



NEW PRODUCT DEVELOPMENT

C-BREEZE SMART COLLAR

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EXECUTIVE SUMMARY

Due to the tropical and humid climate of Malaysia, Malaysians cannot get away from getting sweaty. Although human's body is preconditioned to sweat, it is noticeable that some individuals sweat more than the usual in comparison to others. The aim is to underline the issue of excessive sweating and design a product that could overcome the problem. The study's research method uses online survey through questionnaires for a better understanding on the issue of excessive sweating. The questionnaire survey is distributed to 30 students of Faculty of Architecture, Survey and Planning (FSPU) in Universiti Teknologi MARA, Puncak Alam. Data is collected and discussed which further leads the team to the idea generation.

A session of brainstorming is discussed in idea screening where the team has come up with options of possible products under different categories. Three products under the category of accessory is shortlisted and further voted in the market survey. The survey method that the team uses for this chapter is a face to face verbal interview. The team has interviewed ten of our studio mates in the Faculty of Architecture, Survey and Planning (FSPU) in Universiti Teknologi MARA, Puncak Alam. Smart Collar received the highest vote of 70 percent.

In concept testing, a series of sketching processes is carried out to get the form and functions of the product. With the aid of rendering, 2D and 3D prototypes, the design of the product is finalized. A total of 10 sets of our product named 'C-Breeze Smart Collar' is distributed to ten of our studio mates that were interviewed earlier during market survey for a test marketing.

1.0 INTRODUCTION

1.1 Problem Statement

As we all know, it always feels like summer in Malaysia as it hot and humid throughout the year. This is because Malaysia has a tropical climate as it is situated near the equator. Due to the hot weather, it is expected that Malaysians are used to getting sweaty. Sweating is a way for our body to cool itself off and to regulate the body temperature. There are many factors that causes excessive sweating which includes the fitness of a person, gender and body weight.

Although human's body is preconditioned to sweat, it is noticeable that some individuals sweat more than the usual in comparison to others. There are different types of sweating like excessive sweating at certain area of the body, situational sweating, night sweats and hot flashes. Certain people who often sweats vigorously are diagnosed with Hyperhidrosis, a disorder that does not poses any danger to the health of a person. In most cases, people who sweats excessively seldom seek for medical advices.

Despite being in the same room or environment, some people suffers excessive sweating and it can be a nuisance to their daily lives. People with this problem may deal with insecurities and confidence issues especially regarding the body odour caused by excessive sweating. These problems may interfere the working performance and can affect the quality of life and social well-being of a person.

Apart from taking medical actions, there are some lifestyle changes that could help to ease the problem such as cutting down on caffeine intake, alcohol, and smoking. Although there are ways to lessen the problem, not everyone can suddenly turn over a new leaf. Thus, the team has analyzed the issue and planned to design a device that could counter these problems.

1.2 Methodology

In this chapter, the method used to conduct this study will be clearly organized and explained. A quantitative approach is used for the study. The data collection uses numerical data and statistics to portray the findings which our team find more suitable and structured. All the data collection process mainly involved the quantitative data collection method in the form of surveys. Therefore, as for research design we carried out an online survey to quantify the opinions of the respondents. By doing an online survey, the data collected will be formulated into facts. All recorded data is analysed and concluded.

The online surveys were distributed among the Faculty of Architecture, Survey and Planning (FSPU) students in Universiti Teknologi MARA, Puncak Alam. Only the first 30 responses were taken.

1.2.1 Data Collection

The questionnaire respondents were a total of 30 students which consisted of 21 female and 9 male students. Majority (80%) of the students age ranged from 20 to 29 years old, with 18 females and 6 males. The body weight category of the respondents ranged from underweight to overweight with 6 (20%) underweight, 16 (53.3%) normal-weight and 8 (26.7%) overweight. In this questionnaire survey, our team also questioned on the fitness of the respondents. Most of the respondents (56.7%) has a sedentary lifestyle which is little or no exercises, followed by 10 (33.3%) lightly active, 2 (6.7%) moderately active and 1 (3.3%) very active.

In assessing the issue of excessive sweating, about 20 out of 30 students were prone to Hyperhidrosis as they sweat without exercising and they were mostly among female students. About half of the respondents (53.3%) voted that they were able to tolerate their sweat, (36.7%) finds it hardly intolerable and (10%) voted intolerable. Out of all the responses, only 4 (13.3%) had a positive family history.

In terms of the sweatiest part of the body, the respondents voted face and head as the mostly affected area (33.3%). Underarms and other areas of the body came in second place (26.7%) with a tie as shown in Figure 1.2 (a). From the results, we observed that sweating sometimes interfere the daily activities of the respondents. Sweating also affect the mood of the respondents as they get easily annoyed by the surroundings (Figure 1.2 (b)). Half of the respondents felt that the worst part about sweating was being self-conscious about the way they smell. Others felt that hiding the sweat stains on the clothes is the worst (Figure 1.2 (c)).

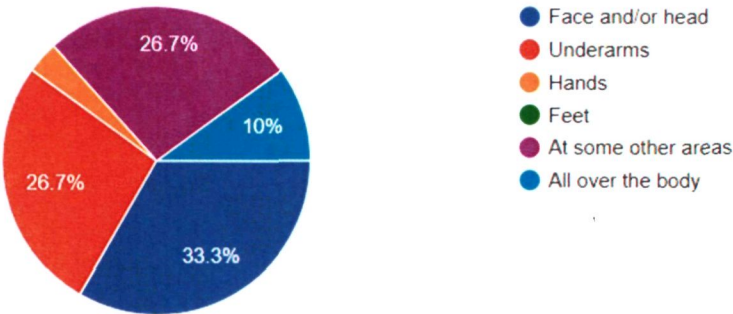


Figure 1.2 (a) Responses to 'Where do you sweat the most?'