Fast Food Deliery	DoorDash Food Delivery Robot PRD

Background

The food delivery service has been growing enormously in the last couple of years, reaching its peak during the Covid pandemics. The pandemics has forced us to search for new and sustainable solutions to the old and new challenges in this area. The mainstream food delivery, as we know it, is not functional to its fullest potential and is becoming more expensive as years go by. Work force costs more and gas prices are continuously increasing.

Online ordering has seen its rise also in the food industry, with more and more restaurants offering deliveries. DoorDash, as a food delivery platform, has been trying to improve this process. The idea is to help the dashers in their everyday work and improve the customer experience throughout the DoorDash community by introducing a tool for the pickup and delivery robots to enable the robot to complete the whole journey from pickup to delivery on its own, with minimum human rerouting intervention. It shall cut costs, save time, is environmentally friendly and more hygienic than the mainstream food delivery.

Goals

- Create a functional tool for restaurants for operating the semi-automated food delivery robot;
- Create an app enabling the restaurant staff to manage orders;
- Reducing the time and cost of food preparation and delivery for the restaurants;

Success metrics

- Partner awareness should be 100% before launch.
- Ratings from business partners/restaurant
- Retention after trial period at least 80%

Key features and scope

Priority	Feature	Description
P0	Restaurant registration	The restaurants should first register themselves into the system, after acquiring the food delivery robot from DoorDash.
P0	Log in	After registration, the restaurant should log in with their business credentials.
P1	No logging in once a device has been registered	This feature should enable the business users to register a device in the system so that they are not prompted to log in every time.
P1	Multiple log ins on different devices	The business user should be able to use the same licence/credentials on different devices at the same time.
P0	Managing incoming orders	When an order lands in the system it should be immediately visible to the restaurant in the app
P0	Sending order to kitchen	The user selects an order and sends it to the kitchen to be prepared.
P1	Sending multiple orders to kitchen at once	The user may select multiple order at the same time to be sent for preparation in the kitchen.

P0	Notification when the order is ready	Once the order is ready to be shipped, a notification is received in the app
P0	Assigning order to a dasher	Once a notification has been received, the user assigns it to the available dasher
P1	Tracking from restaurant to hub	The business user should track the order on its way to the hub and from hub to the customer
P1	Tracking of the order for the customer	The customer/end user should track the order on its way to the them

Target Market

Restaurants that have food delivery as their sales channel.

Size of Total Addressable Market

According to Statista, until March 2022 DoorDash had a 59% share on the platform food delivery market in the US, or a total of 390.000 partner restaurants. One restaurant needs at least 5 delivery vehicles, and these 5 vehicles are potential market for the integration of the tool. This makes up 1.950.000 potential users of the tool.

TAM = $80 x 390.000 users = $31.200.000

Competitors

Our competitors are Uber Eats and Grubhub, employing last-mile autonomous delivery - delivering directly to the customer instead of to a hub, like DoorDash.

Uber Eats	https://www.usesignhouse.com/blog/uber-eats-stats#:~:text=Uber%20Eats%20is%20one%20of,all%20continents%20as%20of%202021.

Number of Users	486 million users (2022)
Total Partner Restaurants	825,000 (2022)
Number of Cities Served	45 countries, with over 6,000 cities (2022)
Revenue	$10.9 billion (2022)

Grubhub	https://www.businessofapps.com/data/grubhub-statistics/#:~:text=Source%3A%20Company%20data-,Grubhub%20users,the%20app%20once%20a%20month.
Number of Users	28.3 million users (2022)
Total Partner Restaurants	333,000 (2022)
Number of Cities Served	4,000 cities (2022)
Revenue	$2,482 billion (2022)

Acquisition channels

Social media advertising: In this channel we can reach out our potential customers the restaurants, since they are also present in social media. Moreover, we can reach our intermediate customers – those that make the orders, and although they are not our first-line target customers, we will be able to get a sense of their opinions through various interactions.

