



اَبْنُو سَيِّدِي تَتَكُونُو لِي فَاارَا  
UNIVERSITI  
TEKNOLOGI  
MARA



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

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COMPANY'S LOGO



Logo description:

**iRotech**

i = in

R = Role

tech = technology

### 1. Executive Summary

While wearable such as fitness trackers and smart watches edge their way towards the mainstream, smart rings might be next in line. Our company team had been choosing Smart Hi-Tech Ring as our new product because in parallel with our times period which is much more technology indeed. Nowadays technology is important in our daily life. Most in our daily activity we apply technology, for example using Touch N Go, locking the gate or door using access card, social media and so on. So with that we come out with the idea which is to make public feel easier. With our product people can access all things, just with one ring on your finger. This product we try to make friendly user for Malaysian citizen and outside. The Smart Hi-Tech Ring has long been the shape of wearable dreams. iRotech company tried it as an all-in-one device that would be the gesture-controlling centre of people digital world.

It has very unique design and unusual form, perfectly sculptured. There is no left or right side; you just can wear it as you wish. This design is beautiful, ring has wonderful minimalistic form and nice irregular lines, what links it organic ornament. Perfect ergonomic design and very comfortable ring for daily wear. Smart Hi-Tech Ring uses a combination of fingerprinting, there's a fingerprint sensor at the base of the ring and an optical proximity sensor to ensure that a user's credentials can't be accessed by third party. Using an app (available for iOS and Android), SHTR apps can pair the ring and their biometric information with anything from power up a computer to access a part door.



# 1. PRODUCT DESCRIPTION

## 1.1 Purpose of Development

- To make people life easier and better.
- Introduce new technology to people.
- Avoid from bring a lots of card in wallet/purse/bag or in our car.

## 1.2 Product Concept

- Useable to make working people life easier.
- Easy to bring to anywhere.
- User friendly – both genders can use it at the finger.
- Smooth ergonomic shape, pleasant to the touch.
- Light and carefree.

## 1.3 Application

### 1.3.1 Functions

- Easy access to many function only in one ring like Touch N Go, punch cad office, home access card and etc.

PRIMARY USE	SECONDARY USE
<ul style="list-style-type: none"><li>• Scan Touch N Go</li></ul>	<ul style="list-style-type: none"><li>• Scan Punch Card</li></ul>
<ul style="list-style-type: none"><li>• Collect Health Data</li><li>- Calorie Burnt</li></ul>	<ul style="list-style-type: none"><li>• Car “Touch” Remote Sensor</li></ul>
	<ul style="list-style-type: none"><li>• Functions as Access Card</li></ul>

## Smart Hi-Tech Ring



- Distance Tracker	(Office and Home)
- Count Steps	• Panic Button
• GPS Tracker	• Media Social Notify

### 1.4 Unique Features

- Water resistant.
- Last one week in single charge. Powerbank include charger to make easy for people charge the ring.
- Panic button – Smart Hi – Tech Ring will take care you everywhere. Fear nothing because a 'SOS' messages will be sending secretly to selected contact that user setting.
- Bluetooth technology to sync with mobile and its sync with custom setting.

1.5

## 1.5.1 Picture Description



a. Front view



b. Back view

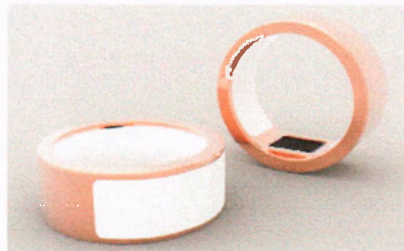
- Smart Hi-Tech Ring comes out with 3 colour options :



Classic White



Stealth Black

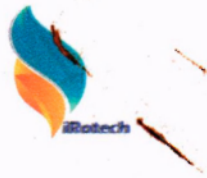


Rose Gold Limited Edition

- Comes together with USB Charger and Wireless Powerbank :

