Project Summary Document

Colorado Data Empowering Couriers and Food Delivery Companies

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Overview

Consumer

Food Delivery Services
- Kroger
- Blue Apron
- Albertsons

Courier
- Fedex
- USPS
- UPS
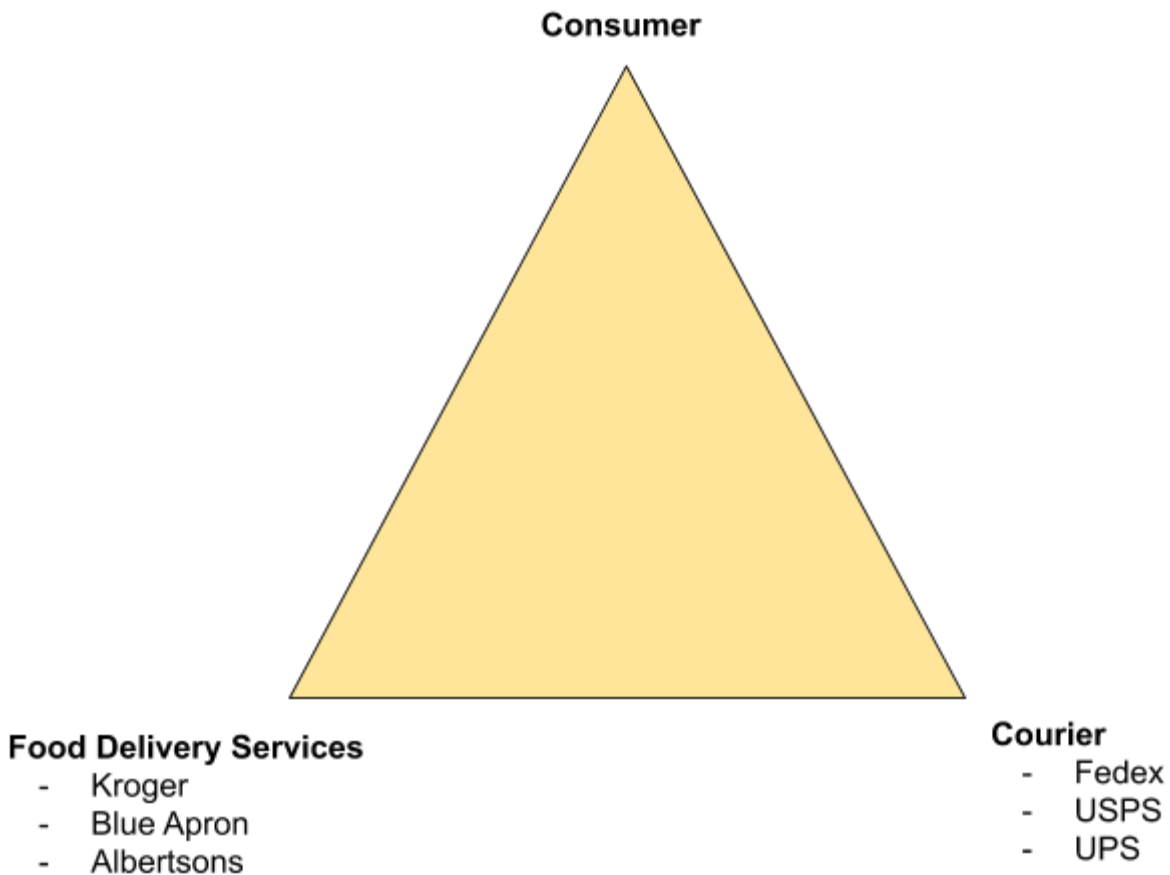
As Covid spreads through communities, the decreased level of mobility creates business opportunities for food delivery services like Blue Apron, Kroger and couriers like USPS, UPS, and FedEx. There is an interrelationship present between the food delivery sector and the couriers as they are affected by each other's change in demand. My proposed tool can take raw Covid infection-rate data at the county level and use an epidemiological model, such as Covedstim (which is produced by Harvard and Yale's Public School of Health), to serve real-time and near-future projected needs that these corporations can fill. The data for this tool will come from Colorado's Covid-19 data tracker[1], John Hopkins's Major Infection Control Measures tracker[2], USPS data and be combined with the companies' internal data. It will help business decision makers in these sectors make informed, confident choices by giving them understanding on how their key internal data points are affected by the proliferation of Covid within the communities they serve. The tool can answer questions like:

