Feeding the Future

A Deep Dive into DoorDash's Strategic Landscape

Presented by Group 8:
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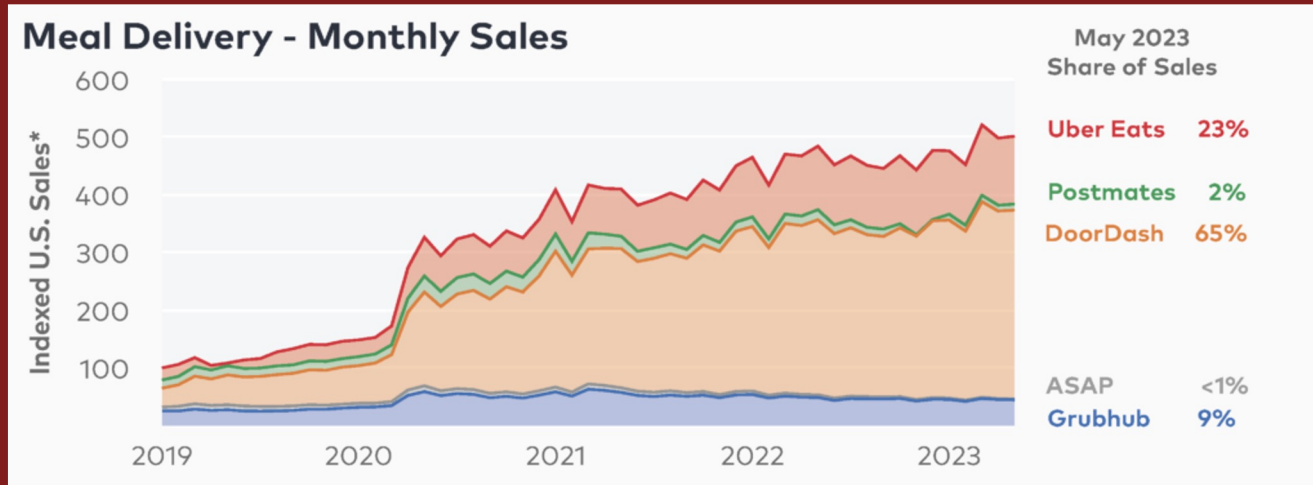Yuntong Zhu,
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DOORDASH

External | Challenging ⚑

Meal Delivery - Monthly Sales

May 2023
Share of Sales

Uber Eats 23%
Postmates 2%
DoorDash 65%
ASAP <1%
Grubhub 9%

In a highly competitive food delivery market, DoorDash holds a dominant position with a 65% share, but faces ongoing pressure from competitors like Uber Eats, Postmates and Grubhub etc.

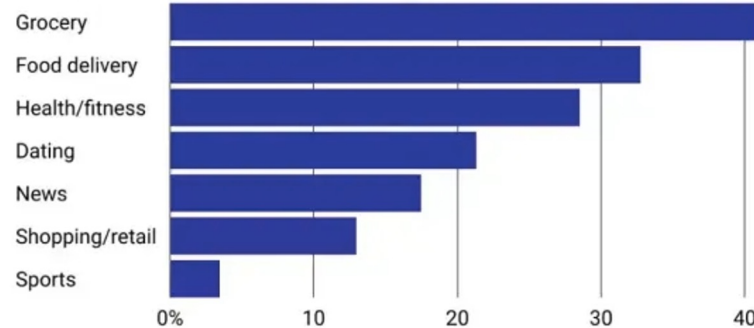Case Analysis — Problem Statement — Alternatives — Solution — Implementation — Risk & Mitigation

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External | Opportunity 💡

User growth of smartphone apps in the US, 2020

Grocery
Food delivery
Health/fitness
Dating
News
Shopping/retail
Sports

0%   10   20   30   40

Note: The grocery and dating categories only include smartphone users over age 18. Food delivery and shopping/retail categories only include smartphone users over age 14.

Data source: Insider Intelligence | eMarketer

The food delivery industry has been vastly revolutionized by the rise of technology.

Case Analysis   Problem Statement   Alternatives   Solution   Implementation   Risk & Mitigation

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Internal | Challenging

DoorDash copes with continued net losses despite significant revenue growth due to increased demand for food delivery during the Covid-19.