Post and e-mail marketing: Advertising per post and e/mail directly to our business customers – the restaurants

Tech- and gastronomy fairs: Representation at such fairs is a great opportunity for live presentation of the delivery robot and therefore for acquisition of customers.

Marketing Guide

Pricing Strategy

The revenue goal is estimated to $15.600.000 by the end of the first year after launch.

If outsourced in Eastern Europe, the building costs are estimated to $70.200. This divided with the planned licences (195.000) gives a building cost of $1 per licence. If we add the maintenance costs to this price and the ROI we reach a final end price of $80 per licence.

Pre-launch Ckecklist

Partner Teams

- Marketing: prepare necessary communications
- Sales and Customer Support: find the target customer and offer the product and provide support through the customer service
- Technical Writers: prepare instructions and frequently asked questions
- Engineering and developers team: building of the tool and the corresponding apps, both for the business users and the private users who order food. After launch, taking care of breach threats, bugs and updates after reviews from customers or from the other partner teams
- Legal: Taking care of the legal aspects concerning both the company and the users. This is in regard to data protection, proceeding after possible hacks etc.

Anticipated Risks

Following risks are possible after launching the tool and the accompanying app

1. The traffic is too overwhelming for the application

   Plan for mitigation: if this happens after launching, the plan is to immediately improve the servers capacity so that they can handle the traffic.

2. Reliability, consistency and speed of the app

   Plan for mitigation: the tech team is at any time prepared and equipped to tackle the bugs once they appear. The team is already aware of the possible issue and has already a plan for action. Therefore this will improve the reliability and the consistency. The speed will be improved as shown in point one above, by improving the server capacities.

3. Problem with the communication between the semi-automated tool integrated in the robot and the app, or failure of a feature within the tool.

Mitigation plan: The team that built the tool for the semi-automated robot is in constant communication with the app development team. If a feature in the toll fails to perform and the robot gets stuck somewhere on the street, the technicians are at any moment prepared to intervene, either remotely or on the spot. If there is a problem in the communication between the app developers and the tool developers, a great communication has already been established between the two teams and the issues should be tackled as soon as possible

Training Guides

Sales and Support Guide

Technical Writers Guide

User Guide

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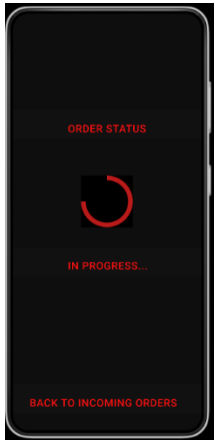
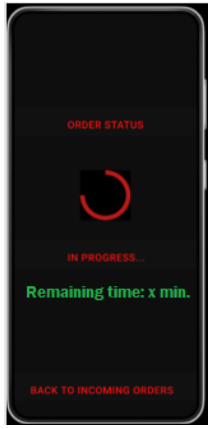
A/B Testing

We want to test if a little update of these feature help the user better estimate the time to completion of the order. So far, the user could see only the percentage of completion. With the update we want to offer the user the remaining estimated time till completion of the order.

Therefore, in addition we will add ‘Reamining Time: X minutes’ under ‘IN PROGRESS…’ as shown in the photo.

Control		**Variant**	
	This feature shows the status of an order once it has been sent for preparation in the kitchen. It show the status in percentage until the order is completed. This helps the user to better plan the further transport.		The user could see not only the percentage of completion, but also the time remaining in minutes until the order is complete.

Hypothesis: This update should enable the user to plan the next stage of delivery better. After the update we want to offer the user more precise estimation of the completion time. As a result, the number of completed and delivered orders will be greater and this will produce more income for the restaurants with the same effort.

Success metrics

The user will still have the option to go back to the previous version if the find this update not suitable. Therefore, as a success we will take the percentage of users that decide to continue using the update instead of opting back to the old function. If more than 40% of users decide to stay with the update, it will be considered a success and the new feature will be rolled out to all users.

Launch E-Mail