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PEPPER CASENITIZER

Nurfatihah Syahirah binti Zaidi Rahimy
Faculty of Hotel and Tourism Management, Universiti Teknologi MARA
fatihahsyahirahhh@gmail.com

Syahira Nisha Nabila binti Mohamad Shahril
Faculty of Hotel and Tourism Management, Universiti Teknologi MARA
syahiranisha64@gmail.com

Muhammad Afiq Syahmi bin Rosli
Faculty of Hotel and Tourism Management, Universiti Teknologi MARA
afiq.syahmi.asr99@gmail.com

Nur Wani Syamimi binti Yaman
Faculty of Hotel and Tourism Management, Universiti Teknologi MARA
syamimiofficial90@gmail.com

Alvin Gatu
Faculty of Hotel and Tourism Management, Universiti Teknologi MARA
alvingatu@uitm.edu.my

ABSTRACT

Crimes in Malaysia are always a serious subject matter. Crime in our society such as sexual assault is known worldwide hence it increases the level of fear. Therefore, Pepper Casenitizer is a one-step solution or prevention product in ensuring the safety of users from being a victim of assaults and protection from germs. The objectives of creating this product are to protect your phone from scratch, to act as a protection from any threats, and to ensure users have their carry-on hygienic equipment. The idea of this product is an innovation combining 3 items, which are the pepper spray that acts as the defense mechanism, hand sanitizer that acts as the hygiene purpose, and a phone casing that acts as the phone holder. The speciality of this product is it can be customizable to suit the user's personality and has refillable pepper spray and hand sanitizer. This phone case is convenient as it is attached to the phone case, and the users do not need to worry about bringing it anywhere as the product is 3in1. The users can pull out the phone case to use it as protection when they are facing danger. It is also convenient to have this phone case as it has hand sanitizer to keep your hands clean. The target market is for any gender as every individual needs to be aware of safety and hygiene on a daily basis. The users need to insert both pepper spray and hand sanitizer inside in the spray compartment. The mist has to be activated by pressing the activator button to release the mist. With all three elements combined, this product can provide good protection from dangers and germs.

Keywords: 3 in 1 phone case, pepper spray, hand sanitizer, safety, hygiene

ISSUE

The issue of sexual harassment has been broadly highlighted among Malaysians. Sexual harassment can happen anywhere and anytime in the workplaces, campuses and public places (The Asean Post, 2019). Both gender, men and women can be the victim of being assaulted in Malaysia, however, women encounter being assaulted more than men. According to the Royal Malaysian Police (PDRM), from the year 2013 to 2017, there were 1,218 has been reported on sexual harassment cases, 79% that were involved as victims were women and 21% were male victims. Chief ACP R. Munusamy (2018) stated that it is not illegal to carry pepper spray as it is used for personal safety. Therefore, the use of pepper spray can help a victim who is being attacked.

Furthermore, the global pandemic of Covid - 19 has hit the world and the use of hand sanitizer has become a new norm (Dastider et al., 2020). Hand hygiene is essential because hands get easily contaminated directly by coughs, sneezes and touches. According to the World Health Organization (WHO), hand sanitizer could kill 99.9% of germs, bacteria and viruses. Therefore, billions of people worldwide use them daily to keep their hands clean and safe (Dastider et al., 2020). This hand sanitizer contains alcohol that could kill the germs on the skin. Therefore, the use of hand sanitizer could help an individual to prevent getting affected by any illness.

Both issues are in the midst of widespread discussion by the public. Therefore, the team takes the business opportunity when developing suitable 3in1 product used daily which is a phone case with pepper spray and hand sanitizer called Pepper Casenitizer.

ABOUT PEPPER CASENITIZER

Pepper Casenitizer is a prevention phone case that could ensure the safety of users from being a victim of assaults and protection from germs. The team chose to put it on a phone case because individuals would grab their phones first when an emergency situation happens. In addition, individuals do not have to bring pepper spray and hand sanitizer separately with them, as this phone case comes with those two items.