2018-2020 Revenue

2018	$290 MILLION
2019	$890 MILLION
2020	$1.92 BILLION

Net loss

- 2018: -$200 MILLION
- 2019: -$670 MILLION
- 2020: -$150 MILLION

Case Analysis · Problem Statement · Alternatives · Solution · Implementation · Risk & Mitigation
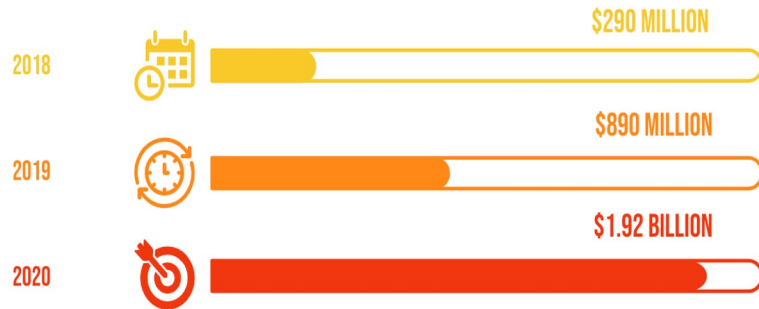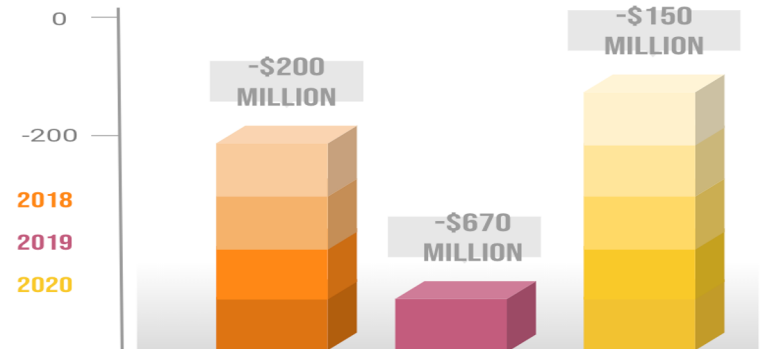
Internal | Machine Learning

Valuable ✓ **Rarity** ✓ **Imitability** ✗ **Organization** ✓

Collected over 900 million orders information

To predict the time of food which could increase the efficiency

Machine learning helps predict delivery times more accurately, resulting in improved customer service and delivery efficiency.

Case Analysis   Problem Statement   Alternatives   Solution   Implementation   Risk & Mitigation

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PROBLEM Identification

"DoorDash should investigate innovative strategies to avert ongoing financial deficits and uphold its dominant position in the fiercely competitive food delivery industry."

DOORDASH

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Alternatives

I. **Robot Delivery: I**nvest in the development and implementation of robotic delivery services to reduce reliance on human drivers.

I. **Machine Learning: U**sing artificial intelligence and machine learning algorithms to enhance its order management, delivery route optimization and demand forecasting.

I. **"Ghost" Kitchen: C**reate a "ghost" kitchen that belongs to DoorDash to better control food quality, delivery speed and customer experience.

Three different solutions to the DoorDash problem

Case Analysis • Problem Statement • Alternatives • Solution • Implementation • Risk & Mitigation

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Criteria

1. **Budget & Cost**

2. **Operational Efficiency**

3. **Reliability**

Are the costs required within the company's acceptable range?

Is it possible to improve the operational efficiency within the company?

Does this solution have a certain degree of reliability?

Budget and Cost, Operational Efficiency, and Reliability were used as criteria for analyzing the three alternatives

Case Analysis — Problem Statement — Alternatives — Solution — Implementation — Risk & Mitigation

Solution Identification

The machine learning satisfies all three criteria	Budget & Cost	Operational Efficiency	Reliability
Invest robotic delivery services	✗	✓	✗
Using artificial intelligence and machine learning algorithms	✓	✓	✓
Create a "ghost" kitchen that belongs to DoorDash	✗	✓	✓

Value Generated

Machine Learning can help us increases sales and lower operating costs

Personalized Recommendations

Increase customer experience and sales

Demand Predictions

Anticipate customer needs to increase sales

Delivery Optimization

Optimizing delivery resources

Case Analysis   Problem Statement   Alternatives   Solution   Implementation   Risk & Mitigation
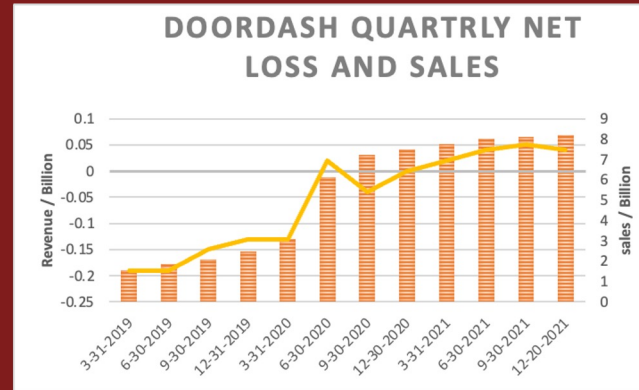
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Estimated Revenue and Sales

