



**Webinar:**

# **Mitigating the Impact of Coronavirus in Retail and Consumer Goods**

**April 2, 2020**

# Speakers



## **Michael Rabinowitz, Founder and CEO, CoEnterprise**

Michael is responsible for leading the development and execution of CoEnterprise's software and services portfolio.



## **Thomas Minnick, CFA, Senior Consultant, CoEnterprise**

Thomas has been an Analytics/BI consultant, working across multiple industry verticals, for more than six years. He emphasizes visual analytics that reliably produce actionable intelligence.

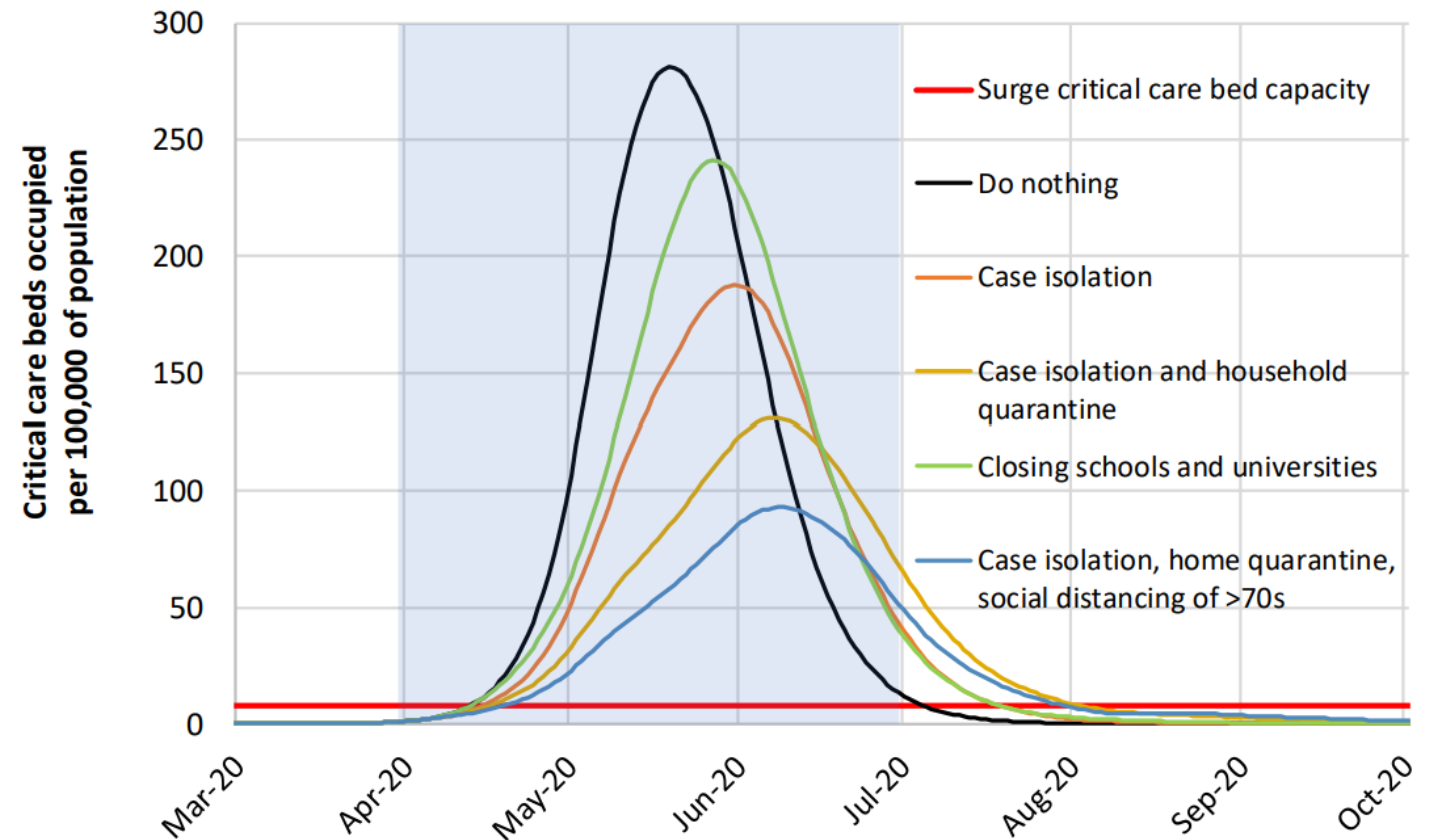


## **Ben Hart, Analytics Services Manager, CoEnterprise**

Ben has a background in Physics and Mathematics and has been working in Data Analytics for four years. He has a passion for deciphering complex systems and determining ways to effectively communicate their nuances.

# CoEnterprise + Tableau – We're Here for You!

- Working together, we will get through this crisis
- By putting people and the community first
- Instituting strong social protection systems like physical distancing
- Along with coordinated action by governments, workers, and employers



Source: Imperial College COVID-19 Response Team | March 16, 2020



# Current State of the Coronavirus Pandemic

# Shifts in the Supply Chain

## Disruption at the Global Scale

- Slowdowns in production and imports
- Non-essential domestic manufacturing shuttering with stay-at-home orders

## Effects at the Local Level

- Consumers panic buying
- Hoarding leaving shelves empty

## Keeping up with Demand

Increasing supply of items in high demand is proving difficult—why?

**There will be a 'massive' shuffling of supply chains globally after coronavirus shutdowns**

**Why And How Coronavirus Will Sharply Change The Supply Chain**

**The Modern Supply Chain Is Snapping**

**How Coronavirus Could Wreak Havoc on Your Supply Chain**

# The Domino Effect—How Much and Where?

## There are few actual shortages in essential goods

Only stabilizing supply will convince and calm customers.

## Response to Rationing

How much should manufacturers produce? How much should purchase managers order?

