

Knifoon

Noraini Sa'ait^{1,*}, Gloria Panit², Putri Nur Syuhadah Kamarol Ariffin³, Muhammad Aiman Mohd Noor⁴, Eunice Sarah Lia⁵, Nur Hazirah Mohd Sabri⁶, and Christine Supang Tidan Alan⁷

¹ norai882@uitm.edu.my;  ORCID ID (0000-0002-4012-7845)

² Gleorale85@gmail.com;  ORCID ID (0000-0001-5527-3215)

* Correspondence: norai882@uitm.edu.my; +6010-3642868.

Abstract: Knifoon is an invention product created by PHECA, the name of our group. Knifoon is a combination of three cutlery tools which is a knife, fork, and spoon. We made it as one cutlery tool, so it is portable to bring anywhere. Common problem people have during meals is a lack of cutlery set, particularly while eating outside. This issue frequently occurs when food retailers forget to provide customers with a complete set of cutleries, making it harder for them to enjoy their meals as they need to use their fingers to eat. People are usually too lazy to bring their cutlery set from home because it takes up too much space and is difficult to bring all of them. Many customers do not want to put their hands dirty when eating outside because there would be no place to wash hands or tissue. It's difficult to eat rice without a spoon and noodles without a fork when having a meal outdoors. Moreover, the current cutlery set that is provided by food sellers from food stalls, food trucks, fast food restaurants are mostly made from plastic material because it is cheaper. However, this is not the best option because plastic came from the trees, and it will affect the environment. Plastic, as we all know, is made up of toxic chemicals and is non-biodegradable, which has a negative impact on the environment. Therefore, we came out with an innovative idea to create a product which is eco-friendlier, reduce the usage of plastics and save the environment. Our innovative product is small, compact, portable, and lightweight. After using Knifoon, the customer can clean it, keep it in the cutlery box and it can be used again.

Keywords: Cutlery set; Portable; Eco-Friendly



Copyright: © 2023 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. INTRODUCTION

Knifoon is an invention product created by PHECA, which is the name of our group. Knifoon is a combination of three cutlery tools which is a knife, fork, and spoon. We made it as one cutlery tool, so it is portable to bring anywhere. The materials that we use for this innovative product is a combination of stainless steel of knife, fork, spoon, and springs to make the Knifoon product more useful. The body parts are made from stainless steel too. We choose stainless steel cutlery tools and springs because we want our product to last long and it is low maintenance. Stainless steel is a long-lasting material and durable. The reason we choose body parts from stainless steel is that it is durable and 100% recyclable material.

2. PROBLEM STATEMENT

Common problem people have during meals is a lack of cutlery set, particularly while eating outside. For example, eating at a restaurant, eating from a food truck, enjoying a picnic, and so on. This

issue frequently occurs when food retailers forget to provide customers with a complete set of cutlery, making it harder for them to enjoy their meals as they need to use their fingers to eat. People are usually too lazy to bring their cutlery set from home because it takes up too much space and is difficult to bring all of them.

Many customers do not want to get their hands dirty when eating outside because there would be no place to wash hands or tissue. It's difficult to eat rice without a spoon and noodles without a fork when having a meal outdoors. Moreover, the current cutlery set is provided by food sellers from food stalls, food trucks, fast food restaurants and others. These cutlery sets are mostly made from plastic material because it is much cheaper. However, this is not the best option because plastic came from the trees, and it will affect the environment. Plastic, as we all know, is made up of toxic chemicals and is non-biodegradable, which has a negative impact on the environment.

Food retailers from e-shops featured in the "Grab Food" and "Food Panda" applications did not always provide customers with a complete cutlery set. Furthermore, food retailers charge their customers when they choose to purchase a cutlery set as part of their food purchase.

Therefore, we came up with an innovative idea to produce Knifoon as an eco-friendly product to save the environment and promote new cutlery product design in the market. Knifoon is created to solve these common problems that customers have during their meals.

3. PRODUCT NOVELTY

The innovation that our group is working on is all-in-one cutlery which combines a fork, spoon, and knife. In the current days, metal cutlery is becoming more popular due to the reduced usage of plastic cutlery. The readily metal cutlery now are usually quite bulky and take up a lot of space which makes it very inconvenient to use at times especially when you are not the kind to carry a big bag everywhere you go. The situation is particularly difficult for mothers as they may need to carry multiple cutlery for their children as well.

Knifoon will become more portable and convenient to carry around with the help of our innovative product. Our innovative product is small, compact, portable, and lightweight. After using it, the customer can clean it and keep it in the cutlery box.

4. PRODUCT FUNCTION

Knifoon has its very own function that is rarely found in other products. A normal spoon, fork and knife have a similar function to our product which is a primary utensil used for eating but, our product has more than one function and the other functions are not the same as the other product. Knifoon is a combination of three cutlery which is spoon, fork and knife. It turns out to be something that will attract customers' attention. Here, we will specifically convey the function to the user.

4.1 Cutlery Holder

- i. The holder works as a house to store the inner parts of the cutlery.
- ii. It is safe to carry anywhere because the cutlery holder can securely store sharp objects.
- iii. With a small size and shape that fits comfortably in your bag, it is convenient to carry anywhere.

4.2 A Spoon, Fork and Knife

- i. The spoon has an elongated round cup.
- ii. The cutlery is used to eat main course food items.
- iii. It can pick up just the right amount of food.
- iv. The spoon is always paired with a fork and a knife of the same length.

