

Sakila DVD Rental Store

Business Intelligence Analysis

Portfolio Project 1



About Us

Group H

Cohort - 9

Data Analytics Course

Institute of Emerging Careers



Meet Our Team



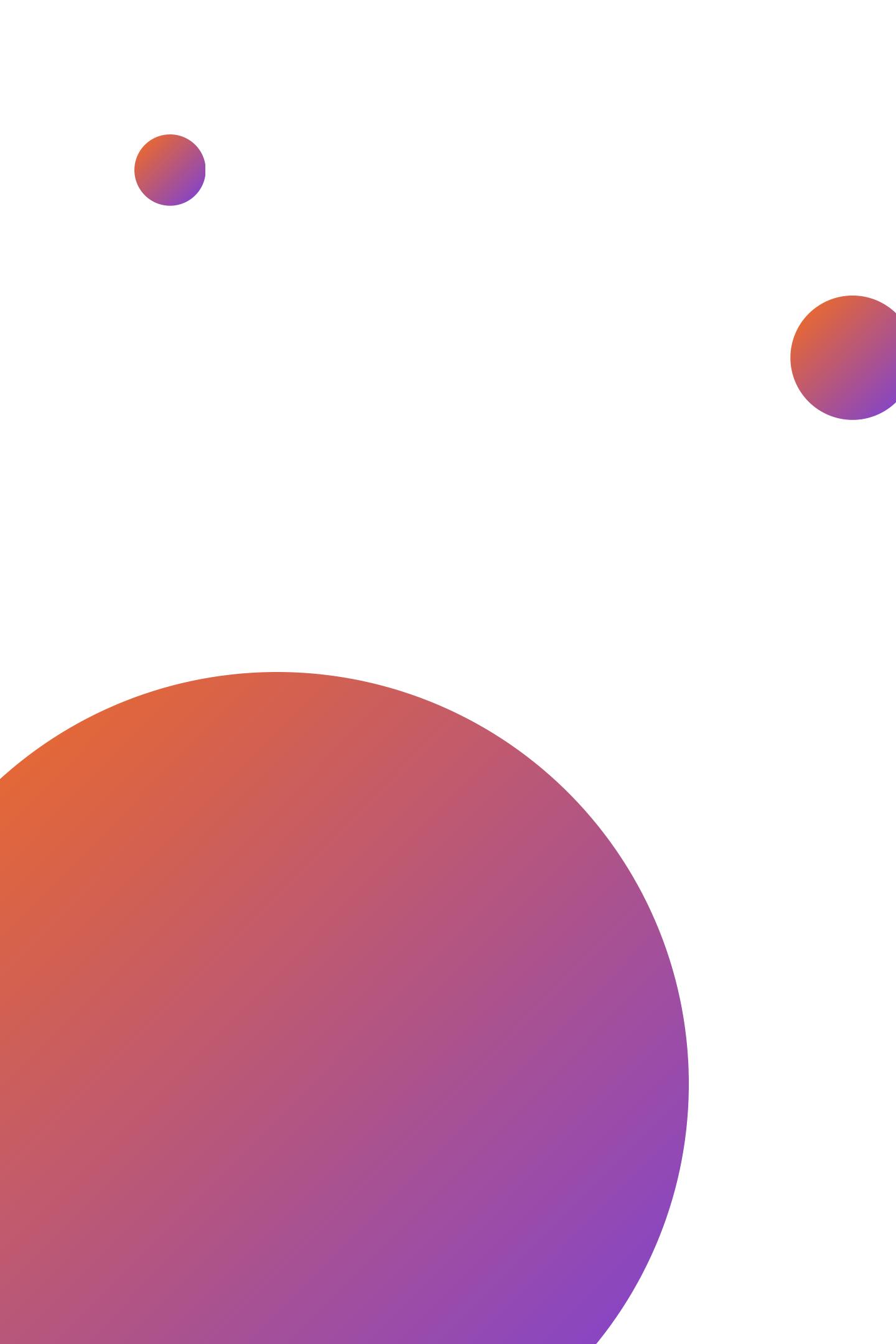
Numra Laeeq

Sundus Qayyum



Agenda

- Objective
- Schema
- Business Problems & Data Visualizations
- Dashboard
- Q&A



Objective

The aim of this project is to illustrate the use of SQL to answer some hypothetical questions about a DVD rental store with a MySQL database named Sakila and visualizing the results on Tableau, in order to focus on enhancing the customer experience, which can lead to increased revenue and long-term business success.

