

COVID-19 EFFECTS ON THE ECONOMY



PANDEMIC PANDAS:

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Summary

There is no question that COVID-19 had an unprecedented effect on our economy. The Pandemic Pandas took a deeper dive into several companies to see just how much of an impact the virus had across industries, and is it all bad?



Questions We Asked

- What are the effects of Covid-19 on company/stock performance?
- Which industries/companies performed well and which performed poorly?
- What companies/products/services are considered essentials?
- What lessons can we learn from companies who thrived during this pandemic?



Scope

- Timeline: identify major milestones of Covid-19
- Publicly-traded companies
- Domestic data
- Consumer brands
- Diverse industries



The image features a dark red, almost black, background. In the upper right corner, there is a bright, warm light source that creates a soft, orange-yellow glow and several out-of-focus circular bokeh lights. Scattered across the scene are several 3D models of coronavirus particles. These particles are spherical with a textured, bumpy surface and are densely covered with prominent, conical spike proteins. One large, highly detailed particle is positioned on the left side of the frame. Another similar particle is at the bottom center, and several others are visible in the background, some appearing blurred due to a shallow depth of field. The word "Data" is centered in the middle of the image in a clean, white, sans-serif font.

Data

Data

Stock performance

Price-to-earnings ratio (used by analysts to determine a company's relative value)

Hires/layoffs in the last month

Quarterly report press releases



Data Cleanup and Exploration

Data sources and pull methods

Exploration and cleanup process

Insights we had while exploring the data that we didn't anticipate

Problems that arose after exploring data, and how we resolved them





Data Analysis

Covid-19 Cases Across the US



3/13

of Positive Cases: 3,004

Trump declares national emergency



3/27

of Positive Cases: 105,462

Trump signs \$2T stimulus packages



4/16

of Positive Cases: 664,129

White House issues guidance to reopen

Industry Selection

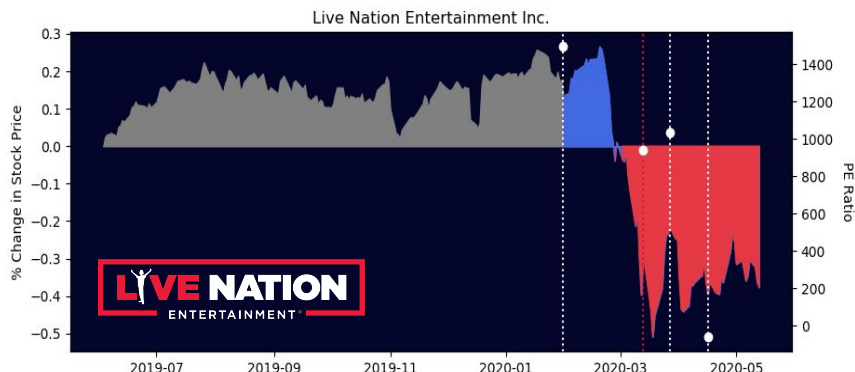
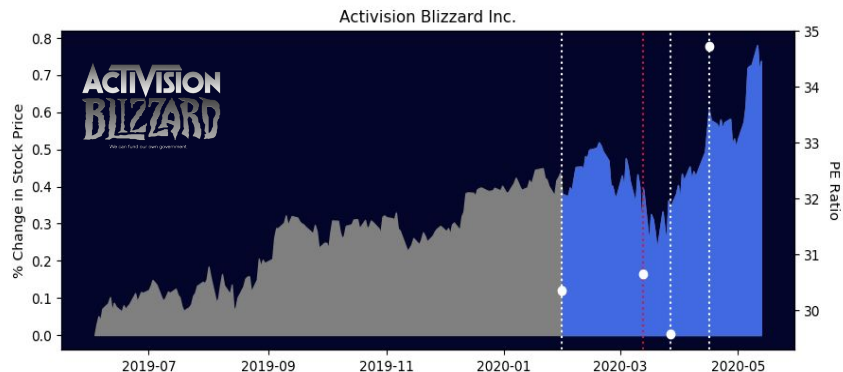
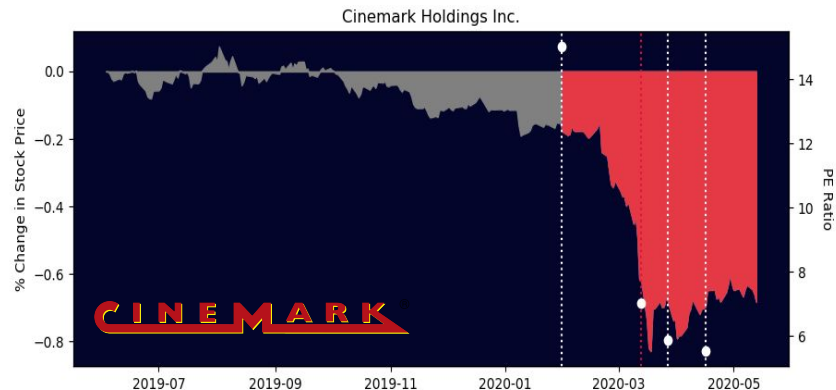
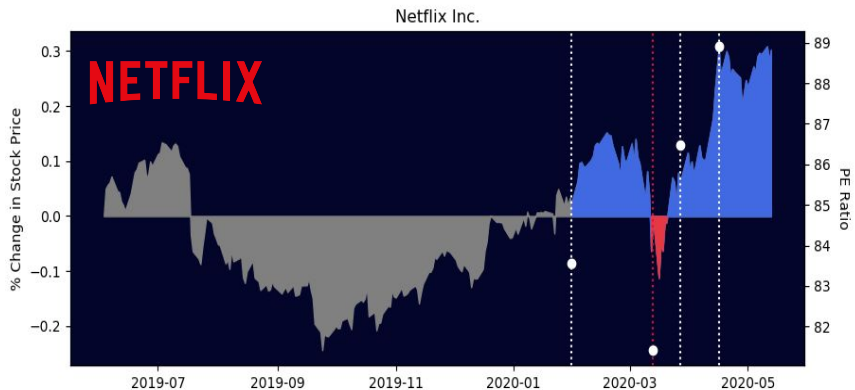
In reviewing the biggest winners and losers of the stock market in the last month, several consumer-facing industries stood out:

