



اَللّٰهُمَّ صَلِّ وَسَلِّمْ عَلٰى سَيِّدِنَا مُحَمَّدٍ
UNIVERSITI
TEKNOLOGI MARA
MALAYSIA

SMART BIN

Faculty : HEALTH SCIENCES
Program : BACHELOR IN MEDICAL IMAGING
Program Code : HS 242
Course : TECHNOLOGY ENTREPRENEURSHIP
Course Code : ENT 600
Semester : 6 / MARCH 2018
Group Name : NHSIF 10Y
Group Members : NAHLI BINTI TABRANI
2015400882
NOR ZAM RIZANA BINTI ABU BAKAR
2015255012
MUHAMMAD SYAFIQ B.
SHAMSULNIDZA
2015627244
MUHAMMAD FARIS BIN MOKHSIN
2015412278

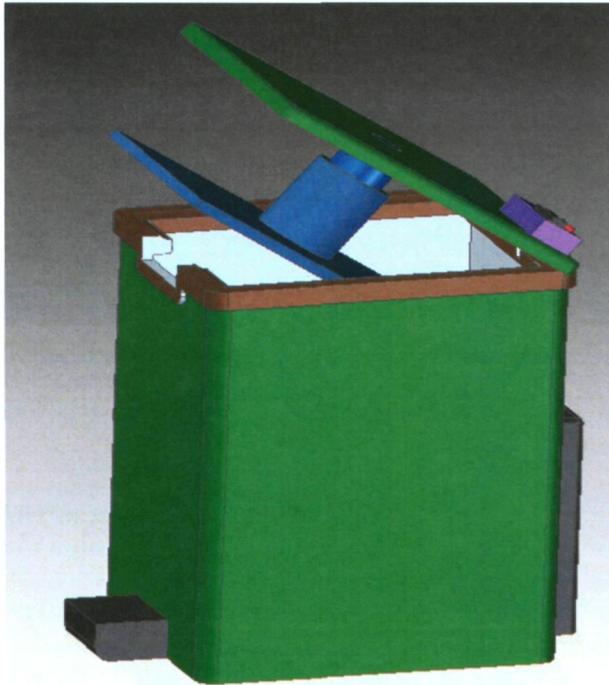
Submitted to

MADAM ZANARIAH BINTI ZAINAL ABIDIN

Submission Date

10TH JUNE 2018

smartbin



N2FS ENTERPERISE

TABLE OF CONTENTS

CHAPTER 1	4
1.0 EXECUTIVE SUMMARY	4
1.1 INTRODUCTION	4
1.2 PRODUCT CONCEPT	4
1.3 THE TARGET MARKET	5
CHAPTER 2	5
2.0 PRODUCT AND SERVICE DESCRIPTION	5
2.1 FUNCTIONS DETAIL	5
2.2 APPLICATION OF THE PRODUCT	5
2.3 UNIQUE FEATURES	6
2.4 PRESENT AND STATE OF DEVELOPMENT PRODUCT	6
2.5 OTHER PROPRIETARY FEATURES OF PRODUCT	8
2.6 OPPURTUNITIES FOR THE EXPANSION PRODUCT	8
CHAPTER 3	9
3.0 TECHNOLOGY DESCRIPTION	9
3.1 OVERVIEW	9
CHAPTER 4	10
4.0 MARKET RESEARCH AND ANALYSIS	10
4.1 CUSTOMER	10
4.2 MARKET SIZE AND TRENDS	11
4.3 COMPETITION AND COMPETITIVE EDGES	11
4.4 ESTIMATED MARKET SHARE AND SALE	13
4.5 MARKETING STRATEGY	13
CHAPTER 5	15
5.0 MANAGEMENT TEAM	15
5.1 TEAM MEMBERS	15
CHAPTER 6	18
6.0 FINANCIAL PLAN	18
6.1 START-UP COST	18
6.2 WORKING CAPITAL (4 MONTH)	18
6.3 COST OF COMPONENT PER PROTOTYPE	19
CHAPTER 7	20
7.0 PROJECT MILESTONE	20

CHAPTER 1

1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

N2FS Enterprise is one of the company that invest the new set of user friendly trash bin. The product is designed with the concept of providing simple operating and user friendly mechanism. The fundamental aspect of the device to help in the process of eliminate waste at the public area during weekend. Which is, lack of staff for cleaning purposes but heavy public user at the hypermarket, mall or university campus. The inspiration of this product come from our observation at most of public area during weekend and problem with insufficient collecting during certain period.

The objective of this product minimize the time and cost relative to company or organization to hire more workers during weekend. Simultaneously, it will also to play important role in recycle bin program. It is because, according Utusan Online 2017, Malaysian government had to prepared RM 2.2 billion per year to manage the waste properly for ensure our environment in clean and healthy position.

N2FS Enterprise has already identified the target market available to advertise the product. The main target is to fully facilitate the university or campus in Malaysia. Therefore the initial priority target markets are the university campus and followed by hypermarket and also shopping mall.

1.2 PRODUCT CONCEPT

This product more prefer to large institution such as university , mall, and hypermarket that still continue their service during weekend .As we know lack of staff during that period, with smart bin product, smartest give the solution for unmanaged garbage without have to hiring the workers during weekend .

Another purpose why our company implement smart bin is to encourage public to maintain the clean and healthy environment with free from garbage pollution and also free from garbage odour

The smart bin also have the opportunity to invest in recycle bin program that organize by The Waste Management Associations of Malaysia.

1.3 THE TARGET MARKET

Our company has already identified the target market available to advertise and promote this device. Main target is to fully facilitate the campus university in Malaysia. Therefore the initial priority target markets are the university campus and followed by hypermarket and also shopping mall. Based on our target market, we predict that there will be 100 units of smart bin orders in the first year of launching our product

CHAPTER 2

2.0 PRODUCT AND SERVICE DESCRIPTION

2.1 FUNCTIONS DETAIL

Our detail product consist of

- 1) Impacter – located at the top of smart bin, use to press down into trash container. The system in this smart bin we use hydraulic compactor system, which is use the Pascal's principle of pressure. With this system , we find the solution to made more waste can be occupied in one trash bin .The Pascal principle is apply when smart bin will autocompress the waste like tin , bottle and carton bin in small a shape , so it will make more space to waste can full fill.
- 2) Hydraulic hose – As a channel for hydraulic system to run
- 3) Power supply plug – direct plug in to electrical source to supply electric power
- 4) Sensoring trash – As an early detection when smart bin already full, sensoring system will automatic lock the smart bin and not allow more waste can be occupied. Another function of sensory system is to show the direction for next smart bin that available in that area

2.2 APPLICATION OF THE PRODUCT

Automatic smart bin compression is a development of normal trash bin that we implement and generate autocompression system to made more space to waste product can be occupied. In additional, we implement this product complete with sensory system which