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BACHELOR OF SCIENCE (HONS.) FOOD SCIENCE & TECHNOLOGY

ENT600: TECHNOLOGY ENTREPRENEURSHIP
NEW PRODUCT DEVELOPMENT

CocoLab

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EXECUTIVE SUMMARY

CocoLab, a forward-thinking company in the confectionery industry, recognizes the urgent need to address the environmental challenges posed by the improper disposal of coconut dregs, a byproduct of coconut processing. This waste contributes to both resource depletion and ecological damage. In response to this issue, CocoLab proposes a sustainable solution by repurposing coconut dregs into a new line of confectionery products—CocoCloud Bites, a nougat with added dried coconut dregs. The disposal of coconut dregs presents a dual environmental problem with resource waste and ecological damage. The lack of effective waste management exacerbates these issues. CocoLab identifies an opportunity to turn this agricultural residue into value-added nougat products, addressing environmental concerns and diversifying the product range. CocoLab conducts extensive research, exploring various sources such as journals and news articles to understand the environmental impact of food waste. The coconut industry's integral role in Malaysia motivates the exploration of innovative uses for its byproducts. Online surveys are employed to gather consumer feedback and preferences, ensuring alignment with market demands. Observations reveal the underutilization of coconut dregs, often discarded despite their potential. CocoLab seizes this opportunity to introduce dried coconut dregs as a primary ingredient in CocoCloud Bites, aligning with the company's commitment to sustainable practices and waste reduction. A comprehensive market survey explores existing nougat varieties on e-commerce platforms, identifying a gap for a nougat product containing coconut residue. CocoLab targets teenagers and adults, emphasizing the product's convenience, nutritional benefits, and affordability for on-the-go consumption. CocoLab follows a structured NPD process, starting with idea generation and research. Idea screening involves the careful selection of nougat as the product to be reformulated, incorporating coconut dregs to cater to Malaysian taste preferences and reduce waste. In conclusion, CocoLab's innovative approach to repurposing coconut dregs not only addresses environmental concerns but also taps into market trends, offering consumers a unique and sustainable confectionery option. CocoCloud Bites, with its diverse flavours and sizes, is positioned to capture the market's attention and contribute to the company's growth while promoting environmental sustainability.

1.0 INTRODUCTION

1.1 Problem Statement

The proper disposal of leftover coconut dregs is a dual environmental problem due to resource waste and ecological damage, and this issue has become increasingly urgent. These dregs build up as a byproduct of processing coconuts, which frequently results in inappropriate disposal techniques that worsen the environment. In addition to being a squandered chance for sustainable practices, the existing dearth of effective waste management plans for coconut dregs also contributes to the detrimental environmental effects of the coconut processing sectors. Furthermore, the necessity for a workable solution is further highlighted by the expense of trash disposal and the possible health risks associated with inappropriate disposal techniques. In this context, the notion of turning leftover coconut dregs into nougat items seems like a good idea. It is possible to both alleviate the environmental issue raised by coconut waste and open a fresh channel for product diversification by using these dregs to produce nougat items with value added. To fully fulfil this potential, though, further research and development are required to create a technique that is both economically and environmentally feasible and satisfies customer preferences and environmental sustainability. The numerous problems with waste coconut dregs are summarized in this problem statement, which also highlights the need and advantages of finding a way to turn this agricultural residue into delicious products.

1.2 Objectives of Report

This report is intended to explain the research and development process of Cocolab; nougat with the inclusion of coconut dregs waste to align with the sustainability concept that is now emerging by using Consumer Trend Canvas (CTC) as the guidance.

1.3 Methodology

CocoLab has employed various methods to collect data and feedback from potential customers about our product.

A. Research

Research is our primary method of obtaining information throughout developing our product. Exploring various sources like journals and news articles assisted us in discovering that making use of food waste could help the planet in various ways. Further understanding of the issue prompted us to study what industry produces edible waste, what waste to obtain, and how to apply it to existing products. Since the coconut industry is an integral part of Malaysia, using its byproducts in ways other than the existing approaches would be an interesting idea to expand. The next step would be to analyse the consumers' acceptance and thoughts on our product through online surveys.

B. Online surveys

Surveys are conducted online by distributing Google form links across social media platforms to reach diverse audiences efficiently. This method aims to introduce coconut dregs as an ingredient in popular confectionary products like nougat to initiate the company's direction in prioritising the utilisation of edible waste. The questions asked to allow us to improve our idea and gauge their response to our business plan from a consumer's perspective. In addition, the consumer preferences of all ages could be determined through this method.

C. Observation

Observations enable us to identify the constant use of coconut milk in local delicacies and the coconut dregs it produces, which are often thrown out as waste if not used for agricultural, composting, and animal feed purposes. Therefore, our company decided to