- Entertainment
- Retail
- Food
- Travel
- Household Products



Entertainment

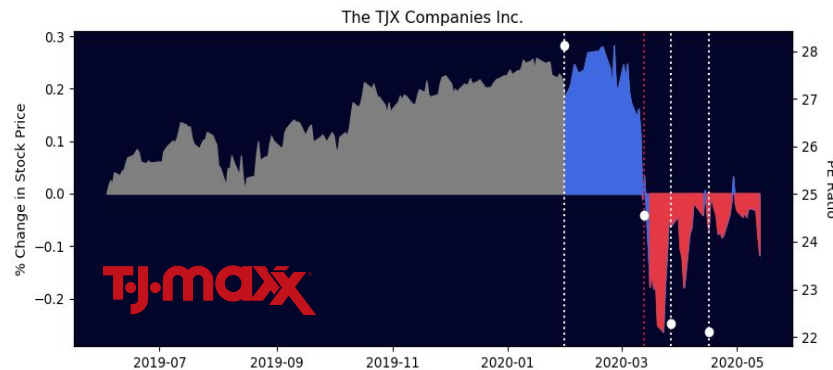
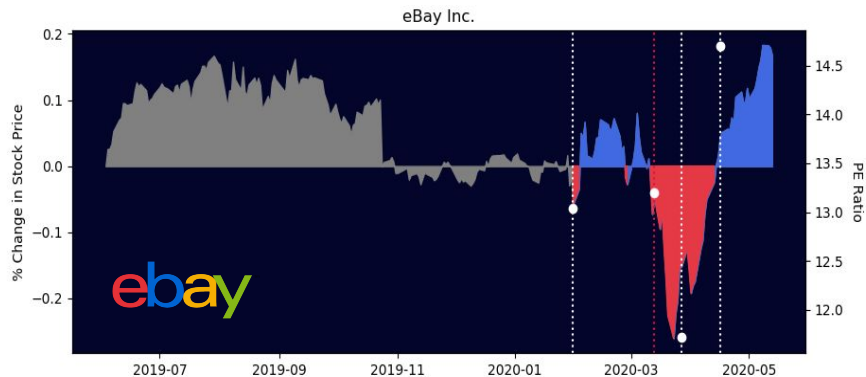
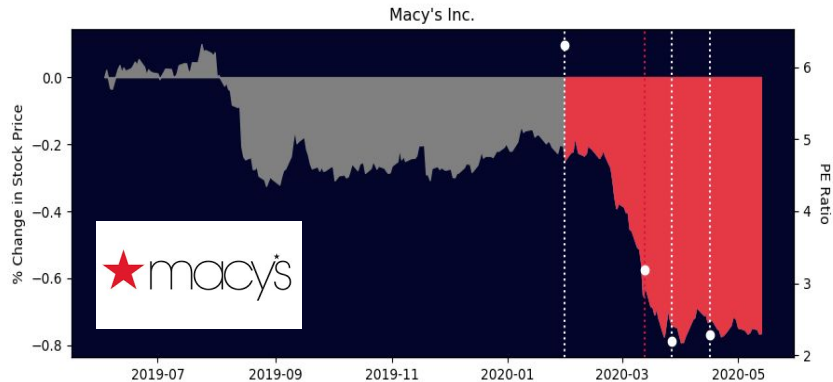
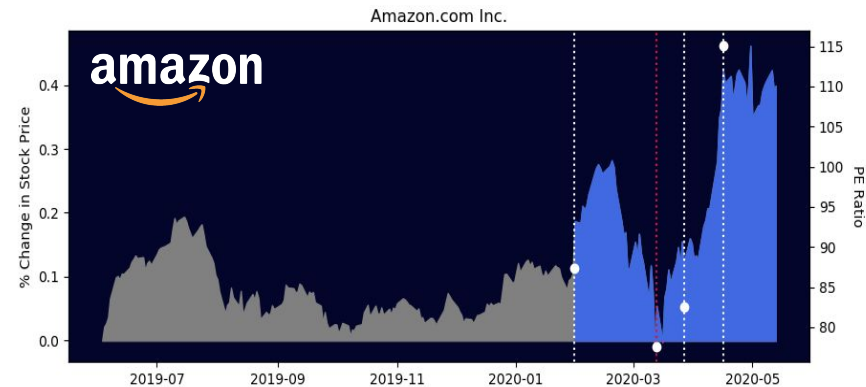
At-home entertainment thrived with stay at home orders, while on-site events came to a halt.



1/31: WHO declares pandemic | 3/13: Trump declares natl emergency | 3/27: Trump signs \$2T stimulus | 4/16: WH issues guidance to reopen

