

# **BUSINESS PLAN**

# **Trees Preservation Monitoring System**

# **40UR**

# Names of Individuals

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Supervisor: Mr Faizal bin Ahmad Fadzil

[Monitoring the condition of the tree to prevent illegal login and falling through web interface using IOT technology.]

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## 1. Executive summary

Forest Research Institute Malaysia (FRIM) is one of the leading institution in tropical forestry research in the world.

In conjunction with their vision and mission which to intensify research and development, technology transfer and resolving industrial issues scientifically to meet the current and future needs of tropical forestry, our team has proposed and targeted to detect and monitor the condition and vibration of the reserve trees that located in FRIM. The main reason for this directive from government agricultural firm that has wasted million of money relates to the lack of predictive systems in agricultural fields.

Since our objective market is the sort of old organization with inheritance framework or old working methodology our promoting system would be concentrating on the effectiveness of upgrading workload and productive working technique for better execution and viable result. What we are putting forth is a coordinated level framework that would diminish a considerable measure of superfluous undertaking and exertion. Client can change the framework that best suits their execution practices and every day working schedule. Internet has been a noteworthy pattern in this new innovation time. Web-based social networking, for example Facebook, instagram and twitter will be our primary publicizing stage with a zero cost. However with an installed framework and such subtle elements setup for the framework, visit meeting and venture proposition with introduction should be finished with the focused on parts and furthermore inquire about focus. The effect and comprehend as additionally utilize would likewise inferred as this would be their defining moment towards new time and mechanical headway.

From the details given by FRIM and observation on most Forest Research Center, most of the routine and workload are still following the old/legacy approach like having to go through the site and checking the condition and existence of the particular substance. With this system implemented, user can easily access information and monitor the condition of the reserve tree in real-time application whether something happen should the warning been issued or not everything will be easy and efficient and 24-hours available. Consequently, this enable them to concentrate a greater amount of their assets on other critical workload and

productively performing other day by day schedule.

Key Business Objectives is mainly security. Our objective for income which extends to the all other trees preservation which could make this framework helpful for their work process. Despite the fact that our administrations are made to be provide food for one association, we plan to make an open framework that permit others effortlessly utilize our framework. The thought is to hold consistent pay and keeping up woods security in the meantime. As far as item rollout, we are intending to build up a solid promoting effort particularly towards the Forest Research Center and Agricultural Center. As a group, we are resolved that this venture will be a top notch arrange since it go for a solitary reason and detached segment. When this venture is propelled and is steady, our future activities is grow the business to a more extensive degree. It will give us the chance to seek after a bigger market and acquire a higher benefit to us. We would likewise pick to auction the framework to another customer in need.

The competitor that we concerned for this product that is from Nimbus. Our strength is we make an innovative production method that provides the potential for monitoring trees system. As for market segment, we are focusing on the workers of the malaysian forest institution (FRIM) whom work manually on updating the monitoring process. Other than this, the potential of this business is marketable as the reserve trees will be monitored automatically. The budget for this project is RM400.00 since we are using 3 Raspberry Pi, Edimax Wifi Adapter, Router and other equipments and tools.

The owner for this project is FRIM and we as team have been assigned by them to fulfil their desire to make an enhancement for their industry. We as a team that consist of 4 person in a team and each of us have role and responsible that need to be fulfilled. For this project, we been given 14 weeks to complete the product and we as an entrepreneur should follow the timeline given. As we agreed, we will have 6 phase till it finish. All the 6 phase consist of Requirement, Development, Quality Assurance and testing, Promotion video development, Video development, Video presentation, and Launch it Live.

# 2. Introduction To The Company

# 2.1 Company Background

### **Company Name**

40ur

### **Industry Profile**

4Our is a leading provider organization focused on design, strategize, management and development of an optimize systems specific for your company. We simplify and automate a working process using an optimize business model that covers everything involved in planning, building and operating a system. We plan, implement and operate leading active system, delivering the best possible solutions for that you could afford. Monitoring and preserving can be alot of effort without a proper management and data control together with good communication among the staffs. Nurturing the evolution of this industrial mobility revolution is our passion. We are committed to innovation, collaboration and providing outstanding service to our client (FRIM), external investors and the customers who had keen interest in the system development itself. We offer a full suite of services to provide a new and well-engineered piece of systems that easy/flexible and compatible with all users in the industry.

