## Data Analytics Portfolio

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# Project overview

Customer	Scope	Topics	Tools	Visualization	Final report
Video game company GameCo	descriptive analysis to help allocating marketing budget	descriptive analysis Grouping results Summarizing results Visualizing results	Excel	Excel	<u>Presentation</u>
Medical Staffing Agency	help in developing a staffing plan for influenza season	Data cleaning, integration, transformation Statistical hypothesis testing Forecasting	Excel	Tableau	<u>Tableau Story</u> <u>Video presentation</u>
Movie rental company Rockbuster Stealth	help with the launch strategy for a new online video service	Querying, filtering, cleaning, summarizing joining tables Subqueries, common table expressions	SQL	Tableau	GitHub Repository Presentation
Online grocery store Instacart	exploratory data analyis on sales pattern	Exploratory data analysis Data wrangling, merging, grouping aggregation	Python (pandas)	Python	GitHub Repository

## 1. Video Games Sales

#### Goal

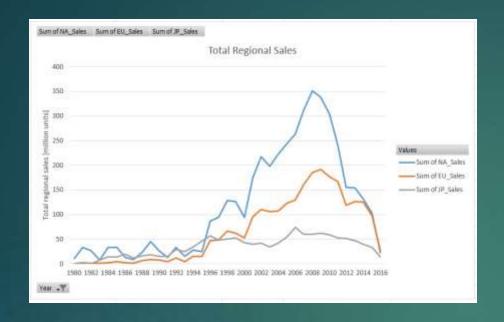
- Propose allocation of marketing budget between USA, Europe and Japan

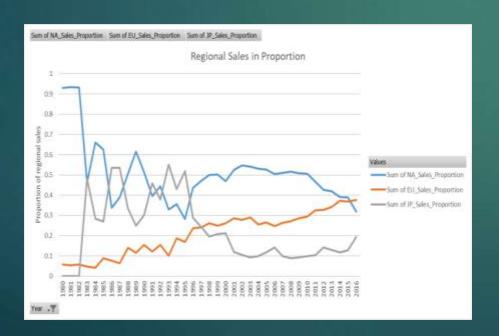
#### Data

- Owner: VGChartz
- Dimensions: Number of sales
- Categories: Name of the game / platform / release year / genre / publisher
   / region (North America, Europe, Japan, other, global)

## My approach

- Understand sales trends and pattern across regions
- Propose budget allocation according to the predicted sales distribution





## Challenge:

The sales were behaved more likely the same in all the regions by comparing the data with years. NA\_sales, EU\_sales, JP\_sales were increased from the year 2001 to 2009. From 2010 to 2016, the sales were started decreasing gradually.

## Hypothesis:

Explosion in digital distributed content Less sales in physical sold games

### Solution:

Examine relative sales
Consistent increase in EU sales

- > Assumption of accuracy in relative data
- >> Conduct analysis based exclusively on relative sales data

- North American Sales are decreasing during the last ten years (2006-2016). On the contrary, the European market has increasing with sustained a steady growth rate during the last 10 years. Europe dominated North America in total sales in 2016.
- We know that sales in NA in larger compare to EU and JP sales. But the sales are also increasing from the year 2000 in EU by observing percentage of regional sales. So I would like to suggest that if Game-co provides good marketing in EU then there are the changes to grow the market in the future.

