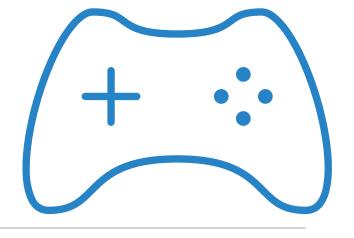
Portfolio

KENSUKE MORRIS

DATA ANALYST

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GameCo Sales



The Project



Company

GameCo, a new video game company, wants to use data to inform development of new games.

Objectives

Conduct descriptive analysis of a video game data set to understanding of how GameCo's new games might fare in the market.

Analysis Process



Preparation

- Cleaning
- Grouping data



Descriptive Analysis

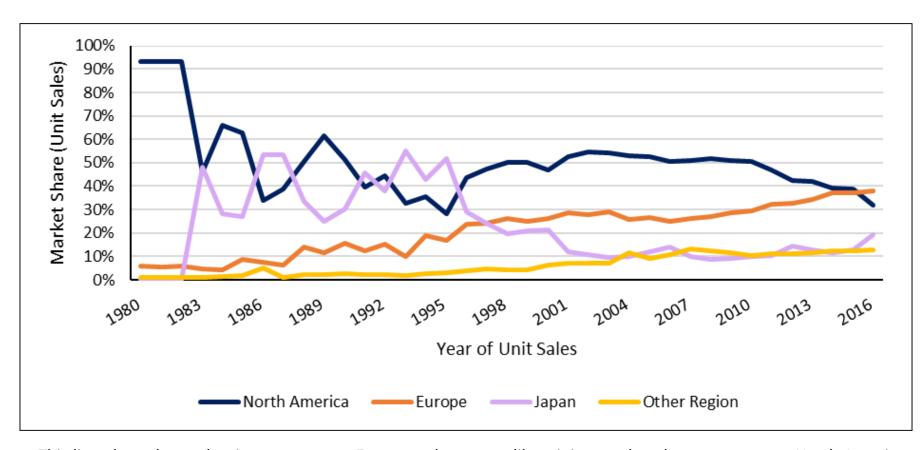
• Summarizing



Visualizations
Storytelling

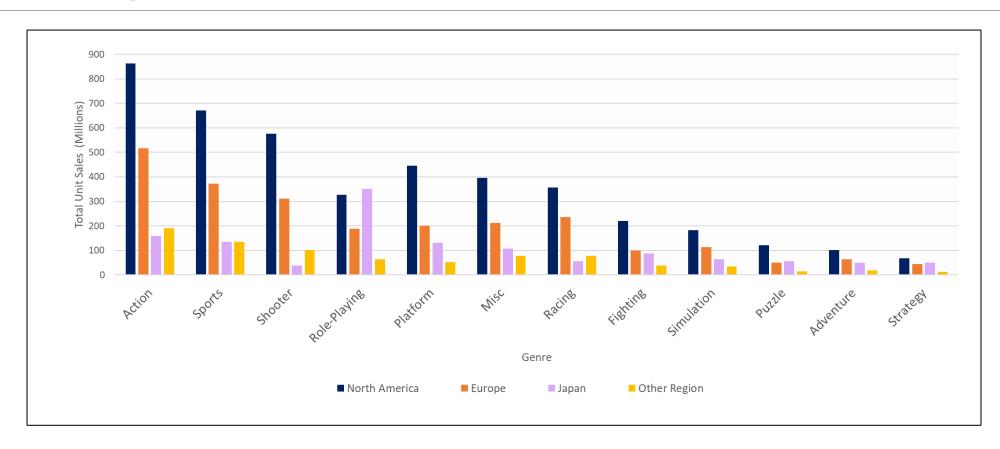
Tools: Excel Pivot Tables, PowerPoint





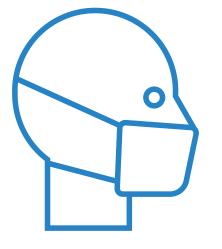
This line chart shows that in recent years, Europe as been steadily gaining market share, contrary to North America.





North America is the leader in total unit sales in every category except role-playing games.

Influenza Season







Company

A medical staffing agency that provides temporary workers to hospitals on an as-needed basis. The agency is currently planning for influenza season, a time when additional staff are in high demand.

Objectives

Examine trends in influenza and how they can be used to proactively plan for staffing needs across the country.