## Analytics is Critical

Carefully tracking orders, shipments, and deliveries, updating inventory models, and communicating effectively with suppliers and customers is imperative to keeping the supply chain flowing.





# The Cascade Effect on Restaurants



## The Fallout of Sudden Restaurant Closures

- Restaurant industry is the country's second-largest private employer with **15.6 million workers**
- Some are shutting their doors (temporarily or permanently) while others are shifting to takeout/delivery
- Restaurants are innovating to keep serving their clientele

## Staffing Changes

- Wait staff furloughs amid dining room closures
- Phone staffing
- Drivers/bikers for delivery
- Expo/kitchen staff for takeout/delivery orders



# Chain Reaction



# Retail/CPG Companies Taking Action



# Companies Expanding Business Capabilities

James Dyson designed a new ventilator in 10 days. He's making 15,000 for the pandemic fight

By Naveen Rao for CNN Business  
Updated 7:27 AM ET, on March 27, 2020



## Dyson

Vacuum company designed a new ventilator in 10 days called “CoVent,” which can be manufactured quickly, at scale, and addresses specific issues of COVID-19 patients

## Tito's Vodka

Along with many other distilleries, is reallocating resources to manufacture hand sanitizer

**Gap Inc.** @GapInc  
An update on our #COVID19 response: Our teams are connecting some of the largest hospital networks in Calif. w/ our vendors to deliver PPE supplies while we pivot resources so factory partners can make masks, gowns & scrubs for healthcare workers on the front lines.

916 11:21 PM - Mar 24, 2020

364 people are talking about this

# Retail/CPG Companies Providing Incentives

## Pepsi

Providing incremental \$100/week for 90,000+ U.S. frontline employees during March-April. Enhanced benefits include full pay for employees in quarantine.



## Hormel

Giving \$4M+ in cash bonuses to 13,000+ plant production employees, \$300 for full-time workers, and \$150 for part-time team members.



## Mondelez International

Boosting manufacturing, distribution, and sales hourly workforce pay by \$2/hr. through May 2 and \$125 weekly bonus for sales reps.