### **Company Logo**



# **Company Details**

Name of business 4Our Enterprise

Address Universiti Teknologi PETRONAS,

32610 Bandar Seri Iskandar, Perak

Darul Ridzuan.

Telephone Number 05-3688766

**Fax Number** 05-3688766

Form of Business IOT monitoring system development

**Date of registration** 1st Jun 2017

Number of registration 188672-U

**Date of commencement** 1st August 2017

Initial (Own) Capital RM 10,000

Name of Financier Maybank Berhad

Email 4our.enterprise@gmail.com

Facebook https://www.facebook.com/4ourent

### 2.2 Business Intent & Clear Indication of Intended Business Activities

TPMS is a system that give information on what's happening currently at the specific monitored tree or reserved tree. TPMS target market is primarily on the aspect of sensor and security of the specific forest research. The intention of our business is categorized as the following:

#### Product or services offered

Our system are capable of providing data sensor surveillance 24hours. The sensitivity of the sensor can even be modify by client themself. the setup of the whole system will be done directly into their mainframe by our technician. Thus with hassle free system, user are also given training prior before begin using the system.

#### Market Need

- Cheap
- Able to reduce effort and workforce
- consistency report on data
- real time monitoring
- easy to do analysis

### **Degree of Innovation**

The system is an innovation grasped from the weather forecasting analysis. Basicly TPMS is an integration of real-time data recording with systematic data analytic dashboard that allow user to view easily.

### Feasibility and Profitability

We intend to make profit through the selling of the system and maintenance contract that allow us to gain continuous profit and at the same time give the best service quality to satisfy the customers need and requirement.

# 2.3 Growth Strategies

TPMS will implement and strive towards certain strategies that we believe will pave our path to an excellent growth rate of the company. These strategies are categorized as financial strategies, technology and product development strategies and marketing strategies where the objective is to increase our target markets.

### 2.3.1 Financial Strategies

The project is funded by Forest Research Institute Malaysia (FRIM). To maximize the project value and image by Initial Public Offering (IPO) and listing the company in KLCI/KLSE.

### 2.3.2 Technology And Product Development Strategies

- To provide comfortability and ease for FRIM as our main client on this project and our sole investor
- To aim for more join ventures of others forest research institute
- To reduce cost on human manpower for the company/client
- To provide effective and efficient monitoring system for the client
- To have smooth operation between users and system and vice versa
- To provide secure infrastructure and accurate system
- To extend the system development into a more details and advance

### 2.3.3 Marketing Strategies to increase market or mind share.

The Vibration detection is one of the idea solution in the way to reduce the crime of illegal logging thus marketing campaign is essential for gaining acceptance and to drive the new information towards the forest research industries and also Hutan Simpan. A broader marketing campaign can follow, making use of print media, the Internet, and other media. An effective marketing strategy is essential for attracting new industries to the IOT monitoring and alert system, especially when the system is first being launched and it is quite rare in Malaysia.

### 2.4 Target Market

TPMS' target audience is primarily focus on the benefit and request by FRIM. Our system will be setup directly inside the client mainframe system thus allow them to easily access, use and understand the mechanic flow of the system itself. Our target currently directed towards them because currently their practition all this while is too orthodox and a lot of unnecessary action was done. Just for a simple task to complete. This with TPMS we will provide a system for them to easily and automatically monitor their trees remotely while having real-time data projected direct to their dashboard and without the need of periodical visit to the exact site. Our system also aim to external parties or other Private/Gov/NGO Bodies that require remote monitoring system and real-time data projection.

With that been said, our main target would be the Forest Research industries that includes the governments and also private sectors as that we identify it and categorize it to market segmentation.

| Dimension     | Variable                                      |  |
|---------------|---|--|
| Geographic    | Location                                      | Natural Forest                                 |
| Psychographic | Age   | > 25   |
|               | Type, Occupation                              | Managers , Supervisors,<br>Biologist, Botanist |
|               | Religion, Race, Maritial<br>Status, Lifestyle | All  |

### 2.5 Revenue Model

There are many type of revenue model that is available. As for starting up the company, TPMS choose a direct sales as a revenue. The price is RM 1,500 as it covers the first installation and maintenance cost up to five years. Table below show the expected revenue 40ur where 40ur is expected to generate a total amount of net profit RM143,100 in 3 year time.

