BUSINESS CASE

RAMS E-CAF:
A WEB-BASED CAFETERIA MANAGEMENT SYSTEM
FOR THE
ASIA PACIFIC COLLEGE

ASIA PACIFIC COLLEGE CAFETERIA
HUMABON 3
MAKATI CITY, KALAKHANG MAYNILA

14/04/2023

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1. EXECUTIVE SUMMARY

1.1. Issue

The business problem that Rams E-Café is facing is the need to improve the efficiency and effectiveness of their current ordering system. Currently, customers place their orders with the servers, who then manually key in the orders. This process is prone to errors, slow and inefficient, leading to long wait times for customers, and dissatisfied customers.

1.2. Anticipated Outcomes

With the implementation of an online ordering system, customers will have the convenience of placing their orders through a web application and picking them up at the food stall. This initiative will provide a better customer experience by reducing wait times and order errors. This will also help to reduce wastage and minimize stock-outs, ensuring that the café can operate efficiently and cost-effectively.

1.3. Recommendation

To address this issue, Rams E-Café is proposing the implementation of an online ordering system that allows customers to place their orders directly from their smartphones or computers. The proposed project aims to provide an online ordering system that is user-friendly, efficient, and cost-effective for both the customers and the business.

1.4. Justification

Rams E-Caf is recommended for implementation due to several reasons. Firstly, it will streamline the ordering process for customers, resulting in improved customer experience and satisfaction. The online platform will allow customers to place orders easily from the comfort of their homes or offices, reducing the wait time and eliminating the need for physical contact during the ordering process, which is especially important during the ongoing COVID-19 pandemic. This will ultimately lead to increased customer loyalty and repeat business.

Rams E-Caf project was selected over other alternatives due to its feasibility, cost-effectiveness, and alignment with the business's strategic objectives. Alternative solutions, such as hiring additional staff or expanding the physical store, would have been more expensive and may not have provided the same level of benefits as Rams E-Caf. The impact of not implementing the project would have been a missed opportunity

for the business to improve its customer experience, operational efficiency, and ultimately, its profitability.

2. BUSINESS CASE ANALYSIS TEAM

Project Manager: Corneliani Jon Melo
Front and Back-end Developer: Jamir Sia
UI/UX Developer: Nathan Allen Sinaguinan
In charge of Documentation: Isiah Tutor and Joshua Cudal

Corneliani Jon Melo is basically the leader of the Coderist group and is considered as the Project Manager of the team. Jamir Sia is the programmer of the Rams E-Caf project and is responsible for the front end and the back-end development of the project. Nathan Allen Sinaguinan, however, is responsible for the UI/UX element of the Rams E-Caf project. Lastly, Isiah Tutor and Joshua Cudal is responsible for the documentation of the whole project, however it is important to note that everyone in the Coderist team including Corneliani Jon Melo is responsible for documentation also – as everyone collaborates on making the Rams E-Caf research paper as clean as possible.

3. PROBLEM DEFINITION

1.1. Problem Statement

Rams E-Caf, the business problem identified was the inefficient manual process of the cafeteria's daily operations. The cafeteria was using a traditional paper-based system for order-taking, and inventory management. This process was time-consuming, and error-prone, and, accident inventory counts, and difficulties in monitoring sales and revenue.

The proposed solution, Rams E-Caf, aimed to address these issues by implementing a web-based cafeteria management system that would streamline the entire process, from order-taking to billing and inventory management.

1.2. Organizational Impact

- To automate the cafeteria's daily operations and minimize the manual process by implementing a web-based cafeteria management system.
- To improve the accuracy and efficiency of the order-taking, billing, and inventory management process.

- To provide real-time sales and revenue monitoring capabilities to cafeteria management.
- To reduce operational costs.
- To enhance the customer experience by providing a user-friendly online ordering system.

The proposed system would modify the current organizational processes by substituting the traditional paper-based system with an automated web-based system. This would require the installation of new hardware and software, including computers and servers, as well as the development of a custom software application for the cafeteria management system.

The new system would also create new roles, including system administrators, software developers, and technical support staff. Existing roles, such as cafeteria staff, would also change as they adapt to the new system and receive training on its use. Overall, the objective is to streamline and optimize the cafeteria's operations, resulting in improved efficiency and customer satisfaction.

1.3. Technology Migration

Rams E-Caf is a web-based cafeteria management system that will be accessed by a web browser and housed on a server. A team of IT professionals will most likely install and configure the system, working closely with cafeteria employees to ensure that the system is set up appropriately and fulfills their specific needs. The implementation process will almost certainly include numerous stages, such as system testing, user training, and data migration.

4. PROJECT OVERVIEW

The Rams E-Caf is an IT solution that aims to improve the service time of food concessionaires at the Asian Pacific College (APC) Cafeteria, benefiting the whole APC community. The project involves creating a new ordering system in the cafeteria that follows safety guidelines against the spread of COVID-19. The solution will be a web application that enables customers to order food in advance, reducing wait times compared to the traditional ordering system.