Stats acquired from [Food Dive](#)

COE  
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+ a b l e a u  
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# Agility is the Key to Success

## Changing Times Call for Changing Business Models

Lack of flexibility → lack of business

## Study the Past, Observe the Present, Plan for the Future

The COVID-19 outbreak is unprecedented, but your business and staff have faced unusual, overwhelming circumstances before.

**This crisis will pass. Where do you want to be when it does?**

## Weather the Coronavirus Storm as a Team

Take care of your people and your community during these difficult times.





# Plan for Now and the Future



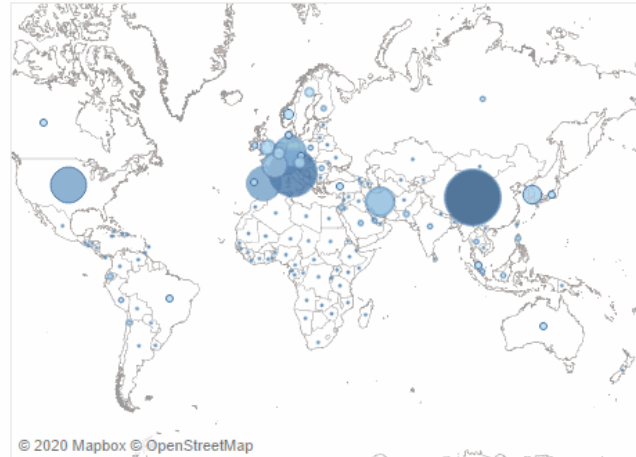
# How to Assess Supply and Demand to Stay Proactive

Let's try a sample analysis!

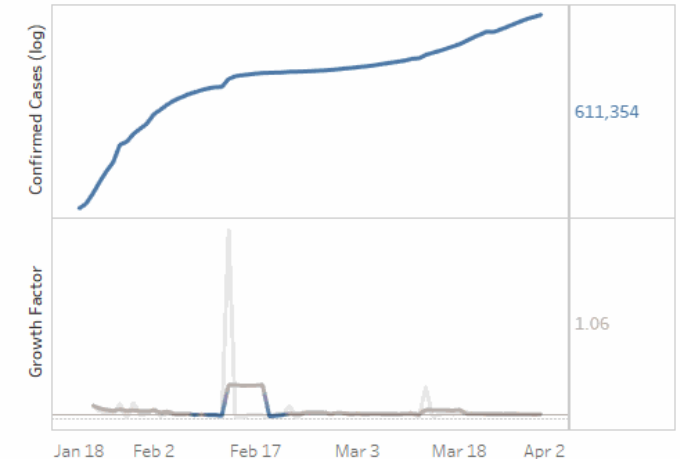
- We are a big-box retailer analysts assessing COVID-19 impact on current suppliers
- **Questions we want to answer:**
  - Where are we with current cases?
  - Which of our primary supplier countries are being impacted most heavily?
  - What product families come from these affected countries, and what are alternative suppliers?

## Supply Side COVID-19 Impact

Confirmed Cases per Country



Cases over Time



Supplying Countries by Likely Impact

Country	Total Shipments	Latest Growth Factor
China	925	0.62
Dominican Republ.	39	0.30
Australia	1,420	1.10
Mexico	1,329	1.11
Cote d'Ivoire	47	0.05
Philippines	326	0.37
Brazil	784	0.92
Germany	907	1.09
United Kingdom	775	1.08
France	1,222	1.71
Turkey	632	0.89
Indonesia	698	0.99
Italy	629	0.78
Nigeria	410	0.91

Product Distribution

Segment	Products	Supply Distribution	Diff from Average Dist.
Fast Moving	Groceries		
	Toiletries		
	Pharmacy		
Medium Moving	Vitamins		
	Entertainment		
	Alcohol		
Slow Moving	Stationary		
	Outdoors		
	Clothing		