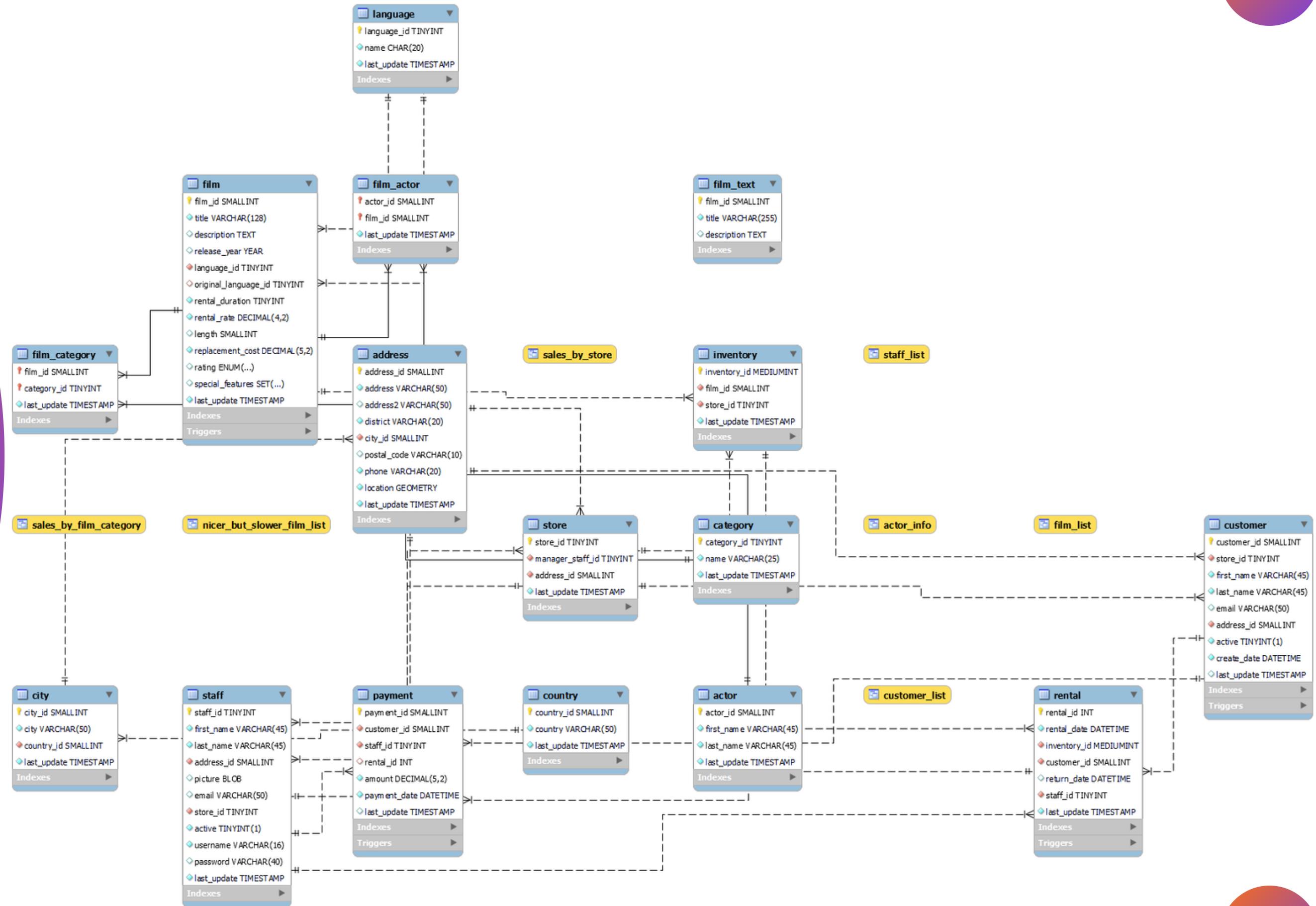


Sakila Schema

The subsequent diagram gives an overview
of Sakila DVD database structure.

Entity Relationship Diagram

- Actor
- Address
- Category
- City
- Country
- Customer
- Film
- Film_Actor
- Film_category
- Film_text
- Inventory
- Language
- Payment
- Rental
- Staff
- Store





