

Door Dash

“Beyond Food Delivery”

Product Owner: Srinivas Katti





Table of Contents

- Introduction
- Business case
- Competitors
- Roadmap
- What's next?

Introduction

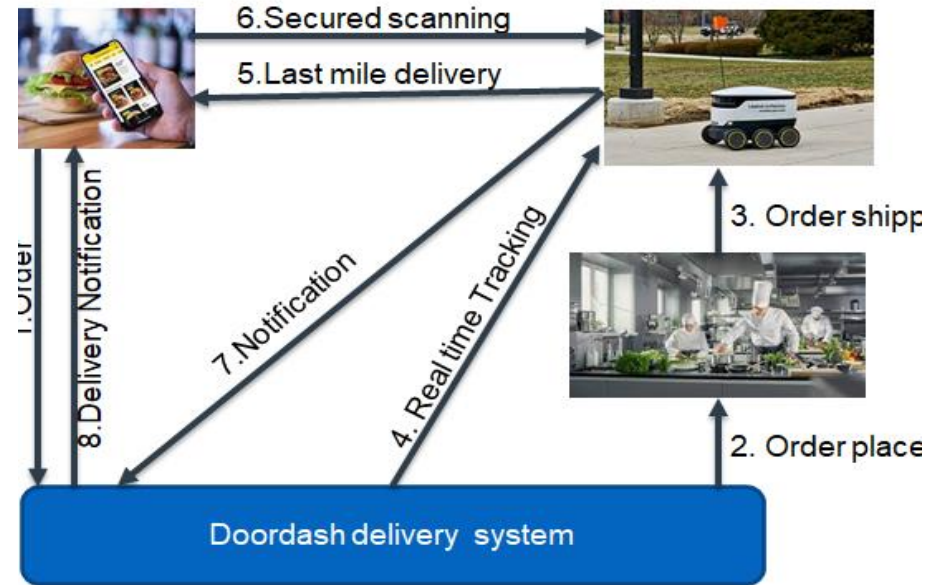
Door dash™

A B2B product which shall provide an end-to-end turnkey solution for the operations team for the automated food delivery using Robots.

A product which shall help the customers to reduce the Operational cost by deploying the robots and increase productivity,thus improving the bottomline

Dash door solution in a nutshell

- Turnkey solution for automating food delivery using robots within 2miles
- Robot with 10 kgs capacity of storage
- Secure transactions at the last mile delivery



Business Case

Executive summary of Dash door

An end-to-end low cost automated delivery turn key solution which shall be offered to the hospitality industry, retail marts. Dash door shall help the customers to reduce the operation cost and ensure on-time delivery of the order. Dash door is very intuitive product which would help operations team to manage the delivery efficiently by automating almost everything, however, the robot shall be trained with the real time maps covering all the directions in the vicinity of 2 miles to start with. However, the range shall be increased to 5 miles or greater after a year's time and shall be incorporated in the roadmap.

Problem statement & Solution

Problem statement	Solution	remarks
High operation cost	Reduce the operational cost by complete automation	Robots replacing the humans with minimum human intervention
Untimely food delivery	Dashboard delivers the food on-time.	At times, the delivery may delayed due to traffic and other unforeseen conditions
Productivity	Improved productivity	Since most of the tasks are automated, the improved productivity is the
Tamper proof	Our solution shall provide scanning option with the bar code	If the bar code is tampered, the customer can reject the delivery saying that it is not safe. By this, it is ensured that the food is not tampered and it is safe.

