

POLITEKNIK MELAKA

DIPLOMA IN INTERNATIONAL BUSINESS

PINAPEEL PAPER SOAP

MUHAMMAD DANISH SYAHMI BIN

MUHAMMAD NOR HAFIZ

11DPI22F2013

MUHAMMAD AKMAL DANIAL BIN YUSUF

11DPI22F2011

DAMUTHARAN A/L SELVARAJU

11DPI22F2019

COMMERCE DEPARTMENT

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11DPI22F2019

This report proposal is submitted to the Commerce Department as
a part of the requirements for the award for a Diploma
International Business

COMMERCE DEPARTMENT

OCTOBER 2024

CONFIRMATION OF THE PROJECT

The project report titled " PinaPeel Paper Soap " has been submitted, reviewed and verified as a fulfills the conditions and requirements of the Project Writing as stipulated

Checked by:

Supervisor's name: PUAN EMILYA BINTI ZURDA

Supervisor's signature:

Date:

Verified by:

Project Coordinator name: PUAN TUTY BIN 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: MUHAMMAD DANISH SYAHMI BIN MUHAMMAD NOR HAFIZ

Registration Number: 11DPI22F2013

Date :

2. Signature :

Name : MUHAMMAD AKMAL DANIAL BIN YUSUF

Registration Number :11DPI22F2011

Date :

3. Signature :

Name : DAMUTHARAN A/L SELVARAJU

Registration Number : 11DPI22F2013

Date :

DECLARATION OF ORIGINALITY AND OWNERSHIP

TITLE : PINAPEEL PAPER SOAP

SECTION : II 2024/2025

1. We,

1. MUHAMMAD DANISH SYAHMI BIN MUHAMMAD NOR HAFIZ
2. MUHAMMAD AKMAL DANIAL BIN YUSUF
3. DAMUTHARAN A/L SELVARAJU

is a final year student of Diploma in International Business, Department of Commerce, Politeknik 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 the Diploma in International Business to us.

Made and in truth that is recognized by;

a) Muhammad Danish Syahmi Bin

Muhammad Nor Hafiz

(Identification card No: [REDACTED])

.....

b) Muhammad Akmal Danial Bin Yusuf

(Identification card No: [REDACTED])

.....

c) Damutharan A/L Selvaraju

(Identification card No: - [REDACTED])

.....

In front of me,

As a project supervisor, on the date:

ACKNOWLEDGEMENTS

Praise to Allah, Lord of the universe for His bounties and bestowed upon us. Peace to Prophet Muhammad S.A.W. the sole human inspiration worthy of imitation. Alhamdullilah all praise to Allah S.W.T. the almighty for the strength and endurance provided us to complete the project. Working for this generally this dissertation specifically is no doubt a challenging and enduring journey that will cherish all our life. The success and outcome of this project required a lot of guidance and assistance from many people, and we are extremely privileged to have got this all along completion of our project. All that we have done is only due to such supervision and assistance and we would not forget to thank them. We respect and thank you Pn Tuty Binti Kamis from Commerce Department for providing us an opportunity to do the project work in Politeknik Melaka and giving us all support and guidance, which made us complete the project duty. We are extremely thankful to her providing such as a nice support and guidance, although she had busy schedule managing the corporate affairs. We also owe our deep gratitude to our project Pn Emilya Binti Zurda from Commerce Department who took keep interest on our project work and guided us all along, till the completion of our project work by providing all the necessary information for developing a paper soap. We are thankful to and fortunate enough to get constant encouragement, support and guidance from all teaching staffs of Commerce Department which helped us in successfully completing our project work. Also, I would like to extend our sincere esteems to everyone for their timely support. Thank you.

EXECUTIVE SUMMARY

In today's world, sustainability and hygiene are two major concerns that need to be addressed simultaneously. PinâPeel was developed as an eco-friendly business project that focused on repurposing discarded pineapple peels into biodegradable paper soap. This innovative product was designed to provide a portable, convenient, and environmentally friendly hygiene solution, especially for individuals who require handwashing on the go.

PinâPeel Paper Soap was created to tackle two significant issues: organic waste management and the lack of accessible, sustainable hygiene products. Every day, thousands of tons of pineapple peels were discarded by restaurants, juice vendors, and households, contributing to environmental pollution. At the same time, many consumers struggled to find affordable and chemical-free handwashing solutions, particularly while traveling or working outside.

This report outlines the business problems and challenges faced, the objectives of PinâPeel, the justification for selecting this project, the scope of the business, and a SWOT analysis. Through the development of biodegradable paper soap, PinâPeel aimed to reduce waste, promote sustainability, and provide an innovative hygiene product that was both practical and environmentally responsible. By combining natural antibacterial properties from pineapple peels with plastic-free, dissolvable packaging, PinâPeel Paper Soap positioned itself as an effective and eco-friendly alternative to conventional soap.

