DoorDash

Opening the doors to the future!

Product Owner: Harshal Gautam

Background

Why Are We Here?

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.

“The DoorBot”

Business Case

Initial Focus

Where are we starting?

- 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 law

Opportunity

What's the problem?

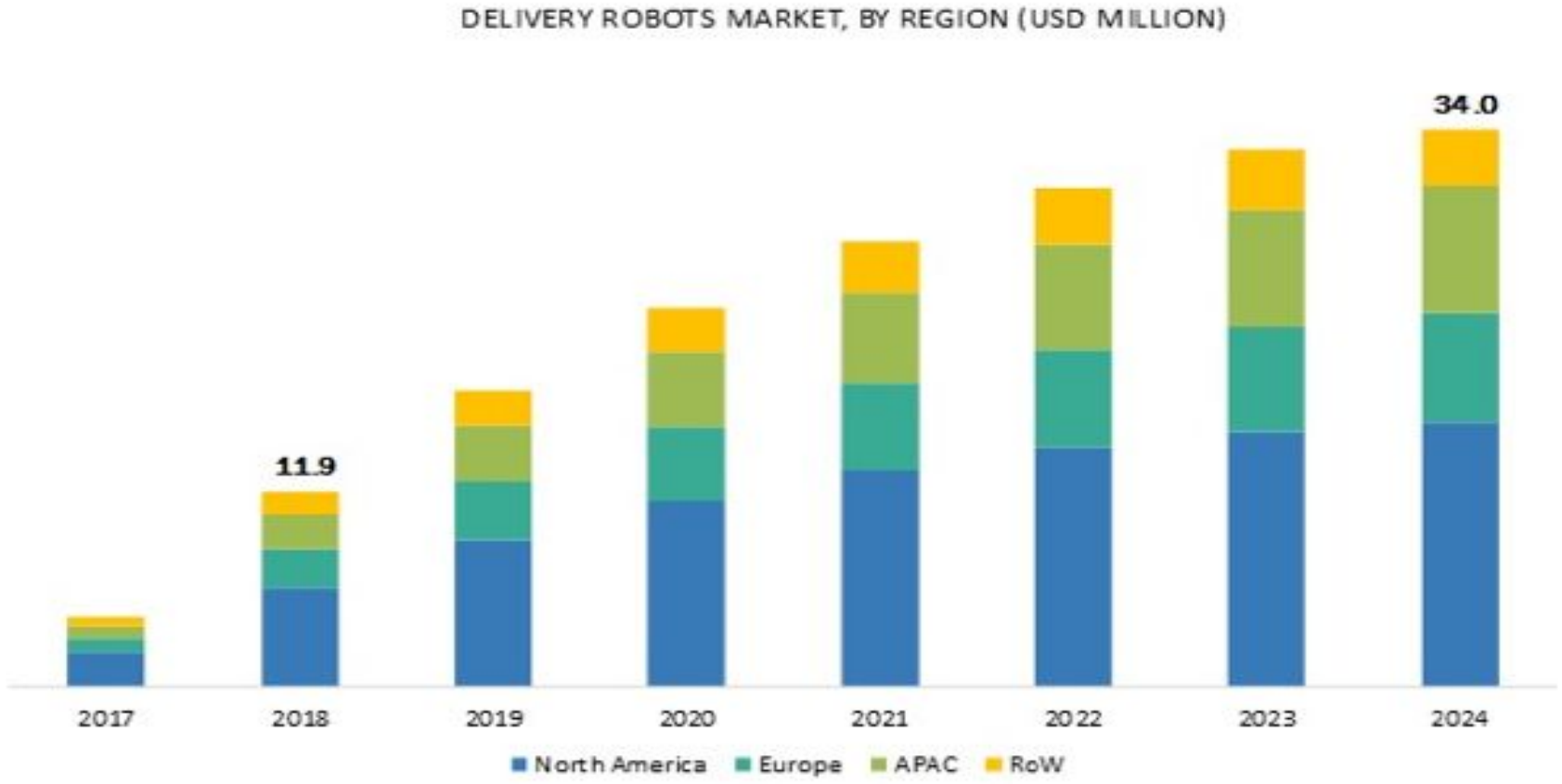
- Delivery robots market is going to see a grow from USD 11.9 million in 2018 to USD 34.0 million by 2024

- 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**

Source: https://www.restaurantdive.com/news/robot-delivery-market-to-triple-by-2024/547162/


DELIVERY ROBOTS MARKET, BY REGION (USD MILLION)
11.9
34.0
2017
2018
2019
2020
2021
2022
2023
2024
North America
Europe
APAC
RoW

Proposal

What's Our Solution?