Dataset - Census data, deaths data from the CDC





Data Preparation

- Integrity checks
- Transformation and Integration



Descriptive Analysis



Statistical Hypothesis testing

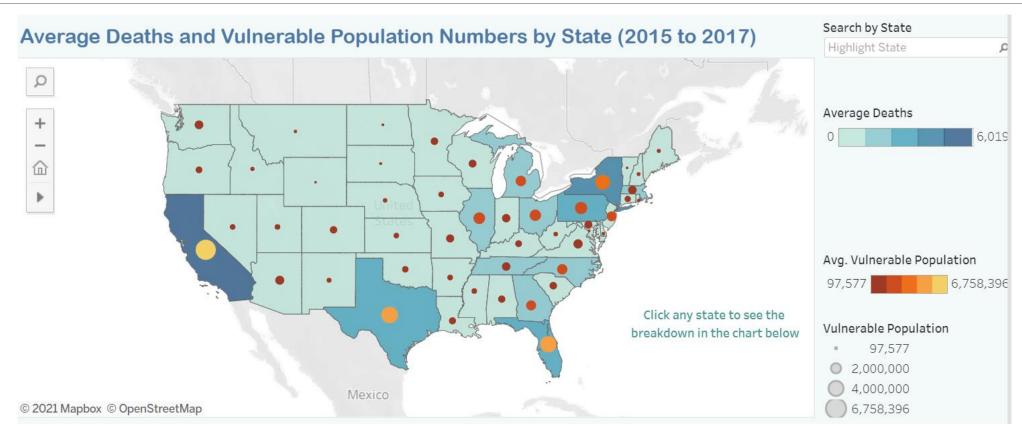


Visual Analysis and Storytelling

Tools: Excel for Pivot Tables and Data Integration, Tableau Story Board



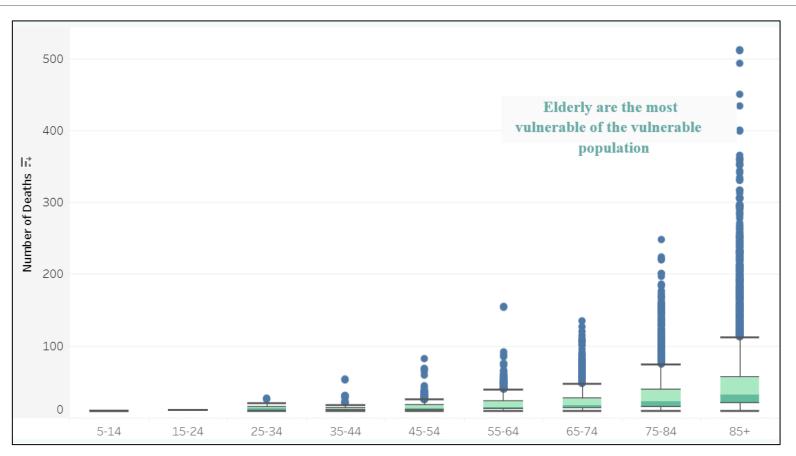




The map shows that California, Texas and has a higher number of vulnerable populations and will require additional staffing.

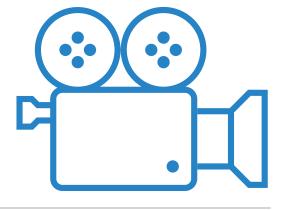






Elderly people occupy a considerable number in the influenza related deaths among vulnerable populations

Rockbuster Films



The Project



Company

Rockbuster Stealth LLC is a movie rental company that used to have stores around the world. To remain competitive, Rockbuster management plans to launch an online video rental service.

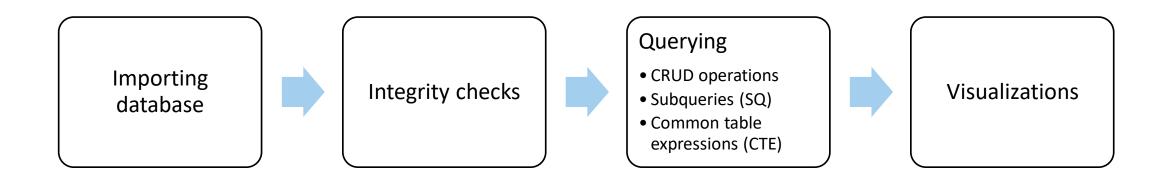
Objectives

Answer business questions posed by Rockbuster's Management Board to inform their strategical plans.

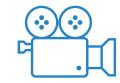
Dataset - Data from all Rockbuster's stores worldwide.

