



SOCIAL DISTANCING ROBOT

TECHNOLOGY ENTREPRENEURSHIP (ENT 600)

TECHNOLOGY-BASED BUSINESS IDEA BLUEPRINT (BP)

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1.0 EXECUTIVE SUMMARY

This report is dedicated to discuss about the blueprint of a new innovation product that is the Social Distancing Robot that is the robot that ease people on delivery process in terms of foods and items usually ordered through online. In the era of pandemic virus, people all around the world are trying to adapt with the new normal that is to keep the distance between individuals. Furthermore, online shopping has become a new trend where people often do online purchasing in terms of food or personal needs. The Social Distancing Robot is a new product development design to promote social distancing and facilitates the delivery process as it comes with portable weight to carry and provide a special payment method that is cashless on delivery. Research and Development processes were on the product as to meet the criteria of customers' needs with a reasonable price and to be a good competitor in the market share. The invented product comes with the latest technology with a specific programming software in order for the product to move by controlling it with a Bluetooth connection on smartphone.

Market analysis were made during the process of introducing the product where we did an assumption on what will we gain from comparing our product with previous invented products in the world. Calculation was constructed in order to identify the sales forecast for our product in the first year of our business and two years after assumption had been predicted. The company compared the producing product with other competitors by marking the advantages and disadvantages of each product in order to improve the invented product specifications. Strengths and weakness were also obtain to make sure the targeted population of the product would gain interest on buying the product. Several method of marketing were analyze and created to make sure the nation know the new product would become a beneficial product not only on the targeted population but also on future consumers as the pricing and descriptions of product is beneficial for them to apply in the specific industry. The management team are the people who are responsible on the successful of organization and business. By having a great management team, it will influence investors on grabbing the opportunity we provide for them. The management team also need to make sure the connections between employees, business activities and customers are in a well-shaped structured. Therefore, we believe that our technology based product will become a demand in the future not only towards the nation but worldwide as we planned to expand our business into other big countries and possible continents.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT

In the new normal of the world, delivery services and logistics team plays an important role as people often do online shopping because they are lacking of time to go to mall, supermarket or even restaurant. The Social Distancing Robot focuses on the customer segment where the priority is towards the food delivery riders and logistics team. The product is not only for food delivery but also parcel delivery that could help the logistics team to smoothen the delivery process. Plus, it may also help postman on delivering the mails or letter to the receiver and preventing the items or letter from throwing it to the floor. By having the social distancing robot, letters or items are in good condition when the customers received it.

Our product comes with modern technology where users can control the movement of the robot by their smartphones with a Bluetooth connection. By making a survey on a few products in the market, it does not provide a payment facilities where their customers must pay through online banking. In the Social Distancing Robot, we provide a Paywave and QR code scanner in which the users' customers can pay their item or foods cashless using their debit card or e-wallet. Moreover, it is suitable for all kinds of areas either in urban or rural and we believe that our product will be very useful and ease the users' working process especially in the delivery part.

2.2 APPLICATION OF PRODUCT

By having the Social Distancing Robot with them, customers does not have to worry about the condition of the item as it is placed well in the Social Distancing Robot and the user will put it in the delivery box or van. When the rider or logistics team arrived, they can take the robot out and put it on the ground and connect with their phone using Bluetooth. Rider can control the movement of the robot from outside and pass through the gate with a distance kept between both individuals involve. During customer receive the items, they can choose two kind of payment method such as paywave or QR code scan pay. If the customer does not have cash and prefer paying their item after the delivery, SDR provide a scanner for customer to pay with single button to click. Once the item is paid, rider control the movement of robot to return back and keep it back in the delivery box. So, the product is helping both groups of solving the problem by having an alternatives on paying.

2.3 FEATURES OF PRODUCT

During the product design process, we did a few research on how other robot technology been developed in the world to help people on improving their way of life. Information were developed by having a survey of introducing the product that has been conducted to identify the necessity of the product towards customers especially food delivery services and logistics company. Other than that, research from the internet provide a few information on innovating the product.

In 2019, Starship Technologies invented the food delivery robot to ease people in the neighborhood on buying food online and the robot will appear in front of the house with the foods ordered. The disadvantages of the invented product is that it is not intended for crowded urban environments and the food ordered must be paid online. In 2016, New Zealand Domino's Pizza introduced a new way of delivering their pizza that is by drone. They believe that by applying drone delivery, it will avoid traffic congestion and reduce the delivery time. However, it will create less opportunities for people who want to work in the industry as the drone can do the task.

Moreover, the technology developed, concept of producing and process of inventing the product are regardless from information gathered by watching videos in YouTube and a live interview with an electrical technician in order to have the create the best product. The main materials of the product is not expensive as we focus on the development of technology that would help people on delivery process. As a matter of fact, our product is lighter compare to previous product developed as we use a solid but light material on making the body. Meanwhile, it comes with a specific programming where it is to control the movement of the product by using a smartphone with Bluetooth connection. Therefore, our price range will meet the criteria of our customers as it is affordable and the technology based in complete with the needs of our customers.