OPERATION ANALYTICS AND INVESTIGATING METRIC SPIKE

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CONTENTS

PROJECT DESCRIPTION

- The objective of todays project is divided in two case study one about the job data and the other about the Investigating metric spike
- The former case study consists data about the actor details such as Id, Organization, language of work etc. In this case study we find out about the percentage share of the language, duplicate rows and jobs reviewed.
- The latter case study consists data about the users various activites being done on the social media. Using the data finding out performance of the company considering factors of user engagement, user growth, Retention of the customers etc.

APPROACH

For this project I have used MySQL to perform queries and extract the required data from a larger set of the data about the social media activites using the advance sql functions such as core window function, views, subqueries and also used excel to create tables and charts for the project.

I have used Power point presentation to create the solution for the required queries raised by the department.

Tech-Stack Used

- MySQL -

1. Version used MySQL Workbench 8.0.32
2. Used SQL to create database, To run queries and extracted the data raised by the department.

- Microsoft power point -

1. Used to create presentation to make it look attractive.

- Microsoft Excel

1. Used to create charts and pivot tables.

RESULTS

In this section we will be going to discuss about the outcomes of the project. Using the data given by the team and the required answers to be showcased for the desired concerns raised by the team.

CASE STUDY 1

1. Number of jobs reviewed :

To calculate this number we use operation of mathematics. We count the total number of jobs reviewed and divide it by the total time period.

Number of jobs reviewed per hour per day
0.0111

2.Throughput

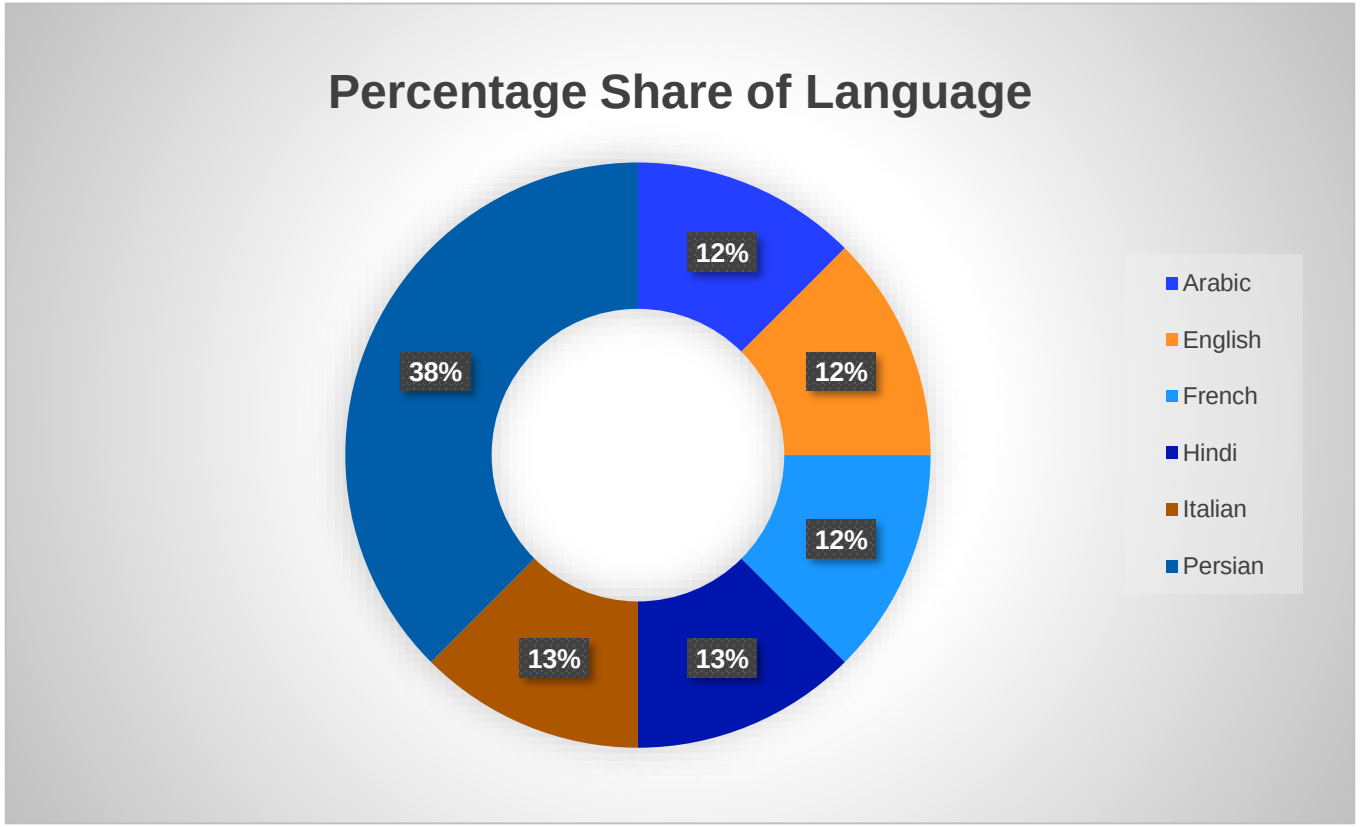
The 7 day rolling average of the throughput is