Database Analysis

01

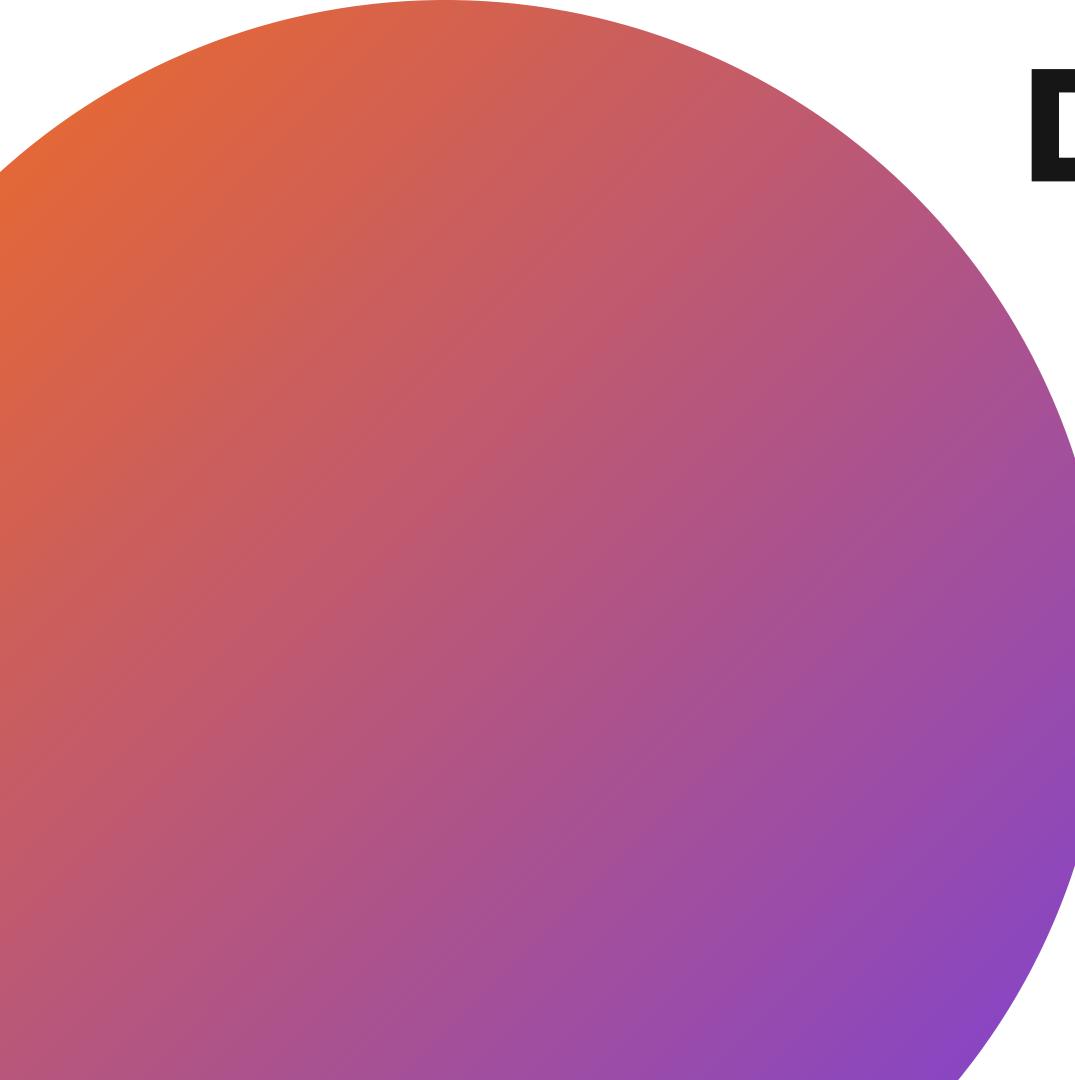
Sales Analysis

02

Performance Analysis

03

Customer Analysis



BUSINESS PROBLEMS & DATA VISUALIZATIONS

Sales Analysis

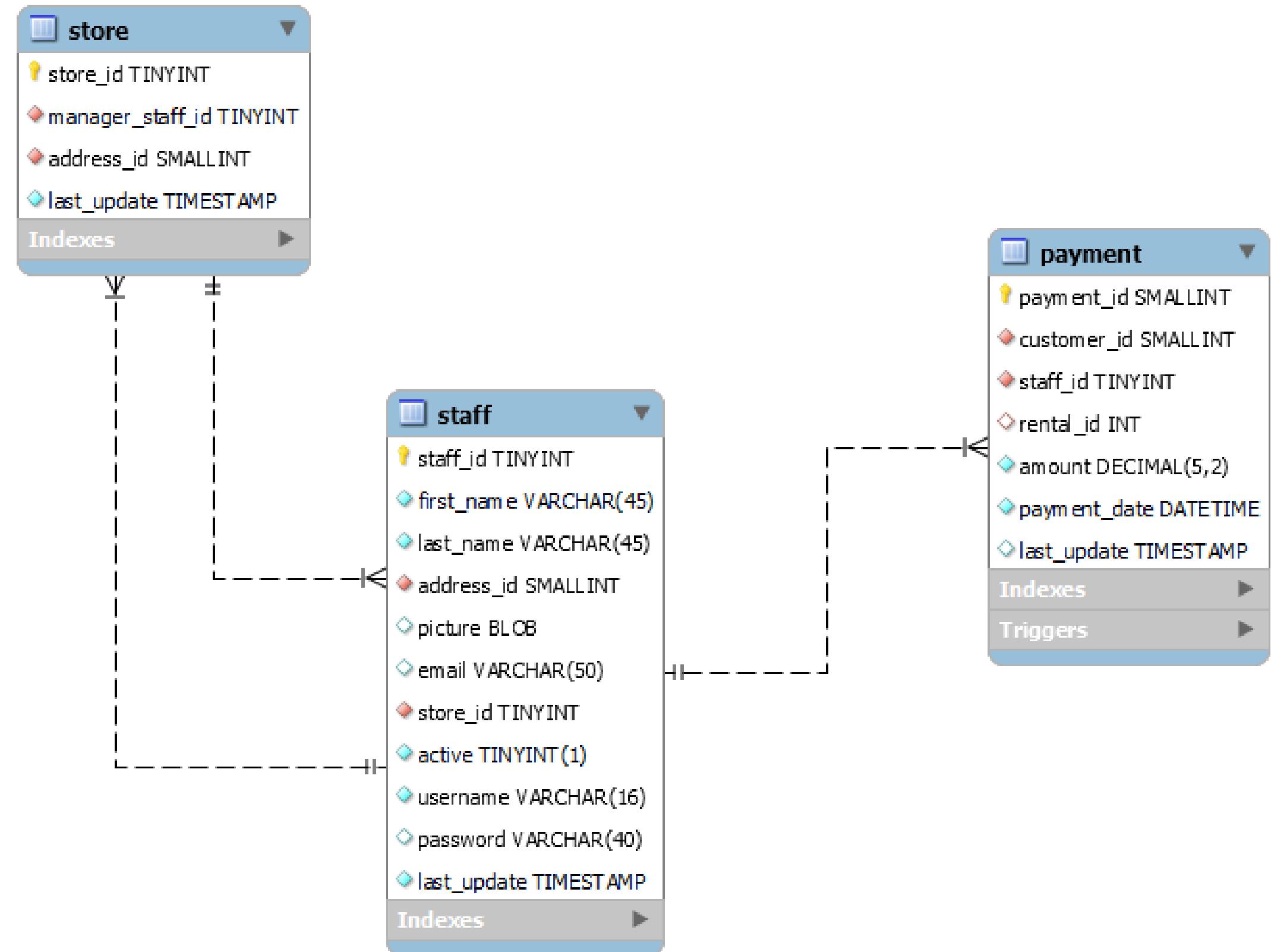
Total Sales:

Total revenue generated from all stores.

Monthly Sales:

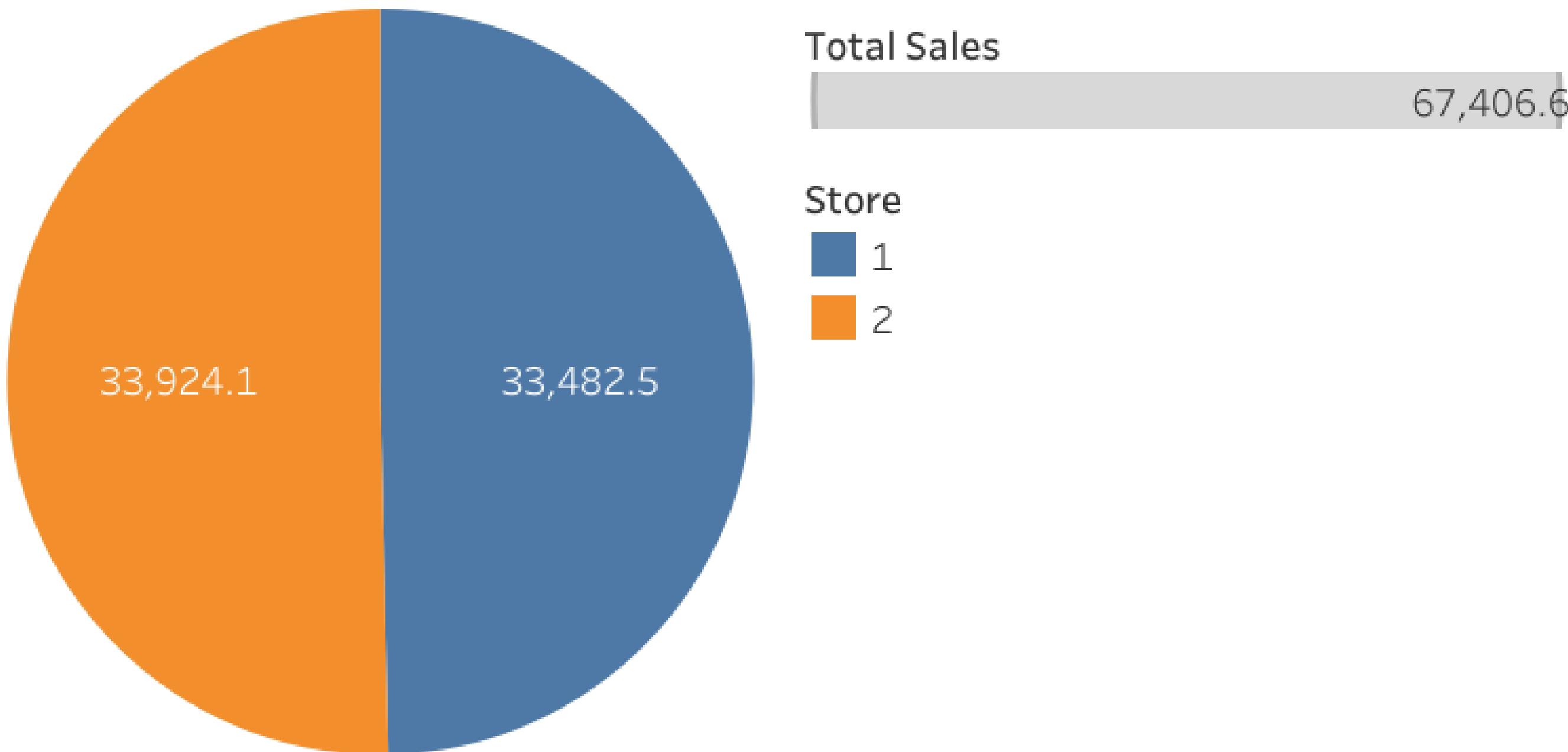
Sales generated per month across each store.

