (Communications Manager)	1. Soft copy 2. Meetings	2024/9/2-2024/11/16
Resource Allocation Meeting	Allocate and adjust resources to ensure project needs are met	Face to Face	Monthly	Xiyuan MAI (Resource Manager)	1. Soft copy 2. Meetings	2024/9/2, 2024/10/2, etc.
Risk Management Meeting	Identify, assess, and plan responses to risks	In-person/Online	Bi-weekly	Xiasi QI (Risk Manager)	1. Soft copy 2. Reports	2024/9/6, 2024/9/20, etc.
Weekly Project Status Meetings	Summarize the project progress and plan the next week's work schedule	Face to Face	Weekly	Jie GAO (Product Manager)	1. Soft copy 2. Meetings	2024/9/2-2024/11/16 Every Sunday
Project Review Meeting	Summarize and review the completed work at the end of each month	Face to Face	Monthly	Jie GAO (Product Manager)	1. Soft copy 2. Meetings	2024/9/30, 2024/10/30
Informal Communication	Use for quick questions, updates, and cooperation among team members	Emails, Wechat, Zoom	Frequently	All Team Members	1. Soft copy 2. Reports	Everyday
Milestone Presentations	Present and review key deliverables at project milestones	Face to Face	Milestone	All Team Members	1. Soft copy 2. Hard Copy	2024/9/16, 2024/10/14, etc.

5. Issues and challenges

During the completion of the project, each of us encountered many problems and challenges. But through mutual assistance and diligent study of classroom knowledge, we have all successfully overcome the difficulties.

Jie GAO (Project Manager)

Challenges:

1. Familiarity with the Project

Initially, being unfamiliar with the project posed a significant hurdle. It took time to fully understand the scope, goals, and intricacies of what we were undertaking. This lack of familiarity made it difficult to plan and execute effectively from the start.

2. Project Management Approach - Part 1 vs Part 2

We didn't handle Part 1 and Part 2 of the project simultaneously in the most optimal way. Part 2, which involved how our project team actually operates using the Agile method, is where most of the practical project management aspects came into play. However, not having a seamless integration between the two parts led to some inefficiencies and confusion in the overall project flow.

3. Time Management and Jira Usage

Jira was a great tool for time management and tracking project progress. But its usability was an issue. The operational barriers made it difficult for the team to master it. Even though, looking back at the end of the project, it was evident that it could have been a very useful project management aid if everyone had strictly adhered to using it. But in reality, with team members having other courses to attend to, not everyone was able to go on Jira daily to update and follow the progress.

4. Report Presentation Standards - Part 1

When it came to presenting the Part 1 report, there was a disparity in the standards that each team member aimed for. While the basic requirement was to meet the given specifications, there were additional elements like using auxiliary charts from PPTs or textbooks that could have enhanced the presentation. However, not all team members were inclined to do this. As a detail-oriented team leader, I felt compelled to review each person's part meticulously. This was not only challenging but also extremely time-consuming and energy-draining. Moreover, once the team members became aware of this practice, there was a risk of them slacking off as they might have felt that I would catch any mistakes anyway. But in this team, everyone performs well and eases my pain. I'm so grateful to everyone in this team!

Solutions:

1. Project Familiarization

To overcome the initial lack of familiarity with the project, I could have arranged for more in-depth project briefings at the start. This could involve bringing in stakeholders or those with prior knowledge of the project to explain its background, objectives, and key deliverables. Additionally, spending more time myself in the early stages to study relevant documents and past similar projects would have helped me get up to speed faster.

2. Integrated Project Management

For the issue of handling Part 1 and Part 2 better, we should have created a more comprehensive project plan that clearly outlined how the two parts interacted and when the transition from one to the other would occur. Regular team meetings to discuss the progress of both parts simultaneously and ensure that everyone understood the overall project structure would have been beneficial.

3. Jira Training and Adaptation

To address the Jira usage problem, we could have organized dedicated training sessions for the team on how to use Jira effectively. This would include not only the basic functions but also tips and tricks to overcome the operational barriers. We could also have set up a system of reminders and incentives for team members to use Jira regularly.

4. Report Presentation Guidelines and Delegation

To deal with the varying report presentation standards, I should have established clear guidelines at the beginning of the project. These guidelines could have detailed the minimum requirements as well as the additional elements that would enhance the presentation. Instead of reviewing each person's part in extreme detail myself, I could have delegated the task of initial review to a small team of more experienced or detail-oriented members. They could then flag any major issues for me to look into further, saving me a significant amount of time and energy.

Yeyu WU (Scrum Master)

Challenges:
1. This is the first year that Jira has been used to assist our course project. Although Jira is a very practical tool, it still requires some time and effort to learn and become familiar with.
2. Help team members from different backgrounds and professions establish good collaborative relationships, overcome information differences and functional barriers. And it is also necessary to guide team members to learn mutual understanding, trust, and support.
3. Maintain patience and persistent drive to continuously optimize team workflow and practices.