**Our use case, driven by publicly available COVID-19 data, aligned to our internal company data**

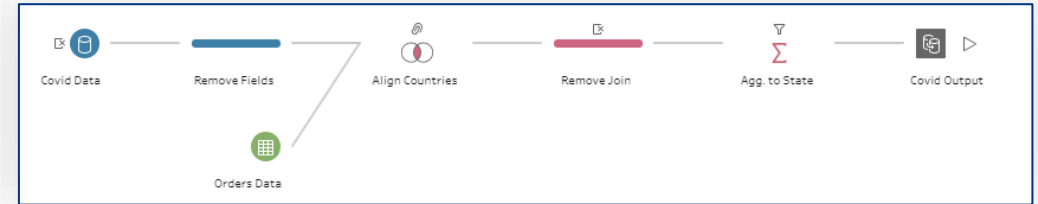
# Getting to Analysis Quickly

## Using Publicly Available Tools

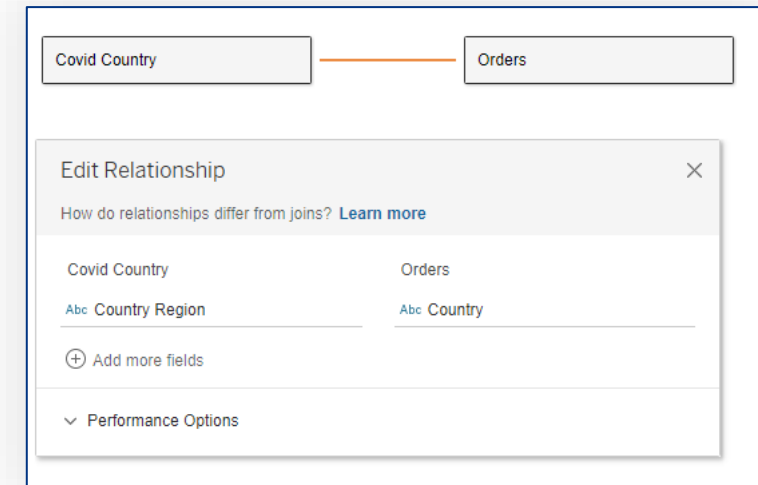
- Source COVID-19 Data: <https://www.tableau.com/covid-19-coronavirus-data-resources>
- Draw inspiration from Tableau Public

## Combining Disparate Data Sets

- Data wrangling is 70% of the work
  - We remove unused metrics
  - Align COVID-19 country names to internal standards
- Creating a flexible data model for varied analysis
  - Tableau's new data modeling Beta
  - Relate internal supply data to COVID-19 data despite different granularity
  - No LODs for easier analysis across data sets



Sample ETL Workflow



Sample Data Model

# Understanding COVID-19 and Epidemic Analysis

Understand COVID-19 before making your viz

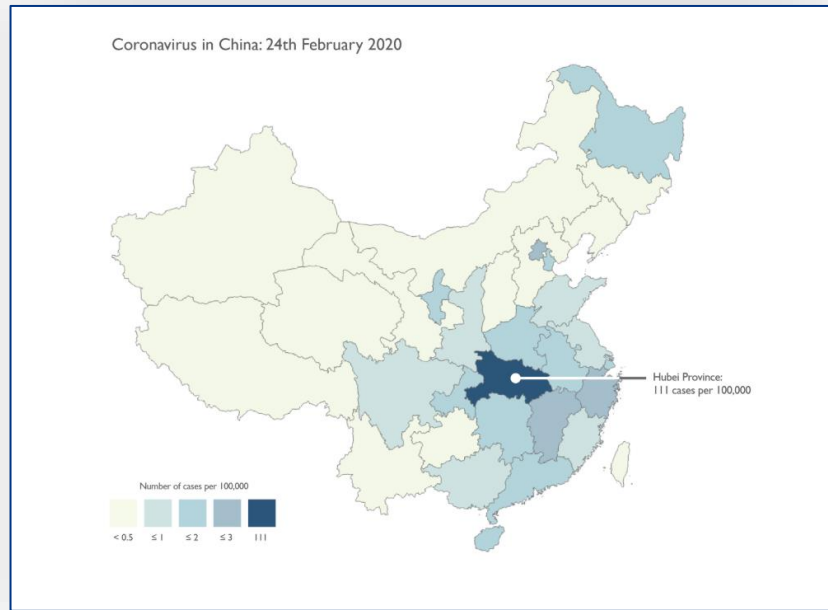
The screenshot shows the CDC's official page for COVID-19. The header includes the CDC logo and the text "Centers for Disease Control and Prevention". Below the header, there is a search bar and a dropdown menu set to "Coronavirus". The main heading is "Coronavirus Disease 2019 (COVID-19)". The page is divided into a left sidebar with navigation links like "Symptoms & Testing", "Prevent Getting Sick", and "Daily Life & Coping". The main content area is titled "Situation Summary" and contains a yellow box with the text: "This is a rapidly evolving situation and CDC will provide updated information and guidance as it becomes available." Below this, it says "Updated March 26, 2020" and provides a detailed paragraph about the pandemic, mentioning that it is a "pandemic of respiratory disease spreading from person-to-person caused by a novel (new) coronavirus".