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CHAPTER 1

INTRODUCTION

PinâPeel was a pioneering business that specialized in the production of paper soap using discarded pineapple peels. With increasing global concerns about sustainability and hygiene, the project aimed to provide an organic and responsible solution that addressed waste reduction while promoting sanitation and healthy living. At the core of this initiative was the development of PinâPeel Paper Soap, a compact and lightweight hygiene solution that could be used conveniently with water and a cleanser anytime, anywhere.

The creation of PinâPeel not only contributed to reducing waste by repurposing pineapple peels that were previously discarded, but it also provided an efficient and biodegradable alternative to conventional chemical-based soaps. Unlike many commercially available soaps that contained synthetic ingredients and harmful chemicals, PinâPeel Paper Soap was formulated to be environmentally safe and skin-friendly. This made it a suitable alternative for individuals who sought natural, chemical-free hygiene products. Furthermore, the introduction of PinâPeel Paper Soap addressed the increasing demand for sustainable personal care products in industries that required high hygiene standards, such as food service, hospitality, and travel.

Through this innovation, PinâPeel not only provided an eco-friendly hygiene solution but also helped raise awareness about the importance of sustainability in everyday life. The project aimed to make sustainable hygiene products accessible to both businesses and consumers while integrating environmental responsibility with product innovation.

1.1 BUSINESS PROBLEMS OR ISSUES

While sustainable hygiene products offered many benefits, PinâPeel faced several challenges in bringing its eco-friendly paper soap to the market. One of the biggest issues was the sheer amount of pineapple peels wasted daily. Restaurants, juice vendors, and households discarded these peels without realizing their potential, contributing to unnecessary environmental pollution. Despite having natural antibacterial and cleansing properties, these peels were often overlooked as a valuable resource. By turning them into soap, PinâPeel not only helped reduce organic waste but also supported a circular economy by repurposing these discarded materials into useful hygiene products.

Another significant challenge was making eco-friendly hygiene products more accessible and affordable. Most commercial soaps on the market contained synthetic chemicals, artificial fragrances, and preservatives—ingredients that caused skin irritation and harmed aquatic life when washed away. People who sought natural alternatives often found them either too expensive or difficult to obtain. This issue was particularly concerning in industries like food service, where employees needed to wash their hands frequently, leading to dry and irritated skin from harsh chemical-based soaps. With its gentle, plant-based formula, PinâPeel provided a skin-friendly solution that ensured effective hygiene without compromising safety or affordability.

Beyond these practical concerns, awareness and market acceptance were also major hurdles for sustainable businesses like PinâPeel. Many people simply did not realize the environmental impact of the soaps they used daily, and as a result, they saw no reason to switch to a natural alternative. That was why educating consumers and raising awareness through strategic marketing became essential for PinâPeel's success. By highlighting the benefits of eco-friendly soap—for both personal health and the planet—PinâPeel effectively encouraged more people to adopt sustainable choices. Addressing these challenges was key to ensuring that PinâPeel became a practical, innovative, and impactful solution for both consumers and businesses.

1.2 BUSINESS OBJECTIVES

1. To reducing organic waste
2. To make a sustainable hygiene products more accessible and affordable
3. To raise awareness about natural and biodegradable hygiene products

1.3 JUSTIFICATION of BUSINESS PROJECT SELECTION

The decision to launch PinâPeel was supported by several strong reasons that made it a smart and sustainable business idea with great long-term potential. One of the biggest driving factors was the growing demand for eco-friendly personal care products. More people became aware of their environmental impact and actively sought sustainable alternatives. Businesses, especially in the hospitality and food service industries, also aimed to reduce their carbon footprint. With hygiene being a top priority in these sectors, PinâPeel provided a timely and relevant solution by offering natural, biodegradable soap products that were both effective and eco-friendly. The utilization of organic pineapple peel waste continues to be a focus in environmentally friendly product innovation. One of the interesting findings comes from research conducted by Rahmah Utami Budiandari and a team from the Food Technology Study Program, Muhammadiyah University Sidoarjo (Umsida). Data from the research states that pineapple skin contains important chemical components such as flavonoids, bromelain, carbohydrates (17.53%), and glucose (17%). This content makes pineapple skin very suitable to be used as a substrate in the kombucha fermentation process.

Kombucha fermented with pineapple peel extract not only utilizes organic waste but also provides a healthy drink alternative rich in probiotics. This research explores the potential of pineapple skin, a part of the fruit that is often considered waste, to be processed into a kombucha probiotic drink that has high health benefits. By taking advantage of controlled fermentation, this research opens up a great opportunity to produce valuable and environmentally friendly products. Ethanol extract of pineapple skin (*Ananas comosus* L.Merr) has an immunomodulatory effect on mice male white with the carbon cleaning method. Dose Ethanol extract of pineapple peel is best for the immunomodulatory effect is a dose of 250 mg/kg BW.