Solutions:
1. Carefully study the knowledge related to Jira taught by the professor in class, and combine it with the Jira learning manual in the courseware. In addition, I am also searching and researching Jira's practical teaching on other platforms such as Xiaohongshu and Facebook.
2. Based on the actual situation of each team member, we will choose a suitable time every week to hold a group meeting. At the meeting, we will discuss our work progress, raise issues and difficulties encountered during our work, and help each other.
3. We update our projects in real-time every week based on the content learned in class. We will promptly carry out detailed division of labor and strive to efficiently and orderly advance our project.

Qinshu DU (Change Manager)

Challenges:
1. Although the teacher was very specific about the requirements of the introduction document, we had problems understanding the document.
Because it was our first contact with project management, our first contact with English teaching, and there were a lot of contents that we had not learnt and mastered yet, so there were deviations and problems in understanding the documents.
2. Many students of our team live in Shenzhen, but we have classes on Monday evenings. Because of the commute, there is not much time to communicate immediately with each other or with the professor just after classes.
3. When drafting the Procurement part, I realized that I had to make many changes up front and spent a significant amount of time in the week before the deadline. So I should understand and consider more in advance next time, and control the overall situation from the beginning, truly understand what needs to be done in each part, and consider the content for the back when you write the front content.

Solutions:
1. Before formally doing the project, we seek guidance from the professor after class to understand the requirements clearly and meet in time to discuss.
Recorded the notes on group work mentioned by the professor in class in time, and sent to our WeChat group.
2. Meet online, and if our encounter issues that are more efficiently discussed offline, make

other daytime appointments to discuss them offline at school.
If we have any problems just after class, students living in Hong Kong will act as representatives to consult the teacher for guidance.
3. As a lesson learned from the project, I learned to plan and prepare more in advance to ensure the project proceeds as planned. This includes understanding all aspects of the project, considering all the details of the project, and preparing all necessary information before starting to write.

Ziyue HAN (Communications Manager)

Challenges:
1. I do not know much about the Internet project development of small and medium-sized enterprises in Hong Kong, so I encountered some problems in the process of compiling deliverables. These issues include limited understanding of all possible deliverables involved in the entire process development of the food ordering platform and a lack of reference when estimating budgets.
2. I am not very familiar with using Jira to manage projects. When it comes to exchanging information with team members or maintaining file consistency at various stages, due to my unfamiliarity with operations and user logic, I would consider Jira's application as redundant in work coordination.
3. In team meetings and other discussions, if there are many uncertain contents or work contents that need to be carefully considered before moving forward, I am more likely to develop the idea of making choices through simple speculation to maintain efficiency as much as possible.

Solutions:
1. I first used LLM to provide me with some reference suggestions, and then conducted further fact checking on Google based on answers of LLM. I searched for reports and news related to the industry, and gained some understanding of budget estimation for the development of the platforms.
2. I gradually adapted to the operating mode of Jira. Its convenience enables me to handle work more efficiently in managing project tasks and tracking progress. One advantage of Jira is that it integrates tasks, progress, and communication content on one platform, reducing delays and errors in information transmission.
3. I gradually realize the importance of team discussions when encountering uncertain content or work that requires further confirmation. Logically recording and organizing all issues generally does not lead to a lack of efficiency, but rather avoids redundant work caused by information asymmetry.

Xiyuan MAI (Resource Manager)

Challenges:
1. It was my first time to use Jira and Agile, and I felt it was difficult to use the Agile method and the Jira tool.
2. I was not sure about many details of the document requirements, and I was not sure about the extent of the specific content.

3. I could not find a completely formal and standardized business plan template, which was different from the previous learning method with standard answers.

Solutions:
1. Through LLM, classroom learning and the teacher's comments on Jira projects, I learned how to accurately arrange project time and complete the plan.
2. Through discussions with group members and answering questions with the teacher's assistant, I understood the details of the group assignment document more thoroughly.
3. Fill in all the content step by step according to the format and content of the tutorial exercise and course slides.

Xiasi QI (Risk Manager)

Challenges:
1. While assembling the deliverables for the food ordering platform, I encountered difficulties due to my incomplete grasp of the deliverables integral to the development process. Additionally, I struggled with budget forecasting due to a shortage of reference points.
2. My unfamiliarity with Jira for project management purposes caused inefficiencies in the exchange of information with my team and in keeping files consistent at different stages of the project.
3. As a risk manager, I recognized that technical risks, such as software glitches and system breakdowns, could have a considerable impact on the project's success.