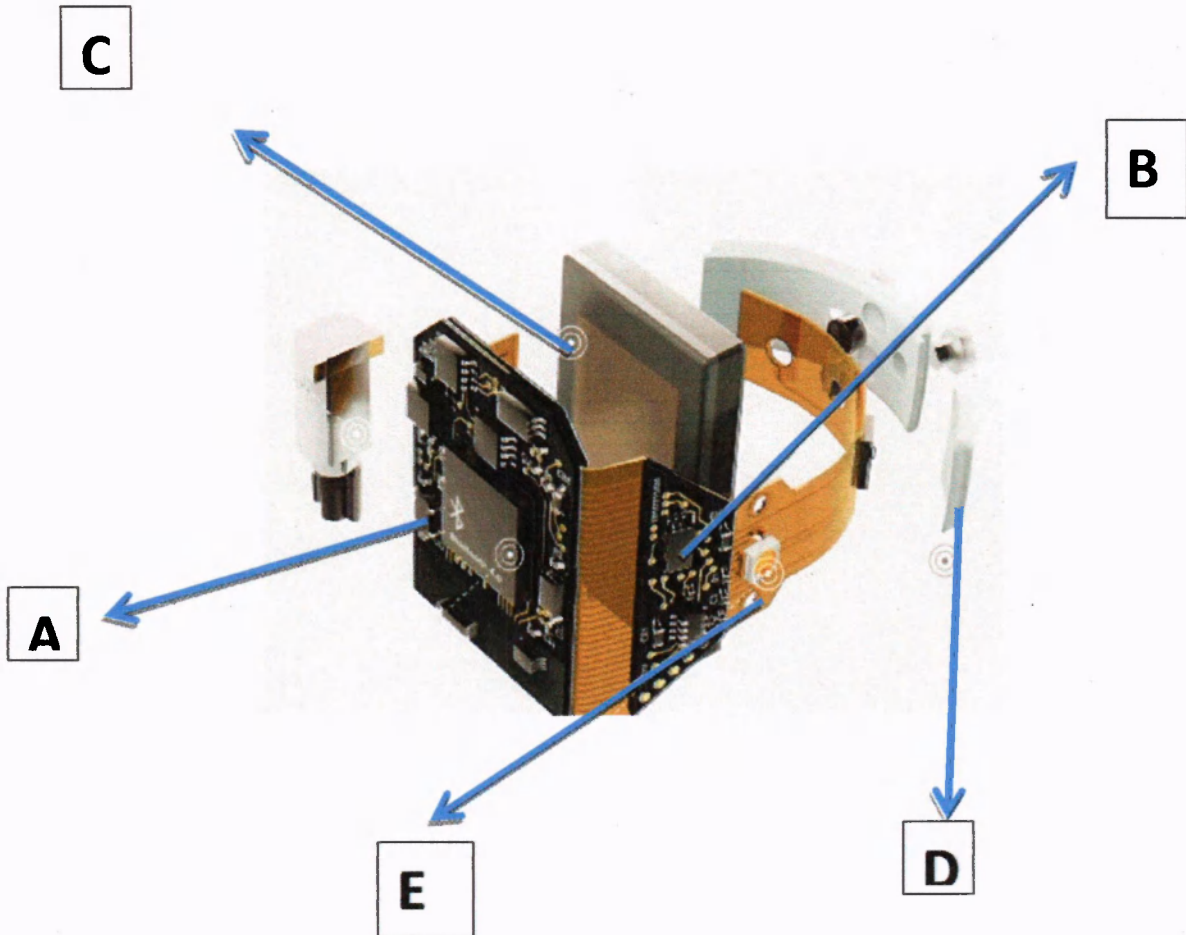






## 2. TECHNOLOGY DESCRIPTION

### 2.1 Overview of Product



Legend :

LABEL	DEVICES
A	Led Screen
B	Biometric Fingerprint
C	Sensor
D	Body cover
E	USB + Powerbank

### Product Description

#### 2.2 (A) LED Screen

##### Description

- Easy Maintenance :
  - Designed with easy assembly and installation.
- Wide viewing angle :
  - Patented design module mask with 120°/ 120° viewing perfect angle and good flatness.
- Environment friendly:
  - 20% power saving to protect environment and saving cost

##### Specification:

- Materials: silicone , alloy case, LED display
- Waterproof
- Water-resistant: 1-3ATM
- Color: Pantone color is available
- Time, date, year, 12/24 format
- Beautiful bright red LED, convenient to see the time in the dark
- Low-power consumption, the LED light die out automatic after 3 seconds
- Anti-ware toughened glass on surface, shiny and prevent scratches





### 2.3 (B) Biometric fingerprint

#### Description

- The biometric fingerprint is designed for using in systems which acquire fingerprint images from fingerprint readers on client side and send them to a server running Fast Fingerprint Extractor component for further processing. The component is designed to be run on ARM Linux or Android or iOS devices. The technology assures system performance with fast, reliable fingerprint matching in 1-to-1 and 1-to-many modes.