4.1. Project Description

The Rams E-Caf project aims to provide a solution to the problem of long waiting times in the APC cafeteria. With the implementation of face-to-face and hybrid classes, students and staff will have less time to spare, making it crucial to manage their time

effectively. Rams E-Caf is an online ordering platform exclusively for the APC community, which allows users to order their food ahead of time and pick it up at a designated time.

4.2. Goals and Objectives

The primary goal of the Rams E-Caf project is to improve the service time of food concessionaires, benefiting the APC community. The project's specific objectives include developing a web application with key features such as User Login, Menu for the day, Website Reports, Order and Payment System, Customer Feedback system, Dashboard for orders, and Edit Food Menu. The web application will be designed to enable food concessionaires to prepare food in advance, reduce wait times for customers, and improve overall customer experience.

4.3. Project Performance

The success of the Rams E-Caf project will be measured based on several performance criteria, including the reduction in wait times for customers, the adoption rate of the new ordering system, and customer feedback regarding the ordering system's ease of use and overall satisfaction.

4.4. Project Assumptions

The preliminary assumptions for the Rams E-Caf project include the assumption that the new ordering system will be adopted by the APC community, and that food concessionaires and admins will maintain the website to ensure its sustainability.

4.5. Project Constraints

The project is subject to time, budget, resource, and regulatory constraints. These constraints will need to be carefully managed throughout the project to ensure that the project is completed on time, within budget, and in compliance with all applicable laws and regulations.

4.6. Major Project Milestones

The given completion dates listed for the major project milestones are assumptions and not final, and they are subject to change prior to the stakeholders and as the project progression. All the said dates are proprietary to completion during the SOFTDEV course that the team will undergo for the upcoming academic year.

Summary Milestone Schedule – List key project milestones relative to project start.	
Project Milestone	**Target Date (mm/dd/yyyy)**
Project Start	04/06/2022
Complete Solution Design	12/21/2023
Acquire Hardware and Software	08/14/2023
Complete Solution Simulation with New Hardware/Software	08/14/2023
Complete Solution Simulation and Testing	02/24/2023
Deploy Solution	10/01/2023
Project Complete	10/02/2023

5. STRATEGIC ALIGNMENT

As the team analyzed and presented the problems and needs of the food concessionaires – the food concessionaires' representatives, Ms. Bernadette Sison acknowledged the team's roles and responsibilities as it is aligned with their strategic plans to somehow manage the crowd in the Asia Pacific College Cafeteria during peak hours.

Expectations are set by the organization which aligns with their goals, while the developers of the Rams E-Caf are expected to follow through. All questions during the design and development stage will be answered by Ms. Bernadette Sison and provide further information that will guide the developers to produce an output aligned with the organization's goals.

6. COST BENEFIT ANALYSIS

The following table presents a cost-benefit analysis of the Rams E-Caf project, which includes the costs of the project components and the associated benefits.

Project Component	Component Cost	Benefit	Price/Benefit
Hardware (Microsoft Surface Pro 3, 8GB Intel Core i5-4300U)	PHP 32.354.00~	Improved Efficiency and Productivity (+PHP 15,000.00~)	46.15%~
Amazon Website Hosting	PHP 894.9 per month	Increased Online Visibility and Sales (+PHP 24,000.00~)	33.33%~
Payment Gateway	PHP 0.00 (Registration fee) & 2.5% per transaction fee (GCash)	Increased Sales and Customer Convenience (+PHP 10,000.00~)	
Total	PHP 33,248.9		79.48%

In this cost benefit analysis, the costs of the project components for Rams E-Caf are outlined. The hardware costs PHP 32,354.00, the Amazon Website Hosting costs PHP 894.9 per month, and there are no costs for the Payment Gateway, but there is a benefit of faster and more convenient payment processing. The hardware component will lead to improved productivity and speed. The Amazon Website Hosting component will increase Rams E-Caf's online presence, potentially leading to more customers and revenue. Overall, the project is expected to lead to improved business performance.

7. ALTERNATIVES ANALYSIS

As the researchers continue to do the planning phase of the proposed project, Rams E-Caf – the researchers considered alternative projects or solutions to the stakeholders and the client's needs. The table below shows the following alternative solutions and the reasons for not selecting the mentioned alternative solutions:

Alternative Projects	Summary of Alternative	Reasons for not selecting

Staff Augmentation	The food concessionaires will hire a part time employee which will only work during the peak hours of the cafeteria	The researchers do not have control over the food concessionaire's budget. The cost will be too much for the concessionaires and is not practical.
Delivery Services within the Campus	The food concessionaires will basically offer delivery service that is only limited to the school campus	The food concessionaires do not have enough time and manpower to offer delivery services for the APC community

8. APPROVALS

The project Rams E-Caf approval will be coming from the project sponsor, project client, and the head of the Asia Pacific College's food concessionaire, Ms. Bernadette Sison.