|                   | E-commerce Website  |
|-------------------|---|
| Price for one set | RM 1500   |
|                   | <ul> <li>Ease the customer to purchase the product</li> <li>Customer can get the product from their home as it is accessible and available to obtain anytime and anywhere</li> <li>Interactive for the customer to ask regarding about the product</li> </ul> |
| Maintenance       | Free maintenance support for 5 years  |

# 2.6 Operational Setup

### **Human Capital**

4Our is consist of 4 workers and each worker have different positions and roles in our company. Our Chief Executive Officer (CEO), Muhammad Firdaus bin Hishamuddin is responsible as the board of directors and setting long term strategy of the company. Mainly, he will contact and have a meeting with key investors, partners and other strategic advisors. Second line-up goes to Chief Marketing Officer (CMO) position by Nur Diana Binti Ahamadi. As a Chief Marketing Officer (CMO) of the company, basically she will handle everything that related to company's marketing such as analyse the market price, designing advertising and promotions of the company's product. Next line-up is Chief Human Resource (CHR) handle by Nur Zarith Natasya Binti Burhan who is responsible for the daily operations of 4Our. For Chief Technology Officer (CTO), it is handle by Muhammad Firdaus bin Hishamuddin. Her roles as a Chief Technology Officer is to monitor technology development of 4our and making decisions related to 4Our technology. Lastly, the Chief Financial Officer (CFO) of 4Our by Nur A'lyaa Binti Roslan. Basically, her job is related to financial, accounting, budgeting and cash management of the company.

### **Financial Requirement**

4Our is a startup company, thus our company have limited access to capital markets. As we want to avoid monthly installment with bank, applying for a loan from banks would not be suitable approach for our financial strategy. Hence, we decided to use our own money for the business capital. At the beginning of the business, RM20,000.00 is allocated as the business capital.

Since this investment is a bit risky as we are start up company, our company offer the benefit for investor that they will earn return 30 percent from the total profit as a dividend. In order to get a good return from the product, our company needs a large number of business capital and in order to achieve that, 40ur need to convince investors to become part of our company's shareholder.

### Location

Since 4Our is a startup company, our office size is small yet compatible with team members of 4Our. The location of our office is at Universiti Teknologi Petronas, Sri Iskandar, Perak. After 5 years, we predict the members our company will increase so the current location will not be capable with big amount of people. Therefore, we are planning to move to bigger office but still in the same location. Our office will open from 9 a.m until 5 p.m. as per standard office hour. However, we still accept any inquiry through our website after office hour.

# 2.7 Long Term Goals of Company

In the next 5 years this system will be applicable for most research industries almost like SAP.

# 2.8 Market and Competitors Information

As of now, the competitors in Malaysia that we have is PEFC the world's largest forest certification system. Competition is not giving us the meaning that we can failed, but as proof that this business has the potential to be bigger and maybe, will be implemented in the whole country as following the MIMOS IOT Roadmap. The market is obviously there in KL, as a lot of government ministries as there, we try to be benefitted in the urban area where government and forest reserve industries sometimes might overlook at this area. This enables us to create a sustainable system that can be used for the sometimes maybe as before the technology advance into the next level. Thus, not only creating an automated monitoring system but also reducing the cost suffer by this industries and effective alert system, data mining sensors in the way of understanding the nature vibration pattern which who knows might be beneficial for future analysis.

# 2.9 Strength & Weakness or SWOT

We have identified a competitor that shares a similar service to ours known as PEFC. PEFC is more to international level, doing forest certification systems which is almost similar to Us. The main reason that we have chosen Forest is to be pioneer in malaysia and setting appropriate strategies to emerge in this marketplace. From the strength and weaknesses listed below, we will analyze and improve our services.

|      | Strength  | Weakness   |
|------|---|--|
| PEFC | <ul> <li>provide certification system for forest research</li> <li>a single web service to allow overview</li> </ul>  | <ul><li>lack in security</li><li>monitoring</li><li>not real-time system</li></ul>                   |
| TPMS | <ul> <li>high value monitoring system</li> <li>Easy to use system</li> <li>system built specifically for that institute</li> <li>real-time monitoring system</li> </ul> | <ul> <li>less guaranteed on<br/>the effectiveness</li> <li>no 24 hours support<br/>system</li> </ul> |