#### Specification:

- The biometric fingerprint component also includes:
  - JPEG 2000 image format support module with 1000 ppi Fingerprint Profile;
  - NFIQ algorithm module, which uses a standard method to determine fingerprint image quality.
  - WSQ image format support module, which allows to compress a fingerprint image up to 10-15 times.

### 2.4 (C) Sensor

#### Description

- A sensor is a device that detects and responds to some type of input from the physical environment.
- It can detect light, heat, motion, moisture, pressure, or any one of a great number of other environmental phenomena.
- The output is generally a signal that is converted to human-readable display at the sensor location or transmitted electronically over a network for reading or further processing.

### 2.5 (D) Body Cover

#### Description

- To cover the sensor and multi – function of a ring

#### Specification

- Materials : stainless steel

### 2.6 (E) USB Charger and Powerbank

#### Description

- High capacity rechargeable which last within 10 – 12 hour operating period

#### Specification

- Weight :0.55 kg
- Wireless Power Watts: 15W
- Battery capacity 20000mAh
- USB output:5V/2.5A: USB1: 5V/2.1A

### 3.0 MARKET RESEARCH & ANALYSIS

3.1 **Target Market** - iRotech company priority target market for Smart Hi-Tech Ring is for all working people in Malaysia but our company also target for start to market our product abroad depend on response given.

#### 3.2 Target Supplier

- Laurel Hi Tech Seals Private Limited, India
- Zhejiang DGX Electronic Technology Co. Ltd, China

#### 3.3 Market Size and Market Share

- Malaysia 2017 population = 32.05 million people (source : Jabatan Perangkaan, Malaysia).
- Working population (15-16 years old)(68.35) =  $32.05 \times 0.682 = 21.86$  million people.
- No. of people use mobile phone =  $97.7\% \times 32.05 = 31.31$  million people.
- Estimated of workers buying (70%) =  $21.42 \text{ million} \times 0.7 = 14.99$  million people.

From the number of worker that is buying, the estimate sales forecast:

$$= 14.99 \text{ million} \times \text{RM } 460$$

$$=\text{RM } 6895.4 \text{ billion}$$

#### 3.4 Competition and Competitive Edges

There is no competitor because there is no high technology ring which is include all function in one ring available in Malaysia. However the product from overseas can be considered as nearest competitor even though their product is not really published worldwide yet.

**3.5 Estimated Market Share and Sales**

COMPONENTS		PRICE (RM)
A	LED Screen	50.00 X 1 UNITS
B	Biometric Fingerprint	100.00 X 1 UNITS
C	Sensor	65.00 X 1 UNITS
D	Stainless Steel Body Cover	5.00 X 1 UNITS
E	Usb Charger + Power Bank	10.00 X 1 UNITS
<b>TOTAL COST</b>		<b>RM230.00</b>

**3.6 Estimated Selling Price**

$$\begin{aligned}
 & \text{RM230} + \text{RM}(230 \times 0.7) + \text{RM}(230 \times 0.3) \\
 & = \text{RM 460 \#}
 \end{aligned}$$

**3.7 Marketing Strategy**

**3.7.1 Sale Tactic**

- Promoting sale price at special discount on special event/day such as *Jualan Mega*, Mother's Day, Merdeka Day and on customer birthday.

**3.7.2 Advertising Online**

- Short on budget, our company decided to use FB ads, INSTA review of influential figure.
- Direct mail to supply or distributor and randomly to our previous product customer to inform them about iRotech Smart Hi-Tech Ring.

- Internet – Banner Advertising
- Television – Introduce Smart Hi-Tech Ring at famous selling tv program for example goSop at astro and CJ Wow Shop at ntv7.

### 3.7.3 Advertising Offline

- Setup booth at crowded open space (shopping mall and university)
- Giving out leaflets of our product to target consumer
- Billboards
- Newspaper
- Trade show
- Sponsor an event
- Magazines

### 3.7.4 Service and Warranty Policy

- Our company offer 1 year warranty to our customer which is product need to be returned with original receipt and box to company in order to claim depending on Terms & Condition.