Solutions:
1. To tackle this challenge, I initially turned to a large language model (LLM) for assistance, which provided me with several reference suggestions. Building upon the insights from the LLM, I proceeded to conduct additional research on Google.To further refine my understanding of the budget estimates, I sought out the expertise of financial analysts within my company. Through collaborative discussions and presentations, I gained deeper insights into the financial aspects of platform development. These interactions allowed me to adjust my budget estimates more accurately and align them with the company's financial goals.
2. I have progressively grown accustomed to the operational workflow of Jira. I've discovered that its user-friendly features enable me to manage project tasks and monitor progress more effectively. One of Jira's key strengths is its ability to consolidate tasks, progress updates, and communication threads onto a unified platform, thereby minimizing delays and inaccuracies in information exchange.
3. To alleviate these risks, I implemented a routine of technical reviews and assessments for the food ordering platform. Moreover, I set up a vulnerability tracking system to promptly monitor and rectify any issues. Additionally, I collaborated closely with the technical team to ensure they had the necessary resources and support to overcome any technical hurdles.

4. Learning

Although the learning difficulty of this course is not low, it is still very helpful to us. We not only learned practical knowledge about project management, but also honed our teamwork and communication skills. We are all very satisfied with our learning outcomes.

Person	Learning
Jie GAO	1. Task Delegation I've realized that as a leader, I shouldn't always take on all the tasks myself. Delegating tasks to the right people based on their skills and expertise is crucial. This not only reduces my own workload but also increases the efficiency and quality of the work as team members are more likely to perform well in areas they are good at. By minimizing the need for me to redo or correct work, it saves valuable time and resources for the whole team. 2. Communication and Expectation Setting Clear communication from the start about project requirements, presentation standards, and the use of tools like Jira is essential. Team members need to know exactly what is expected of them and why certain things are important. This helps in aligning everyone's efforts towards the common goal and reduces the chances of misunderstandings or misaligned work. 3. Trust in the Team I've learned that I need to trust my team members more. While it's important to ensure quality work, constantly micromanaging can have a negative impact on team morale and productivity. By giving team members the freedom to work within the set guidelines and trusting them to deliver, they are more likely to take ownership of their work and strive for better results.
Yeyu WU	1. I have learned how to use Jira, a convenient tool, to assist in project management. In the process of using Jira, I gained a deep understanding of the core principles, roles, events, and processes of the Scrum framework, and learned how to effectively implement agile methods to improve team flexibility and responsiveness. 2. During the completion of the project, I improved my communication and collaboration skills and learned how to effectively communicate with different roles. 3. Improved problem-solving and decision-making abilities, able to identify and eliminate obstacles in team work, and maintain efficient team operation.
Qinshu DU	- Gao Jie (product manager, team leader) is a highly responsible and detail-oriented person. I have learned from her the dedication to project details and her determination to complete and excel in the project. - Wu Yeyu (scrum master) is a person with clear thinking, very smart, and good at communication. I have learned from him the overall control of the project and the ability to work efficiently.

	- Mai Xiyuan (team member) can quickly grasp course knowledge, possesses strong learning abilities, and has a clear and meticulous approach to projects. I have learned from her how to grasp course knowledge and apply it to the project. - Han Ziyue (team member) is proactive in responding to project-related tasks and can analyze project details based on the knowledge learned; he always helps us consider the project from a more comprehensive perspective, and I have learned from him how to think holistically. - Qi Xiasi is responsible for her work, always submits on time, and has excellent English writing and speaking skills; I am gradually learning from her, gradually moving away from translation software and speaking English confidently.
Ziyue HAN	1. Optimize the way and logic of editing prompts when using LLM. 2. Gain a deeper understanding of the importance of fact checking when using LLM 3. Adapt to operating mode of Jira. 4. Gain a more practical understanding of the abstract knowledge of agile management method. 5. Recognize the importance of discussion and task organization in addressing uncertainty issues.
Xiyuan MAI	1. How to effectively plan, allocate, and optimize resources to meet the needs of projects and organizations. 2. Use data and indicators to evaluate resource utilization and make data-driven decisions. 3. Align resource management with organizational strategic goals, optimize resource allocation to support business development.
Xiasi QI	1. Deeply understand the basic principles, processes, and methods of risk management, including risk identification, assessment, response, and monitoring. 2. Use quantitative and qualitative analysis tools to assess the likelihood and impact of risks. 3. How to align risk management with organizational strategy to support the achievement of business objectives.