# 3. Employment of Knowledge Workers

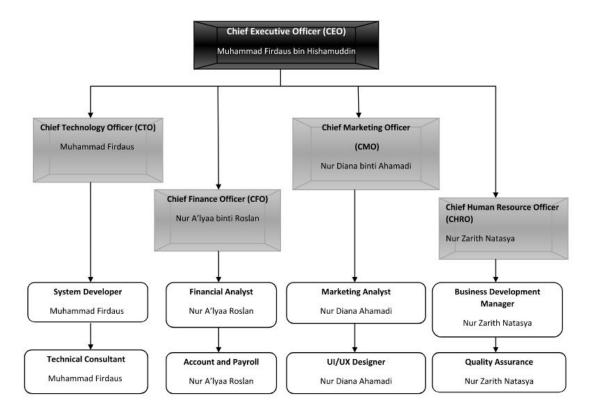
# 3.1 Management Team

The table below shows a brief resume of key management staffs in our company

| Employee                            | Education Background   |  |  |  |
|-------------------------------------|--|--|--|--|
| Muhammad Firdaus Bin<br>Hishamuddin | Education: Bachelor Of Technology (Hons) Business Information System, Universiti Teknologi PETRONAS  |  |  |  |
|                                     | Experience and strength : Former Senior Computer Engineer at Intel   |  |  |  |
|                                     | Designation: Chief Executive Officer (CEO) Chief Technology Officer (CTO) System Engineer Technical consultant   |  |  |  |
|                                     | Job Description:  Lead and consult the subordinates to develop and manage the project  Ensure every phase of the product development conduct as planned  Develop the program code for the system  Analyze and approving suitable tools, software and hardware needed for the project  Develop and maintaining the system |  |  |  |
| Nur Diana binti Ahamadi             | Education: Bachelor Of Technology (Hons) Business Information System, Universiti Teknologi PETRONAS  |  |  |  |
|                                     | Experience and strength : Former Vice President of Marketing and Sales, PETRONAS Dagangan Berhad   |  |  |  |
|                                     | Designation:<br>Chief Marketing Officer (CMO)<br>UI/UX Designer  |  |  |  |
|                                     | Job Description:   |  |  |  |

|                                      | <ul> <li>Responsible in creating marketing plans</li> <li>Responsible to market the product including product development, product advertisement and dealing with client</li> <li>Design and create the user friendly user interface of the system</li> </ul>  |
|--------------------------------------|--|
| Nur A'Iyaa binti Roslan              | Education: Bachelor Of Technology (Hons) Business Information System, Universiti Teknologi PETRONAS  Experience and strength: Former IT Support and Business Analyst, Schlumberger  Designation: Chief Finance Officer (CFO) Finance consultant  Job Description: Responsible to plan the financial activities Responsible to prepare financial reports, company's budget and financial statement Control income, cash flow and expenditure Responsible in consulting on product profitability   |
| Nur Zarith Natasya bt Mohd<br>Burhan | Education: Bachelor Of Technology (Hons) Business Information System, Universiti Teknologi PETRONAS  Experience and strength: Former Head of Human Resource, Ambank (M) Berhad  Designation: Chief Human Resource Officer (CHRO) Business Development Manager  Job Description:  Responsible to hire the workers Responsible to plan the business development for the company Collecting business and system requirement with client Plan, conduct and monitor testing and inspection of the system to ensure finished product quality |

# 3.2 Organizational Chart



# 3.3 Human Resource Plan

The table below shows 4our Company's 3 year projected Human Resource Plan:

