

**ENT600****TECHNOLOGY BLUEPRINT**

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We perceived as this opportunity as big milestone in our studies about entrepreneurship and widen our knowledge in business also technology. This knowledge not only useful for our assignment, but also useful in our future.

## CHAPTER 1

### 1.0 EXECUTIVE SUMMARY

Smart Aquarium has been designed by keeping in mind the problems of those who has the difficulty to maintain the lives of their fish. The competitive advantages for this product is equipped with unique features such as servo meter auto-feeder, on board sensor keeps the temperature, water level, turbidity and pH of the water in the aquarium under control and control the LED lamp. The 'Smart Aquarium' has been chosen to minimize the problems of fish keepers or aquarists by shifting the manual aquarium mode to the automatic mode. The Smart Aquarium can be controlled and managed through an application Aquavis Pro apps. It is recommended that household who seek for convenience in maintaining their fish to own at least one Smart Aquarium. The smart aquarium can minimize the problems faced by household especially fish keepers or aquarist by shifting from manual to automatic mode and thus reduce maintenance time. The team discovered that the target customer is from the age of 19 to 25 with 72.1% and the percentage of mark-up cost is 15% selling price with the total of RM 1,146.55. From the total number of families that are buying, the estimate total market size is RM 7,429,644.00 for 6,480 families. In addition to that, the total market size in 3 years is calculated as RM 27,861,165. Lastly, the management team consist of five members who holds position as executive manager, marketing manager, operational manager, financial manager and administrative manager. Each of the members have their own duties and responsibilities in the company in order to make sure the business run smoothly as planned.

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## CHAPTER 2

### 2.0 PRODUCT DESCRIPTION

#### 2.1 Introduction

The product will be developed is 'Smart Aquarium'. Fish keeping is a popular worldwide. Almost people from all the age groups like to keep aquarium in their home and offices for decoration purpose or as a hobby. Fish keeping is not an easy job. We always need an aquarium or a pond for that. The hobby of fish keeping is broadly divided into freshwater and ornamental fish. However, most of people having difficulties to manage the aquariums. Thus, the team is developing 'Smart Aquarium' that can minimize the problems of fish keepers or aquarists by shifting the manual aquarium mode to the automatic mode. α

#### 2.2 Application of the product

Usually, fish keeper facing problems in maintaining the vitality and health of fishes. Fish keeper always facing problems such as difficulty in changing the aquarium water, maintaining the pH of the water, controlling the turbidity of the water and figuring out when the water is to be filtered. All these steps are done manually. Smart Aquarium that will be build is an automatic aquarium for those who cannot keep an eye on their aquarium regularly. The product is an automated system to take care of fishes. It will replace the manual maintenance of fish aquarium with its automated functions. It will monitor the physical changes in the water and will maintain it to the ideal conditions, with required changes. D

#### 2.3 Unique features

The uniqueness of the product for availability in Malaysia market consists of:

- Have on board sensor that keeps the temperature, water level, turbidity and pH of the water in the aquarium under control.
- User can control the LED lamp which helps in the growth of fish and plants.