SMART DUSTBIN

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EXECUTIVE SUMMARY

This New Development Product report intends to inform the prospect consumer and user about the product that will be created. The first process of developing the new product is to identify all the consequences and problems that might happen during the development process and the user will be faced. A survey has been completed that involved almost 33 respondents most of them come from the students of UiTM Arau, Perlis, and a few public respondents. The survey will identify all the problems that might the respondents faced regarding the development of the product that will satisfy the user's need and the market requirement. Moreover, the survey also allows the users to suggest ideas of improvement and the users' opinions about the product.

The product is related to the development of a smart dustbin with some technology. The purpose of developing the product is to ease the process of managing the wastes from the dustbin. By providing the technology, it might reduce the user from touching the dustbin which prevents them from having a disease when handling the waste from the product.

Based on this survey, the users will be asking about their awareness regarding the handling of waste such as the waste disposal frequency in the household, understanding about the concept of the greenhouse, the type of waste they dispose of, and issues and problems faced by them. They are various issues faced by the respondents when handling the waste disposal process. First, the problem is about the current dustbin was unable to separate the leftover and recycle trash. Currently, the respondents need to manually choose the trash that can be recycled such as plastic, paper, and aluminum. Next, the user needs to manually fold the trash when the dustbin was full and needs to replace the new plastic on the dustbin and it will be time-consuming faced by the respondent to finish the process. Furthermore, the respondents also need to manually lift the dustbin caps to insert the trash. This might give some discomfort for them because their hand will be dirty if there is some leftover was left on the dustbin caps.

Due to all the problems mentioned above, a smart dustbin is a proposed idea for the New Development Product. This smart dustbin will provide some current technology that helps the users to reduce their time to manage the leftover and recycle trash. This will be included technology such as a sensor on the dustbin that helps it to separate the wastes. Smart dustbin also will provide the space for the trash according to the type of waste which are leftover and recycle items.

INTRODUCTION

BACKGROUND OF COMPANY

The Max Cycle company was founded in 2021 by Muhammad Muttaqin and colleagues. Before this were founded Muhammad Muttaqin was works as the staff in the marketing department found a huge issue in meeting the need of the Cycle Group in keeping up the first project product development meet the current marketing demand at the time. Muhammad Muttaqin later started to plan to create a Cycle's own sub company with the team that provides sales & marketing, production & logistics and admin & account services to the main company. Together working with him in this effort is his colleagues Muhammad Aiman, Nor Izzat Shazwan, Hanies Ardeenie and Nurlaila Aseelah who each of them have one of a kind information in commerce field. After the team succeeded in persuading the Board of Director of the Cycle Group, the Max Cycle finally came into existence in 25 May 2021.

PROBLEM STATEMENTS

1. People does not alert about where their trash

Some people nowadays do not take a good example or responsibility to through the trash properly in the dustbin. They even think that they have made a good throw of their trash in the dustbin and this is not really good way to throw the trash away. The dustbin is a non-technology product that have been use for people in daily life. Mostly in public place such as downtown, theme park, parking park, mega mall and others are where many people need to entertained themselves to make sure that the place is clean and good-looking places. Besides, in the house where the parents have to teach the children how important to throw the trash properly in the dustbin. So, when the time comes those children will show a good responsibility wherever they are on how important throwing the trash in the dustbin.

2. People mix up the trash in the garbage

One dustbin should not be necessary for people to throw all the trash. The dustbin is need to be separate for the right trash so that when the trash is pick up by garbage truck. The garbage truck will carry the garbage to the landfill. Most of dustbin in public have been given a guide to throw

2.3.2   PRODUCT DESIGN AND FEATURES

2.3.2.1 Overall Design

Smart Dustbin is a merger of two space that separated the trash according to it types. Basically, this dustbin will isolate the trash into two type which are recycle that included the trash that made from aluminum, plastic, and paper based and leftover that included dry and wet food waste. This smart dustbin used stainless steel as its basic materials. The reason for using this type of material is because this smart trash can will look more contemporary in appearance and durable in terms of durability. Furthermore, an important factor in the use of this material is about the aspect of hygiene because by using this material the cleaning process will be easier and faster because the dirt does not easily stick to this material. The overall size of the waste storage space is 3 meters for length, 1.5 meters for width and 1.5 meters for height. Plastic lumber will be used for a dustbin cap because the material is suitable for outdoor that has high scratch and abrasion resistant. In addition, because this material has a light weight, so it will facilitate the process of this lid being opened using a sensor placed on it. Instead of that, one features could be added to the dustbin because this material has a light weight, so it will facilitate the process of this lid being opened using a sensor placed on it. In addition, one feature could be adding which is the tires that are placed under the smart dustbin to make it easier for users to move the position of the rubbish bin according to the suitability of the place and situation.