| Chairman/CEO             |      |          |      |
|--------------------------|------|----------|------|
|                          |      |          |      |
| Chairman/CEO             | 1    | 1        | 1    |
| CEO                      | 1    | 1        | 1    |
| Technical Advisor        | 1    | 1        | 1    |
| Executive Secretary      | 1    | 1        | 1    |
|                          |      |          |      |
| Position/Role            | Y1   | Y2       | Y3   |
| Technical Division       |      |          |      |
| СТО                      | 1    | 1        | 1    |
| System Engineer          | 1    | 1        | 1    |
| Technical Consultant     | 1    | 1        | 1    |
| UI/UX Designer           | 1    | 1        | 1    |
|                          |      |          |      |
| Business Dev Division    |      |          |      |
| СМО                      | 1    | 1        | 1    |
| CHRO                     | 1    | 1        | 1    |
| Business Development     | 1    | 1        | 1    |
| Manager                  |      |          |      |
| Quality Assurance        | 1    | 1        | 1    |
| Marketing Analyst        | 1    | 1        | 1    |
|                          |      |          |      |
| Finance and Admin        |      |          |      |
| CFO                      | 1    | 1        | 1    |
| Financial Analyst        | 1    | 1        | 1    |
| Account Payroll          | 1    | 1        | 1    |
| Executive                |      |          |      |
|                          |      |          |      |
| Total No. of Manufacture |      |          |      |
| Total No. of Worker      | 4    | <b>A</b> | 4    |
| Total Knowledge          | 4    | 4        | 4    |
| Workers                  | 0    | ^        | •    |
| Total Foreign            | 0    | 0        | 0    |
| Knowledge Workers        |      |          |      |
| % of Knowledge           | 100% | 100%     | 100% |
| Workers                  | •    |          |      |
|                          |      |          |      |

### 4. PRODUCT OR SERVICE DEVELOPMENT

## 4.1 Product / Service / Technology Overview

Currently, in short term, TPMS will provide service where user is able to know whether there is a vibration happens at the designated preserved tree or not through a simple dashboard. The designated preserved tree will be equipped with a simple vibration detection device which will trigger if there is a slight vibration detection, thus sending the data to cloud database which will then be read through the dashboard build custom for the client benefits. The application that we use to store, track and retrieve data will be fully utilized by our own employees. An example would be registering a user into the system by using the web application. This can only be done by themself. The only thing that need to be done by our staff is setting up the device at the tree and installing the dashboard into their original mainframe. The service development will be further explained as follows:

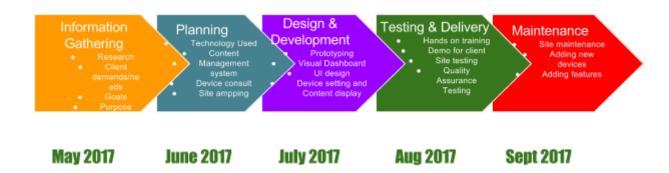
### **Core Technologies**

Our business is using the following items listed below as the mechanism to detect and display the sensor data. Each tree will also function as a key that contains a specific ID for each device to store and post data where it will be able to track and record the vibration of sensors.

- Raspberry Pi 2 with noobs Linux OS
- Tp link Wifi adapter
- Python 3 script
- Internet/wifi router
- Laravel PHP framework
- HTML canvas

### **Current Development**

TPMS' current development is tracked based on the progress of the system development since initiation. The development progress is shown in a diagram below:



TPMS' device sensors will be include a vibration sensor and a wifi dongle that allow Raspberry pi to transmit data immediately, once the sensor triggered accordingly to the python script written. The diagram below shows the initial setup of how the device will look like:

Raspberry Pi 2





SW420 (Digital Vibration Sensor)

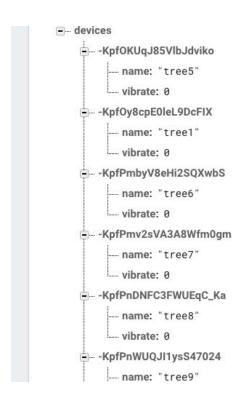


TPLINK WiFi Doggle

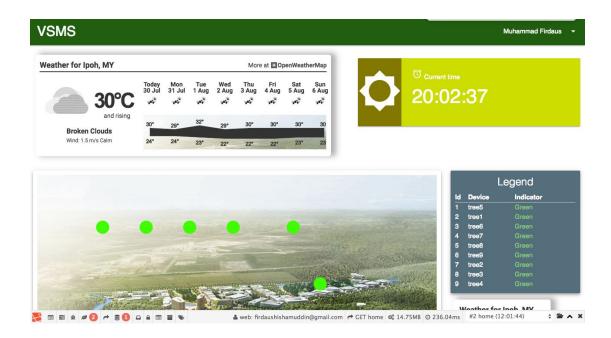
### **Product Strategy**

As our system/business is directed and focus on FRIM. Thus our initial designed will mainly cater the needs of Forest Research industry and that is our priority. The system we are currently developing is to serve and lease the burden by the FRIM staff and management on monitoring the preserved tree. We aim to provide high security system and alert system. To provide an effective detection and overall statistical data collection. These are the basic function of the system as the initial design. In the near future, we will release a newer version after receiving more requirements and request from our customers.

