POLITEKNIK MELAKA

DIPLOMA IN INTERNATIONAL BUSINESS

RESOAP

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11DPI22F2018

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11DPI22F2022

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COMMERCE DEPARTMENT

OCTOBER 2024

CONFIRMATION OF THE PROJECT

The project report titled " RESOAP" has been submitted, reviewed and verified as a fulfilment of the conditions and requirements of the Project Writing as stipulated

Checked by:

Supervisor's name: PUAN SHARIFAH BINTI POLAI
Supervisor's signature:
Date:

Verified by:

Project Coordinator name: PUAN TUTY BINTI KAMIS
Signature of Coordinator:
Date:

"We acknowledge this work is our own work except the excepts we have already explained to our source"

1. Signature:

   Name: AHMAD NAJMIE FARHAN BIN JAIDI

   Registration Number: 11DPI22F2018
   Date:

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   Name: AMMAR ALIF BIN MOHD HAIROL

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   Date:

DECLARATION OF ORIGINALITY AND OWNERSHIP

TITLE : RESOAP

SESSION : 11 2024/2025

1. We,

    1. AHMAD NAJMIE FARHAN BIN JAIDI

    2. AMMAR ALIF BIN MOHD HAIROL

    3. MUHAMMAD ARIFF BIN NASRUL AZHAR

    is a final year student of Diploma in International Business, Department of Commerce, Polytechnic Melaka, which is located at No 2 Jalan PPM 10, Plaza Pandan Malim, 75250, Melaka. (Here in after referred to as 'the Polytechnic').

2. We acknowledge that 'The Project above' and the intellectual property there in is the result of our original creation / creation without taking or impersonating any intellectual property from the other parties.

3. We agree to release the 'Project' intellectual property to 'The Polytechnics' to meet the requirements for awarding us the Diploma in International Business.

Made and in truth that is recognized by

.

a) Ahmad Najmie Farhan Bin Jaidi
(Identification card No: [redacted])
.....…….

b) Muhammad Ariff Bin Nasrul Azhar
(Identification card No: [redacted])
...……..

c) Ammar Alif Bin Hairol
(Identification card No: [redacted])
.....…….

In front of me,

As a project supervisor, on the date:

ACKNOWLEDGEMENTS

Praise be to Allah, the Lord of the universe, for His countless blessings and guidance throughout this journey. We are deeply grateful for the strength, patience, and perseverance granted to us in completing this final year's project, Resoap.

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We would also like to express our sincere appreciation to our coordinator, Puan Tuty binti Kamis, for her unwavering support and for providing us with the necessary resources and insights to complete this project successfully. Her leadership and encouragement have greatly contributed to our learning experience.

Furthermore, we would like to acknowledge all the lecturers and staff of the Commerce Department at Polytechnic Melaka for their assistance, advice, and motivation throughout our journey. Their dedication to education has inspired us to push forward and strive for excellence.

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EXECUTIVE SUMMARY

This proposal introduced an innovative soap product made from recycled cooking oil, specifically designed for cleaning sanitary cloths used in commercial kitchens. Our soap effectively tackled stubborn grease stains, addressing a key hygiene challenge faced by food establishments such as the renowned Kuih Keria Antarabangsa Limbongan. By repurposing used cooking oil into an eco-friendly and cost-effective cleaning solution, we aimed to enhance kitchen cleanliness while promoting sustainable waste management.

The soap was formulated with natural degreasing agents that broke down oil residues more efficiently than conventional detergents. Its unique composition ensured deep cleaning without damaging the fabric of sanitary cloths, prolonging their usability and maintaining hygiene standards in food preparation areas. Additionally, this product is aligned with the growing demand for environmentally responsible solutions in the food industry.

By adopting this grease-fighting soap, Kuih Keria Antarabangsa Limbongan was able to improve operational efficiency, reduce maintenance costs, and contribute to a greener environment. The initiative supported waste reduction efforts by transforming discarded cooking oil into a valuable cleaning resource. This innovative approach not only benefited the business but also set a positive example for sustainability in the local food industry.

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CHAPTER 1

INTRODUCTION

The food industry involves a great deal of cleanliness and hygiene, particularly in high-demand ventures like Kuih Keria Antarabangsa Limbongan where massive volumes of food are processed daily. The most challenging issue in maintaining hygiene in such establishments is how to properly sanitize sanitary cloths used in wiping down surfaces, cooking utensils, and food preparation areas. These cloths tend to trap oil, grease, and sticky food residues that are not removable using ordinary soaps or detergents. Most firms, therefore, resort to chemical cleaning agents, which are efficient but costly and detrimental to the environment and human health (Rahayu et al., 2021). In addition, improper disposal of used cooking oil is a source of environmental degradation, including clogged drainage system and water resource contamination (Zayed et al., 2024).

To address these problems, the Resoap program was established. Resoap is an innovative, eco-friendly soap that is made from recycled used cooking oil and is specially designed to clean grease-contaminated sanitary cloths in food establishments. This environmentally friendly cleaning agent not only recycles waste cooking oil that would otherwise go to waste but also offers an affordable and sustainable alternative to conventional cleansing agents. Unlike widespread chemical-based cleansers, Resoap is nontoxic, biodegradable, and effective at oil residue dissolution and therefore suitable for daily use in eateries (Zayed et al., 2024; Rahayu et al., 2021). Its integration into cleaning routines can reduce environmental impacts without sacrificing high standards of safety and hygiene.

