



UNIVERSITI
TEKNOLOGI MARA
MALAYSIA

E – LIGHT NPD

Faculty : **FACULTY OF APPLIED SCIENCES**

Program : **BIOMOLECULAR SCIENCES**

Program Code : **AS244**

Course : **TECHNOLOGY ENTREPRENEURSHIP**

Course Code : **ENT 600**

Semester : **5**

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Submission Date

13 DECEMBER 2019

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1.0 EXECUTIVE SUMMARY

E-Light is the next generation of highlighter. This innovation is a convenient highlighter that attached with USB flash drive and other additional technology such as on and off button, touchable menu screen and scanner. This device allows to digitally 'highlight' words in any book, and the words are then transcribed onto the computer automatically. The idea of combining these features on a highlighter is due to the current highlighter that has a very limited function that can only 'highlight' words in a book which would require significant more time and work to survive the passage of time. Besides, to make improvements to existing highlighters that cannot be used for a long time because fast running out of ink.

Ideas to generate this product was obtained from the internal idea sources and external idea sources. The internal idea sources were obtained through the observation and discussion among the team members. The external ideas sources were obtained from a lot of complaints from fellow students about the limited time spent in daily works and assignments at the university. The idea was screened, evaluated and filtered by reading from websites on the internet.

Instagram pooling was used in order to perform market survey and concept testing for electronic highlighter (E-Light). This survey was participated by our instagram followers who were on the timeline during 15 hours of polling session. The respondents were asked with few closed ended questions about the product with its technology features added. In the market survey, from Instagram polling, we are able to obtain the respondents' status, their opinion regarding the product features, expected price and conclude the most suitable population that suits with this product if it is being marketed. In the concept testing, from instagram's polling, it helps us to enhance the current idea and identify the highest users in population after the product have been marketed. Majority of the respondents agree and give positive feedbacks regarding the E-Light innovation.

Test marketing will be based on the results of the majority of respondents in the Instagram polling. This product will be tested to be marketed among the university students for both male and female. The price of the E-Light will be set below RM50 as it is affordable and reasonable for the target market. As for the promotion, we will also create interesting flyers which contains specialities and information in details about the product.

2.0 INTRODUCTION

2.1 PROBLEM STATEMENT / ISSUES

The feature of the highlighter does not meet any requirement of the students where the highlighter only have one colour for one highlighter. The students have a difficulty to copy the notes in the text into the Microsoft Words. The problem of the USB flash drive is small and easily to lose.

2.2 METHODOLOGY

A survey via Instagram polling was collected to gather information about the proposed innovation of the product and to prepare the report. Several pictures of our electronic highlighter were uploaded on Instagram along with a brief discussion on its function. Some few closed ended question regarding the product was asked. The respondents of this survey are random both men and female who were available on the Instagram's timeline during the polling session. Due to limitation of time, the duration for the polling session was unable to collect in 24 hours. Therefore, the time was fixed to 15 hours only. Results from the Instagram poll was recorded in percentage (%).

2.3 LIMITATIONS

The limitation that the team faced during this process are:

- Only big company supplied the digital highlighter and mostly from overseas company.
- The team face difficulties in accessing the product precisely. Only can purchased through online because there is limited store in Malaysia that sell the digital highlighter.
- Time constraint. Unable to perform the survey about the product numerous times to get a satisfied result and feedbacks about the innovation product.

3.0 NEW PRODUCT DEVELOPMENT

3.1 DEFINITION

E-Light is a compact digital highlighter that is wireless and easy to use. It is modern pieces of technology that is able to scan the selected words from any books and convert the scanned data into machine encoded text, therefore making it available

for easy editing. It is also a better preservation of the data (such as old books, which would require significant more time and work to survive the passage of time).

This innovation gives the user an advantage to use the highlights for a longer time as it can be refilled with a variety of color options and it is rechargeable.

3.2 CLASSIFICATION OF NEW PRODUCT DEVELOPMENT

The current digital highlighter that offered in market are too expensive and used with a very complicated function. Based on our perception, digital highlighter is very identical to pen scanner which makes the identity of digital highlighter are fading away. The digital highlighter currently has the technology but not really satisfying enough for the users.

So, the team has decided to improve the existing product by enhancing the function with more desirable and created the features to be a simple-to-use.

However, this product is still in the concept testing. The team has conducted a survey to collect the respondent's feedback about the proposed innovation and make evaluation to optimize the function of the E-Light.

3.3 NEW PRODUCT PROCESS

3.3.1 RESEACRH AND DEVELOPMENT

The R&D process done for the ideation stage through:

- Idea Generation

The idea to develop this product is through internal idea which is discussion among the team members. The team members conducted observation in UiTM Shah Alam and they found out the students are using highlighter as their main stationary to highlight their notes for study as well the flash drive is important for the students to bring the notes and transfer it to their laptop or computer. After conducting the observation, the team member made a discussion where the new idea came out which is to combine the highlighter and a flash drive become one. The external idea sources come from the customers which is the students' feedback about the combination of the highlighter and a flash drive. The team member interviewed random students in Faculty of Applied Sciences about their opinions on the new product development. From the interview session, most of the