-0.165 B
2019

Average Revenue

2.01 B
2019

Average Sales

DOORDASH QUARTRLY NET LOSS AND SALES

2019   2020   2021

DoorDash Revenue Analysis and Prediction

0.03 B
Estimated Revenue

7.91 B
Estimated Sales

2021
Year

Case Analysis   Problem Statement   Alternatives   Solution   Implementation   Risk & Mitigation

Implementation

	Phase 1 Model development		Phase 2 Pilot Testing and Implementation		Phase 3 Expanding scale	
Action	Data collection and labeling	Model training and testing	Pilot city testing and experiment	Staff training	Improvement and Implement to all cities	Evaluation
Cost / Revenues	$20,000	$88,500 (Incze, 2019)	$40,000	$20,000	$100,000	$10,000

Dec	Jan	Feb	Mar	May	Jul	Sep	Nov	Dec	Feb	Mar	May

Project Plan

Activity / Phase 1

Milestone

Activity / Phase 2

Activity / Phase 3

Constant development and improvement through 1.5 year, with $278,500

Case Analysis   Problem Statement   Alternatives   Solution   Implementation   Risk & Mitigation

Risk & Mitigation

Inaccurate prediction

Solution alignment with problem
Form multiple research groups

Over reliance

Add flexibility for dashers

Complexity and cost

Use roll-out plans and milestones

Severity	Rare	Unlikely	Possible	Likely	Almost Certain
Catastrophic					
Major					
Moderate					
Minor					
Insignificant					

Probability
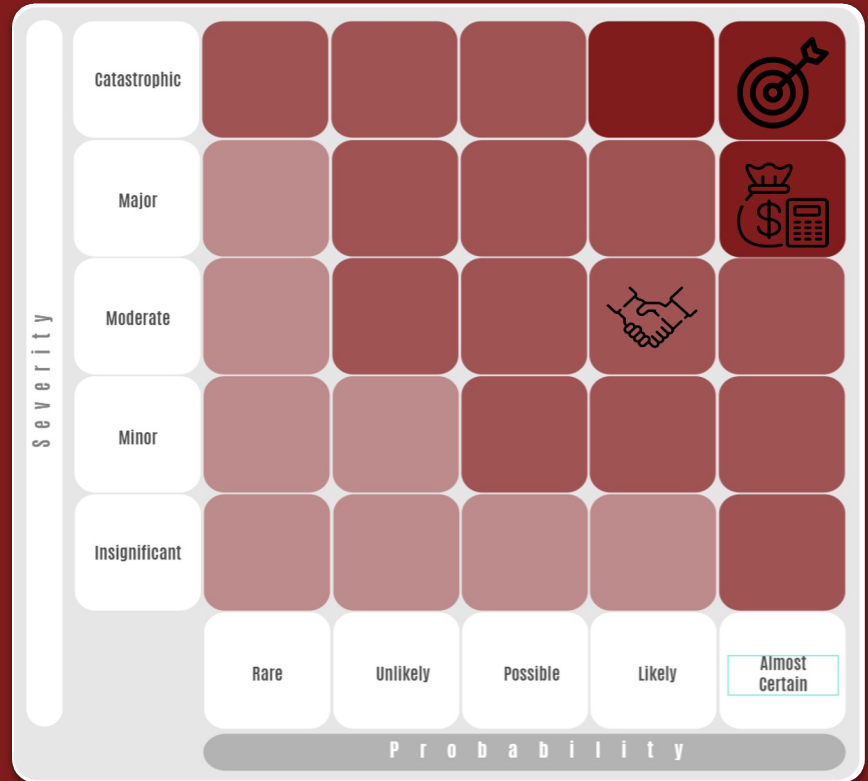
High risk, high payback, Doordash should be prepared for loss

Case Analysis — Problem Statement — Alternatives — Solution — Implementation — Risk & Mitigation