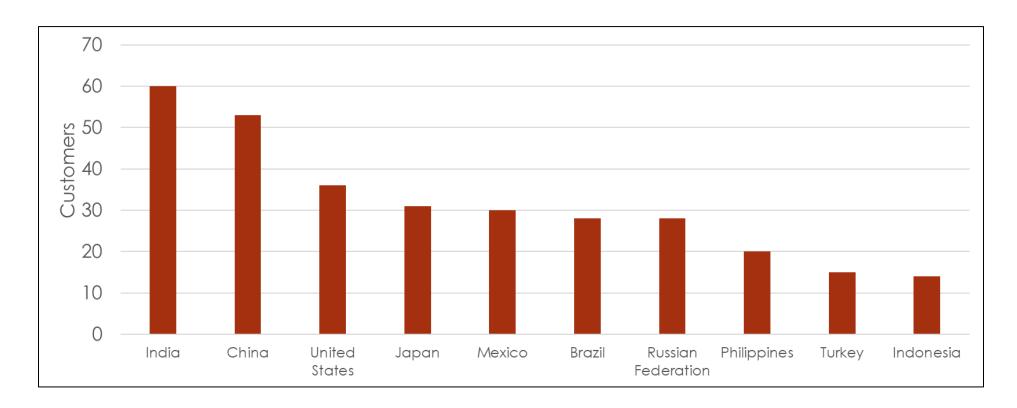
Analysis Process





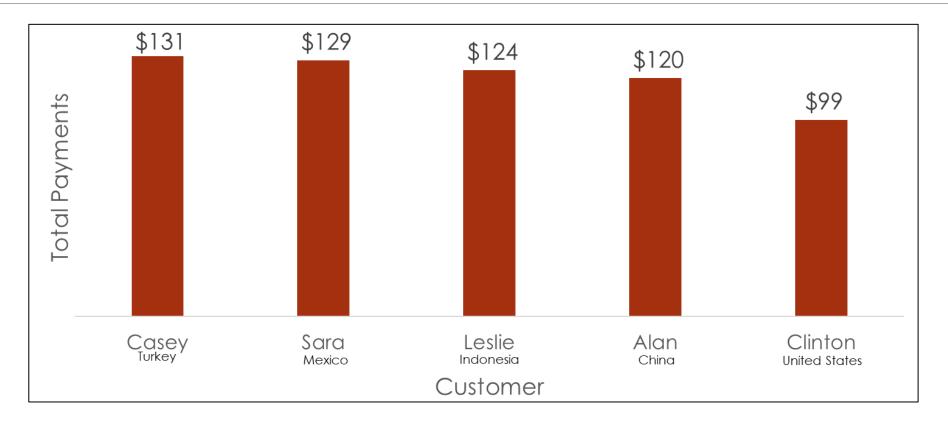
Tools: PostgreSQL for Integrity Checks, SQ and CTE, Tableau for Map Visualization





The bar graph above shows the 10 ten countries based on number of customers.





The chart shows the top 5 customers within the top ten countries based on their total payments.

These top customers are eligible for rewards for their support.

Instacart Customer Behaviour







Company

Instacart, an online grocery store that operates through an app. Despite good sales, executives want to uncover more information about their sales patterns.

Objectives

Perform an initial data and exploratory analysis of customer data to derive insights and suggest strategies for better customer segmentation.