Revenue generated by
each store

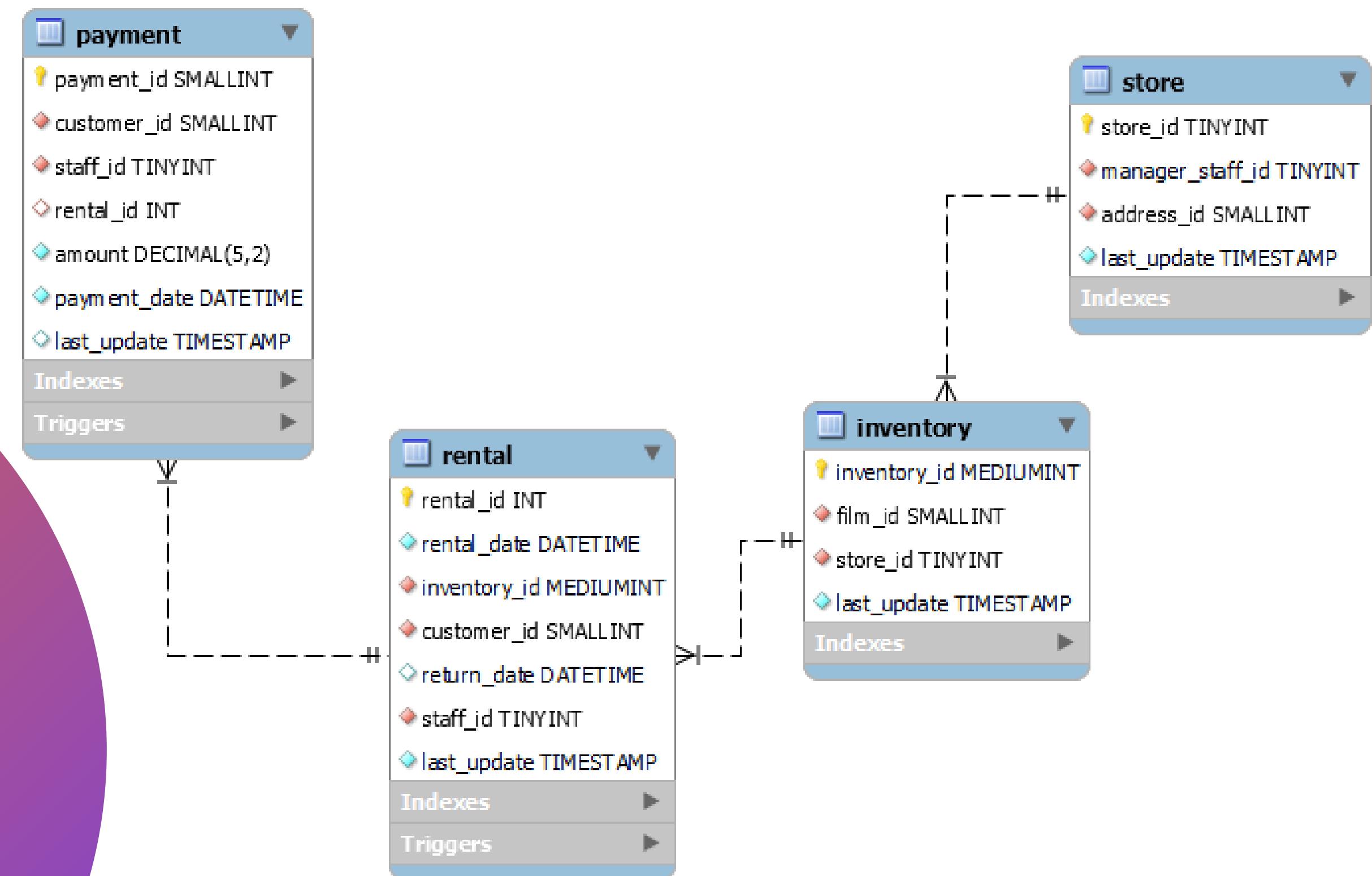


Total Sales for each store

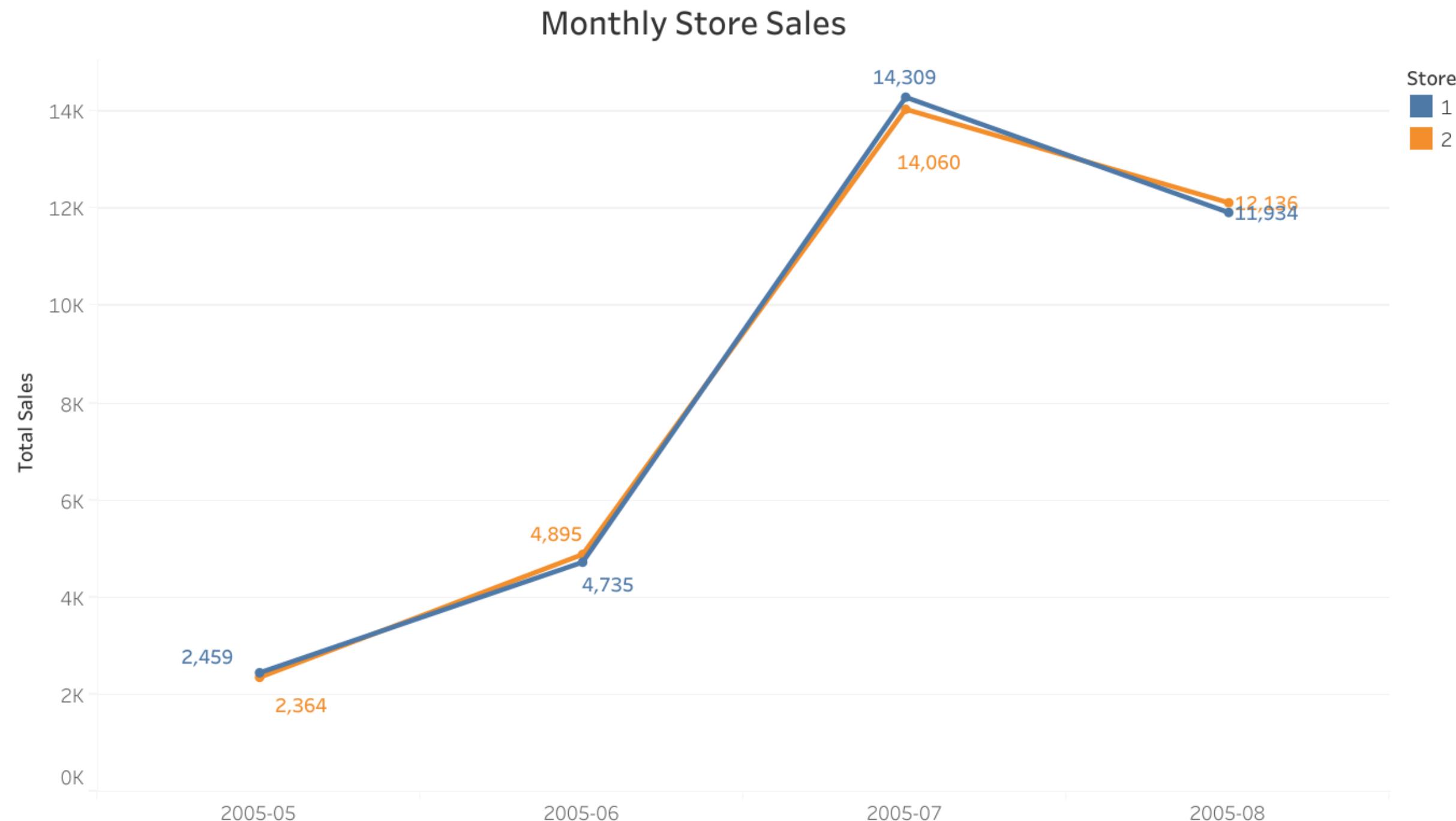
Store Sales



Monthly Sales for each store



Monthly Store Sales





Customer Analysis

Churn rate:

Churn rate is a customer-focused metric because it directly relates to the loss of customers or clients.