### 3.7.5 Pricing

- iRotech company try to give affordable price of Smart Hi-Tech Ring so that it can be own for all people out there.
- Range of price that our company offer much lower than others competitors product which is RM 460

## 4.0 FINANCIAL PLAN

### 4.1 Start-up Cost

ONE TIME START-UP COSTS	RM
Business Fixtures And Equipment	100,000.00
Machineries/Equipment	50,000
Basic Renovation	3000.00
Rental Deposit (2 Months)	4000.00
Utilities Deposits (1 Month)	2000.00
Legal And Professional Fees	1550.00
Licenses And Permit	2500.00
Insurance	2100.00
Contingencies (15%)	30000.00
<b>A. Total One-Time Start-Up Costs</b>	<b>195 150</b>

### 4.2 Working Capital (4 months)

4 MONTHS EXPENSES	RM
Salaries And Wages (6 Person) RM 2000 X 6	12000
Rent	1000
Utilities	600
Office Supplies	500
Miscellaneous	2000
<b>a. Total Monthly Working Capital Required</b>	<b>10000</b>
<b>B. Total 4 Months Expenses (Ax4)</b>	<b>RM 104 400</b>



COMPONENTS	RM/UNIT	UNITS	RM
LED Screen	50.00	1	50.00
Biometric Fingerprint	100.00	1	100.00
Sensor	65.00	1	65.00
Body Cover	5.00	1	5.00
USB Charger + Powerbank	10.00	1	10.00
<b>Total Cost Per Prototype</b>			<b>230.00</b>
<b>C. Total Cost of Prototype x 10 Quantity</b>			<b>2300.00</b>

#### 4.3 Cost of component per prototype

$$\begin{aligned}
 \text{Total Cost (4 Months)} &= \text{Total Cost A} + \text{Total Cost B} + \text{Total Cost C} \\
 &= \text{RM}195,150 + \text{RM}104,400 + \text{RM}2300 \\
 &= \underline{\underline{\text{RM } 301,850 \#}}
 \end{aligned}$$

## 5.0 MANAGEMENT TEAM

### 5.1 Organization



**CEO**

**Hajjah Zanariah binti Zainal Abidin**



**CHIEF TECHNOLOGY OFFICER**

**Siti Rubaani binti Sobri**



**CHIEF FINANCIAL OFFICER**

**Nurul Naiwa Binti Ghani**



**CHIEF MARKETING OFFICER**

**Nabilla Affiqqah Binti Mohd Rosli**

5.2 Key Management Role and Personnel

<p>Siti Rubaani binti Sobri</p>	<p><b><u>Key Management Role :</u></b></p> <ul style="list-style-type: none"> <li>➤ Team leader</li> <li>➤ Idea Design and Software Engineering Team</li> </ul> <p><b><u>Career Highlights :</u></b></p> <ul style="list-style-type: none"> <li>➤ Co- Founder</li> <li>➤ She has over 10 years of experience in engineering and computer programming.</li> <li>➤ She has taken part in commercial software creation as a project lead under Tourism Government in 2012.</li> </ul> <p><b><u>Duties &amp; Responsibilities :</u></b></p> <ul style="list-style-type: none"> <li>➤ Lead and provide direction to the team</li> <li>➤ Provide design visual design asset for the product</li> </ul>
<p>Nurul Najwa binti Ghani</p>	<p><b><u>Key Management Role :</u></b></p> <ul style="list-style-type: none"> <li>➤ Management and Financial Team</li> </ul> <p><b><u>Career Highlights :</u></b></p> <ul style="list-style-type: none"> <li>➤ 7 Years of experience in investment banking and financial consulting at Malaysia Banking</li> <li>➤ She spends 2 years consulting companies in the Turkey.</li> </ul> <p><b><u>Duties &amp; Responsibilities :</u></b></p> <ul style="list-style-type: none"> <li>➤ Make sure keep the budget on track as what had been discuss</li> <li>➤ Set budgets for the relevant department for the trading year</li> </ul>