Retail

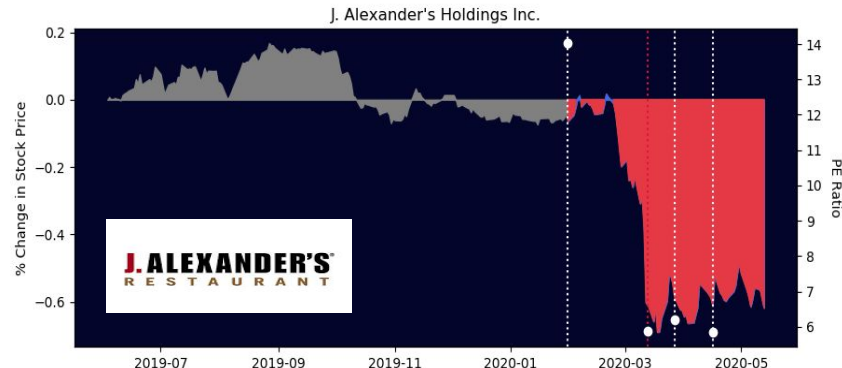
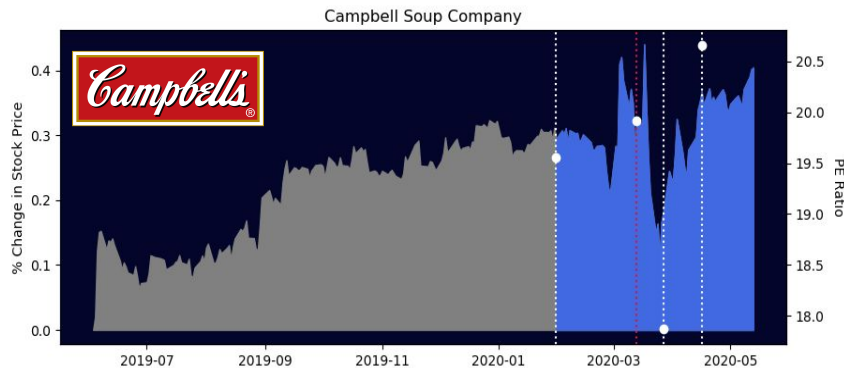
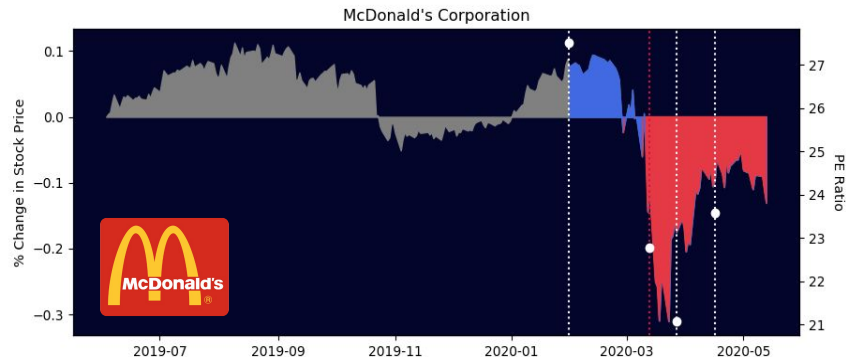
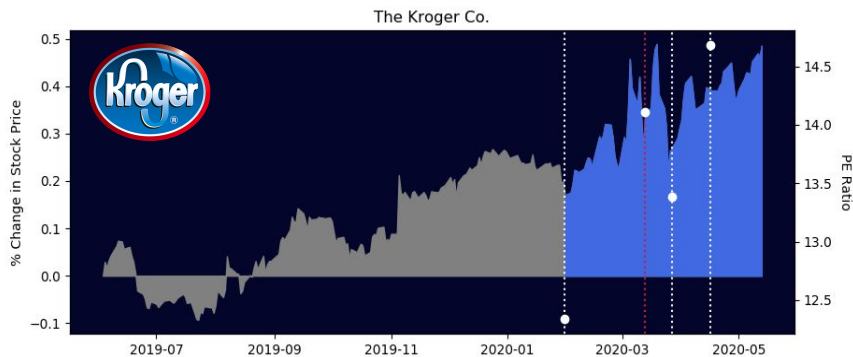
Online retailers have done well while already struggling brick-and-mortar stores have tanked.



