DOORBOT

PRD

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STATUS: DRAFT

Background

We will be working on a new product that will change the way DoorDash completes it's food delivery service which will set it apart from it's competitors and with this we will be making changes in our Operations Technology.

Problem

In today's time, the most frustrating aspect of food delivery the industry faces is the customer dissatisfaction when it comes to late deliveries. Our dashers can have a hard time understanding the navigation process especially in rural areas which causes customers to switch their focus on our competitors. Having robotic dashers will reduce the risk of our 100,000+ human dashers having close interactions with the customers during the pandemic of COVID-19 and this product will help out in maintaining social distancing laws. Delivery robots market is going to see a growth from USD 11.9 million in 2018 to USD 34.0 million by 2024. Currently, the cost for each last-mile delivery is USD 1.60 via human dashers which can be scaled down to USD 0.06 via robotic dashers. According to Second Measure, DoorDash has taken 35% of the meal delivery market while rivals such as GrubHub and UberEats have captured only 30% and 20%

respectively. TAM = 0.35* 150M(target audience)* $7 USD per user = 409M.

Goals

Our goal is to make the food delivery service safe for both our customers and our fellow Dashers. This is why we are introducing robotic autonomous delivery systems which will help the public maintain physical and social distancing laws but still be able to enjoy their favourite meal from any restaurant. By bringing in this new technology, we also hope to launch in a new demographic market after the initial phase.

Success Metrics

One of the main sources of tracking our success will be from the feedback we receive from our customers through the product rating of DoorBot. Another source being the ease of use for Operations Team, our Operations team will have the opportunity to give us feedback and give us a detailed perspective on how the product can further develop in terms of Operations. We will also be monitoring the number of customer support calls per day to give us some insights upon the problems that are arising everyday.

Key Features & Scope

DoorBot will act as a helpful hand to the company's human workers who at this point must drive to a restaurant or store, find parking, pick up the food, drive to the delivery location, and finally find parking again. DoorBot aims to reduce the amount of driving involved in delivering a cheeseburger by sending the bot into a store or restaurant and then dropping it off to the address given by the customer while finishing the last mile of the trip. The portal for our Operations Team will perform various tasks following these bots. There will be 24/7 customer and monitoring support available and there will be easy steps to take control of the bots for the Operations team in uncertain situations:

•**GPS tracking of our bots:** GPS tracking will be available for our Operations team to monitor any unusual visuals (**P1)**

•**Help button on the bot:** There will be a "Help" functional button available for customers to get help regarding their orders (**P2)**

•**Ability to take control:** Our Operations Team will be able to take full control of the bots in case of outlier situations (**P1)**

We will be working and collaborating with our development team to push both a mobile and web application for users to create and use DoorBot. Data will be integrated from our applications into our Portal for the Operations team, Some features will include:

•**Ability to view the earliest time a delivery can be made (P1)**

•**Users will be able to give their bot a personalized name during their delivery which will stay the same throughout their journey at DoorBot (P3)**

•**After every checkpoint, the bot will take a picture which will be sent to the customer**

(optional) (P3)
•Bots will take a selfie after delivery with the customers (optional) (P3)

Core UX Flow

https://www.figma.com/proto/YPSJy1MdEwqBWEnFhp67bt/DoorBot?node-id=146%3A142&scaling=contain

Acquisition Channels:

1. **Social Media Marketing:**

   Social Media is a vital platform to showcase our product by having certain deals/promotions for our users to create awareness of our product. Through social media, we can have various promotions for example: if you post and tag a friend on Instagram, you might have a chance to win $50.00 worth of DoorBot credit.

2. **Restaurants:**

   This product requires the restaurants to come on-board in order for our customers to order any food items through our platform. In order to do this, we will have to market our robots at these restaurants for more engagement with both the restaurant owners as well as the regular/loyal customers of the restaurant.

3. **College Campus:**

   Since our target audience is College students, we can have events or workshops through DoorBot to showcase our product and get students to come up with innovative ideas to further enhance our product. Through college events, the word will get out there in between students of our product and we will soon see many students using DoorBot.

Pricing Strategy:

Currently, the cost for each last-mile delivery is $1.60 via human dashers which can be easily scaled down to $0.60 through robotic dashers. For our pricing strategy, if the order amount exceeds over $25 then the delivery charge will be waived but if the order amount is less than $25, our customers will have to pay delivery charges of $3.50 on their orders.

ROI:

Cost:

Assuming we launch 43 robotic dashers

- 20,000 (Manufacturing + Delivery) + 3,000 ($ maintenance per robot every 6 months)
- Application Development Cost = ($20,000) *4 months = $80,000

- Marketing Cost = 15,000 (Marketing expenses) per month
- Total Cost = $ 880,000

Impact

- 43 robotic dashers*4 deliveries per hour*8 hours a day* $3.50 per delivery*365 days
- First Year Revenue $1,506,720 (1.5M)
- ROI for first year is 71%

Pre-Launch Strategy

Product Manager	Making sure that all phases of the product are successfully completed. There should be clear communication to other departments/teams of the product launch
QA	All testing should be done before the launch to make sure the product works perfectly fine for users
Product Designer	There should be no elements missing from the design to the development side. All aspects should be covered and the designer needs to make sure of that
Engineer	The product should be free of any technical issues before launch to make sure the customers are not frustrated with any glitches
Sales	Sales targets should be set before the launch to get the sales team motivated. Information to sales team must be given
Customer Support	Should have all the process documents before launch to help out on any customer support issues.
Legal	All legal issues must be taken care of and dealt with prior to launch
Marketing	Marketing channels need to be established and there should be clear communication of post launch process required

Risk Factors:

R1: Too many requests for our Operations team might get overwhelming

R2: Response time from our robots might taken longer than usual at times

R3: Is the customer support team ready for the rush that might come to them after the launch?

Risk Mitigation Strategy:

R1: We will require more staff on the Operations team during the times when there might be too many requests to solve for our robots. We also need to make sure that our machines are well up-to-date for the operations team so that the system does not run slow because of too many requests.

R2: During rush hour It is possible that our robots might respond slow because of the amount of orders being made in similar locations. To avoid this, we can either have a wait time for our customers as we only have 43 robots, and the rest of the deliveries can be done through a human dasher. As we become more successful in the market, we can easily get more robots and hence reduce this risk

R3: To better prepare our customer support team, we will need to give them training beforehand of the product so that no time is wasted after the launch. The customer support team will get thorough training on the product to help customers with any issues that they may have.

Next Steps

Through the data provided through our Data & Analytics team, we understand that 25% of the deliveries are still facing issues because our Operations team requires more functionality in order to ensure utmost customer satisfaction.

In order to dive into this issue, we will be conducting test cases on our robots to find the root cause of the problem. This may also include the scenario where some members from the Operations team might go along the Dasher and our robot to find where the issue lies. Another way we can solve this issue is by conducting thorough research on the kind of APIs we can use to connect our systems to a map where our robots are still able to provide us their updated location even when they might be in rural areas where there's low connectivity. There should be a better solution then the Google Maps API we currently have acquired.

By the end of next month, we will again get our Data & Analytics team to acquire the success matrix to see if there's any difference in our patterns of the successful orders delivered by our robots. We believe that these next steps will definitely help us ensure that our customers are satisfied, and this will be seen once our numbers improve in terms of successful orders.