## 2. Plan for Influenza Season

### Goal

- Helping a medical staffing agency plan for influenza season

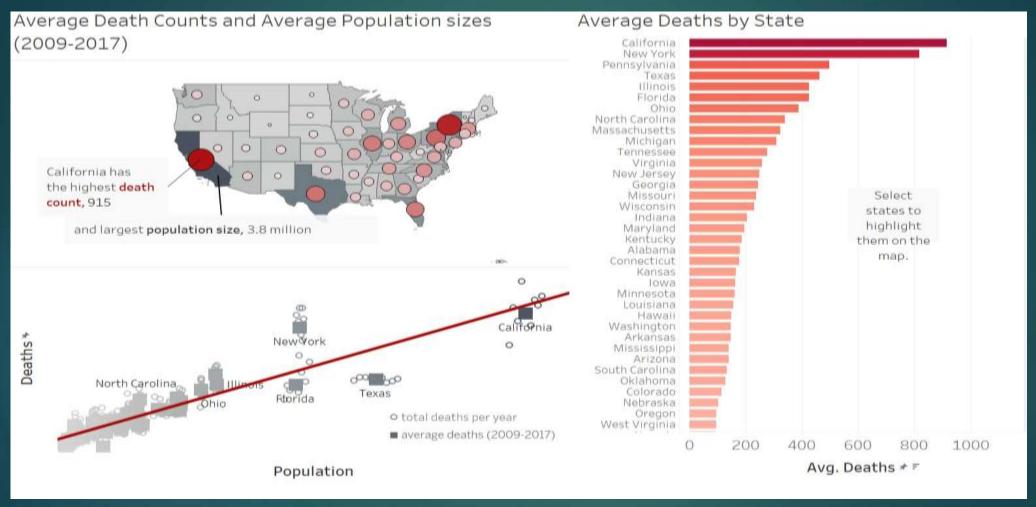
#### Data

- Influenza deaths data
- Population data
- Data regarding influenza-like illness reports
- Scope: USA 2009 2019

## My approach

Answering key questions: Where is the highest demand? When? Who is at most risk?

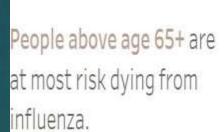
## Where is the Highest demand?

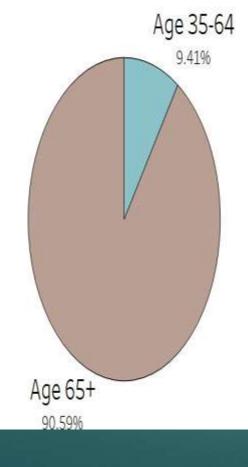


States with larger populations like California, New York and Texas suffer greater losses and therefore require more support.

## Who is at more risk?

Distribution of influanza related deaths among different age groups





No deaths for people under age 35 from 2016 and 2017

## 3. Movie Rentals Analysis using SQL

### Goal

- Help with a launch strategy for an online video service

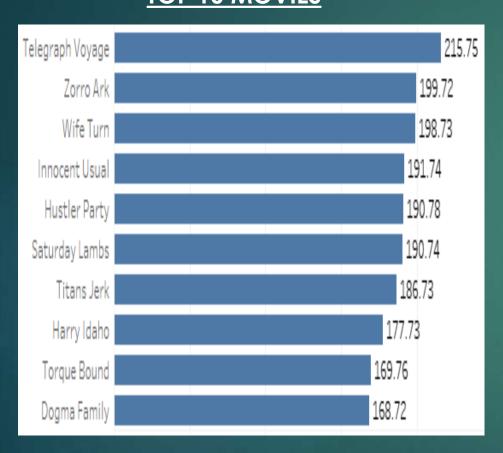
#### Data

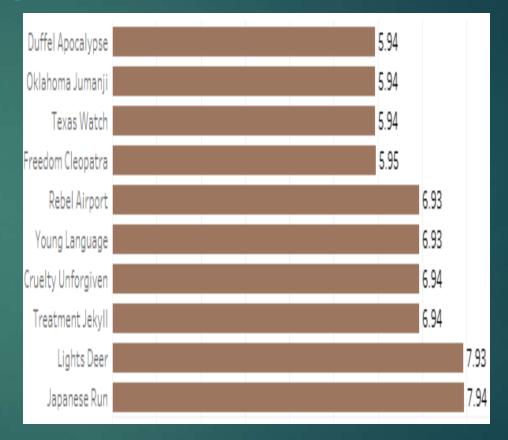
- PostgreSQL database with data related to movie rentals