Churn Rate

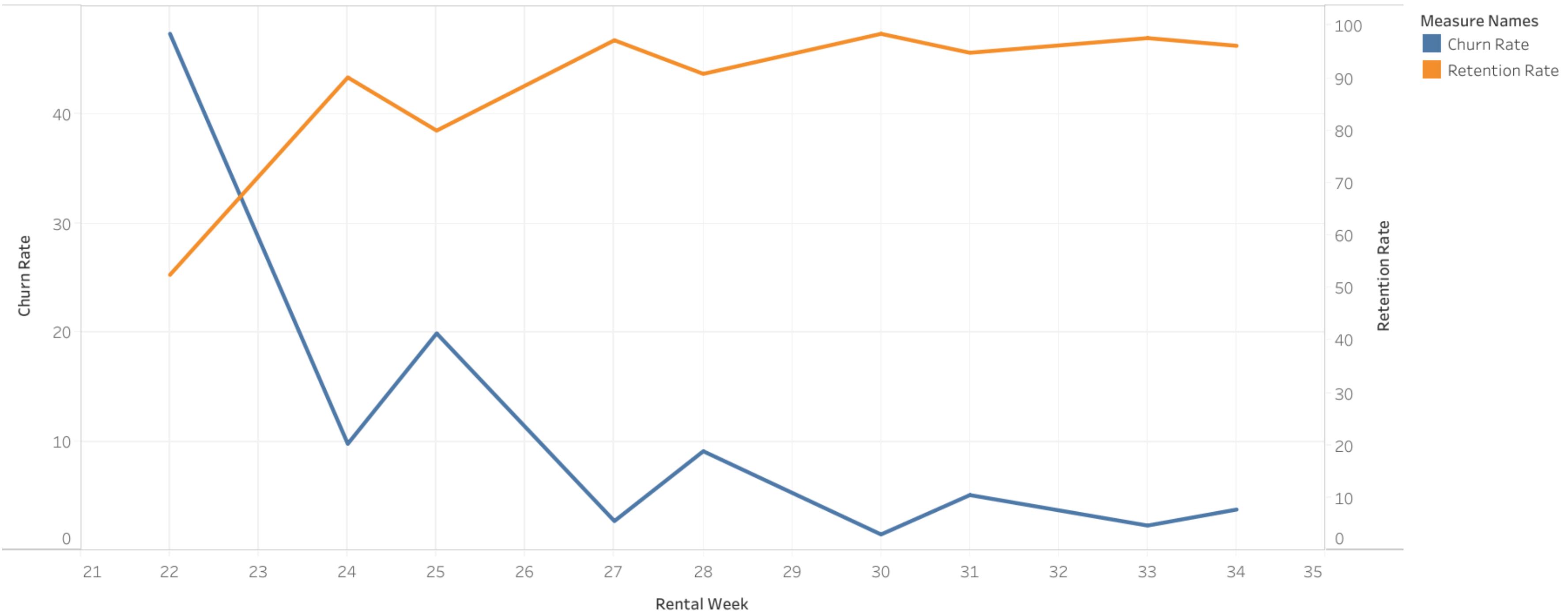
Churn rate is the percentage of customers who stop using your product during a given period of time.



Customer Retention Rate

Retention rate is the percentage of existing customers who continue using your product.

Retention & Churn Rate





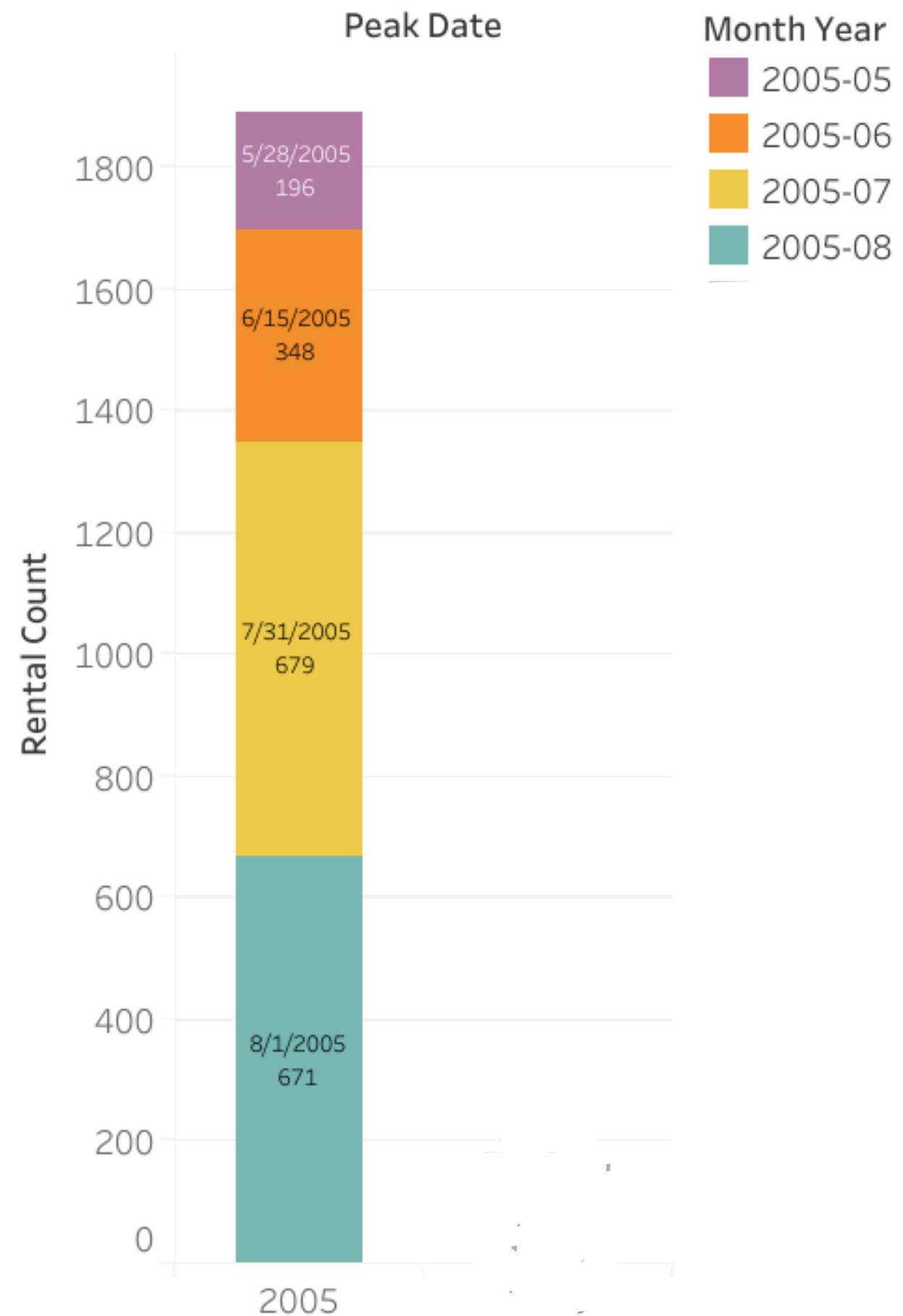
**Identify the peak
rental count in
each month?**

