



FACULTY OF ELECTRICAL ENGINEERING

UNIVERSITY TEKNOLOGI MARA

TECHNOLOGY BLUEPRINT

SMART COMPACT BIN

Faculty : Electrical Engineering Electronic (communication)

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Group class : EE241S8B

Group name : ECO GREEN TECH

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1.0 EXECUTIVE SUMMARY

The product that we developed is Smart Compact Bin. One of the main features for this trash bin is it can automatically create more space for the trash, hence the name Smart Compact Bin. The trashcan is mainly made of aluminium rather than stainless steel for several reasons, one of it is that cheaper than its alternative. Other than that, aluminium is also lighter, which made it easier for transporting from one place to another. Aside from compacting the trash, this Smart Compact Bin is also equipped with two compartments each for its own purposes. The upper compartment is for general trash such as paper, food waste, plastic, glass and other thing. But the bottom part is equipped with wire mesh. This is to allow water to flow down to bottom compartment when it is compact will full of trash. The bottom compartment is used to contain the water that is dripping down from all the trash above.

Our target market is mostly for fast food restaurant and hotel around the area of Shah Alam. This is because the main feature of Smart Compact Bin is the most beneficial to this type of organization/shop. For example, restaurant or hotel can take advantages from this product due to high amount of food waste generated every day. Food waste can be very disgusting to handle or removed. This is why our product is suitable for them. City council can also take benefit of this product if they want to use it on location with high amount of tourist. By using this product, it can improve the aesthetic value of the location.

Although our company is just established, we are quite confidence in our ability to penetrate this market. This is because in Malaysia, the concept of “Smart Trashcan” is not widely known yet. Most of the smart trashcan are only available online and most of them are from China. We try to take advantage of this opportunity and set our foot in this market before other local competitors did the same.

Based on the sale forecast, we are expected to have increases in terms of sale each passing year. For the next two years, we are expecting an increase of 5% and 10% of sale respectively.

In order to make sure that our company achieve our target and goals, we have to establish our management team which consist of General Manager, Administrative Manager, Marketing Manager, Financial Manager and Operational Manager. Responsibilities have been assigned to each and every one equally.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT APPLICATION

2.1.1 PRIMARY APPLICATIONS

Our new product to be released to the market is called Smart Compact Bin. It is a brand new type of trashcan which is designed to automatically create more space for the overflowing trash to create more space and reduce the unpleasant smell.

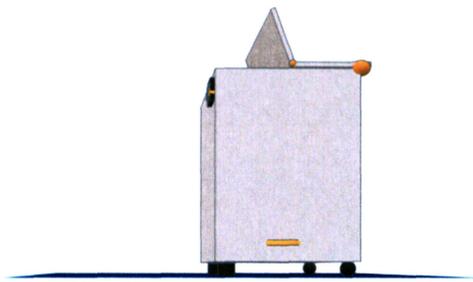


Figure 1: Automatic Open Cover

Aside from creating space for the trash, this Smart Compact Bin is also equipped with two compartments each for its own purposes. The upper compartment is for general trash such as paper, food waste, plastic, glass and other thing. But the bottom part of upper compartment is equipped with wire mesh. This is to allow liquid to flow down to bottom compartment when it is full with trash.

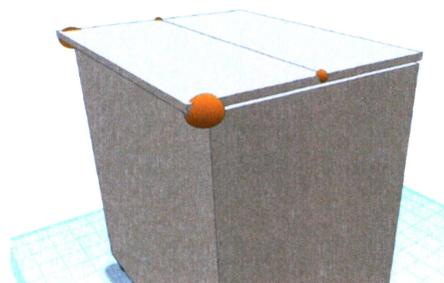


Figure 2: Upper Compartment

The bottom compartment is used to contain the liquid that is dripping down from all the trash above. This will help to reduce the unpleasant smell from the trash.

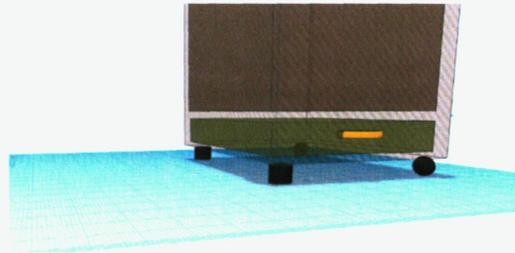


Figure 3: Bottom Compartment

2.1.2 SECONDARY APPLICATIONS

Other than the three main functions stated above, Smart Compact Bin is also equipped with LCD Display. The LCD Display's function is to display the level of trash inside the trashcan.