Leave the complex predictive work to the Epidemiologists!



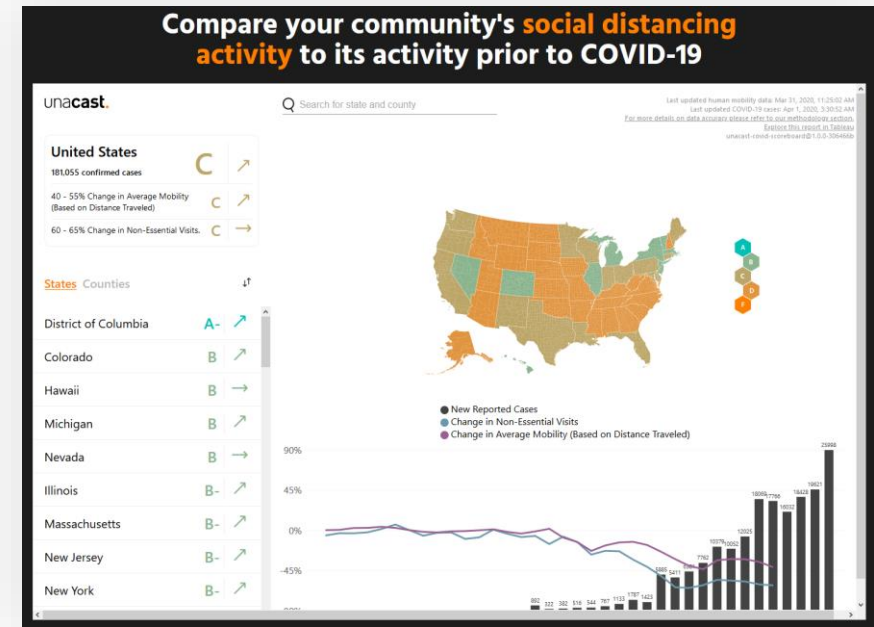
# Visualizing Responsibly

## Make thoughtful design choices



- Avoid red for confirmed cases
- Symbol maps over choropleth
- Display relative measures, not absolute

## Consider your audience and your impact



- Each data point is a person
- Consider what your analysis adds to our collective response



# What Steps Should You Take Next?



# Working through Today's Crisis and Beyond

No one knows how long the pandemic will last and what changes it will bring. Plan your strategy to be flexible!

## Draw on all your Resources

Gather intelligence from the people on the frontline as well as the corner offices.

## Prepare for Best, Worst, and Other Cases

Uncertain times call for developing and implementing contingency plans for a wide variety of scenarios.

## Take the Long View

Tracking, modeling, and analytics work best as part of a long-term strategy and a vision of who you and your company are and aspire to be.