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Food

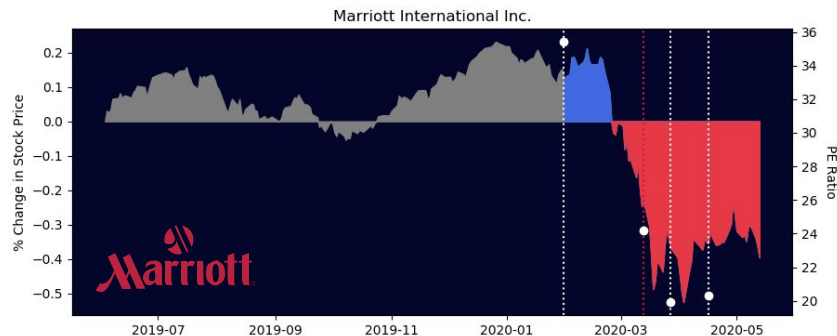
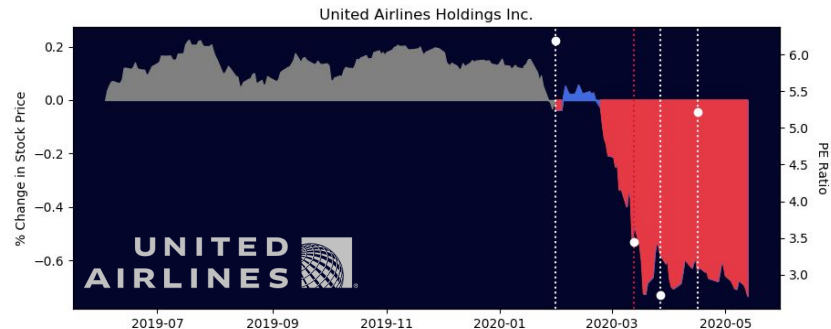
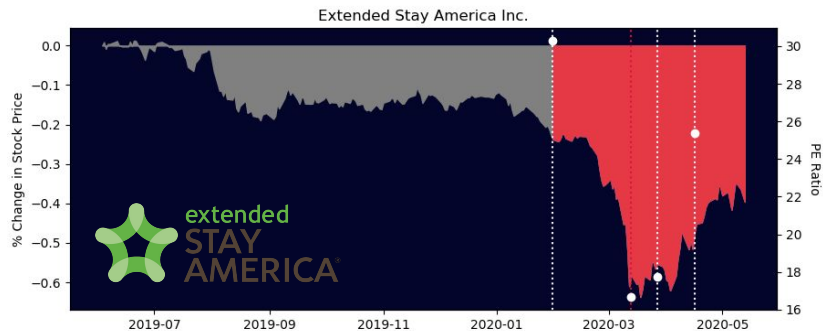
Grocery stores are essential while sit-down restaurants are trying to stay afloat with take-out.