•We will be using autonomous robotic dashers for our food delivery service which can help reduce human-to-human contact during COVID-19 and provide a customer service experience like no other business in the industry will be able to provide.

•Initially, the deliveries will be for within the 2 mile range and so will start out by providing the robotic dasher service in areas close to College Campus within Florida

•Our Operations team will have 24/7 monitoring over these robotic dashers and will have the ability to take control through our application (DoorBot). The team will be able to track our robotic dashers and address issues to provide a smooth customer experience

Return On Investment

What can we do?

COST:

Assuming we launch 43 robotic dashers:

- 20,000(Manufacturing + Delivery) + 3,000 (USD maintenance per robot every 6 months)
- Application Development Cost = ($20000) * 4 months = $80000 USD
- Marketing Cost = 15,000 (Marketing expenses) per month for a
- Total Cost = **USD 880,000**

Return on Investment

What can we do?

IMPACT:

- 43 robotic dashers * 4 deliveries per hour * 8 hrs a day * $3 per delivery * 365 days
- **First Year Revenue 1,506,720(1.5M USD)**
- **ROI for first year is 71%**

Measurement

How will we know if we're successful?

- **Product/App rating:** One of the main source of tracking our success will be from the feedback we receive from our customers through the product rating of DoorBot

- **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.

- **Customer Support:** Monitoring number of customer support calls per day will give us a insight upon the problems that are arising everyday

Competitors

Postmates

POSTMATES SERVE

- Serve is Postmates' new autonomous stroller that it hopes can cut costs and speed deliveries

- The rover uses cameras and Lidar to navigate sidewalks, but always has a human pilot remotely monitoring a fleet of Serves who can take control if there's a problem

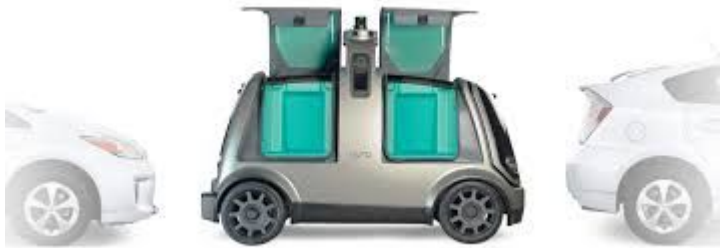
- Serve delivers to customers that unlock its cargo hatch with their phone or a passcode
  - Currently active in San Francisco
  - Funding: $40M USD

Source:
https://www6.royalbank.com/en/di/hubs/tech-and-culture/article/paving-the-way-for-sidewalk-delivery/k11cl27q#:~:text=In%20one%20month%20alone%2C%20e,funding%20to%20expand%20its%20efforts.

Nuro

SELF-DRIVING VEHICLE

- Nuro is a fully autonomous, on-road vehicle designed to transport goods and services quickly, safely and affordably
- The front-end of the product is designed to protect pedestrians as it will collapse inwards in the event of a collision
- Nuro also has temperature control to help keep food fresh
- Currently active in: Arizona & Houston
- Funding: 1B USD



Source: https://www.crunchbase.com/organization/nuro-2#section-related-hubs

Our Advantages

Why are we better?

- Our delivery fee of just $3 is lower than our competition
- 24/7 customer line support
- In-built voice control that has has embedded the top 10 most common languages to connect with our customers depending on their language of interest
- We control 35% of the market and have a higher growing rate than our competition
- Delivery guarantee depending upon the area of delivery

Roadmap and Vision

Roadmap Pillars

Where do we go from here?

- 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

- We will follow three major milestones of our product up until the launch and further after the launch

Portal for Operations Team

First Step towards on vision

- 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

- **Help button on the bot:** There will be a “Help” functional button available for customers to get help regarding their orders

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

Testing the Product at Different Locations

Testing makes our Products better!

- Testing our product at different locations will be a vital aspect to see if there will be any technical issues that we might face in the future

- We will have to test specifically in areas with low networking issues to see if our bot can make decisions without help from our Operations Team

- Potential customers and store owners can give us feedback by clicking on an emoji that will be available on the Tablet-like screen of the robot on its front-end which will be analyzed by our Data & Analytics team to further enhance developmental processes

Pushing a New App

Final Push Leaning Towards the launch of DoorBot]

- We will be working and collaborating with our development team to push both 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

- **Features will include:**
- Ability to view the earliest time a delivery can be made
- Users will be able to give their bot a personalized name during their delivery which will stay the same throughout their journey at DoorBot
- After every checkpoint, the bot will take a picture which will be sent to the customer (**optional**)
- Bots will take a selfie after delivery with the customers (**optional**)

Where do we go from here?

Widening the scope

Depending upon the Initial response from our customer base, we will customize our product to make it suitable for different segmentation by looking at the demographic data in the US