Nabilla Affiqqah binti Mohd Rosli

**Key Management Role :**

- Marketing and Corporate Services Team

**Career Highlights :**

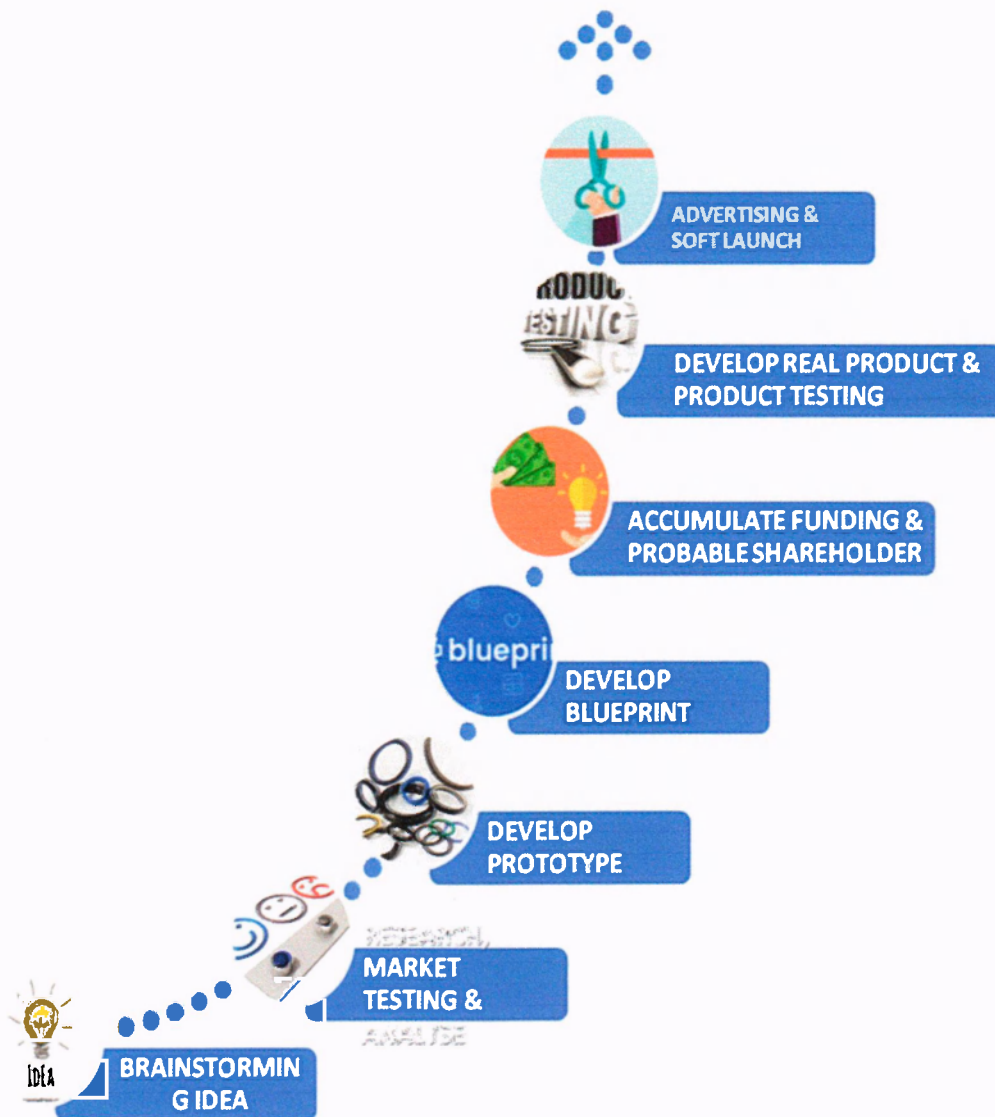
- Own successful marketing agency for given an advice for online stores.
- She also launched iRotech mobile apps which achieved one of the highest rates of installs.

**Duties & Responsibilities :**

- Find the distributor and target supplier
- Identify the gold of the product in the long, short and medium term

## 6.0 PROJECT MILESTONE

### 6.1 Flow chart Project Design Planning





6.2 Project schedule

Progress	1	2	3	4	5	6	7	8	9	10	11	12
Preparation Of Technology Blue Print	█	█										
Application For Preseed Fund			█	█								
Fund Approval					█							
Set Up Premise/Purchase Equipment And Material						█	█					
Develop Prototype								█	█			
Test Prototype								█	█			
Final Prototype										█	█	
Documentation And Submission												█



### 7.0 CONCLUSION

Based on market survey iRotech company will proceed this project because we want to introduce and sell product to our customer which is in new technology development where it can give more easier and comfortable to people. Our company is confident there will be high demand from target market for Smart Hi – Tech Ring which is can be beautiful jewellery that happens to be smart device especially from working people.

For the first beginning our company will introduce, Smart Hi – Tech Ring sample testing for Mckinsey & Company, Inc where is located at Petronas Twin Towers, Ampang Road . We will give advertising and open the booth at the company to show for employer at that company how our product will work out. We hope that our latest design of technology Smart Hi – Tech Ring will be “Your Friend Device” to everyone out there especially for working people who needs this and we believe these tiny pieces valuable technology can make big different in people life.