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Travel

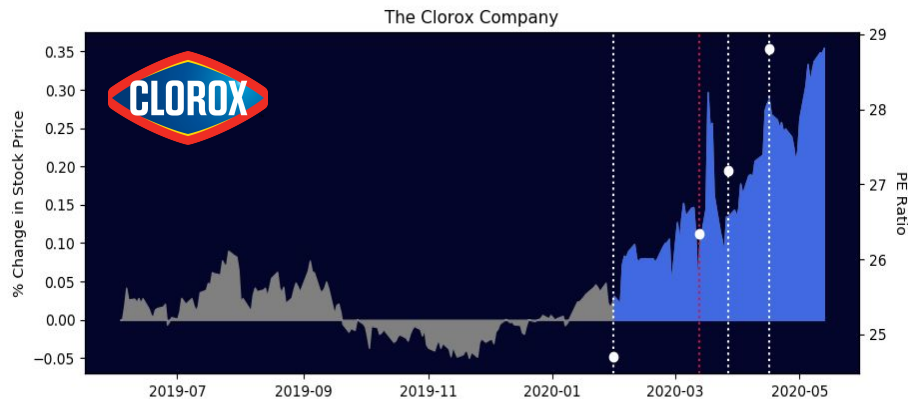
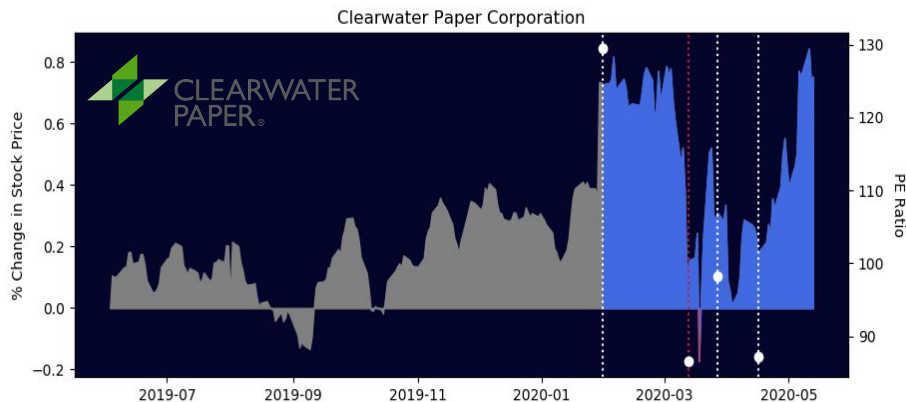
Travel came to a screeching halt but we found a surprising financial uptick with Extended Stay hotels for essential workers who need to quarantine from their families.



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Household Products

We couldn't talk about the pandemic without looking at the 2 most sought after products: toilet paper and disinfectant products



