



اَوْنُوْرَسِيْتِي تِيكْنُوْلُوْجِي مَارَا  
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**NEW PRODUCT DEVELOPMENT**

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## **Executive Summary**

Technology involves year by year with the innovation made by the human that covers nearly every area of human activity in everyday life. Sports and entertainment also get the indirect effect from the evolution of technology. From basic fitness equipment such as dumbbell to the advanced workout machines in the gym, research and development processes are under way to create more efficient product that can fulfil buyer's needs. My firm has invented a new type of dumbbell calling as The X-Beast Dumbbell. This dumbbell is ergonomic so this dumbbell should be used to work out and perform the aerobics. Some problem occurs when I want to invent my product such as suitable material that needs to be use and competition in the market of dumbbells with other brand. There are also some limitations that need to be considering like capital to R&D, shell life of the product, as well as lack of idea for new fixtures. Under new product development, research and development program is done with some idea generation, idea screening, and market survey to produce better product. Sketching of the product is important to project some image about how the product might look like with some verbal description. The prototype will be built according to the sketching of the product. Test marketing has been conducted to gather some feedback from various backgrounds of respondent.

## **1.0 INTRODUCTION**

### **1.1 Background of the company**

X-Beast is a company that specialize in producing health and fitness product. Recently technology involves year by year with the innovation made by the human that covers nearly every area of human activity in everyday life. Sports and entertainment also get the indirect effect from the evolution of technology. From basic fitness equipment such as dumbbell to the advanced workout machines in the gym, research and development processes are under way to create more efficient product that can fulfil buyer's needs. My firm has invented a new type of dumbbell calling as the X-Beast Dumbbell. This dumbbell is ergonomic so this dumbbell should be used to work out and perform the aerobics.

### **1.2 Problem Statement/Issues**

Nowadays, in the world industry of health and fitness are booming with people who want to stay active in daily life. This show that more people will care about their appearance wants to live in healthy lifestyles. There a lot of benefits doing exercise in daily life which is, it's can improve our moods and get healthy physical body. Doing exercise with equipment is one of the solutions to help beginner to start workout activity. Dumbbell is the one type of equipment are using for workout session. Using little dumbbells or dumbbells in exercise classes, its working with free weights that never gone out of style.

The main issue that happens when use a dumbbell during your workout; people feel awkward holding the rope. It's not the safety to use it. It's because the surface of the dumbbell can slip with the sweat, and it's going to fall. The next issue is that the concept of the dumbbell only relies on a few movements. It might be a problem for people who want to do a full body workout. People need to spend their money buying a lot of plate or other size of a dumbbell for their workout. The last issue here is, all product of dumbbell does not come with the latest technology, which is no electronic device on dumbbell to track repetition when users doing of the exercise.

This issue has solution for help people who have intention to use of the product. My company have doing some research to solve the current issue of using this product and come up with the

### 2.3.2 Product Design & Features

This could be said that the Dumbbell 's functionality is almost the same as the new standard adjustable dumbbells but smaller and lighter. This invention is suitable for the concept of making people exercise effectively everywhere and the safety is not compromised.

<b>Name of product</b>	Toning Dumbbells
<b>Design</b>	Ergonomic
<b>Diameter</b>	Handle: 3,66 (center, 2 sides Left and Right)
<b>Width</b>	Handle: 10 cm
<b>Composition</b>	100.0% Iron Coating 100.0% Rubber Coating
<b>Weight</b>	1.0,2.0,3.0,5.0,10.0 kg
<b>Color</b>	Black
<b>Designed to</b>	Muscle strengthening and toning exercises at home or at the gym
<b>Body Zone</b>	Biceps, Triceps, Shoulder and Chest
<b>Sports Practice</b>	Body Builder
<b>Type of technology</b>	Motion sensor and electronic counter
<b>Type of rubber grip</b>	Silicone
<b>Stability</b>	Good Stability

**Table 2.0 Product Description**

- **Performance**

The X-Beast Dumbbell specially built for all people from all ages and to help customer love their workout. The small size and light weight will help people lift the dumbbell easily. The style come out with rubber grip will allow people to keep dumbbell very well. The technology attachment will make sure that the users especially from health and fitness industry get easier and more successful in doing workout.