# Automated food delivery for doordash

Design Sprint

Product Manager: Oboh Kingsley



# Set the stage

Set the stage for the Design Sprint by framing the problem

### **Initial PRD**

### **Background**

The idea of cooking food and having it delivered is not new; in fact, it's been around for a long time. Some people may think that online cooked food delivery started with GrubHub, Seamless or Postmates, but online food delivery actually goes back to 1982 when John Sylvan and Thomas Fernandez came up with SmartFood: a frozen burrito that could be cooked and eaten at home.

Shortly after SmartFood was introduced, companies such as carry Out Kitchens appeared in big cities such as New York. over time, online food delivery evolved from being just fast takeout to being fresh homemade meals. Today, there are several popular apps that offer an even greater variety of options than ever before, making it easy to order both freshly made meals and ready-to-eat dishes without ever leaving your home.

#### **Problem**

Door dash has the largest market share in the united states with 65% of the online food delivery market. Customers complain about the quality of the food delivery service. There's a need to serve customers accurately and timely. Door dash needs to reduce it operating cost. Its important that door dash delivers food accurately and timely and they would be able to make profit once the automated food delivery is implemented. Door Dash had a loss of \$1.36B.

#### Goals

- Purchase an automated food delivery robot.
- Improve timeliness and accuracy of the delivery service.
- Reduce operating cost

# Understand

Create a shared understanding of the space, problem, and goals

### How Might We

How might we deliver timely?

How might we deliver accurately?

How might we reduce operating cost?

How might we teach robots to avoid obstacles?

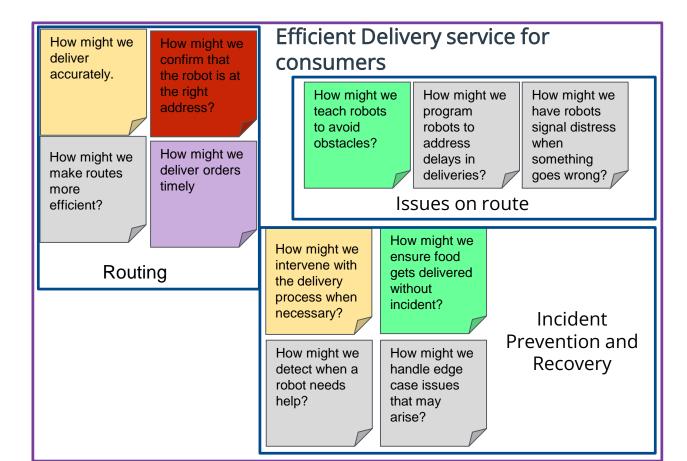
How might we mitigate accidents between robots and pedestrians?

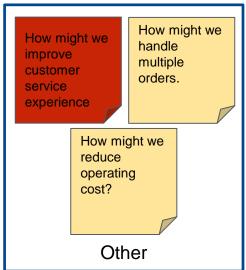
How might we intervene with the delivery process when necessary?

How might we handle multiple orders.

How might we improve customer service experience

### Sorted Stickies





### Sprint Focus

Focus	Efficient Delivery service for consumers
Slide #	6
I selected this theme because	This theme encapsulates what the project is about, which focuses on how to deliver in a timely and accurate manner and with the help of the automated delivery system we would achieve our aim.

# Define

With an understanding of the problem space, create focus and align on specific outcomes for the Design Sprint

### Doordash's 'automated food delivery': An Efficient delivery system

[Date: 13<sup>th</sup> september 2023]

In this bullet train era, dreams are transforming into reality. The dream of an autonomous delivery system for delivering packages to the last pile of customers will become a reality very soon. This delivery system would be available for customers who place orders and it will help in meeting consumer's desire for on demand convenience. Door dash would be the latest company that will succumb to this trend of efficient delivery service which will be beneficial for Doordash's customers. Their fleets of trucks and other delivery automobiles are easily manageable by the system. The primary benefit of the system is that it will speed up the delivery process and can remove the complexities of delivery by offering fast, easy, and simple operations. Customers can check Robot location in real-time through the tracking link sent by the software. Providing such a facility to the customer increases customer satisfaction. Food delivery robots can operate around the clock and make deliveries more quickly and reliably than human delivery drivers, reducing wait times and improving the overall customer experience. The autonomous delivery method will help the customers get their order in a timely manner which supports the aim of this document "an efficient delivery system".