1) As a business decision maker of Kroger, how many more deliveries will I have to plan for? This week, next month, next quarter?
2) As a business decision maker of UPS, how many shifts and fleets will I additionally need? In what locations?
3) As a business decision maker of Blue Apron, which communities do I target for advertisements of my services so that people in Covid-afflicted communities know that they have options like mine?
4) According to USPS data$_3$, citizens are leaving big, densely populated areas and spreading out to suburbs or smaller communities both across the state lines and within Colorado. As a business decision maker of a courier, can I use these data points to inform that my distribution algorithms are still the most efficient?
5) If a given community is hard hit by Covid-19, it is likely that this affliction will also affect my employees themselves. Due to this, how many of my employees can I expect to get sick themselves? What is the level of redundancy of employees that I need to build into my business model as a result of this pandemic to ensure customers are receiving food, medicine and other perishable items?

Overall, this form of business intelligence can be beneficial to food delivery companies and couriers. Increasing the level of efficiency achieved through better and more precise information can benefit all three sides of the triangle, ending with a happier and healthier consumer.

Data

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[1]COVID-19 Colorado Cases, Division of Homeland Security & Emergency Management
https://data.colorado.gov/-/COVID-19-Colorado-Cases-Dashboard/ffjg-bf34

CDPHE Open Data
https://data-cdphe.opendata.arcgis.com/search?tags=covid19

[2]University of Medicine: Impact of Opening and Closing Decisions by State
https://coronavirus.jhu.edu/data/state-timeline/new-confirmed-cases/colorado/26

[3]United States Postal Service® change-of-address data from February to July 2020.
https://www.mymove.com/moving/covid-19/coronavirus-moving-trends/

CDC Covid Data Tracker
https://covid.cdc.gov/covid-data-tracker/#cases_casesper100klast7days

Covedstim Model
https://www.covidestim.org/

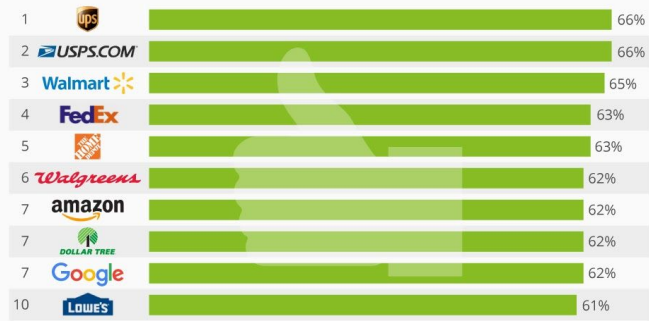https://www.statista.com/chart/22111/us-new-daily-cases-covid-19/
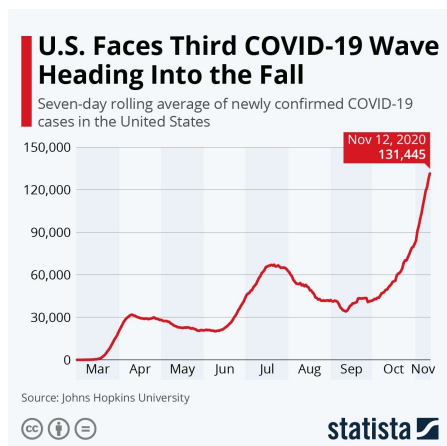
The Brands Making The Most Positive Impact On Communities
Share of respondents saying the following companies 'make a positive impact on your community'

Rank	Brand	Percentage
1	ups	66%
2	USPS.COM	66%
3	Walmart	65%
4	FedEx	63%
5	(Home Depot)	63%
6	Walgreens	62%
7	amazon	62%
7	DOLLAR TREE	62%
7	Google	62%
10	Lowe's	61%

n=330,488. Conducted July 15 to October 15, 2017.
Note to the rankings: When the percentage is the same,
the share of 'negative impact' responses is taken into account, if different.

@StatistaCharts   Source: Morning Consult

statista

https://www.statista.com/chart/12026/brands-making-a-positive-impact-on-communities/