



اَوْنَبُوْزِ سَيِّتِي تَيْكُونُو لَوِي كِي مَارَا  
UNIVERSITI  
TEKNOLOGI  
MARA



### **NPD : SMART HI - TECH RING**

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**Group Members** :

NO	NAME	NO MATRIC
1	Nurul Najwa Binti Ghani	2015606864
2	Nabilla Affiqqah Binti Mohd Rosli	2015287252
3	Siti Rubaani Binti Sobri	2015498184

**Submitted to**

**Madam Hajjah Zanariah Binti Zainal Abidin**

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# 1. INTRODUCTION

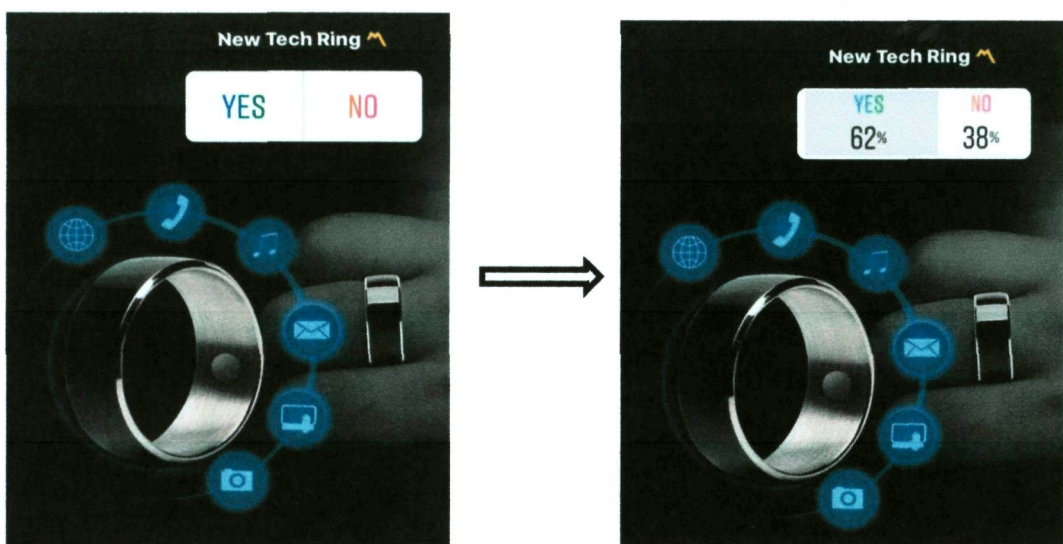
## i. Problem Statement / Issues

The world is full of opportunities to satisfy unmet needs by creating new product and services for example smart glasses and smart watch is in trend right now. Why not our company produce smart ring which is wearable device to everyone? In a developing and modern era for sure people are crave for something that can make their life much easier. While many in tech world agree that wearable device is natural next stage of computing that can make everyone life better. As of today, our company think that we can develop one new technology ring for everyone out there, which we call it Smart Hi-Tech Ring, with one ring at your finger you can access everything – the power is in your finger.

## ii. Methodology

1.2.1 Data Collection – Our Company have a several way to collect the data about our Smart Hi-Tech Ring Smart Hi-Tech Ring Smart Hi-Tech Ring Smart Hi-Tech Ring Smart Hi-Tech Ring Smart Hi-Tech Ring Smart Hi-Tech Ring Smart Hi-Tech Ring product. There are :

- (i) Online survey – Use the most popular platform which is using media social. Our company using Instagram Story Poll, Facebook and Twitter to ask the public about New Tech Ring.



*The diagram shown survey taken at instagram story poll*

- (ii) **Public Survey – Asking the public at the random area at our own branch district which is at Putrajaya, Kelantan and Seremban by giving quick survey form. A survey was conducted at :**
  - Putrajaya – Alamanda Mall (30 people)
  - Kelantan – Aeon Mall (30 people)
  - Seremban – Aeon Seremban 2 (30 people)
  
- (iii) **Friends and Relatives – By asking them about their thought and opinion about Smart Hi-Tech Ring and asking them is it makes them interested if the company produce the product.**
  
- (iv) **AT Company Design, Putrajaya – 120 workers at there.**

### **iii. Limitation**

- **Smart Hi-Tech Ring have a several limitation which are :**
  - **Moving from prototype to full production can occasionally present unexpected delays, but we've factored in enough buffer time to make sure this doesn't take a long time or happen.**
  - **More process stage required.**
  - **Technology is an on-going expense. There are initial purchasing costs, as well as on-going maintenance and update. Should a system failure occur, loss of revenue can result due to loss of product production halted. Technology needs to be updated periodically, requiring continued investment.**
  - **Disconnectedness with the apps while using the ring.**

## 2. New Product Development (NPD)

### i. Definition

- Smart Hi-Tech Ring product from our company is not a completely new product but an existing product that has undergone significant improvement and be upgrade from time to time by using apps which is connect to tech ring. It is a biometric based wearable ring that can make your daily life easy because all with a wave of one magic finger uses of combination of fingerprinting which is have a finger print sensor at the base of the ring and an optical proximity sensor to ensure that a user's credentials can't be accessed by a third party. This Smart Hi-Tech Ring used together with apps which is available for iOS and Android. Smart Hi-Tech Ring presents the mobile app with just a touch of a thumb. It provides 'beep sound' or vibration feedback for each notification or alert that comes from your mobile phone.

### ii. Classification of NPD

- Smart Hi-Tech Ring is a completely new product which is new to the firm where is new to iRotech Company but not new to the market place. Have some company out there produce technology ring but the technology used is different from our company. iRotech Company try to make Smart Hi Tech Ring which is suitable for Malaysia market.

### iii. New Product Development (NPD) Process

#### 2.3.1 Research and Development (R&D)

- Idea Generation :

#### i. Brainstorming & Conversations

- Our company come out with the idea during monthly meeting where is discuss about technology that we can offer to the public to make their life much easier. At the brainstorming time we come out with few question about customer needs for example :
  - a. How can consumer satisfy with our product?
  - b. What are daily technology that consumer need?