



Ushering in the Age of Endemic

THE 11TH INTERNATIONAL INNOVATION, INVENTION & DESIGN COMPETITION INDES 2022

EXTENDED ABSTRACTS BOOK



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MINICHINE

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ABSTRACT

The environmental effect will occur if every food thrown away at landfill contributes towards pollution through CO₂ emission. Food waste is currently one of the largest greenhouse gases (GhG) contributors globally, this results in larger issues such as water pollution, air pollution and climate change. Since the environment is our natural capital which provides raw materials and resources for our life, we should be aware of going green to reduce the amount of food waste that affects the pollution of the environment. It is a future trend as everyone is aware of green intentions to engage in environmental protection.

1. INTRODUCTION

As consumers are getting more aware of the environment, eco-friendly and green products will become their first choice of products selected by them. Therefore, we believe that this composting machine will have potential in the current and future market and achieve higher sales accordingly. With Minichine, users will experience a better and more convenient life.

2. METHODOLOGY

After conducting literature review, we found that the current social trends are one of the main drivers that make our ideas become a reality. The former Health Minister said that Malaysians' behaviours and lifestyles need to change, especially when it comes to safeguarding the environment (Abas 2019). Malaysians are more aware that a good environment will bring positive impacts to their lifestyle (NST 2016). Their attitudes, actions taken, and individual choices are key to protecting the environment. It is their responsibility to protect the environment and contribute to society as human beings. Nevertheless, we believe that everyone has their own busy lifestyle. Especially during COVID-19 pandemic. Most people spend more time at home. An unpleasant odor in the home may be an indication that certain spaces need to be cleaned, especially in the kitchen ("How to Create", n.d.). Therefore, they will wish to use some machines to help them to clean the environment. Our product is very convenient and suitable for their daily life because food waste can be composted into organic fertilizer which is a by-product (secondary product) by using a compost machine. It is a simple and eco-friendly method of getting rid of food waste in the kitchen. The undesired food waste including vegetables, meats, eggshells, and bread all can be composted, enriching the soil for future growing plants (Richentek, n.d.). Hence, people will reduce the use of chemical fertilizer as it will contaminate local waterways and underground water systems, endangering wildlife, and people nearby (Miley, 2022).

2. FINDINGS

55% of solid waste disposed of in landfills is food, which shows that food waste has absolutely reached a critical level in our country. Therefore, people should be more conscious of following the Go-green direction to make it more effective for people not to pollute the environment by littering or wasting food. Until now, people were still wasting food every day, so we wanted to solve this problem by introducing this kind of green product to protect the environment.

A study shows that 58% of consumers from all generations (baby boomers to Gen Z) were willing to spend more on sustainable products in the last two years. Approximately 90% of Gen X consumers indicated that they would be ready to pay more for sustainable products (Petro, 2022). Based on the above research, there is a greater chance that more people will realize that buying and using this sustainable green product in their daily life can better protect the environment.

4. CONCLUSION

In addition, the world is moving in the direction of the science and technology era, and most people prefer to use technology products in their daily life. We have found a way to meet people's needs and make their lives easier while helping to improve society's well-being, the environment, and tackle pollution. Our machine, which is equipped with a smart plug enables users to easily complete the operation through their smartphone. Even when they are away from home, they can use their smartphone for remote operations such as turning on the machine, checking the progress of the compost and so on. In addition, people no longer need to worry about increased food waste as it can easily be turned into fertiliser in their homes.

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