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Magnify Group Sdn Bhd

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- Technology Disruption
- did not follow format
- did not describe both
- poor writing - cannot understand

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CHAPTER 1 :PRODUCT DESCRIPTION

1.1 INTRODUCTION

Plastic pollution is when plastic has gathered in an area and has begun to negatively impact the natural environment and create problems for plants, wildlife, and even the human population. Often this includes killing plant life and posing dangers to local animals. According to a report published by the Ellen MacArthur Foundation, if the current rate of plastic pollution continues, there will be more plastic in the oceans than there are fish by the year 2050.

Plastic straw is major pollution in the world, though at first this small straw may not seem like a lot, when its usage is added up, plastic straws create a big problem for the environment. Plastic free alternatives already do exist in the market which are eco-friendly and sustainable. So there is a raise in demand for new alternatives to solve the plastic straw pollution.

In order to overcome this problem, many company trying to do their best to cope with this issue. Many suggestion such as paper straw, rice grain straw, metal straw and bamboo straw has come to the market.

Our company, taking this opportunity by taking a grass straw which has been innovated by a Vietnamese man namely Tran Minh Tien. Tran has shown how a certain type of grass named *Lepironia articulata* (also known as Grey sedge) that is dominantly found around the Mekong Delta in Vietnam which is being converted into drinking straws.

Apart from this, the straw is just a plain straw. Our company taking these model of straw into a next level of straw by improvising it with a new features.

1.2 PURPOSE OF DEVELOPMENT

The purpose of these improvised product is to respond to the government appreciation to reduce the usage of the plastic and replace it with a biodegradable product that can sustain in the market without compromising the functionality of the product. Secondly, this is the little step that the company and community can take in order to safe the environment. This little step can make a difference with a contribution from all level of the community.

In order to make a plastic product, the main ingredient is material consisting of any of a wide range of synthetic or semi-synthetic organic compounds that are malleable and so can be molded into solid objects. These plastic is taking a long period of time to decomposed in

the nature. It might take a hundred year to decomposed according to the polymer structure.Human has to start find another alternative to replace plastic straw by using more eco-friendly product whether the raw material or end product. This improvised straw s another step to invent a better product by adding special value to make it more acceptable to the community. These improvised product making the straw more functionality rather than just to sip a drinking water.

These improvised straw helps the people having a problem with clean drinking water. The supply and demand factors increase with the natural and human factors like pollution. This limits drinking water supply provision and raise the delivery cost. Therefore, using this product will help the consumer to get a clean drinking water with minimum effort.

1.3 PRODUCT CONCEPT

The concept of the product comes from the eco-friendly straw that already available on the market. Instead of just using the product, it can be improvised into something that can be more useful and helping the community with minimum effort.

The concept is very simple. Turn the water into a safer drinking water with a minimal effort at low cost and harmful to the environment.

1.4 APPLICATION

By using this, the customer will feel the difference since this product is biodegradable and helping to increase the quality of the drinking water. Some people might experience having a bad quality of drinking water, this might be the best solution without worrying the cost to afford it.

Those who are seeking alternative ways to drinking water directly from the sources, this is the new alternative that might want to be consider since its does not require special tool, specific equipment or worrying the effects.

1.5 FUNCTION

In India, eighty-five per cent of urban population has access to drinking water but only 20 per cent of the available drinking water meets the health and quality standards set by the world health organisation (WHO),(Singh, 2000). The prevailing water stress in many developing countries is not only due to source limitation but other factors such as poor

distribution efficiency through city networks and inequalities in service provision between the rich and the poor (UN-HABITAT, 1999).

The design of water distribution systems in general has been based on the assumption of continuous supply. However, in most of the developing countries, the water supply system is not continuous but intermittent. The Asian Development Bank has reported that, in 2001, 10 of the 18 cities studied, supplied water for less than 24 hours a day (ADB, 2004).

Therefore, it is very important to help the people to get the clean water as a drinking water. Even though every houses got the water supply from the local authorities, sometimes the quality of the water doesn't up to the acceptance level. Sometimes, the water becomes smelly, rusty water and even worst, there might be some violation to the required standard.

This product, actually trying to improve the quality of the water by minimal efforts. Another else, by using the biodegradable product can help to control the pollution by natural decomposing material.

1.6 UNIQUE FEATURE

The first unique features is the product is coated with the anti-microbial coating known as a Sodium Hypo chloride. These anti-microbial acting to kill the microbe inside the water. Microbial contaminants include bacteria, viruses, and protozoa that may cause severe gastrointestinal illness. Children and elderly are particularly sensitive to microbial contaminants, such as Giardia, Cryptosporidium, E. coli, and noroviruses, because their immune systems are less developed than those of most adults.

Water can contain microorganisms such as parasites, viruses, and bacteria. The disinfection of drinking water to reduce water-borne infectious disease is one of the major public health advances of the 20th century. The method by which infectious agents are removed or chemically inactivated depends on the type and quality of the drinking water source and the volume of water to be treated.

Secondly, this grass straw is equipped with the activated charcoal which functioning as a filter. People have long used activated charcoal as a natural water filter. Just as it does in the intestines and stomach, activated charcoal can interact with and absorb a range of toxins, drugs, viruses, bacteria, fungus, and chemicals found in water. The charcoal's porous texture has a negative electrical charge, which causes it to attract positively charged molecules, such as toxins and gases. This helps it trap toxins and chemicals in the gut.