The diagram below shows how the data will be collected:



We create a website that will be set up into their mainframe to display and react to the changes in data. Below is the initial dashboard that we proposed:

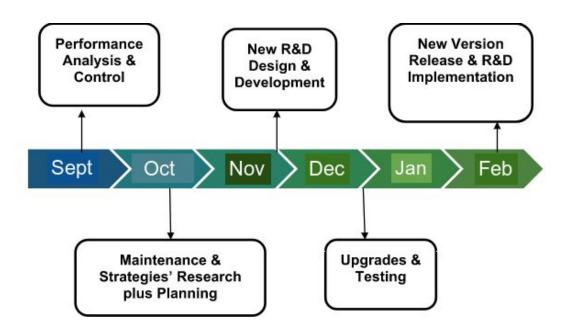


# 4.2 Research and Development

The research that we have been doing for the past months are of the initial plan for our system. Technological improvements will be done after a complete analysis of the service. Our future R&D strategies are listed as follows:

- Provide a generic device that allow future installation on custom trees more easy.
- Provide a custom UI dashboard that allow admin to set which data to display on their mainframe.

The diagram below shows forecasted milestone for TPMS' development after the system has been launched:



### 4.3 Benefits & Customer Value

The idea of our business is basically the first of its kind in Malaysia. Although there are a lot of competitor who applies the similar concept of services, their scope or context is a little bit different compared to ours. The focus or target market also differs from TPMS.

TPMS' goal and business concept is more to direct deal with more easier communication with the customers and understanding of what they really want. Although the are a lot of cloud services offer similar system, not every old legacy user understand what the providers/sellers are trying to explain. Thus since we know our specific target market, we aim to get down deep into the root of what kind of advancement that the client/customers desired instead of "hey, we build this, everyone can use this, we provide this and this and this". Thus our aim is for deeper specification on the types of system for the client and we also provide the following values to our customers:

- Asset tracking
- Online monitoring asset
- Long lasting system
- Real time system tracking
- Automated system
- Completed dashboard (with weather detection)
- Cost saving
- Effortless
- Outsourcing maintenance

### **5. MARKETING PROGRAMS**

# 5.1 Marketing Overview

As far as our concerned, the competitor that we have is Nimbus. Competition is not giving us the meaning that we can fail, but as criterion that this business has the potential can be marketable. Next, here is the SWOT Analysis of our company:

### Strength

An innovative production methods provides the potential for monitoring trees

#### Weakness

• No experience in development product

### Opportunities

- Open target market
- Collaboration with malaysian forest institution (FRIM)

### Threat

Possibility of new market entries

As for market segment, we are focusing on the workers of the malaysian forest institution (FRIM) whom work manually on updating the monitoring process. Other than this, the potential of this business is marketable as the reserve trees will be monitored automatically.

# 5.2 Marketing Programs

Our company is applying some various strategies such as Sustainable Marketing, Company Marketing Strategy, Product, Branding and Services Strategy and Advertising Strategy as a part of our marketing programs.

### **Sustainable Marketing**

In sustainable marketing, our company deploy "Prevention is better than cure" as a slogan in order to promote our system and to increase the level of the groups we distribute. It also will socially be responsible and accountable to enhance the nature of next generations.

### **Company Marketing Strategy**

Our company consist a few number of strategies to generate the flow of our income to sustain the company. We will do the advertisement publisher which we will do the online advertising also called internet advertising. By this, it will attract more consumers as it appears on the screen for promoting. Next, we could have customer contract payment to keep this company run as well as the contract is active.

Moreover, we also will attract some number of investor to assemble investment for our company and become our company's shareholder. Hence, we are looking for a good return on investment (ROI) upon market entry, thus we could avoid from applying for a loan.

#### **Product, Services, Branding Strategy**

Our company is the first company in Malaysia that provide a monitoring vibration system that could assist our target market to preserve the trees. Besides that, we also offer a free service if the system is not working or there is a problem after implementation, as long as our customer satisfy with our system. Hence, by implement this system user can cut down the manpower since it is build as an automated reservation system that can at least last long for five years and also it comes with a complete dashboard.