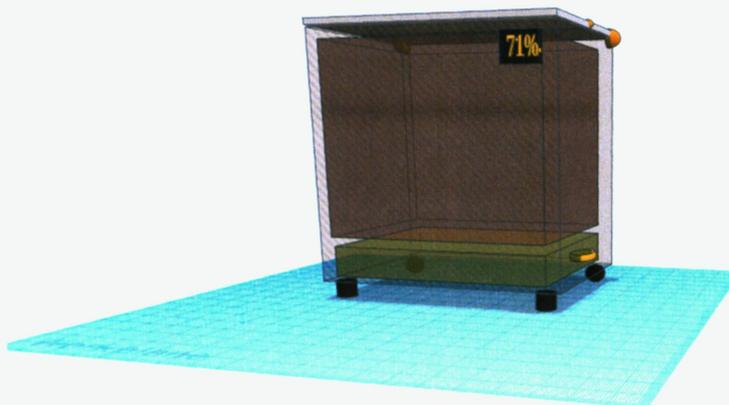


Figure 4: 3D Model of Easy Compact

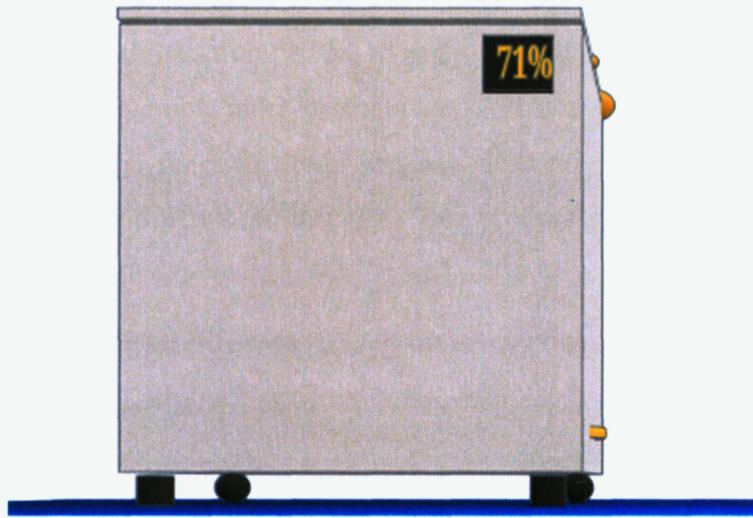


Figure 5: Front View

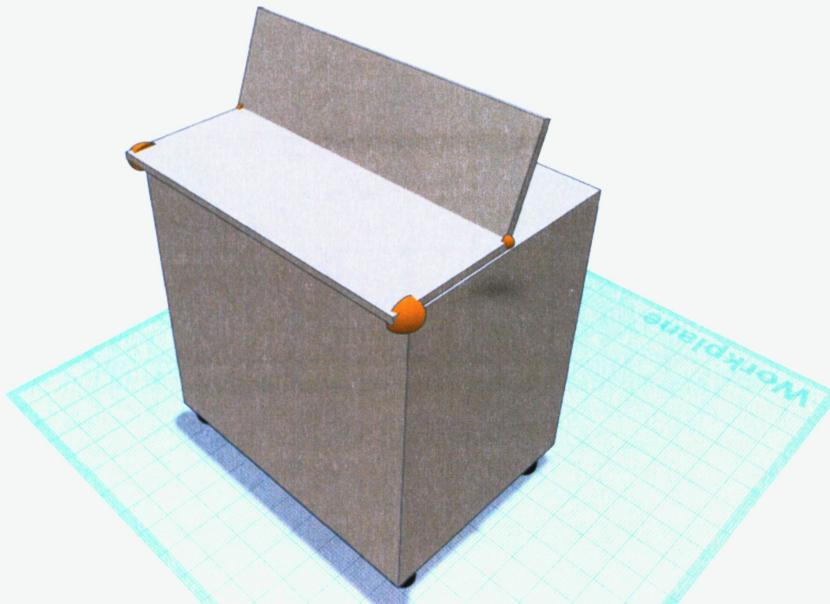


Figure 6: Plan View