TECHNOLOGY BLUEPRINT (AUTO STIR THERMOS)

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1.0. EXECUTIVE SUMMARY

New Product Development Report is one of the assignments for the Technology Entrepreneurship (ENT600) course. The objective of this assignment is to have a strategy for the development of an innovative product. It is important to introduce the new products to a new market so that the development of the product is known and survived in the industry. Thus, the student needs to gain some data from the market to be analysed and implemented to the new product. It is also important to find unsatisfying needs and potential technology approach solutions to overcome the problem.

First and foremost, our product which is thermos (vacuum flask) is classified under improvement and revisions to existing products, whereby it is an innovation to satisfy people's needs. Research and Development method had been conducted which consists of idea generation, idea screening, market survey, as well as Consumer Trend Canvas (CTC). In this part, a questionnaire for concept testing is distributed to the public to create awareness and obtain several data regarding the product. The survey is carried out for several days and had obtained approximately 10 respondents. In the CTC, basic needs, drivers of change, emerging consumer expectations and inspiration had been analysed. While innovation potential and who are already applied to our innovative product.

The data from the survey leads to new design of thermos that can maximise consumer satisfaction. The results are interpreted with the design made by the product developer based on the new technology that put on the thermos. As an example of the technology put on the thermos is two ways blade that act as a stirrer for the thermos. After the product design had been improvised, the new prototype is then built for test marketing before commercialization.

2.0. PRODUCT OR SERVICE DESCRIPTION

The objectives of this thermos are to ease the users on the daily basis. The first reason of this self-stirred thermos is that it can stir by itself and it is the main selling point. There is a lot of self-stirred mug/cup but we came to the idea of making the 'Self-Stirred thermos' where it has the ability to keep the warmth/cold of the water no matter the situation. Other than that, who knows the suspicious joy of squeezing the last part of a warm spritzer out of a bottle with a plastic touch? Thermos stainless steel bottles have obvious advantages here. First, it is the acquisition of life because it cannot actually be destroyed. In addition, they are completely food-neutral and hygienic. There is no "healthier" way to transport drinks.

Next, the thermos itself is light, robust and extremely insulating. Climbers, ski tours, trail runners and mountain hikers (especially) have one thing in common. It means knowing the right time to enjoy a cold or hot drink. Thermos specializes in this very target group and has developed a beverage container that offers maximum insulation performance with minimum weight. The thermos is an easy option when it comes to the people who love outdoor activities. This thermos also benefits to the mommies where they can keep the hot water for their children's milk or they can keep the milk hot and easy to stir without needing to use long spoon to stir the milk.

Lastly, the product at a glance is built with thermos insulation technology, double-walled stainless steel, Vacuum insulation, top-rack dishwasher-safe, hygienic, easy to clean, no interior coating, flavor-neutral, free of BPA and contaminants, keeps hot and cold, Ultra-lightweight, depending on the model, available in sizes of 355 ml, 500 ml, 750 ml, and 1000 ml. The sizes that we bring is the best option whereas the 355 ml is super light and easy to bring to anywhere, whereas the 500 ml is the medium size and just as small as the normal mineral water that is sold in every convenience store. The 750 ml is the mid-big size where the users need if they do not want the biggest size. Lastly, the 1000 ml is the largest. Although it's our biggest size, but it's still the lightest among all of our competitors.

3.0. TECHNOLOGY DESCRIPTION

We have come up with the auto stir thermos water bottle with special features in order to reduce the difficulty on our daily basis. This auto stirs thermos water bottle consists of copper, battery, auto stirrer and rubber grip. First and foremost, the copper stainless steel auto stir thermos water bottle is built of. As you can see, most thermos water bottles are made of stainless steel, however we chose copper over stainless steel since copper has a better heat conductivity. Copper is a good heat conductor and works well in heat exchangers. For heat exchangers in industrial buildings, copper is a preferred material. Heat may travel through fast due to its strong thermal conductivity.

The auto stir thermos water bottle will then be covered with a two-layer wall. In addition, the auto stirrer which is the 4-way blade is included in this package. The auto stirrer in the thermos will assist in stirring the water within the thermos. The battery will be used to turn on the auto stirrer.

Finally, the auto stirs thermos water bottle has a rubber grip, which is a distinctive feature. The exterior thermos will have rubber around the bottle to make it easier for customers to hold. We went with a silicone-based rubber. Silicone is the most often used rubber for grip and handle due of its excellent heat insulation and anti-slip properties. This rubber grip is one of the safeties and welfare measures for clients. This auto stirs thermos water bottle aids individuals with a design that is both easy and effective to carry about. Furthermore, this auto stir thermos water bottle has a convenient size that allows you to carry it anywhere and at any time. Furthermore, it will be available in a range of colour.