# **Advertising Strategy**

For advertising part, our company is using a variety social media as a platform to attract and persuade customer and also to promote our services.

# **5.2.1 Marketing materials**

Marketing materials are the collateral that our company use to promote our business to current and prospective client. They include:

- Business card
- Website
- Social media (facebook, admob)
- Bidvertiser

# **6. FINANCIAL PROJECTIONS**

# 6.1 Financial Overview

4Our Profit & Loss projection for 5 years (in Ringgit Malaysia)

|                                      | Yea   | ar 1   | V 0     | Year 3  | Year 4  | Year 5  |
|--------------------------------------|-------|--------|---------|---------|---------|---------|
|                                      | Q1/Q2 | Q3/Q4  | Year 2  |         |         |         |
| Sets of Devices<br>Implemented       | -     | 50     | 100     | 160     | 190     | 240     |
| Average Selling<br>Price for per set | -     | 1,500  | 1,500   | 1,500   | 1,500   | 1,500   |
| Average COGS per set                 | 500   | 500    | 500     | 500     | 500     | 500     |
| Revenue                              | -     | 75,000 | 150,000 | 240,000 | 285,000 | 360,000 |
| COGS                                 | -     | 25,000 | 50,000  | 80,000  | 95,000  | 120,000 |
| Profit/Loss Margin                   | -     | 50,000 | 100,000 | 160,000 | 190,000 | 240,000 |

# 4Our's Profit & Loss projection for 5 years

| Raspberry Pi and other components | RM120 |
|-----------------------------------|-------|
| Vibration sensor (3XRM34)         | RM60  |
| Edimax wireless adapter (3XRM10)  | RM210 |
| SD Card (3XRM27)                  | RM90  |
| Fwmale-to-Female adapter          | RM20  |
| Total Production cost             | RM500 |

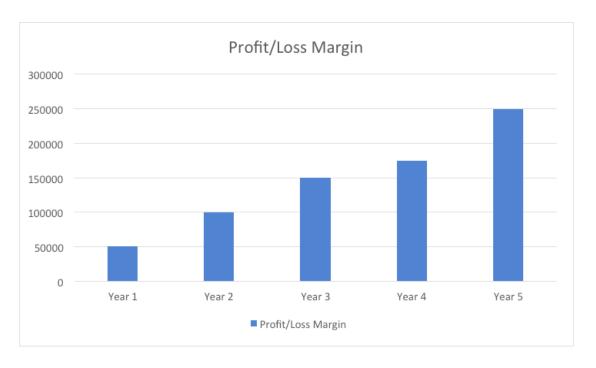
4Our's Total Production Cost

|   | Year 1  | Year 2 | Year 3  | Year 4  | Year 5  |  |
|---|---------|--------|---------|---------|---------|--|
| CASH INFLOW                               |         |        |         |         |         |  |
| Capital (cash)                            | 20,000  | 0      | 18,000  | 20,000  | 24,000  |  |
| Loan                                      | 0       | 0      | 0       | 0       | 0       |  |
| Cash Sales                                | 38,000  | 80,000 | 125,000 | 150,000 | 190,000 |  |
| Collection of Accounts<br>Receivable      | 0       | 0      | 0       | 0       | 0       |  |
| Total Cost Receipt                        | 18,000  | 80,000 | 107,000 | 130,000 | 166,000 |  |
|   | CASH OU | JTFLOW |         |         |         |  |
| Pre-Operating & Incorporation Expenditure | 2,000   |        |         |         |         |  |
| Sales & Marketing Expenditure             | 5,000   | 4,000  | 3,500   | 2,000   | 2,000   |  |
| General & Administrative Expenditure      | 5,000   | 10,000 | 20,000  | 30,000  | 40,000  |  |
| Operations & Technical Expenditure        | 2,000   | 3,000  | 3,500   | 4,000   | 5,000   |  |
| Purchase of Fixed Asset                   | 3,900   |        |         |         |         |  |
| Total Cash Outflow                        | 17,900  | 17,000 | 27,000  | 36,000  | 47,000  |  |
| Cash Surplus (Deficit)                    | 100     | 63,000 | 80,000  | 94,000  | 119,000 |  |
| Beginning Cash Balance                    | 0       | 100    | 63,000  | 80,000  | 94,000  |  |
| Ending Cash Balance                       | 100     | 63,000 | 143,000 | 174,000 | 213,000 |  |