OBJECTIVES

The main objective is to protect the phone from any damages and scratches. The phone casing that acts as the base of the product. Our phone contains valuable items, information, and data that can be stored for a long time. To avoid negligence of phone damage, the case is essential for every mobile phone. Despite its functional purposes, it can also increase the aesthetic appeal of the phone case. Next, the key ingredient of the pepper spray is capsicum oil which has an impressive rating on the Scoville Heat Units (SHU) scale. It is an instant way to protect consumers from danger as once it is exposed to danger, the danger will lose temporary eyesight and consciousness. Therefore, it gives some time for consumers to further away from the danger. It provides a powerful substance type of protection from danger. Lastly, this 3-in-1 product is convenient and on-the-go to take anywhere, making it an accessible hygiene equipment. The hand sanitizer cleans and reduces the spreading of germs. Since the pandemic Covid-19, it has stirred uncomfortable norm and this product can be a practical way to reach hygiene equipment quickly.

NOVELTY

Crime like sexual assault is a concerning issue that happens around the world which made one's need to seek a solution as prevention. Next, due to the current pandemic, hygiene practices have become significant. Hence, the idea of the product is to combine three items into one product. The pepper spray is a necessity for protection that acts as a defense mechanism to decrease the number of crime issues. The hand sanitizer acts as a germs killing liquid for hygiene purposes where people can easily use it anytime and anywhere. Lastly, the phone case acts as a phone holder where the consumer can simply bring it everywhere. With this product, consumers do not have to worry if they forget to bring one of the items.

SPECIAL CRITERIA

Pepper Casenitizer has a variety of designs in terms of colors and patterns. The customer also can customize their phone case depending on what design they want. The customer can send their desired design to the Pepper Casenitizer team. Even though the customer can send their own design, the team also provides sleek, unique and trendy designs for the future customer. The team decided Pepper Casenitizer can be customized so that it can attract more customers regardless of age and gender. This customizable casing can unleash one consumer's creativity to create their aesthetic design on the casing. Other than that, Pepper Casenitizer also comes with a refillable spray compartment for the customer to refill. The button for hand sanitizer and pepper spray has a responsive button to activate the mist. This phone case can be used multiple times as long as the customer refills the hand sanitizer and pepper spray.

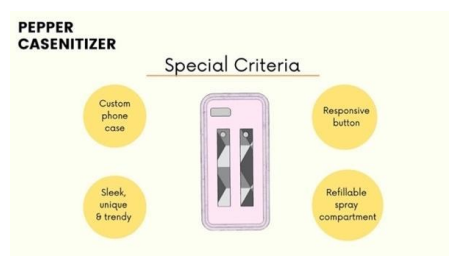


Figure 1. Pepper Casenitizer's Special Criteria

IMPACT & USEFULNESS

This phone case can bring benefits to the economy. It helps phone case entrepreneurs see opportunities to gain more incomes during Covid - 19. In Malaysia, phone case designers have business opportunities to create colors and trendy phone cases. These trendy designs can attract future customers. Companies such as CasesbyWF, CaseLook and Casebook have launched and come out with unique, stylish and extra protection to the phone. This can help phone case entrepreneurs to create job opportunities for designers who can design phone case.

In addition, the usefulness of this phone case is that it is built to be convenient because it is a 3in1 product that comes with pepper spray and hand sanitizer. The pepper spray feature could save an individual's life and it has been proven that it saves thousands of women's lives from

being attacked or assaulted by random strangers – male or female. Moreover, it is practically useful when pepper spray is attached to a phone case. People always carry their phone with them and when any circumstances occur. The users can take immediate action as they grab the phone first. It is a common sense that most people would not put their phones in the bag and instead would carry their phones. The faster the action is taken, the higher chance to save a life.

Other than that, hand sanitizer that is attached with a phone case is convenient. Some people find it hard to use their hand sanitizer and end up using the one provided to the public. Individuals can avoid using the public hand sanitizer when they carry it on their own which is attached to their phone's phone case. Some of the hand sanitizers provided to the public does not follow the required amount of alcohol to be put in the hand sanitizer. An alcohol-based hand sanitizer should contain between 60% to 95% of ethyl alcohol or isopropyl alcohol to effectively kill any germs (Dastider et al., 2020). Carrying own hand sanitizer could avoid getting affected by the virus.