## My approach

- Understand the key factors that drive revenue

# Which movies contributed the most/least to revenue gain? Bottom 10 movies





In the top 10 movies, the most revenue contributed movies are Telegraph Voyage and Zorro Ark

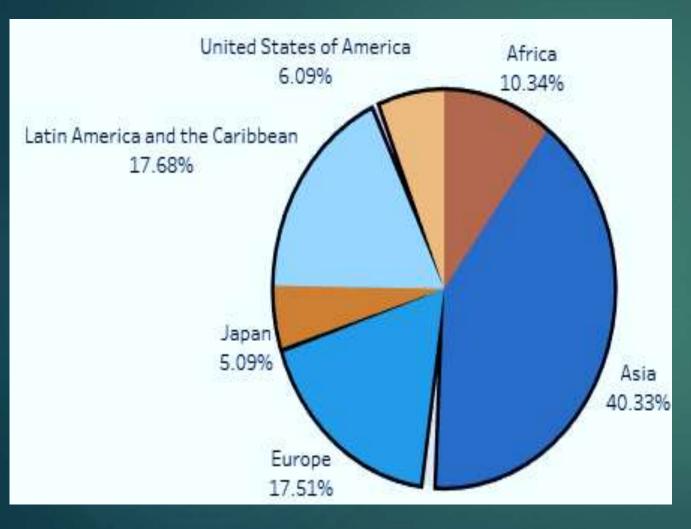
In the bottom 10 movies, the least revenue contributed movies are Duffel Apocalypse, Oklahoma Jumanji and Texas Watch.

## Which countries are Rockbuster customers based in?



The Rockbuster serves 109 countries within 6 regions with 2 stores located in Canada and Australia.

## Revenue by Region



Total Revenue = \$61,312

Asia, Europe and Latin America has the highest Revenue followed by Africa, US and Japan.

# 4. Instacart Grocery Shopping Cart Analysis using Python

#### Goal

- Uncover more information about sales pattern

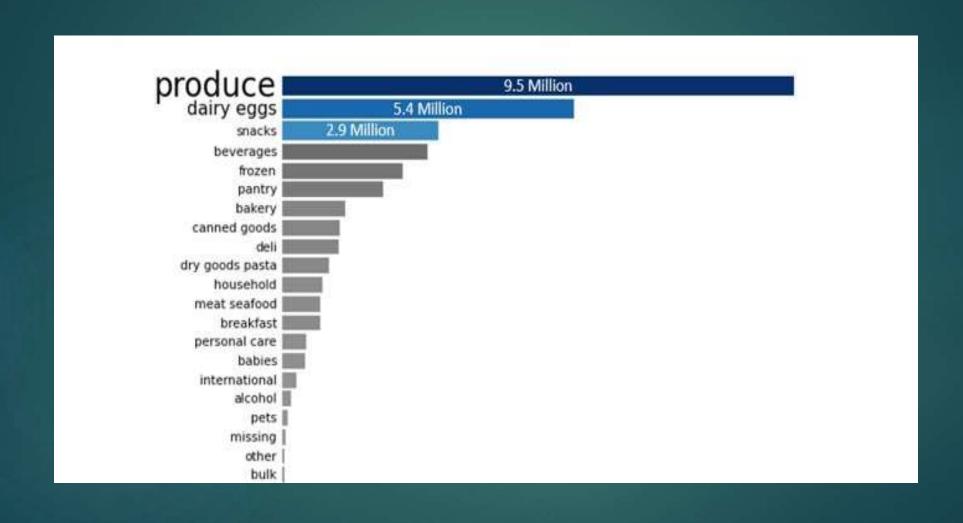
#### **Data**

- Owner: Instacart
- Data regarding products, orders and customers

## My approach

- In-depth analysis revealing insights which are hidden deep in the data

## Departments with Highest Item sales



Please find my GitHub repository for the Python task.
GitHub repository:

https://github.com/GeethaLakshmi13/instacart analysis python

# Thank you

Geetha Lakshmi Data Analyst