Performance Analysis

Peak rentals:

Analyzing rental patterns, including the specific day of the month with the highest rental activity, can provide valuable insights into customer habits

Peak Rental Dates



Performance Analysis

Most rented categories:

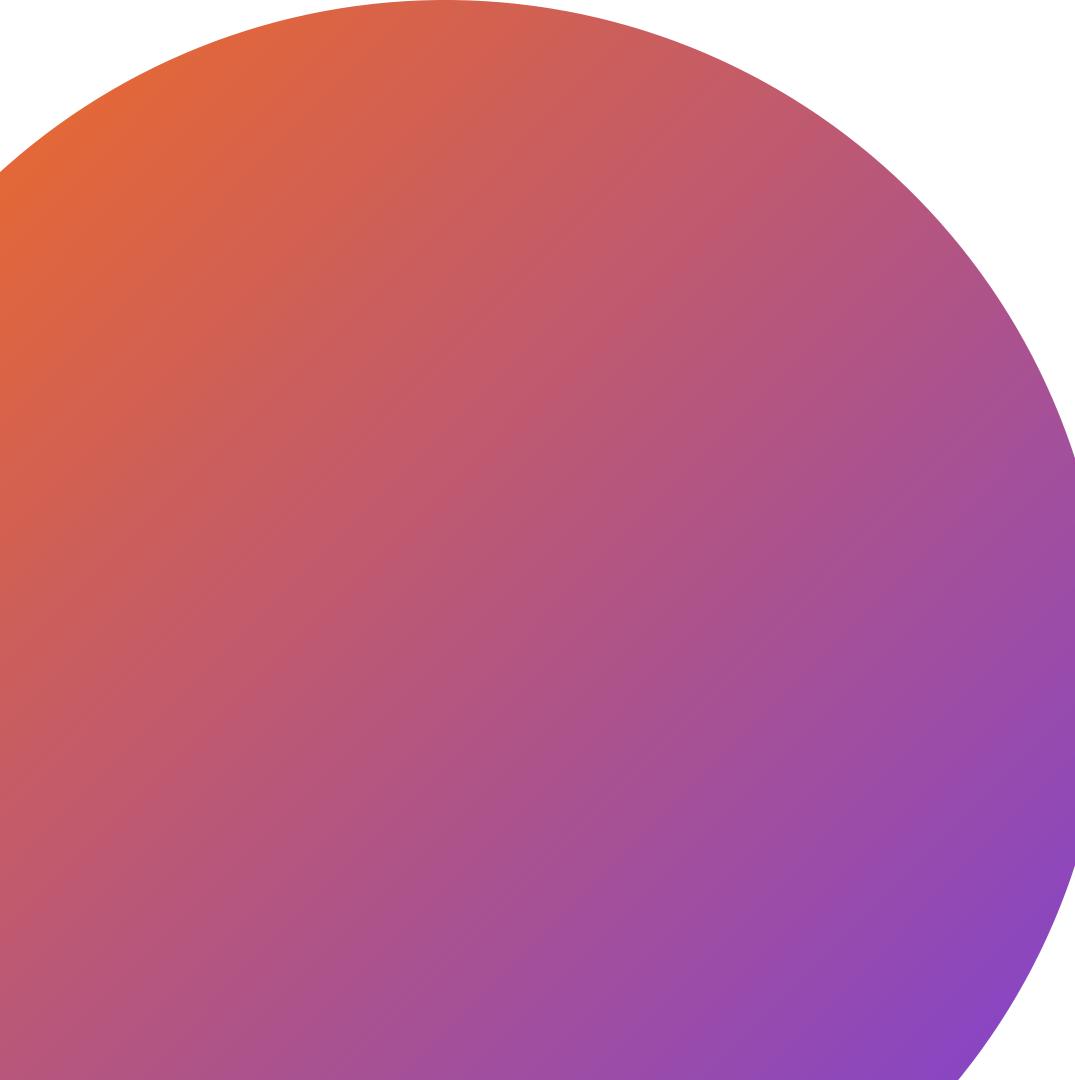
Identifying most popular categories can help with inventory management.

Return time:

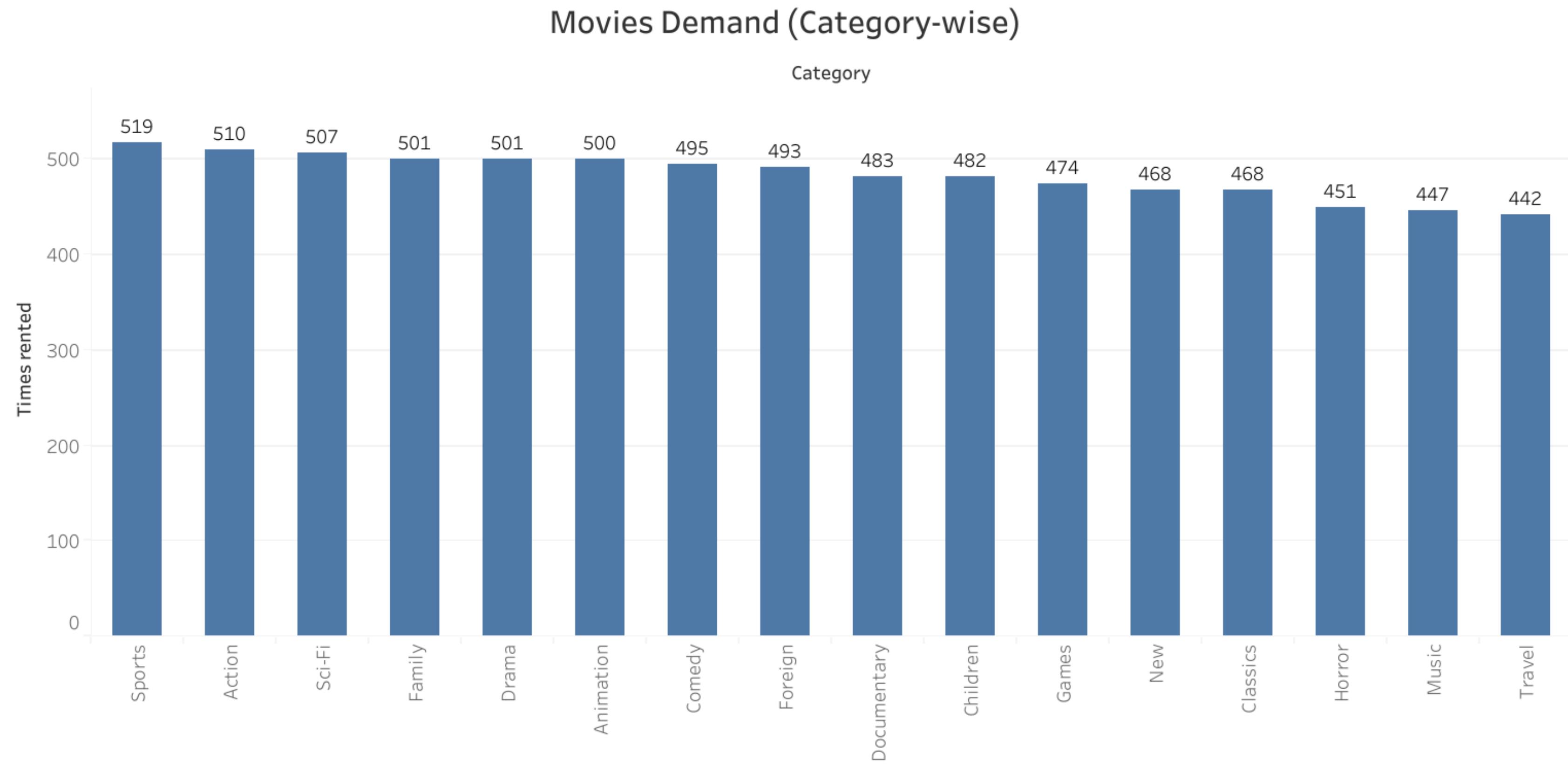
Rental duration information can be used to determine how long customers typically keep DVDs, which can be valuable for setting rental periods and pricing strategies.