# Use Case: Leveraging a Public Data Set

Luke Stock & Roman Usatin  
Tableau

# Global COVID-19 Starter Workbook

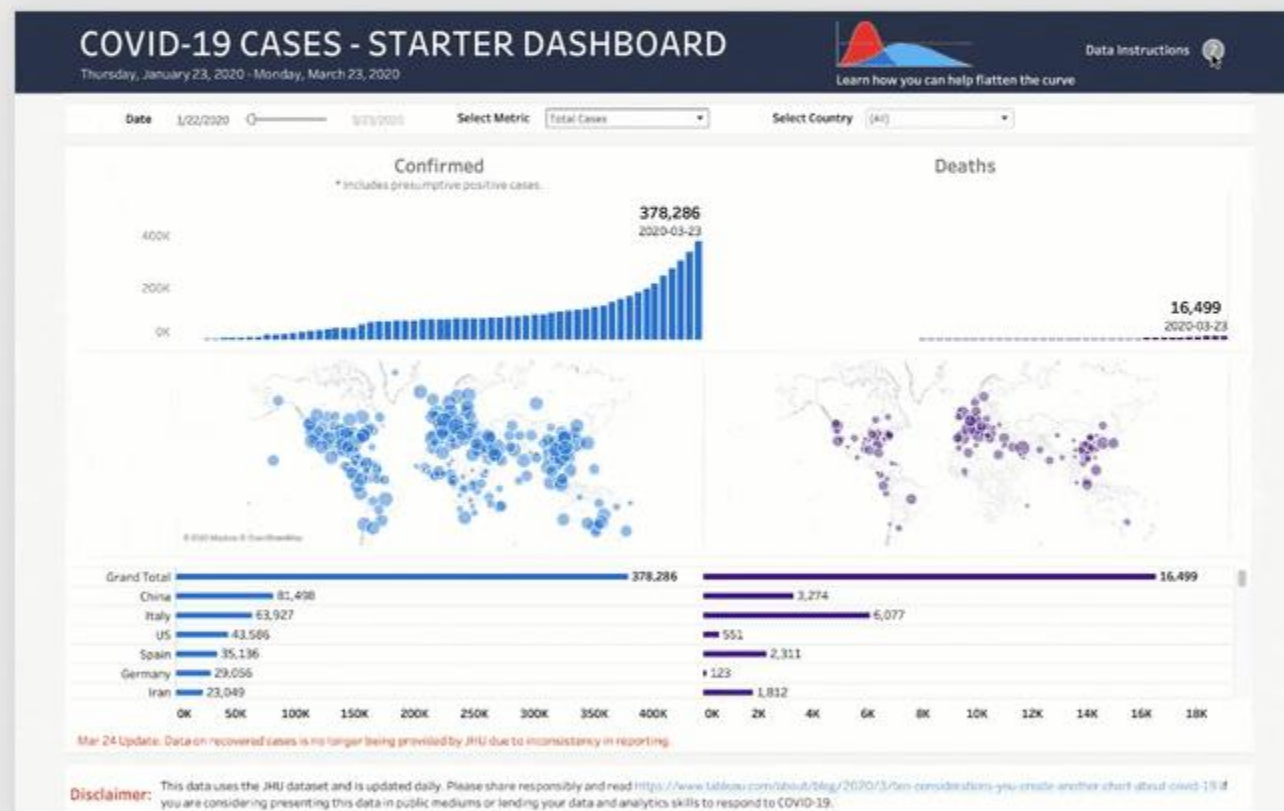
We have created a downloadable workbook with a starter dashboard and an embedded connection to a clean Johns Hopkins University Coronavirus Data Stream that combines WHO and CDC case data. Anyone can blend their own data with this workbook to better understand the impact on their organization. [View the Dashboard](#)

