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NEW PRODUCT DEVELOPMENT (NPD) REPORT

“ELECTROBOOST SHOES”

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1.0 EXECUTIVE SUMMARY

We gladly present to you our term paper on new product development process. We prepared the report on the basis of the study in stages of new product development process. The team is developing a power generating shoe that we called 'Electroboost Shoes', which is an outdoor sport shoes that are made from material that are waterproof, quick dry and breathable. It is designed with cushioned arc support, self-tighten shoelaces when it is contact with water, neon cushioned midsole that consist of kinetic energy and also high grip sole. The idea is generated based on the reading on research that the possible association between impact forces and foot pronation and the development of running related injuries, and proposes a new paradigm for impact forces and foot pronation (Nigg BM, 2001). As people nowadays preferred convenience, specialty and affordable price, this sport shoes is suitable as it can diminish the pain. Furthermore, can produce and convert kinetic energy to electrical energy that is then flow to a spring inside the shoe that will boost the speed of the user when running or walking and can make the user jump even more higher. Moreover, the kinetic energy absorbed also convert into heat that can kill bacteria and avoid muscle cramps. A product concept testing with a survey conducted among 200 peoples in Malaysia.

2.0 INTRODUCTION

2.1 Problem Statement

Exercising has been a very difficult thing to do due to several reasons like laziness and packed schedules and this leads to obesity. In 2017, Malaysia ranked number 130 in the World Ranking: Obesity Rates by Country This shows that people need to do something in order to cut down more their weight so that they achieve an ideal Body Mass Index (BMI). People prefer to use shortcuts in order to get ideal BMI such as taking weight loss pills and this alternative may cause harmful effects on a person like agitation, kidney problem and liver damage.

2.2 Methodology

The following method is used to motivate and encourage people who wear to exercise more by doing outdoor activities like jogging, playing sports and hiking, thus, leading to a healthy lifestyle and achieving ideal BMI.

2.3 Limitation

However, this device has some limitation which is even though the device is made waterproof, but it cannot be immersed in water for too long as it will damage the device.