Business Model Canvas

Key Partners

- Ecosystem partners(H/W, Software partners)
- Distributors
- Resellers

Key Activities

- H/w + S/W Dev
- System Integration

Key Resources

- Developers
- Testers
- Integrators

Value Proposition

- Low cost end-to-end turnkey solution with enhanced security

00

Customer Relationships

- Feedback from App
- Surveys
- Voice of customers

Channels

- Distributors
- Resellers
- E-commerce
- Sales enquires

Customer Segments

Hospitality Industry

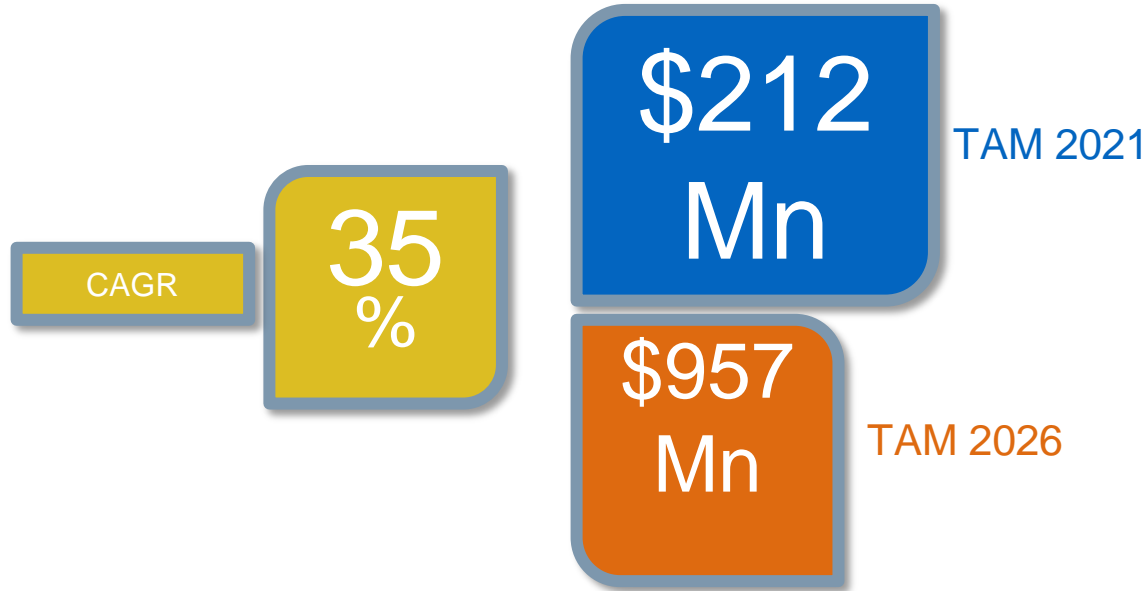
Cost Structure

- Development(H/W, S/W) – NRE cost
- Integration
- Marketing
- Sales
- Operational cost

Revenue Streams

- Product Offering to customers
- Product Training
- AMC from customers

Opportunity



<https://www.prnewswire.com/in/news-releases/autonomous-last-mile-delivery-market-size-is-projected-to-reach-usd-84-72-billion-by-2030-at-cagr-24-4-valuation-reports-802847682.html>

Proposal

Door dash shall have the following features :

- Low cost robot for delivery robot.
- Has builtin sensors to support various features like motion, gyroscope, temperature, proximity sensors to name a few
- Has built in GPS to track the robot location in real time
- Has built in notification system to send out notification to the user in real time if there is delay in delivery.
- Mobile (Android/iOS) native app for the users to place order
- Has builtin options like bar code scanner/ passcode /retina/ options to receive the delivery at end-point. It is the customer's discretion to use any one of them.
- Has two level of security provided at the last mile delivery, scan the robot to get your order and also scan the delivery for any tempering(which has bar code sticker), thus ensuring the product is not tampered and its safe and secure.
- The delivery system sends out notification to the user after the delivery
- Has 3 compartments for cold, hot and food which can be kept at normal temperature.
- The product has the following components
 - ❖ Customized hardware with
 - ❖ Software (Apps, Database) builtin with AWS/Azure/Openstack or any other public cloud
 - ❖ Analytics engine

Return On Investment

Task	Cost
NRE Cost	\$ 5,00,000.00
Operation cost	2,50,000.00
Marketing cost	10,000.00
Production cost*	2,00,000.00
Total Invested cost	9,60,000.00
Customer base	50
Avg Revenue from each customer	\$ 50,000.00
Revenue	25,00,000.00
Interest	7,50,000.00
PAT	17,50,000.00
ROI	82%

Assumption :

- The services offered to customer is managed services , which involves training the operations team ,with Strict SLAs defined .
- Minimum 100 devices order to be placed.

Note: NRE is the one-time non-recurring engineering cost for the development of the hardware and software, 3rd party software and the Integration activity

Measurement

- Successful product launch adhering to the time-to-market
- Decrease the operational cost by **50%** by automation
- **30%** increase in the productivity by automation
- Achieve breakeven in six months of product Launch and have atleast 50% ROI after the first year of the product launch
- Add 10-20 new logos every quarter, which shall set growth path for the company

Competitors

Competitive analysis

Product	Features	Revenue	Price
Star ship Technologies	Carries food items with separate compartment	\$ 24 Mn/year	\$5,500
Nuro	Electric Vehicle	\$110 Mn	Not available for free
Eliport	Electric Vehicle	Not available	Not available for free

Reference:

<https://www.owler.com/company/starship>

Competitor –Starship Technologies

The Starship delivery robot has quickly become the go-to choice for many food and delivery companies. These six-wheeled electric vehicles are used by several US colleges for delivery food to students across campus, and have been trialed by grocery stores and takeout businesses in the US, UK and Europe.