## LATEST UPDATES:

*JHU Data Stream is updated daily at 11 p.m. EST*

*We added county level data for the U.S.*

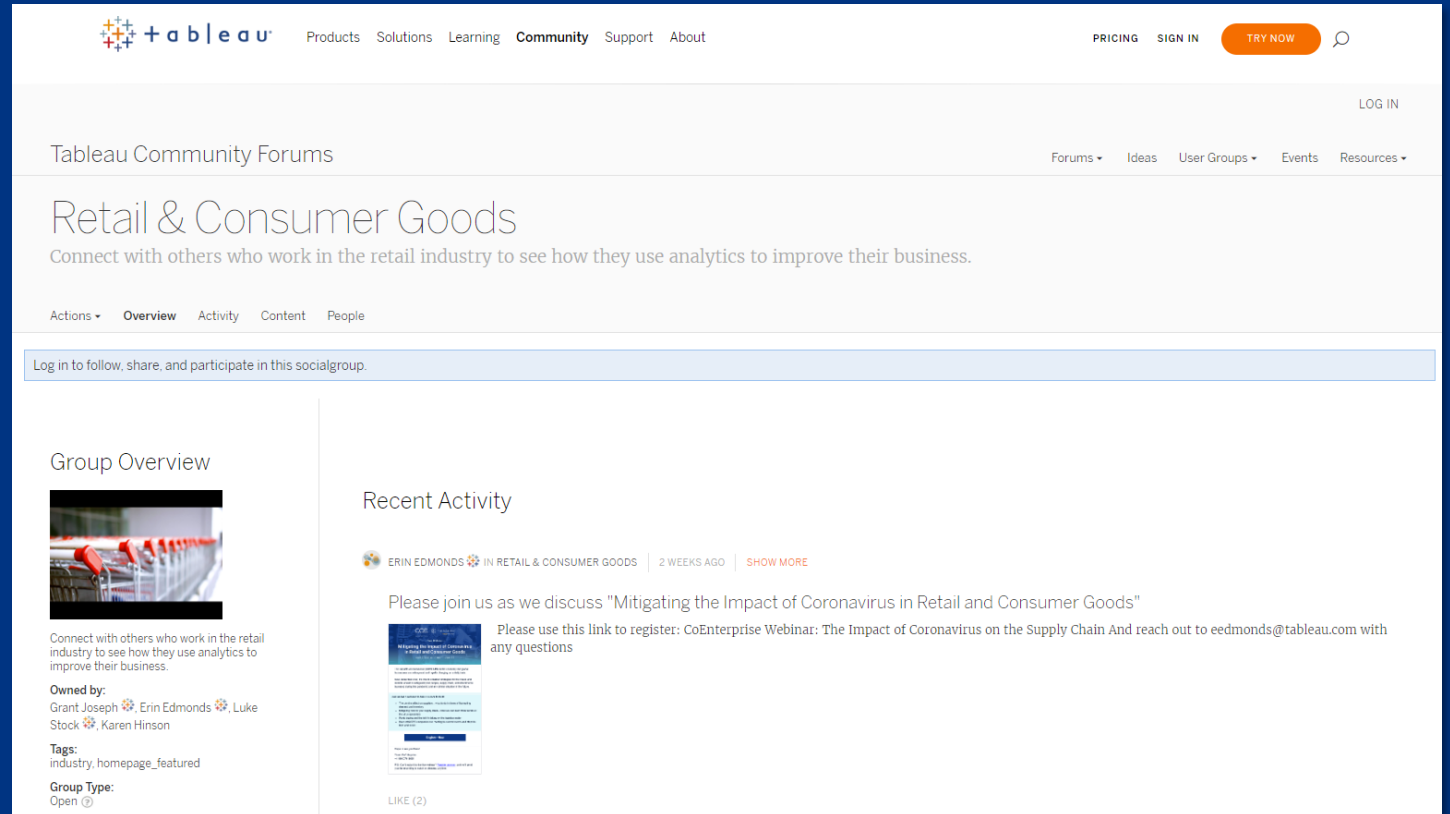
DOWNLOAD THE WORKBOOK 



Special thanks to Tableau Zen Masters [Anya A'Hearn](#), [Tamas Foldi](#), [Allan Walker](#), and [Jonathan Drummey](#) for all of their work to make these resources more accessible to the public.

