



اَوْنِبُوْ سَيِّتِيْ تَيْكُوْ لُوْ كِيْ مَارَا  
UNIVERSITI  
TEKNOLOGI  
MARA

## 2-IN-1 TIN SMASHER AND PLASTIC BOTTLE CUTTER

### TECHNOLOGY ENTREPRENEURSHIP (ENT600): NEW PRODUCT DEVELOPMENT

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## **EXECUTIVE SUMMARY**

In this New Product Development (NPD) report, the step and process to develop 2-in-1 Tin Smasher and Plastic Bottle Cutter is thoroughly explained. The research & development process of this product such as how we came up with the idea to create this product and market research about the product will be explain in detail in this report. We also will explain on the function and the uses of every component that we used for the product and also how the product operate.

A survey regarding the people's perspective of the product was distributed until it reach 50 respondents. The result of the survey really important as it help us understand more of our product effectiveness and feasibility for commercialization. This survey also allows us to enhance and improve our product based on the feedback and critics of our future customers.

We did not have a true target market as we think that this product can be used by anyone. However, we think that the people that live in urban area can consider in buying this product because as we know, the city area have a higher waste disposal rate compare to the people that live far from the city. By proposing and developing this product, we hope that this will help in increase the awareness of the people and help decreases the disposal of plastic bottles and tin cans.

# CHAPTER 1: INTRODUCTION

## 1.1 Problem Statement

In this modern world, rapid development and economic growth had contributed to a remarkable rise in plastic manufacturing and consumption in most country around the world. Plastic is a synthetic substance that is used in various type of industries where the packaging, manufacturing, electronics, electrical products, furniture, vehicles, homes and agriculture industries are the most common. Statistics in United States showed that for every second, 1,500 plastic water bottles are consumed and over 60 million plastic bottles were threw away where most of it end up as waste in streets, parks and waterways which then wash out to the sea. Other than that, aluminum cans litter is another problem that become worsen nowadays. The Solid Waste Coordinators of Kentucky found in 1999 statewide study report that 52 percent of roadside litter consisted beverage containers which include plastic bottle and tin cans.

In Malaysia, the problem about plastic bottle and tin cans has become worsen from years to years. Representative of Malaysia Nature Society (MNS) said in the interview with Sinar Harian in 22 Sept 2019 where plastic bottles are among the highest number of garbage collection in the garbage cleaning program conducted at Pantai Pelindung in Kuantan. 2051 of plastic bottle were collected during the 2 hours' program. Therefore, we come out with a product that can help in reducing the problem regarding this plastic bottle litter and tin cans litter which is 2-in-1 Tin Smasher and Plastic Bottle Cutter. We combined a plastic bottle cutter and a tin cans smasher to increase the function to help cutting the plastic bottle into useful waterproof string and at the same time can be used to smash the tin cans.