### Success Metrics

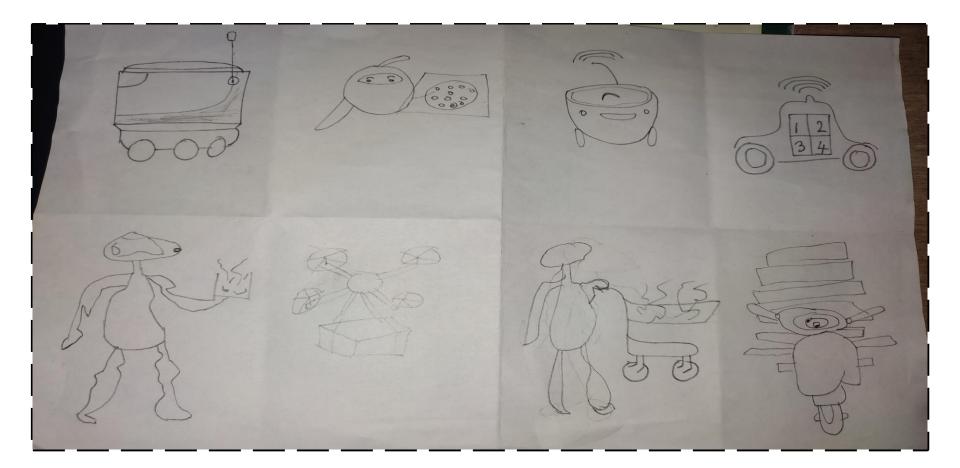
- Set at least two user-centered *goals*
- Identify changes in user behavior will signal success in reaching the goal
  Create a metric to measure each signal

	Goals	Signals	Metrics
Happiness	Efficient delivery	Delivery en-route	Avg. delivery time
Engagement	Place order	Food order added to cart	Avg. order purchased per cart
Adoption	Share with friends	Refer a friend	Referral sign up rate
Retention	ordering of food to same address	Opt in to auto fill address	Avg. number of food ordered / user / month
Task Success	Food delivered timely	Tracking of ordered food	% of successful deliveries

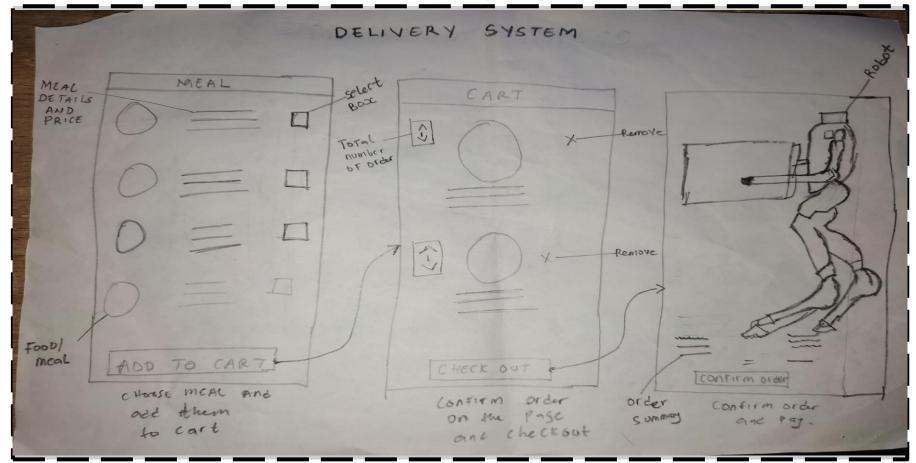
# Sketch

Generate tons of ideas, then narrow them down to two in depth solution sketches

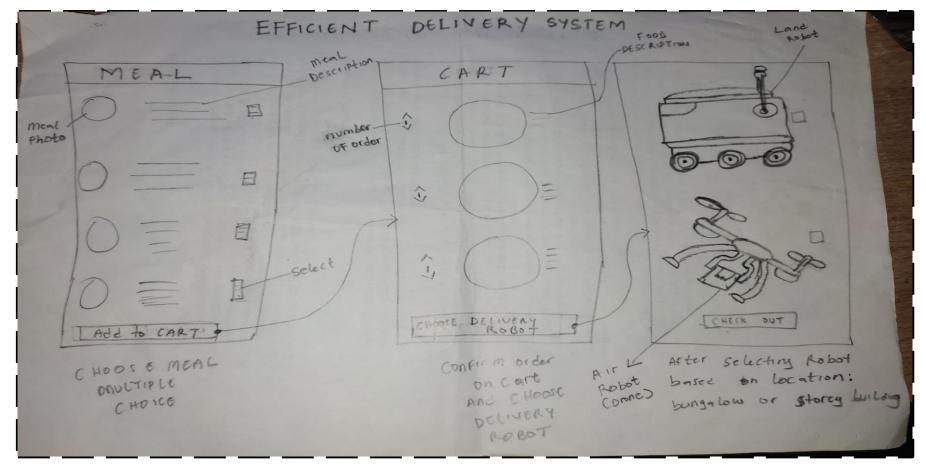
### 8 Sketches



### Solution Sketch: Delivery system



### Solution Sketch 2: Efficient Delivery system



# Decide

Pick the final concept that you develop into a prototype

### Decision

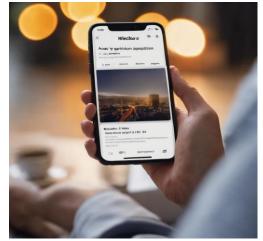
Decision	Efficient Delivery system
Rationale	This sketch was choosen because it fits more into what the users need. The user needs an efficient delivery system that would enable them choose between two delivery method making it easy to order both freshly made meals and ready-to-eat dishes without ever leaving your home. The user can decide to choose between the drone option for places farther and will be able to beat traffic congestion and deliver the food to them if the user live many feets above the ground or the land robot if they live in a bungalow. Therfore this option will help deliver orders timely and accurately.