Competitor- Eliport

Its four-wheeled electric vehicles are designed to drive at walking speed on sidewalks and in pedestrianized spaces, delivering goods to homes and offices. Eliport claims it is different to other robotic delivery startups, because its robots are designed to be loaded without **human involvement**. That way, a fleet can be stored at a distribution center, then automatically loaded up and sent on their way, instead of being packed by hand.

Competitor - Nuro

- Instead of taking the popular route of using a sidewalk-driving robot from Starship Technologies, Nuro has opted to head for the open road. Its vehicles are purpose-built to carry fresh food in chilled or heated compartments, and being fully autonomous means there are no conventional controls, and no space for a driver.
- Called the R2, the vehicle as of April 2020 is allowed to be tested on public streets in California, specifically around portions of Los Altos, Menlo Park, Mountain View, Sunnyvale and Palo Alto.
- Customizable space inside can be used to carry fruit and vegetables, prepared meals, or stacks of freshly baked pizzas, with the temperature adjustable to suit whatever's inside.

Our Advantages

- Low cost product with managed services with intuitive design.
- Two times authentication at the last mile delivery, either **passcode/face recognition/retina scanning/barcode scanning need to be done to get the delivery as the first step** and **then the barcode sticker needs to be scanned**, so that the food you are sure that the food is not tampered.
- Flexible business models(Capex/opex model).
- 24/7 support for premium subscription.

Roadmap and Vision

Vision

“To be one of the prominent player in the Autonomous Robotics space, helping Our customers to reduce the operations cost and improved productivity”

Doordash Roadmap

Product Launch-Q4

Integration/A/B Testing-
Q3

Application
development(Android , iOS -
Q2)

H/W + Board bring-up + Driver
development

2016

This is a sample text.
Insert your desired text here.

This is a sample text.
Insert your desired
text here.

Roadmap Pillars

- Bottom up approach, where the custom hardware is built to reduce the BOM cost.
- Mechanical design of the robot shall be designed after the form factor of the electronic board is ready(Outsourced activity)
- Board bringup activity(Firmware, Drivers)
- Testing of the drivers
- Application & Mob application development
- 3rd party software integration
- Testing – A/B
- Soft launch
- Product Launch

Board bring-up

- PCB design and prototyping for the custom hardware shall be built with the features of GPS, various sensors built on the hardware .
- Board bring up activity.
- Porting the real time operating system on top of the hardware
- Testing the hardware with all the peripherals
- EMI/EMC testing for the hardware (This can be parked at a later point too)

Application development and Mobile app development

- The app development(Ordering,Scanning, Notification(SMS),GPS tracking,traffic signal and detection) and the mobile app for the user shall be developed .
- Database integration shall be carried out parallely.
- MVP and trials with the customers

Note : The deployment model shall be flexible, either on-prem, hybrid or public cloud

Security App

- This feature allows the food to be secure by asking the user to enter the passcode/face recognize/barcode scanner with mobile for authentication and then scan the code sticker to ensure it is tamperproof, the app shall not scan if the sticker is tampered , it notifies the user that it is tampered, they can return the food delivered .

What's next?

- Expanding the range of the food delivery from 2 miles to 10 miles.
- Internationalization of the product
- Get regulatory certifications UL/CE and other certifications pertaining to the demographics.
- Venture into B2C market offering Robot as a service (Pay per delivery) or subscription model (Like Amazon Prime)

Note: We have not factored in Risks and Mitigations, due to technology disruptions robots may fly and deliver the products, which can be a biggest threat to the product

Thank you

Strategy-Hambrig's diamond

ARENAS

- Market - APAC Market
- Channels-Resellers,Distributors ,channel partners
- Product-Electronics device/Robotics

STAGING

Cater to APAC market and expand footprint globally.

VEHICLES

Internal development, Joint-venture, Ecosystem partners

DIFFERENTIATORS

Low-cost robots with enhanced security features built-in within the device

Extra slide

Generate revenue by Offering solution to Hospitality industry (Hotels, Malls, resorts, Motels, Restaurants) , Grocery stores, Supermarkets, retail outlets