Prompt documentation worksheet

Student Name: Jie GAO				Student Number: 59009639		
Prompt (version): Kimi AI, GPT-4o, Doubao, Wenxin Yiyan						
Task	LLM & Version	Accuracy	Relevance	Conciseness	Follow up Prompts needed	Notes/Comments
Agile - How to apply backlog refinement in agile?	Kimi AI	5	4	5	No need	10 detailed steps are given, however, unrelated to our group project management.
Critical path - Alternative solutions to potential problems	GPT-4o	5	4	5	Need to be combined with our WBS	/
Project management plan – Requirements gathering method	Doubao	4	5	4	Need to be combined with our stakeholders	/

Student Name: Qinshu DU				Student Number: 58819313		
Prompt (version): Moonshot AI						
Task	LLM & Version	Accuracy	Relevance	Conciseness	Follow up Prompts needed	Notes/Comments

(company background) What are the reference case companies of single-person meal enterprise? Please provide company name	Moonshot AI	5	5	4	Need to put the website in the answer: Please provide company name and website	/
(company background) Is there a single-person meal enterprise in Hong Kong, or a similar platform?	Moonshot AI	3	3	4	No need	The current answer is sufficient. Since there are no relevant well-known companies in Hong Kong, we can only give referable answers.
(Company Background) What should leadership, style, culture, look like in a small micro business?	Moonshot AI	4	4	3	No need	Gives a full range of answers and I can make choices
(Company Background) Are delivery services part of the supply chain?	Moonshot AI	5	5	5	No need	Give an accurate answer
(A Project Schdule) How long does task xx take?	Moonshot AI	4	5	4	Need to continue to ask if subtasks can be done at the same time	/

Student Name: Xiyuan MAI			Student Number: 59015148			
Prompt (version): Chat GPT, CityU GPT						
Task	LLM & Version	Accuracy	Relevance	Conciseness	Follow up Prompts needed	Notes/Comments

(Company background) Is it possible for a CEO to become both a sponsor and a project manager?	Chat GPT	5	5	4	No need	It is confirmed that it is feasible for the boss to be the project manager, mainly depending on the individual's ability and the company's situation.
(resource management plan) Is there a rule on the value assigned to each person's division of labor in the resource histogram?	CityU GPT	5	5	4	No need	There are no mandatory provisions. It can be allocated according to the number of teammates, tasks, working hours, etc.
(resource management plan) What kind of resource issues do teammates usually encounter when doing a project?	CityU GPT	5	4	3	No need	Many directions are given for us to choose whether it suits our project.

Student Name: Yeyu WU Student Number: 58902145

Prompt (version): Food company, online order platform, work breakdown structure, project charter

Task	LLM & Version	Accuracy	Relevance	Conciseness	Follow up Prompts needed	Notes/Comments
Work breakdown structure	GPT-4o	4	4	3	System, database, materials	Overall, the content generated by GPT may not be accurate or practical. But it has certain reference and

						learning value, and can provide inspiration from it.
Project charter	GPT-4o	3	4	3	Assumption, constraint, success criteria	The content provided by GPT is still quite different from the content taught in the course, but overall it has certain reference and feasibility.

Student Name: Ziyue HAN			Student Number: 59140758			
Prompt (version): ChatGPT-4o						
Task	LLM & Version	Accuracy	Relevance	Conciseness	Follow up Prompts needed	Notes/Comments
(Cost Rstimate) Estimate budget range for developing and operating an online delivery platform for a medium-sized food retail	ChatGPT-4o (Version October 2023)	3	5	4	To explain the budget details for different parts and provide explanations for the differences in budget ratios for different tasks.	The prediction of the budget required for the business is within a reasonable range. The explanation of the logic for allocating the

business in Hong Kong.						budget is not sufficiently convincing
(Scope Statement) What kinds of deliverables does a project of online platform invlove?	ChatGPT-4o (Version October 2023)	2	5	3	/	Not very clear, but illuminating.
(Stakeholder Strategy) How to analyze the Potential Management Strategies?	ChatGPT-4o (Version October 2023)	3	5	3	/	Examples and logic provided by LLM are relatively helpful.

Student Name: Xiasi QI			Student Number: 58959414			
Prompt (version):Kimi AI, GPT-4o						
Task	LLM & Version	Accuracy	Relevance	Conciseness	Follow up Prompts needed	Notes/Comments
(Company background) Why is personalized nutrition becoming a trend?	GPT-4o	4	5	3	From two aspects: socioeconomic changes and consumer demands, analyze the reasons why	Comprehensively demonstrated the increase of personalized diets is due to the fast-paced lifestyle of modern society

					personalized diets are becoming a trend.	and the increasing demand from consumers for convenient, quick, and personalized dietary solutions.
(Company Background)What are the characteristics of Hong Kong as a high-density city?	GPT-4o	5	4	3	No need	The dietary habits of residents in the high-density city of Hong Kong are influenced by accelerated pace of the society.Dietary habits reflect the demand for personalized and convenient dining among Hong Kong residents living in a fast-paced environment.
(Quality Assurance Plan)How does a procurement	Kimi AI	3	3	5	Please provide specific examples on	For instance, Procurement managers need to monitor their

manager assess suppliers?					evaluation criteria.	performance and quality index to ensure ongoing compliance and to address the issues or concerns,manage relationships with suppliers.