# We're Here to Help

## Tableau Community Forum - Retail & Consumer Goods

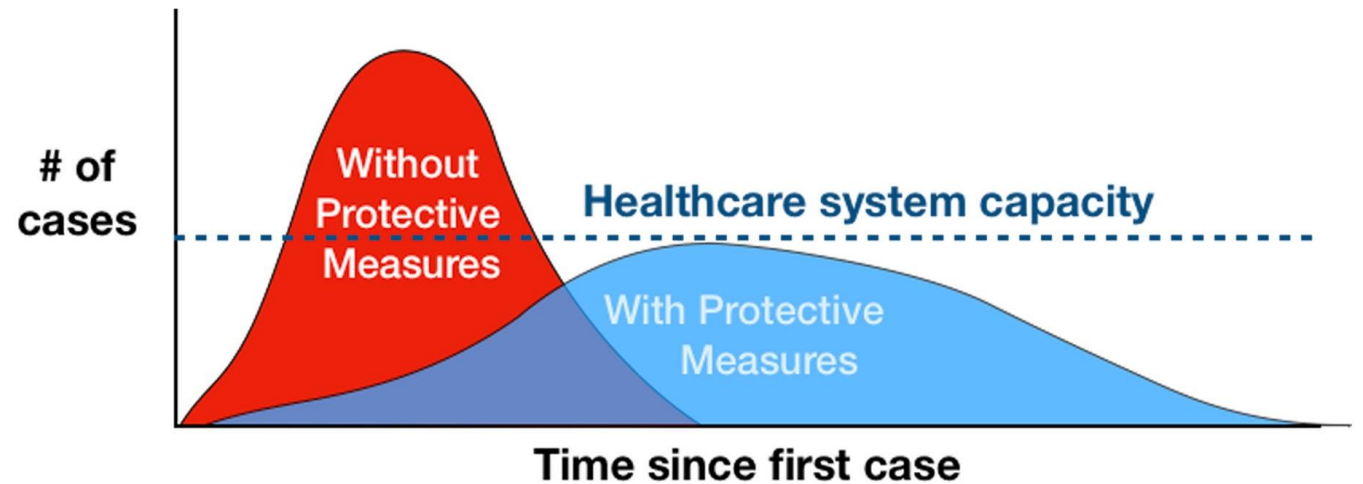


The screenshot shows the Tableau Community Forum interface. At the top is the Tableau logo and navigation links: Products, Solutions, Learning, Community (active), Support, and About. On the right are links for PRICING, SIGN IN, and a TRY NOW button. Below the navigation bar, the page title is "Tableau Community Forums" with a "LOG IN" link on the right. The main heading is "Retail & Consumer Goods" with a subtext: "Connect with others who work in the retail industry to see how they use analytics to improve their business." Below this is a navigation bar with "Actions", "Overview" (active), "Activity", "Content", and "People". A light blue banner prompts users to "Log in to follow, share, and participate in this socialgroup." The page is divided into two columns. The left column, titled "Group Overview", features a video thumbnail of a retail store, a description of the group's purpose, and lists the owners: Grant Joseph, Erin Edmonds, Luke Stock, and Karen Hinson. It also shows tags like "industry" and "homepage\_featured", and indicates the group type is "Open". The right column, titled "Recent Activity", shows a post by Erin Edmonds from 2 weeks ago about a webinar titled "Mitigating the Impact of Coronavirus in Retail and Consumer Goods". The post includes a registration link and a call to action to reach out to edmonds@tableau.com with questions. The post has 2 likes.

<https://community.tableau.com/groups/retail>

# Summary

- Use data to support your decision-making during times of change
- Remain agile – learn from Blockbuster
- Pivot and change direction quickly
- Implement an analytical-minded culture – data strategy AND analytics strategy
- Plan now for the NEXT event, know the risks
- Stay informed



*Adapted from CDC / The Economist*



Q&A



## Thank you!

[coecares@coenterprise.com](mailto:coecares@coenterprise.com)  
(866) 276-3685  
[www.coenterprise.com](http://www.coenterprise.com)

## Additional Resources

Access, analyze, and stay informed with trusted  
COVID-19 global data:

<https://www.tableau.com/covid-19-coronavirus-data-resources>

Download Accurate Data:

[World Health Organization](#) | [Johns Hopkins](#) | [NextStrain](#)