Executive Summary

Problem Statement

"DoorDash should investigate innovative strategies to avert ongoing financial deficits and uphold its dominant position in the fiercely competitive food delivery industry."
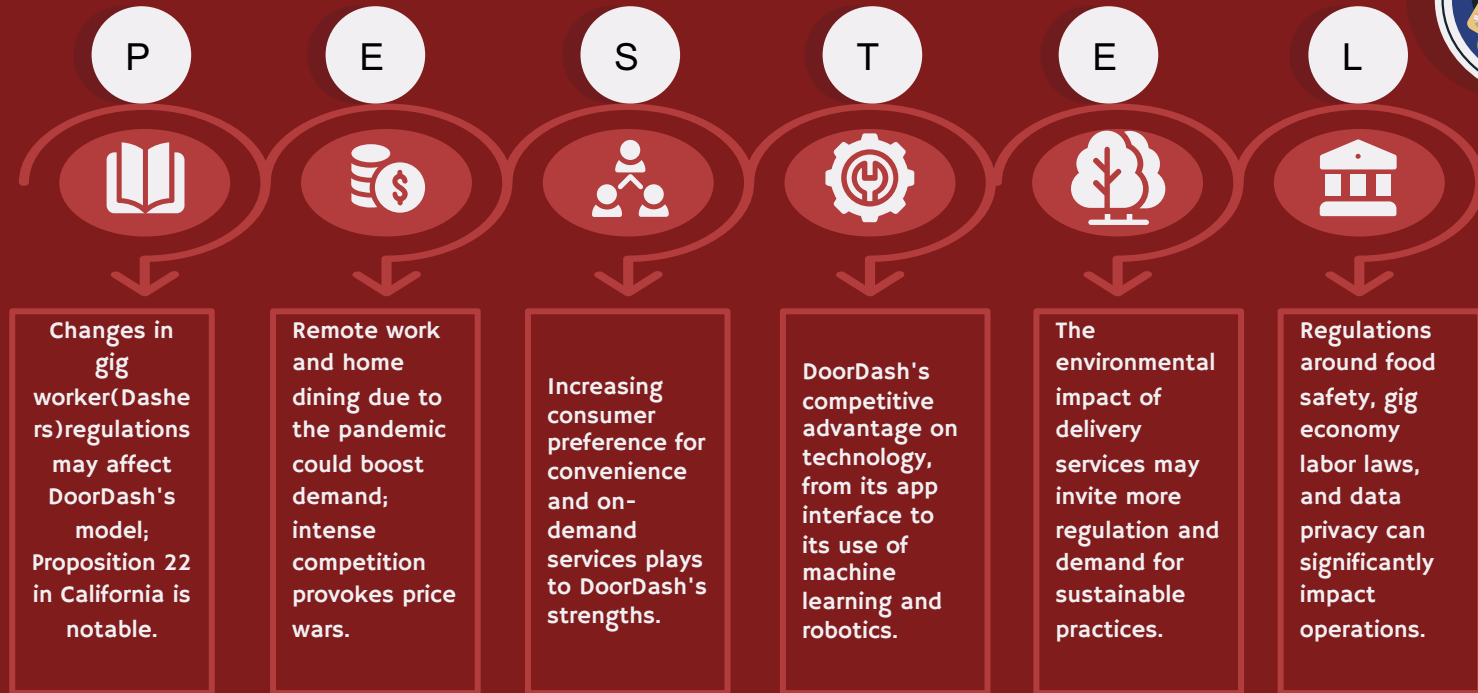
Solution
Use Machine Learning to Reduce Operational Cost

Appendix: PESTEL

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Changes in gig worker(Dashers)regulations may affect DoorDash's model; Proposition 22 in California is notable.

Remote work and home dining due to the pandemic could boost demand; intense competition provokes price wars.

Increasing consumer preference for convenience and on-demand services plays to DoorDash's strengths.

DoorDash's competitive advantage on technology, from its app interface to its use of machine learning and robotics.

The environmental impact of delivery services may invite more regulation and demand for sustainable practices.

Regulations around food safety, gig economy labor laws, and data privacy can significantly impact operations.

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Appendix: SWOT ANALYSIS

STRENGTHS

- Innovative use of technology (machine learning, robots) to optimize efficiency and improve service.
- Loyalty customer base

OPPORTUNITIES

utilization of machine learning, robotics, and ghost kitchens to expand market scope

WEAKNESS

- High dependence on SoftBank for capital, creating potential sustainability issues.
- High service charges leading to customer dissatisfaction and strained relationships with restaurants.

THREATS

- The online food delivery market is highly competitive
- If the contractor model (gig economy) comes under legal scrutiny, it could threaten DoorDash's business model, leading to higher operating costs.

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Appendix: VRIO

Resources	Valuable	Rarity	Imitability	Organization	Competitive Advantage
DoorDash Pass	YES	NO	NO	YES	Temporary Competitive Advantage
Machine Learning	YES	YES	YES/NO	YES	Sustained Competitive Advantage
Robert Delivery	YES	YES	NO	YES/NO	Emerging Competitive Advantage

Reference

Perri, J. (2023, June 15). *Which company is winning the restaurant Food Delivery War?*. Bloomberg Second Measure. https://secondmeasure.com/datapoints/food-delivery-services-grubhub-uber-eats-doordash-postmates/

Incze, R. (2019, September 12). *The Cost of Machine Learning Projects. Medium; Cognifeed.* https://medium.com/cognifeed/the-cost-of-machine-learning-projects-7ca3aea03a5c