SCHOOL OF COMPUTING

Faculty of Engineering

REPORT (GOALS 12 : Responsible Consumption & Production)

UHMT1012
GRADUATE SUCCESS ATTRIBUTES

SECTION : 30 - 1SECR

COURSE : BACHELOR OF COMPUTER SCIENCE - COMPUTER NETWORKS AND SECURITY

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DATE OF SUBMISSION : 5 DECEMBER 2019

INTRODUCTION

Sustainable consumption and production is about promoting resource and energy, efficiency, sustainable infrastructure and providing access to basic services, green and decent jobs and a better quality of life for all. Its implementation helps to achieve overall development plans, reduce future economic, environmental and social costs, strengthen economic competitiveness and reduce poverty.

Over the years, awareness and innovations on reducing waste actually arise globally due to the dramatic increment on plastic usage. A lot of bad consequences affect our mother-nature and environment. Improper disposal of these packaging products leads to these harmful compounds finding their way to water bodies, where they dissolve over a long time due to their non-biodegradable nature. Littered plastics are also harmful to animals because they occasionally eat them and die. One of the biggest factor of plastic usage is online shopping as the packaging are made from plastics. Hence, we create an alternative ways on using parcels package from the conventional ways – plastics, to a modern and sustainable usage.

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In collaboration with PosLaju Malaysia, our company is planning to substitute the current parcel package into a more sustainable materials as follows:

Categories	Details
Material(s)	❖ Silicone, Geami Wrap @ Corn-starch packaging

	❖ Silicone
	    ➢ Silica found in sand
	    ➢ Petroleum-based

Characteristic(s)	❖ Highly durable ❖ Ocean friendly ❖ Extreme endurance on high temperature
Target Audience	❖ E-shopper and courier service in Malaysia
Benefits	❖ Discount on postage ❖ Personal metric identification ❖ Real-time application for postmen

HOW DOES IT WORK?

Objects	Details
Every e-shopper will receive a member number	The member number contains the customer details such as names, addresses, phone numbers, etc.
Each smart parcel have a unique bar code which represents the tracking number	❖ The smart parcel must be returned to the nearest PosLaju after use. It can be done by the e-shopper or the postmen. ❖ The e-shopper will be notified through the applications once the smart parcel's bar code is scanned at PosLaju. ❖ The member number will be attached to the tracking number for each delivery. ❖ After the smart parcel is returned, through the apps, the e-shopper's member number will be detached from the tracking number and ready to be filled by the next user.

THE PROCESSES

	Details
E-shopper	❖ Key-in their member number before checking out their purchase ❖ If they have enough points, they can choose either they want to redeem free postage or not
E-shop	❖ Sent the product to PosLaju and key-in the e-shopper's member number ❖ The packaging will be done according to the member number by the e-shopper.
PosLaju	❖ The tracking number(along with the smart parcel) will be attached to the member number through the applications ❖ Send related information such as address and tracking number to the postmen through the apps ❖ Give points to the e-shopper for every usage of smart bag once it is returned
Postmen	❖ Receive information from PosLaju ❖ Deliver the package accordingly ❖ Scan the parcel's bar code to know whose parcel is whose ❖ Might help the e-shoppers to return the smart parcel back to PosLaju

REWARDS AND POINTS

The rewards system is compulsory for marketing purpose. We would like to encourage the people to send the smart parcel back to the nearest PosLaju so we could reuse it. This can be done by giving them a free postage fee once they reached a minimum points. This reward is an option for the e-shopper as they could choose either they want to redeem it or not before checking out their online purchase. In addition, they could also redeem the reward if they want to post something other than through online shopping. All they need to do is to select the option on the application and scan their member number at the counter of the post office.

Package's weight (kg)	Points given	Minimum points needed
0.5	5	
1.0	10	150
2.0	20	
5.0	50	250
10.0	100	

CONCLUSION

To summarize, we believe that this idea will help the society to overcome the problem where plastics are used widely around the world. We all know that usage of plastic may ruin our Earth as it takes a very long time to decompose. The current usage of plastic packaging for most postal services are also not convenient as it cannot be reused. This leads to the production of more and more plastics. By implementing our idea, we hope that smart parcel system could be applied in real world as soon as possible.

APPENDIX

The Belbin' Team Role Circle

- Mina
- Iffah

- Syida

- Iskandar

- Syida

- Mina
- iskandar

- Iffah