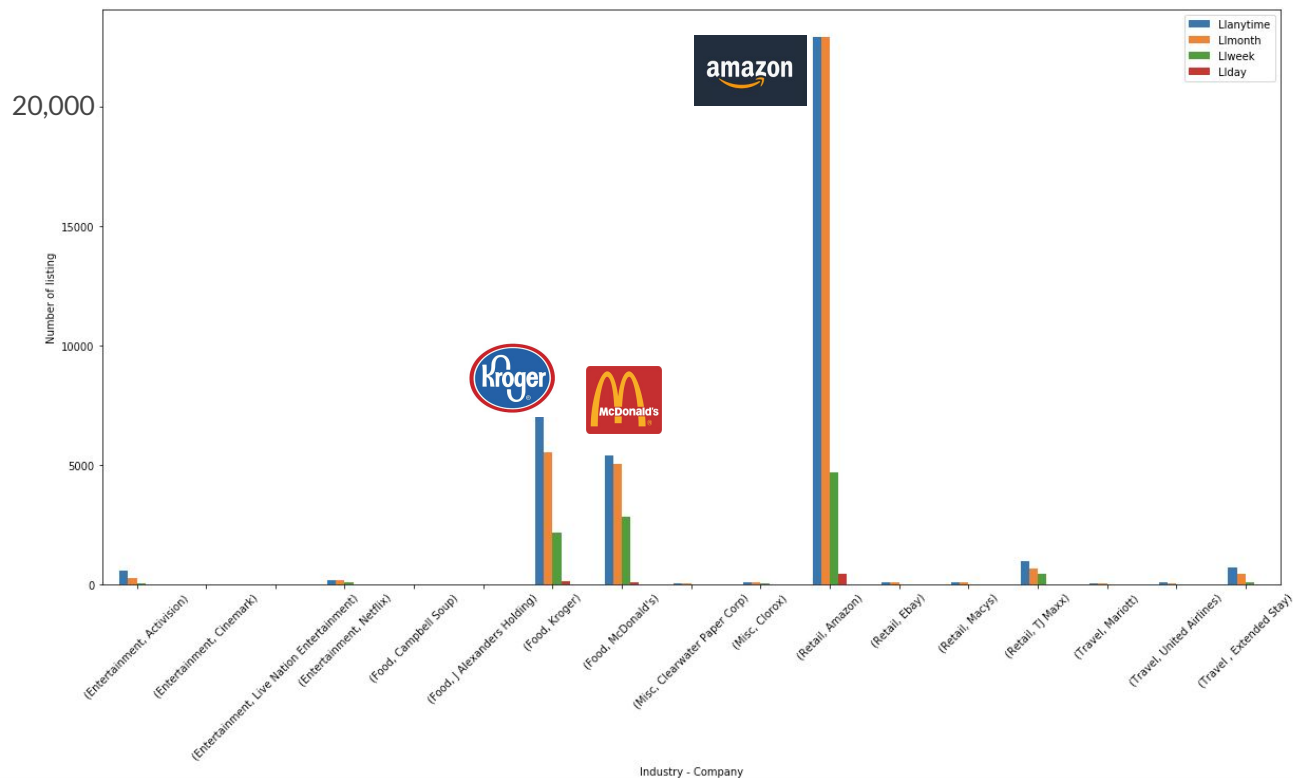
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The background of the slide features several 3D-rendered coronavirus particles. These particles are spherical with a textured, reddish-brown surface and are covered in numerous spike proteins that protrude from the outer layer. The particles are distributed across the frame, with some in sharp focus in the foreground and others blurred in the background, creating a sense of depth. The overall color palette is dominated by deep reds and dark oranges, with some lighter, hazy areas in the upper right corner.

Other Metrics

New Hires

Companies across industries are struggling to hire, but a few outliers had a surge of job postings in the last month since the pandemic took over.



Press Releases

We looked at quarterly report press releases to get a sense of leadership's sentiment to their stakeholders. Despite the economic hardship, some companies are staying true to their priorities: their employees, their customers, health and safety.





Conclusions

Conclusions

What are the effects of Covid-19 on company/stock performance?

- Effects varied depending on certain companies

Which industries/companies performed well and which performed poorly?

- Our data analysis revealed winners and losers within each industry; it wasn't all downhill.
- The type of business and how the product is consumed were key factors in a company's success or downturn.

What lessons can companies learn from those who thrived during this pandemic?

- Sell online, customers are consuming at home



Post Mortem

What are some difficulties that arose?

- 5 pulls per minute limit on an API, slows down the process
- Timeseries dates needed special handling
- Difficulties on Yahoo Finance

What are some additional questions that arose?

What are other factors that would affect company's stock and financial performance, such as government stimulus to certain industries?

What would we research if we had 2 more weeks?

- Look at states that are starting to open up businesses
- Look at other countries that have opened up to see if there's indicators for US



Thank You