Another major reason for choosing this business was the abundance of raw materials. Pineapple peels were widely available and often discarded as waste, despite having valuable antibacterial properties. Instead of allowing them to go to waste, PinâPeel repurposed them into a key ingredient for its paper soap. This initiative not only helped reduce waste but also ensured cost-efficient production, allowing the business to offer sustainable products at competitive prices.

Additionally, the food service industry presented a strong market opportunity, as restaurants, cafes, and other food-related businesses required constant hand hygiene solutions. By providing them with a natural, safe, and effective alternative, PinâPeel successfully met their hygiene needs while also supporting their sustainability goals.

What made PinâPeel stand out from the competition was its unique selling point (USP). Unlike

conventional soaps that relied on artificial fragrances and chemical additives, PinâPeel Paper Soap was formulated using natural pineapple extracts. This not only gave the product antibacterial properties but also provided a refreshing scent—without the need for synthetic ingredients. As more consumers sought chemical-free and skin-friendly hygiene solutions, PinâPeel catered to health-conscious individuals and environmentally aware businesses, giving it a competitive edge in the market.



Lastly, long-term business viability was a key factor in the selection of this project. As environmental regulations tightened and consumers became more selective about the products they used, the demand for eco-friendly hygiene solutions continued to grow. PinâPeel was in a strong position to capitalize on this trend, ensuring a business model that was both sustainable and profitable. Through its commitment to waste reduction, affordability, and consumer education, PinâPeel successfully positioned itself as an innovative solution in the sustainable hygiene industry.

1.4 SCOPE OF BUSINESS PROJECT

The PinâPeel project was designed to create eco-friendly and sustainable paper soap that benefited both people and the environment. By repurposing discarded pineapple peels, the project turned waste into a valuable product, offering a biodegradable alternative to chemical-based soaps. The goal was not only to develop a hygienic and effective soap but also to promote better waste management and sustainable living. One of the main focuses of the project was product development. PinâPeel Paper Soap was created as a lightweight, travel-friendly hygiene solution, perfect for travelers, office workers, and people on the go. The soap was gentle on the skin, free from harsh chemicals, and biodegradable, ensuring it was safe for both users and the planet. Sustainable packaging was also used to reduce plastic waste, supporting the project's eco-friendly mission. To ensure the product reached the right customers, PinâPeel Paper Soap was marketed to both businesses and individual consumers. Businesses such as restaurants, cafes, hotels, and food service industries required effective and sustainable handwashing solutions, making them key target customers. Meanwhile, individuals who valued convenience and sustainability found PinâPeel Paper Soap to be a practical choice. The product was distributed through online platforms, eco-friendly retail stores, and bulk partnerships with businesses looking to adopt greener hygiene products.

Beyond providing a hygiene solution, PinâPeel aimed to make a positive environmental impact. Instead of allowing pineapple peels to go to waste, they were collected from juice vendors, fruit markets, and restaurants and transformed into soap. The production process used minimal water and avoided harmful chemicals, supporting a circular economy where materials were reused instead of discarded. Raising consumer awareness was also a key part of the project. Many people were unaware of the harmful effects of conventional soaps and their impact on the environment. Through social media campaigns, workshops, and partnerships with environmental organizations, PinâPeel helped educate consumers on the benefits of switching to sustainable hygiene products. This approach not only encouraged greener habits but also built trust among eco-conscious consumers. The project also considered future growth opportunities. There were plans to expand the product range by using other upcycled fruit waste for natural skincare and hygiene products. Additionally, hotels, corporate offices, and the travel industry were identified as potential markets where sustainable hygiene solutions were in demand. Investing in research and development ensured that PinâPeel could continue improving its products while maintaining its commitment to sustainability.

1.5 DIFFERENTIATION

	<p>Differentiation between pinapeel and other brands</p>	
PINAPEEL PAPER SOAP		BOOMBA
<p>Made from upcycle pineapple peels, reducing organic waste</p>	<p>Eco Friendly</p>	<p>Regular paper soap; not made from upcycled or food-based waste</p>
<p>Compact and lightweight paper soap, ideal for travel</p>	<p>Portability</p>	<p>Also compact and travel-friendly, commonly used for hygiene on the go</p>
<p>Free from harsh chemicals, making it gentle on the skin</p>	<p>Skin Benefits</p>	<p>May contain fragrance and preservatives; varies depending on product line</p>
<p>Designed for travelers, office workers, student, and business looking for sustainable solutions</p>	<p>Target Market</p>	<p>Targeted toward general consumers seeking convenient hygiene solutions</p>

