



SCHOOL OF COMPUTING
Faculty of Engineering

SECV2113 – HUMAN COMPUTER INTERACTION

PROJECT 1 PROPOSAL

Sustainable Development Goals (SDGs) Related Problem

SECTION : 02 – 1SECR

COURSE NAME : BACHELOR OF COMPUTER SCIENCE – COMPUTER NETWORKS & SECURITY

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DATE OF SUBMISSION : 22nd APRIL 2020

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Problem Statement

Sustainable consumption and production are 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 arise globally due to the dramatic increment on plastic usage. 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. One of the biggest factors of plastic usage is online shopping as the packaging are made from plastics. Hence, we create an alternative way based on the 12th SDGs which is Responsible Consumption and Production on using parcels package from the conventional ways – plastics, to a modern and sustainable usage.



Illustrations to Problem

As we mentioned previously in the problem statement, here are some clear pictures on the problems that we want to solve in more innovative way in parallel with the chosen SDGs methodologies.

	The usage of plastic widely across the globe in shipping the parcels will end up in trash bins and being deposited to garbage dump.
The amount of plastic waste will increase dramatically by years as many people nowadays will go for online buying.	
	The tremendous number of plastic waste disposal may lead to dangerous situation when it started to decay and gives out improper chemical elements.

SMART PARCEL

We create an alternative way on using parcels package from the conventional ways – plastics, to a modern and sustainable usage.



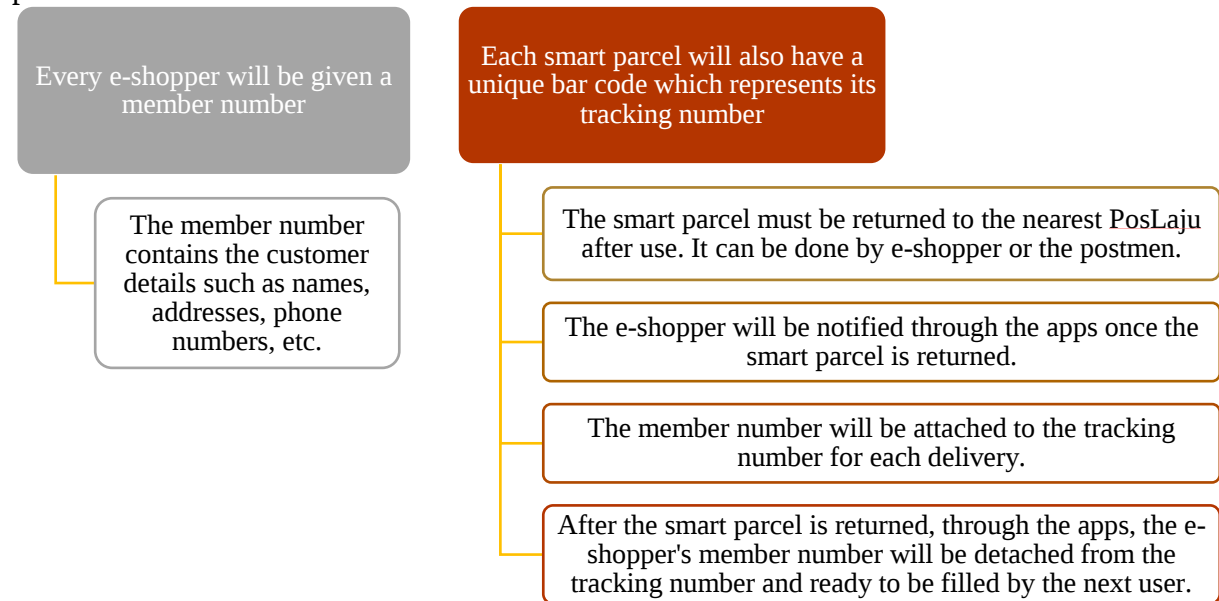
An Overview of Our Smart Parcel

Categories	Details
Material(s)	Silicone, Geami Wrap @ Corn-starch packaging
Characteristic(s)	Silica found in sand
	Petroleum based
	Highly durable
	Ocean friendly
	Extreme endurance on high temperature
Target Audience	Online shopper
	Nationwide courier service
Benefits	Discount on postage
	Personal metric identification
	Real-time application for postmen



How It Works?

We plan to use an app where it can be accessed by the e-shopper, e-shop, and the postmen.



The Process

Users	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 courier office so we could reuse it. This can be done by giving them a free postage fee once they reached a minimum point. 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	150
1.0	10	
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.