

I'm excited to share the successful launch of our new Autonomous Delivery Monitoring Tool with you. This innovative tool marks a significant milestone in our journey towards enhancing DoorDash's delivery services.

In the quest to reduce operational costs and improve delivery reliability, we embarked on a mission to automate short-distance food deliveries using self-driving robots. Our goal is to ensure consistent and efficient delivery times while reducing reliance on human drivers. The need for this tool arose from our recognition that initial deployments of autonomous robots might require manual intervention and real-time monitoring to address any unforeseen challenges.

We have developed a comprehensive tool for the operations team that allows them to:

- **Real-Time Delivery Monitoring:** Track the status and location of delivery robots in real-time, ensuring timely and efficient deliveries.
- **Remote Control and Intervention:** Manually control delivery robots when they encounter obstacles or unexpected situations, maintaining reliable service and customer satisfaction.
- **Optimized Route Planning:** Utilize advanced algorithms to determine the most efficient delivery routes, reducing travel time and operational costs.

Here are the initial results post-launch:-

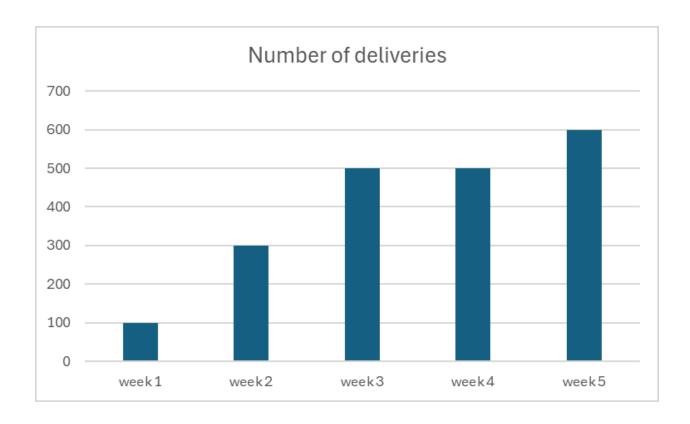
Week 1: 100 deliveries

Week 2: 300 deliveries

Week 3: 500 deliveries

Week 4: 500 deliveries

Week 5: 600 deliveries



Proposed Solution

Implement an automated monitoring and alert system for the robots to detect malfunctions in real-time. This system will use advanced sensors and machine learning algorithms to identify potential issues and notify the operations team immediately.

Why It Solves the Problem

By providing real-time alerts, the operations team can quickly address malfunctions, reducing the number of deliveries with issues. This proactive approach ensures that problems are detected and resolved before they impact customer satisfaction.

Success Metric

• **Success Rate**: Increase the success rate of deliveries to at least 95% by reducing the occurrence of malfunctions.

Test Description

A/B Test Design:

Control: Current system without automated alerts.

Hypothesis

The implementation of the automated monitoring and alert system will reduce the incidence of robot malfunctions, leading to a higher success rate in deliveries. Specifically, we expect the success rate to improve from 75% to at least 95%.

We will continue to iterate and improve the tool based on user feedback and performance data. Your insights and feedback are invaluable as we strive to optimize this innovative solution.

Thank you for your hard work and dedication to this project.

Best regards,

Heba Mohamed On behalf of the Autonomous Delivery Team