Customer-base:

Identifying the countries in which rental services are provided, customers and sales generated.



**What are the top and
least rented (in demand)
categories?**





**What is the return time
for rented films?**

Criteria for calculating return status

In case where return date is available:

rental duration > diff b/w return date & rental date ----> **Returned early**

rental duration = diff b/w return date & rental date ----> Returned on time

rental duration < diff b/w return date & rental date ----> Returned late

Criteria for calculating return status

In case where return date is not available:

rental duration > diff b/w last update & rental date ----> In transit

rental duration < diff b/w last update & rental date ----> Bad return

DVD Rental Return

Return Status	
Returned late	7,269
Returned early	6,864
Returned on time	1,728
In transit	182
Bad returns	1

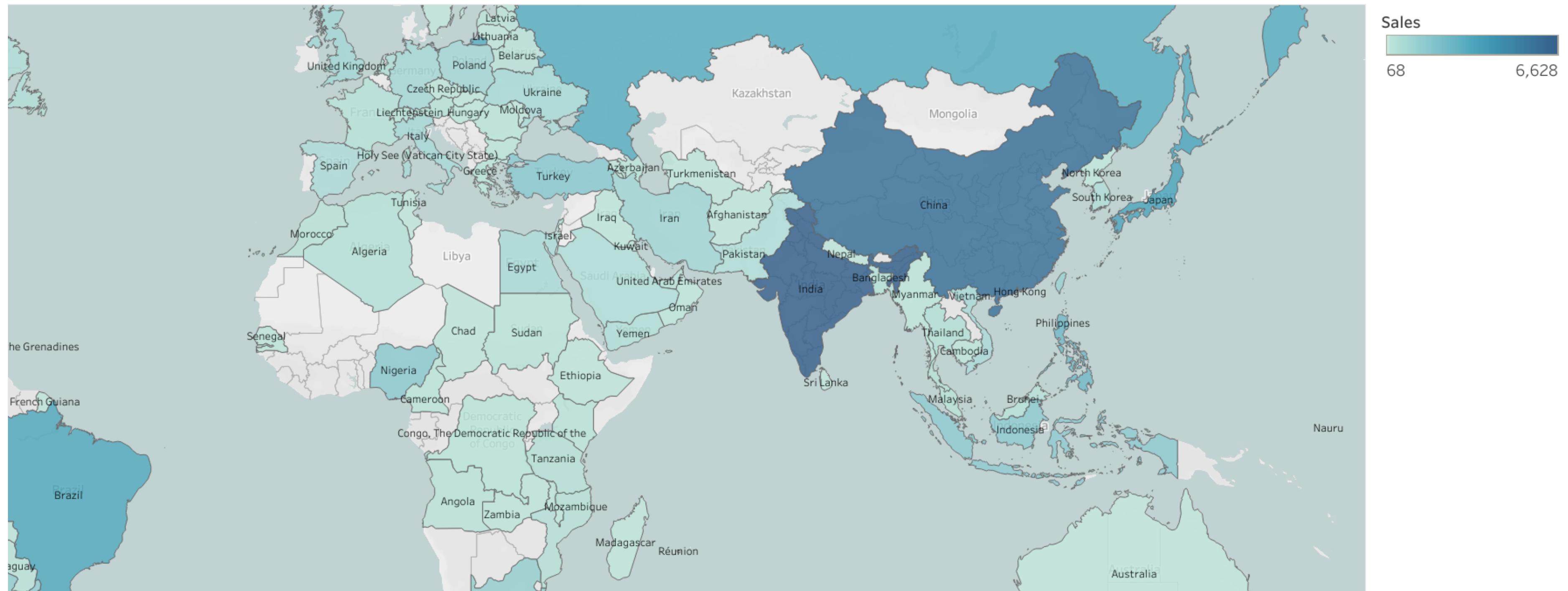
DVD Return Rate

Return Status	
Returned late	45.31%
Returned early	42.78%
Returned on time	10.77%
In transit	1.13%
Bad returns	0.01%



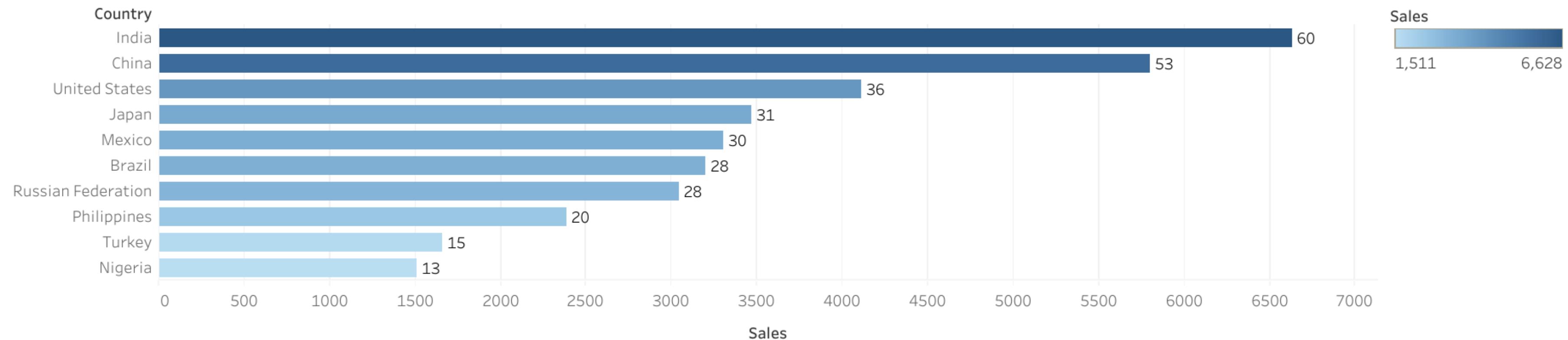
**In which countries Sakila
DVD gives rental
services. What are the
total sales and clientele
in each country?**