The determinants of adoption of such green practices can be identified through the Theory of Planned Behavior (TPB), a theory that explains intention behind behaviour as being made up of three general factors: attitudes, subjective norms, and perceived behavioural control (Ajzen, 1991). In this case, a positive belief in Resoap's efficacy and environmental benefit can facilitate adoption (Armitage & Conner, 2001). In addition, social support or organizational norms within food companies can also influence behavioural intentions (Clayton & Griffith, 2008). Perceived ease of use and accessibility of Resoap also play a significant role in determining whether food handlers always use it in their cleaning routine (Hardeman et al., 2002).

The aim of this project is to evaluate the efficacy of Resoap in a food establishment based on TPB. By its exploration of how attitudes, social, and perceived behaviour controls its application, the study promotes green cleaning behaviour and responsible consumption under Sustainable Development Goal 12. Ultimately, the integration of Resoap in firms like Kuih Keria Antarabangsa Limbongan is a practical illustration of circular economy principles in addressing environmental and business concerns.

1.1 BUSINESS PROBLEMS OR ISSUES

Kuih Keria Antarabangsa Limbongan relied heavily on sanitary cloths to maintain cleanliness in its kitchen. However, a major challenge they faced was the persistent residue of oil and odours that remained even after washing. Conventional detergents were not effective enough to fully remove grease and food smells, which raised concerns about hygiene. This issue was especially critical for a food-based business, where cleanliness directly impacts product quality and customer trust. The inability to properly clean the sanitary cloths could lead to problems in meeting the required hygiene standards, which would ultimately harm the business's reputation.

Additionally, the business generated a significant amount of used cooking oil, which, if not disposed of properly, could contribute to environmental pollution. Converting this waste into soap for cleaning the sanitary cloths presented an opportunity for sustainable waste management. However, there were concerns about the effectiveness and safety of such a product, which required careful formulation and testing to ensure it met hygiene standards. This process involved detailed studies and trials to ensure that the soap would effectively remove oil and odours while remaining safe for use in a food-related environment.

Cost was another important consideration for the business, as the use of commercial detergents could be quite expensive, especially when large quantities were needed. Therefore, a soap made from recycled cooking oil provided a cost-effective alternative, potentially reducing operational expenses. However, customer and staff acceptance were crucial, as there was scepticism about using soap made from used oil. To overcome this, it was essential to develop a strong brand, implement educational programs about the benefits and safety of the product, and ensure compliance with relevant safety regulations. With these measures in place, the business could prove that using soap made from recycled cooking oil was a safe, effective, and environmentally friendly alternative, while still meeting high hygiene standards.

1.2 BUSINESS OBJECTIVES

1. To produce RESOAP for Kuih Keria Antarabangsa Limbongan Melaka.
2. To identify effectiveness of RESOAP for Kuih Keria Antarabangsa sanitary cloth.
3. To improve waste management by Kuih Keria Antarabangsa Limbongan Melaka.

1.3 JUSTIFICATION of BUSINESS PROJECT SELECTION

The selection of Resoap as a business project was justified by its potential to promote eco-friendly waste disposal, ensure compliance with health, safety, and environmental regulations, and raise awareness while shifting consumer perception. Resoap aimed to reduce environmental pollution by providing an innovative and efficient method of repurposing used cooking oil, which would have otherwise contributed to drainage blockages and water contamination. By transforming waste oil into a useful cleaning product, the project encouraged sustainable practices and responsible waste management, addressing a pressing environmental issue.

Furthermore, Resoap prioritized compliance with all relevant regulatory standards in production, packaging, and distribution. Meeting these health, safety, and environmental guidelines was essential for market viability and consumer trust. By adhering to these regulations, Resoap ensured that its product was both effective and safe for household use, positioning itself as a reliable and responsible brand in the cleaning industry.

Another key objective of Resoap was to raise awareness about the benefits of recycled products and change consumer perceptions regarding their effectiveness. Many consumers had misconceptions about the cleanliness and efficiency of soap made from used cooking oil. Resoap sought to address these concerns by highlighting its contribution to sustainability and proving that repurposed materials could be just as effective as conventional products. Through education and marketing efforts, the project aimed to foster a more environmentally conscious consumer base, ultimately contributing to a greener future.

1.4 SCOPE OF BUSINESS PROJECT

The scope of this business project focused on developing and implementing a soap made from used cooking oil specifically for cleaning sanitary cloths at Kuih Keria Antarabangsa Limbongan. The project aimed to address hygiene concerns by providing an effective cleaning solution that removed grease and odours while being environmentally friendly. The formulation was tailored to ensure that the soap was safe for food-related cleaning purposes and met industry hygiene standards.

Additionally, the project explored the feasibility of integrating sustainable waste management practices within the business. This included collecting and processing used cooking oil from the shop itself, reducing waste disposal issues, and repurposing it into a cost-effective cleaning solution. The effectiveness of the soap was tested through trials to measure its cleaning efficiency compared to conventional detergents.

The project also included a cost analysis to determine potential savings for the business by switching to a recycled soap alternative. Furthermore, staff training and awareness programs were implemented to ensure proper usage and acceptance of the product. If successful, this initiative was expected to serve as a model for other food businesses looking to adopt sustainable and cost-efficient cleaning solutions.

1.5 DIFFERENTIATION

RESOAP		**VANISH**
Specially designed to remove stubborn grease stains and odours from sanitary cloths, making it ideal for food businesses.	Specific Function	Formulated to remove a wide range of stains, including grease dirt and dye-based stains, suitable for general household use.
Made from used cooking oil, promoting sustainability and waste reduction.	Raw Material	Made from chemical-based surfactants, enzymes, and oxygen-based bleaching agents.
More affordable due to the use of low cost, recycled materials, reducing operational expenses for businesses.	Cost Efficiency	More expensive due to its specialized formula, brand value, and chemical composition.