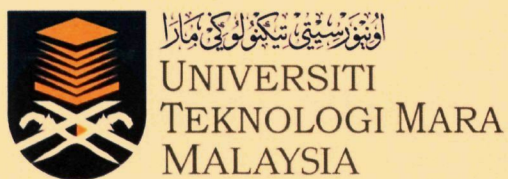


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INTELLIGENT PHONE CASE

Faculty : Faculty of Chemical Engineering
Program : Bachelor of Engineering (Hons) Chemical
Program Code : EH 220
Course : Technology Entrepreneurship
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1.0 INTRODUCTION

1.1 Problem Statement

As we know, people tend to bring along their phone for all day. Thus, the chances of the phone to fall is really high. Furthermore, it is commonly known as the phone fall it will be crack even how expensive smartphone is. So, this opportunity has been taken for us to invent a smartphone which has the ability to absorb the shock from the falling to prevent the smartphone from cracking or broken. Besides, a feature will be added to our smartphone which it can change the design according to the user taste.

1.2 Methodology

The table below shows the methodology used for product development:

Methodology	
Idea Generation	Personal Experience
Idea Screening	Instagram Pooling
Concept Testing	Face to Face Interview

1.3 Limitation

During the development of product, there are some limitation need to be considered. The limitations are:

- The scope of study is only for student of UiTM Shah Alam.
- The students that answer the questionnaires by google form might not be truthful.
- The biases might be occurred, thus may influenced the collection data.
- The sample size for data is too small make it hard to analyse the data.

2.0 NEW PRODUCT DEVELOPMENT

2.1 Definition

Intelligent Phone Case is defined as unique mobile case design to ease consumer's lifestyle with the unique features package. The Intelligent Phone Case is designed with modern approach, featuring artificial intelligent (AI). The case assists consumer in practicing ergonomic posture with highly handed grip. Adjustable phone dimension enables best fitting for various phone models together with camera and fingerprint sensor for the best camera and fingerprint scanner location as located based on the model. In simple words, the phone case that built with special engineering approach for a better lifestyle.

2.2 Classification of NPD

The classification for the team product is new product lines because the product is only new to the company but not necessarily new to the marketplace. The purpose of new product lines is to widen or diversify the existing brand in the market. This will allow more choice for the customers. The next relatable classification of the team product is improvements and revision to existing products. This is due to adjustment and modification makings based on current product or simply called innovation.

2.3 New Product Development Process

2.3.1 Research & Development

The research & development process have be done for the ideation stage through:

a) Idea Generation

The idea has came out through our personal experience where the phone always slipped out from the hand especially during writing the message or browsing social media. From our common knowledge, most of people tend to fell off their phone accidently when holding their phone. Thus, the phone crack and damage when falling down from a high place since the phone did not have shock absorber ability

and the user need to spend a lot of money to fix the damage. To solve the problem above, intelligent phone case have been designed.

b) Idea Screening

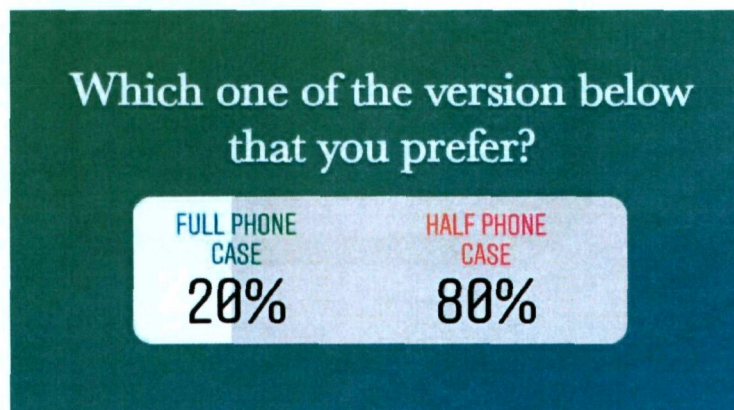
From Instagram pooling, there are two version of phone case have been choose:

Version A	Version B
Full Phone Case <ul style="list-style-type: none">• Provided with mirror• Water proof• Second screen• Pepper spray phone case	Half Phone Case <ul style="list-style-type: none">• 2-Mode System• Anti-Falling System• Shock Absorber• Automatic Wallpaper Change

c) Market Survey

The market survey the team used are:

1) Instagram Pooling



Based on the result above, it is showed that 80% of 15 respondents had chosen half phone case compared to the full phone case.