Total Sales (Country-wise)



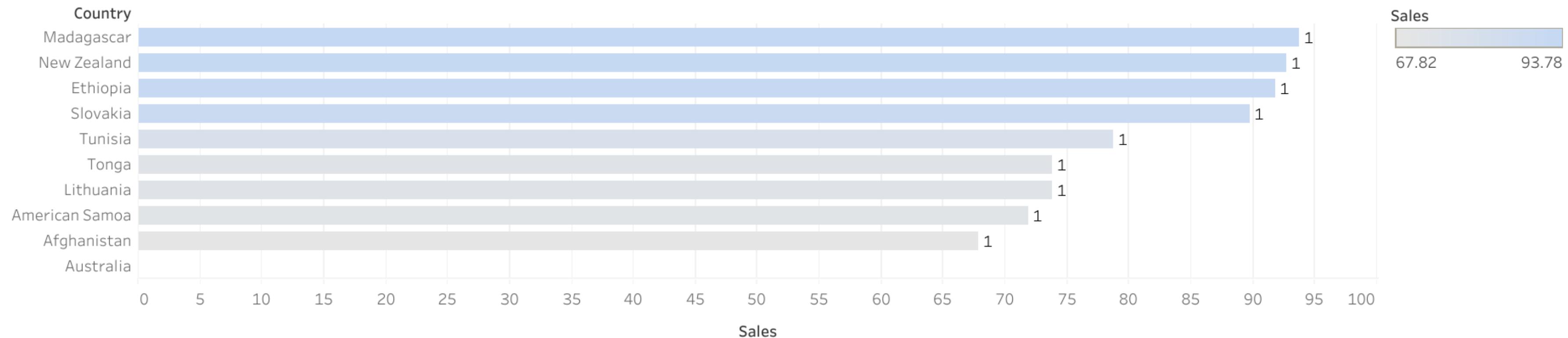
Country VS Sales & Clientele

Top 10 Countries



Country VS Sales & Clientele

Bottom 10 Countries

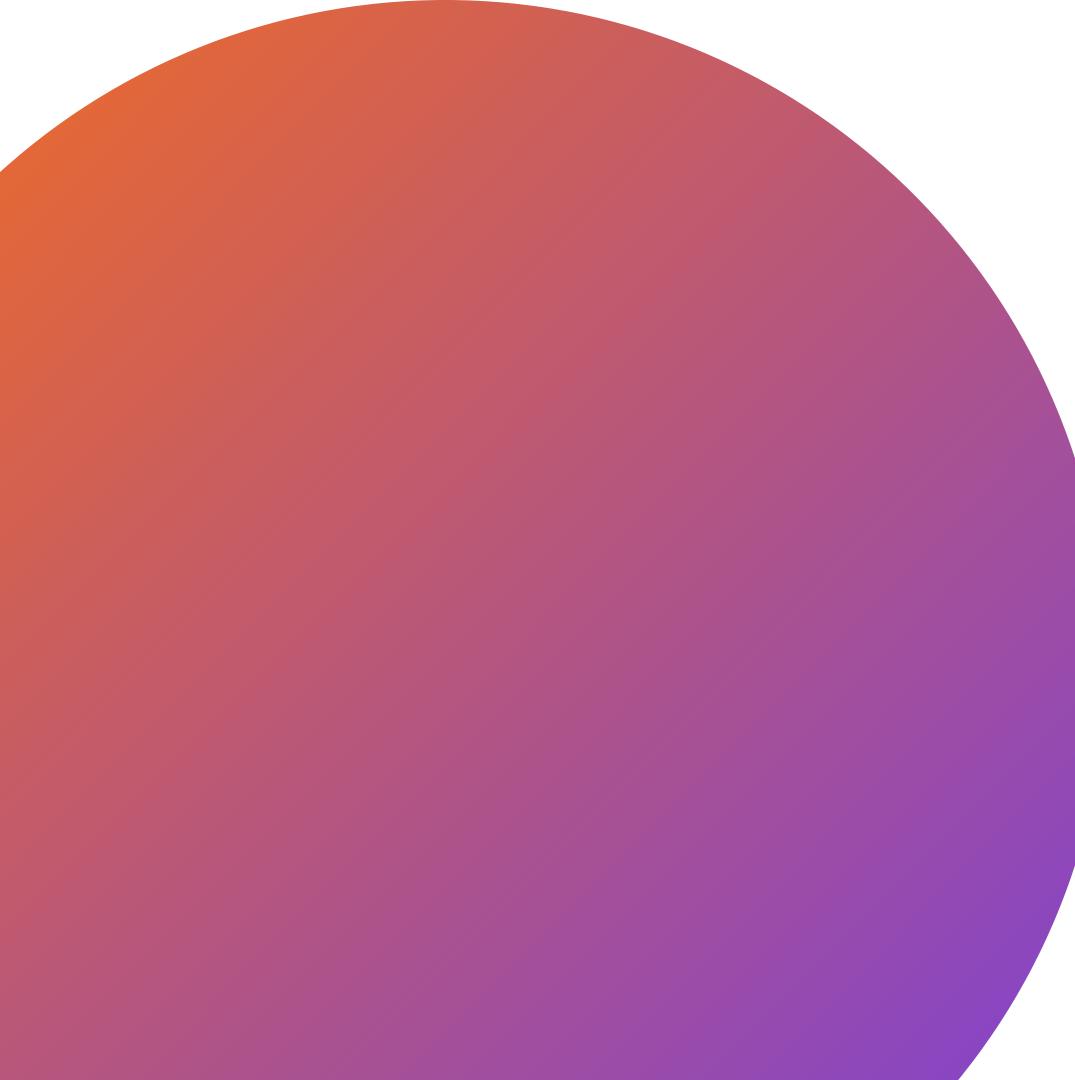




Customer Analysis

Loyal customers:

Customers who have a higher total spending history are more likely to be loyal.



**Who are the Top 3
customers per total
sales?**

Top 3 Customer Details

		Purchases
1	KARL +214756839122 KARL.SEAL@sakilacustomer.org Cape Coral United States 221.55	 195.58 221.55
2	ELEANOR +354615066969 ELEANOR.HUNT@sakilacustomer.org Saint-Denis Réunion 216.54	
3	CLARA +563660187896 CLARA.SHAW@sakilacustomer.org Molodetšno Belarus 195.58	



STUDIO SHODWE

Thank You

SLIDE PRESENTATIONS DESIGN