4. *Spring and Button*

- i. The spring keeps the cutlery retracted until ready for use.
- ii. Button is a physical switch that controls the function of the cutlery
- iii. With the buttons, you can choose whether to use a spoon, fork or knife.

5.0 PRODUCT COMMERCIALIZATION

This product is affordable. It is because the selling price of this product is RM25. Because of the Covid-19 pandemic, we need to decide the price of Knifoon product based on the cost of living in society. The workers or students can buy this product. Based on our research, because of the Covid-19 pandemic, people need to be careful especially when buying food. They can use Knifoon product, so they do not have to use the plastic cutlery provided by the restaurant. Our pricing objectives of market share are surviving with the low market if we are in a slow-growth industry and experience a few product changes. Our pricing objectives of maximizing sales are ignoring profits, competition, and the marketing environment if sales are increasing. By applying sales-oriented pricing, it is assured that we can achieve high sales of Knifoon product. The advantage of this strategy is discouraged or blocks competition from market entry and boosts sales and provides large profit increases.

Knifoon product suitable for all. Besides, this product is easy to bring and use anywhere and anytime. There are two types of promotion that we choose to promote our product which is advertising and sales promotion. We use advertising to promote our product to consumers. The reason for choosing advertising as our promotion strategy is because it is a way to attract customers to buy the product while they watch the ads on television. We also create ads on media social because many people are always active on media social when they have free time such as Facebook and Instagram. Thus, we can take this opportunity to promote our product on social media. We can promote our product on Facebook and create an official page that we can promote on that page. When people are active in their social media, they can know our product and will be attracted to buy our product. These strategies also can get feedback about our products when they give comments or suggestions about the product on our official page.

The consumers' comments or suggestions about the product can help us to improve our product or services. Moreover, we also use sales promotion. When we use this strategy, we can attract more customers to buy our products. This is because when they buy our products, they can get rewards such as free casing, brush, and chopsticks. This reward can attract customers because the consumers like the reward.

Finally, we choose retailers as our marketing channel. Retailing channel enables our product to be sold much easier and this channel directed to retailers focuses the sales to consumers. The benefit of the retailing channel helps us to increase sales effectiveness and effectively while being able to use minimum cost. We also chose intensive as the level of distribution intensity. Intensive level of distribution involves achieving mass-market selling and convenience goods and also aimed at having a product available in every outlet. This method allows manufacturers to concentrate their sales efforts on all the shops. Supermarket and convenience stores as instances of retail stores that sell our product.

Our objective is to get consumer satisfaction and make it easy for the consumers to find and buy this product. Therefore, we can achieve high sales at marketing because our product is convenient and useful.

6.0 CONCLUSION

In conclusion, our product has been created to improve a better quality and experience for the customers in the dining experience. Knifoon was created by our group, PHECA, in the hopes of having a significant impact on the environment, society, and economics. Knifoon aims to be an

environmentally friendly product by avoiding the use of plastic materials, as we strive to limit our use of plastic. As a result, it will protect our environment from the global plastic pollution crisis.

Knifoon is so easy to use, that it has a positive impact on society by helping individuals in making their lives easier. People can enjoy a better dining experience with Knifoon. All they need to do is press the tool's button. People who own Knifoon can take it with them wherever they go at any time, and it helps a lot if the food retailers do not give a complete cutlery set. Knifoon can be used for breakfast, lunch, supper, and dinner, as well as for quick meals. Our group is committed to maintaining the high quality of Knifoon product, ensuring that they are always durable, stainless, and difficult to break.

Furthermore, the Knifoon product's innovation has the potential to benefit the economy. Our group, PHECA, recognises that the economy is suffering during the COVID-19 pandemic, which is why we decided to set an affordable price for Knifoon with a selling price of RM25. This is the price at which anyone can obtain it. It fits the price because it is made of high-quality materials like stainless steel and is rust-resistant. This will attract customers' attention to the product, thus increasing demand for Knifoon. PHECA puts a high priority on customer satisfaction to keep them satisfied, which leads to increased earnings that benefits both the company and the economy.

Overall, the PHECA company will work hard to provide a high-quality product that will benefit the world in the present and future. We hope that Knifoon's innovation will help people to enjoy their dining experience by using Knifoon's unique functionality design.

Acknowledgements : First and foremost, we would like to thank and appreciate our supervisors Madam Noraini Binti Sa'ait and Madam Gloria Anak Panit for their invaluable advice and guidance. We would also like to thank our beloved family and everyone who had been involved directly or indirectly upon completing this project. Thank you for showing the support, love, and the prayers we have received.

References

- Bowen, S. (2022). The best cutlery sets of 2023. Retrieved from: <https://spruceup.co.uk/best-cutlery-sets/sarahbowen>.
- Earth Reminder. (2022). Harmful effects of plastic pollution: Plastic pollution effects on the environment, ocean and animals. Retrieved from: <https://www.earthreminder.com/effects-of-plastic-pollution>.
- EcoWonder. (n.d.). The 10 most eco-friendly materials: green substitutes for plastic. Retrieved from: <https://ecowonder.co.uk/eco-friendly-materials>.
- Jupiter Flatware. (n.d.). Retrieved from: <https://jupiterflatware.com/2018/05/11/the-advantages-of-disposable-cutlery>.
- Zendesk (n.d.). Retrieved from: <https://plasticpollutioncoalition.zendesk.com/hc/en-us/articles/Why-is-plastic-harmful>.