Dataset - Instacart datasets about customers, orders, products and departments

Analysis Process



Data Preparation

- Data Wrangling
- Integrity Checks
- Merge Datasets



Exploratory Data Analysis

- Variable Derivation
- Create flags based on Customer profiles
- Aggregations



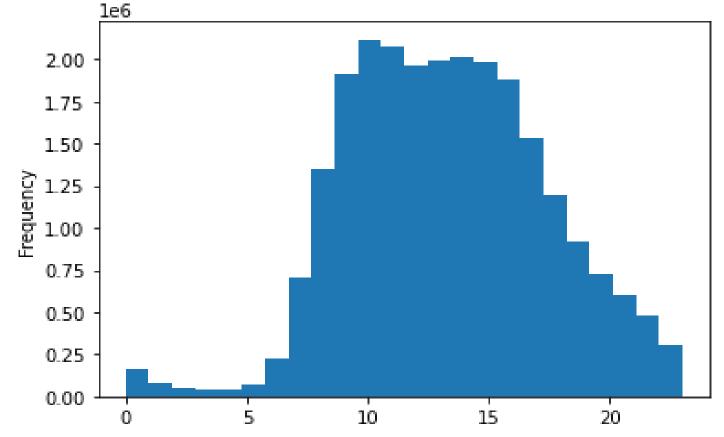
Visualizations

- Reporting in Excel
- Population Flows

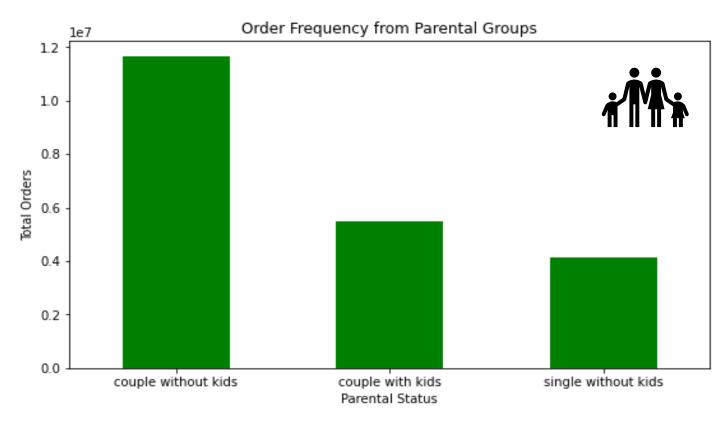
Tools: **Python** for Data Analysis and Visualization, **Excel** for Reporting





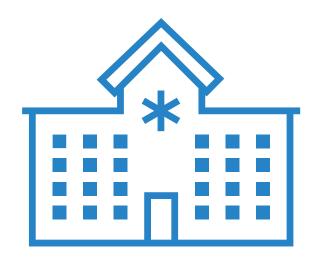






The graph is based one of the customer profiles based on parental groups. Couples without children made the most orders on the Instacart platform.

Patient Discharge Encounters



COUNTIES IN CALIFORNIA, U.S.A

The Project



Company

CaLED, a fictitious company, specializes in developing user experience (UX) related solutions for healthcare facilities and patients. A UX research manager wants to investigate patient encounters in California.

Objectives

Preliminary investigation of discharge encounters related to patient race groups and ED discharge types.

Dataset – Facility-level and location level data form the Office of Statewide Health Planning & Development (OSPHD)

Analysis Process



Data Preparation

- Data Sourcing
- Data Wrangling
- Integrity Checks
- Merge Datasets



Exploratory Data Analysis

- Variable Derivation
- Aggregations
- Spatial Analysis



Analysis

- Regression
- Clustering
- Time-series

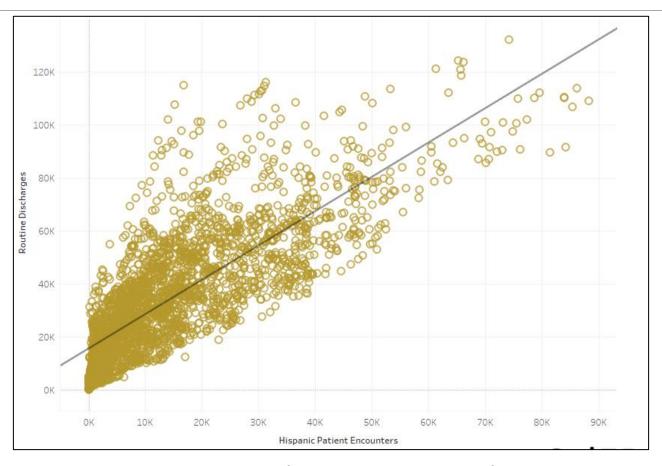


Visualizations

• Reporting in Tableau

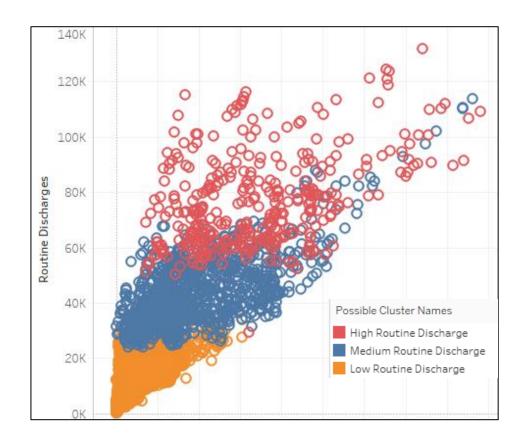
Tools: Python for Preparation to Analytics, Tableau for Dashboard Reporting





Hispanic patient encounters explain 63% of the variability in the data for routine discharges.





Facility Patient Discharge Profiles: three clusters based on Hispanic patient encounters were derived.