PEPPER CASENITIZER FEATURES

The Pepper Casenitizer has three prominent features of a 3in1 phone case which are phone case, pepper spray and hand sanitizer. The features can be referred to Table 1.

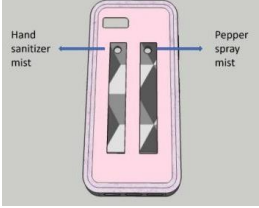
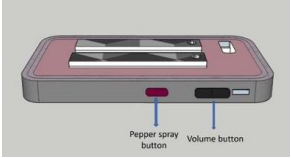
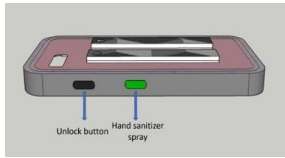
Table 1. Features of Pepper Casenitizer

Feature	Description
Phone Case	Protective and durable phone case is to protect the smartphone from damages such as phone fall when escaping from attackers and phone slip when using hand sanitizer.
Pepper Spray	Pepper spray contains OC (oleoresin capsicum) spray which is legal in Malaysia for self-defense purposes (Chief ACP R. Munusamy, 2018). It can spray up to 3 meters and it is 15 ml of liquid.
Hand Sanitizer	Hand sanitizer contains 60% Isopropyl Alcohol, Aloe Barbadensis Leaf Juice and essential oil and it is 15 ml of liquid.

PROCESS OF USING PEPPER CASENITIZER

Our product aims to protect people from any dangers or threats that may cause trauma to them and as an accessible hygiene equipment. In Table 2, the team has explained in detail the process of using Pepper Casenitizer.

Table 2. Process of Using Pepper Casenitizer

 <p>Figure 2. Phone Case</p>	<ol style="list-style-type: none"> 1. Insert the liquid inside by pressing the spray compartment. 2. On the right: pepper spray 3. On the left: hand sanitizer
 <p>Figure 3. Pepper Spray Button</p>	<ol style="list-style-type: none"> 1. Press the activator button on the right to release pepper spray mist. 2. Spray to the attacker when being assaulted or attacked.
 <p>Figure 4. Pepper Spray Button</p>	<ol style="list-style-type: none"> 1. Press the activator button on the left to release hand sanitizer mist. 2. Rub on hands until dry.

PRODUCT COMMERCIALIZATION

As stated by Kostsyk (2012), the marketing aspects are one of the influential factors to commercialize a product. The target market for this product can be focused on the demography of the target market. The targeted consumers' age range for this product are Gen-Z that starts with the aged 13 to 21, Millennials (aged 22 to 37), and Gen-X (aged 38 to 53). It is suitable for both female and male consumers, as danger can be exposed to both genders. The selected target market is fitting as based on a statistical analysis by Heromyth in 2020, 98% of Gen-Z and 92% of Gen-X grant at least one mobile phone.

Suggested platform to commercialize Pepper Casenitizer is by social media. Due to the limitation of Covid-19 restriction, social media such as YouTube, Facebook, Instagram, Twitter, TikTok are the easiest way to commercialize the product because every person with a smartphone will have at least one social media platform. On these social media as well, there are website traffic tools which can be recognised as 'featured', 'suggested', 'sponsored' features for businesses to market their products and services. According to Pew Research Center (2018), the usage of social media supports Pepper Casenitizer's product commercialization because majority of the online community uses their preferred social media at least once in a day. In February 2021, a survey conducted by Pew Research Center authors, Auxier B and Anderson M, reported that 7 out of 10 Facebook users will visit Facebook several times a day. While 73% of Gen-Z and Millennials visit Instagram on a daily basis. Therefore, possible customers can view Pepper Casenitizer on social media and discover more of this product.

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Cawangan Kedah
Kampus Sungai Petani

Faculty of Administrative
Science and Policy Studies

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