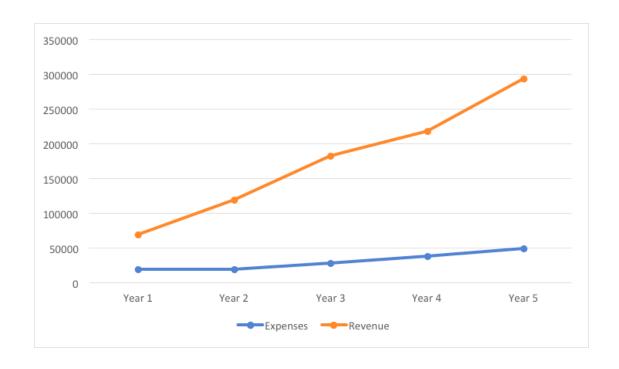
4Our Cash Flow projection for 5 years

|                            | Year 1  | Year 2     | Year 3   | Year 4  | Year 5  |  |
|----------------------------|---------|------------|----------|---------|---------|--|
|                            |         | SETS       | 1 Cal 3  | Teal 4  | 1 cai 3 |  |
|                            |         |            | <u> </u> |         |         |  |
| CURRENT ASSETS             |         |            |          |         |         |  |
| Cash                       | 20,000  | 0          | 18,000   | 20,000  | 24,000  |  |
| Net Accounts Receivable    | 38,000  | 80,000     | 125,000  | 150,000 | 190,000 |  |
| Inventory                  | 1,000   | 1,000      | 1,000    | 1,000   | 1,000   |  |
| Total Current Asset        | 59,000  | 81,000     | 144,000  | 171,000 | 215,000 |  |
|                            | FIXED   | ASSET      |          |         |         |  |
| Utilities                  | 1,500   | 1,000      | 800      | 500     | 500     |  |
| Office Facilities          | 1,000   | 800        | 600      | 500     | 500     |  |
| Other Expenditure          | 500     | 500        | 500      | 500     | 500     |  |
| Plant & Equipment (net)    | 800     | 800        | 800      | 800     | 800     |  |
| Total Net Fixed Asset      | 3,800   | 3,100      | 2,700    | 2,300   | 2,300   |  |
| Total Assets               | 62,800  | 77,900     | 141,300  | 168,700 | 212,700 |  |
|                            | LIAB    | ILITIES    |          |         |         |  |
|                            | CURRENT | LIABILITIE | ES       |         |         |  |
| Accounts Payable           | 5,000   | 10,000     | 15,000   | 20,000  | 25,000  |  |
| Accrual & other Payables   | 2,000   | 2,000      | 2,000    | 2,000   | 2,000   |  |
| Total Current Liabilities  | 7,000   | 12,000     | 17,000   | 22,000  | 27,000  |  |
| SHAREHOLDERS EQUITY        |         |            |          |         |         |  |
| Capital Stock              | 5,000   | 7,000      | 9,000    | 12,000  | 15,000  |  |
| Retained Earnings          | 7,000   | 9,000      | 12,000   | 15,000  | 20,000  |  |
| Total Shareholder's Equity | 12,000  | 16,000     | 21,000   | 27,000  | 35,000  |  |
| Total Liabilities & Equity | 19,000  | 28,000     | 38,000   | 49,000  | 62,000  |  |

4Our Performance Balance for 5year



4Our expected profit/loss margin for 5 years



4Our Expense-Revenue graph within 5 years

### 7. CONCLUSION

The initiative of creating this business idea is to provide long term business run that is sustainable to users and environment. As FRIM is our target market, we aim to automate most of the action and effort that has been made by the existing worker of this agriculture sector to protect and monitor those reserved trees. With these advanced technology like Raspberry Pi, IoT, vibration sensor and many more, this project can be done to reduce the work force on monitoring these reserve trees from illegal cutting or damage. This project will reduce the burden of the workers that manually monitoring the reserve trees. The monitoring work will be more efficient with this development system using raspberry pi. To conclude, this project is marketable and profitable to both parties.