# Prototype

Turn your concept into a realistic, interactive prototype that you will use to validate your assumptions and ideas

# Storyboard







Dami is a very busy employee that loves to order online as there is no time to cook meals. Dami wants to order food that would be delivered quickly before getting cold.

Dami downloads the door dash app

Dami is happy that there are variety of food from different restaurants.

Storyboard









Dami selects a meal and confirms order.

Dami selects the automated delivery method(drone) for a building.

Dami tracks the order while en route to his appartment.

Dami is happy that the food he ordered arrived on time and its accurate.

### Prototype

#### Description

- High level overview of the prototype
- What does it do?

This prototype shows how a typical user experience would be, once the automated food delivery sytem has been implemented. It gives users the option of choosing their delivery method and able to track their order in a timely and accurate manner.

clicking on the cart icon would take you to the pay out page

#### **Assumptions**

- Any assumptions within
  - - a user can place order
    - A user can choose delivery method.

A user can login/sign up.

There are two delivery method

the prototype



What are the tasks that a user can complete in the prototype?



Double click on figma logo to access the prototype

# Validate

Users will go through your prototype and provide feedback on your concept. This is also an opportunity to have an engineering feasibility discussion

# Automated food delivery for Doordash Research Plan

PM: OBOH KINGSLEY STATUS: DRAFT

### Objectives

The objectives of this research is to find out the user pain points, how they would use this product and their behaviours. A non disclosure agreement would be signed.

### Methodology

This user research would be conducted using the qualitative research method. This involves asking open ended questions from potential users. The interview would be recorded to refer back later.

#### **Participants**

The participants who would be intervied are potential users who use food delivery service often.

# Doordash automated food delivery service: Interview Sessions

#### Introduction

my name is Oboh kingsley. The team is working on a new idea and I would like to get a feedback from you while you interact with the product and if you do not mind I would love to record this session.

#### **Background Questions**

What's your name? What's your Occupation? How long have you been living in this city?

Do you order food online? Have you used a food delivery service Application before? Whats your experience with

the application? How long have you been using food delivery service? How often do you order food in a month?

What's your favorite feature about the application? What features would you like to be added or wished they had?

#### **Tasks**

[Disclaimers: Prototype-- not everything may work. You're not being tested. Want your feedback on what we've built. Please think out loud]

Task 1

[Scenario to give user. Follow up questions]

#### Task 2

[Scenario to give user. Follow up questions]

### Wrap Up

[Overall feedback. Would you use it? How would you make it better?] [Thank you]

# User Testing: Participant 1 Key Findings



What worked well	The app was able to track delivery, it gave the option of choosing delivery method every other thing was smooth.
Where participants got stuck	Participants couldn't find the cart icon at will. He was confused
Other observations	They loved the idea behind it. They enjoyed interacting with the application

### Participant 1: Interview Notes

The first participant's name is joel and he is a cryptocurrency trader.

Joel loved the app but wanted the cart should be stationed for easy accessibility.

## User Testing: Participant 2 Key Findings



What worked well	recording The app was able to track delivery, it gave the option of choosing delivery method every other thing was smooth.
Where participants got stuck	Participant were confused as there was no place to put address for order to be delivered.
Other observations	They loved the idea behind it. They enjoyed interacting with the application.

### Participant 2: Interview Notes

Damilola is a computer engineer.

Damilola loves the Prototype because it will help him get his order in a timely and accurate manner.

Dami noticed there was no delivery address page in the prototype

# Handoff

### **Updated PRD**

#### **Background**

The idea of cooking food and having it delivered is not new; in fact, it's been around for a long time. Some people may think that online cooked food delivery started with GrubHub, Seamless or Postmates, but online food delivery actually goes back to 1982 when John Sylvan and Thomas Fernandez came up with SmartFood: a frozen burrito that could be cooked and eaten at home. Shortly after SmartFood was introduced, companies such as carry Out Kitchens appeared in big cities such as New York. over time, online food delivery evolved from being just fast takeout to being fresh homemade meals. Today, there are several popular apps that offer an even greater variety of options than ever before, making it easy to order both freshly made meals and ready-to-eat dishes without ever leaving your home.

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### Updated PRD (page 2)

Priotization	Feature	Description
P0	Create account	The user would be able to register in the app using their email.  Additional details like name and password would be added.
P0	In app food varieties	The user would have so many meals to select from and the photos of each meal is displayed.  Additional details about the meal will be stated.
P2	Popular meals	The user would be able to see relevant meals based on what they've ordered before
P0	Delivery method	The user would be able to choose its method of delivery based on his location i.e. a drone or a land robot
P1	Tracking	The user would be able to track its order remotely from the app.

Link to mock: <a href="https://www.figma.com/file/512VuQuQDpFZSdWvoxeB7b/door-dash-food-delivery-app?type=design&node-id=0%3A1&mode=design&t=oGsWIAR6PBaRmtMf-1">https://www.figma.com/file/512VuQuQDpFZSdWvoxeB7b/door-dash-food-delivery-app?type=design&node-id=0%3A1&mode=design&t=oGsWIAR6PBaRmtMf-1</a>