DATE	EVENTS	ROLLING AVERAGE
2020-11-25	1	1.0000
2020-11-26	1	1.0000
2020-11-27	1	1.0000
2020-11-28	2	1.2500
2020-11-29	1	1.2000
2020-11-30	2	1.3333

The choice between a daily metric and 7 day rolling depends on the specific need. The former deals with throughput for that particular day, which is used for short term performance. Where as the latter provides complete picture of short term and long terms performance

3. LANGUAGE SHARE

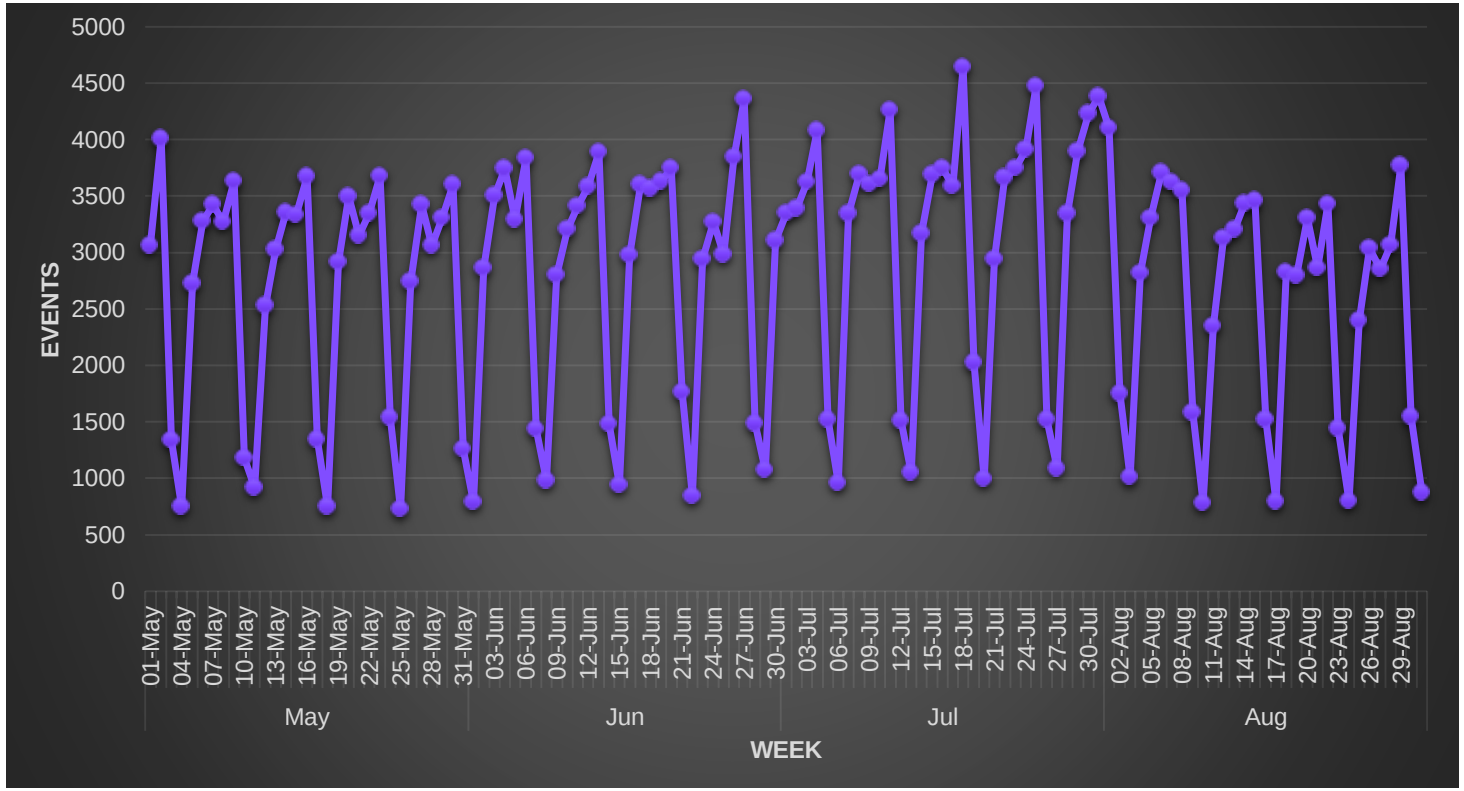
To calculate the percentage share of each language across 30 days.



CASE STUDY 2

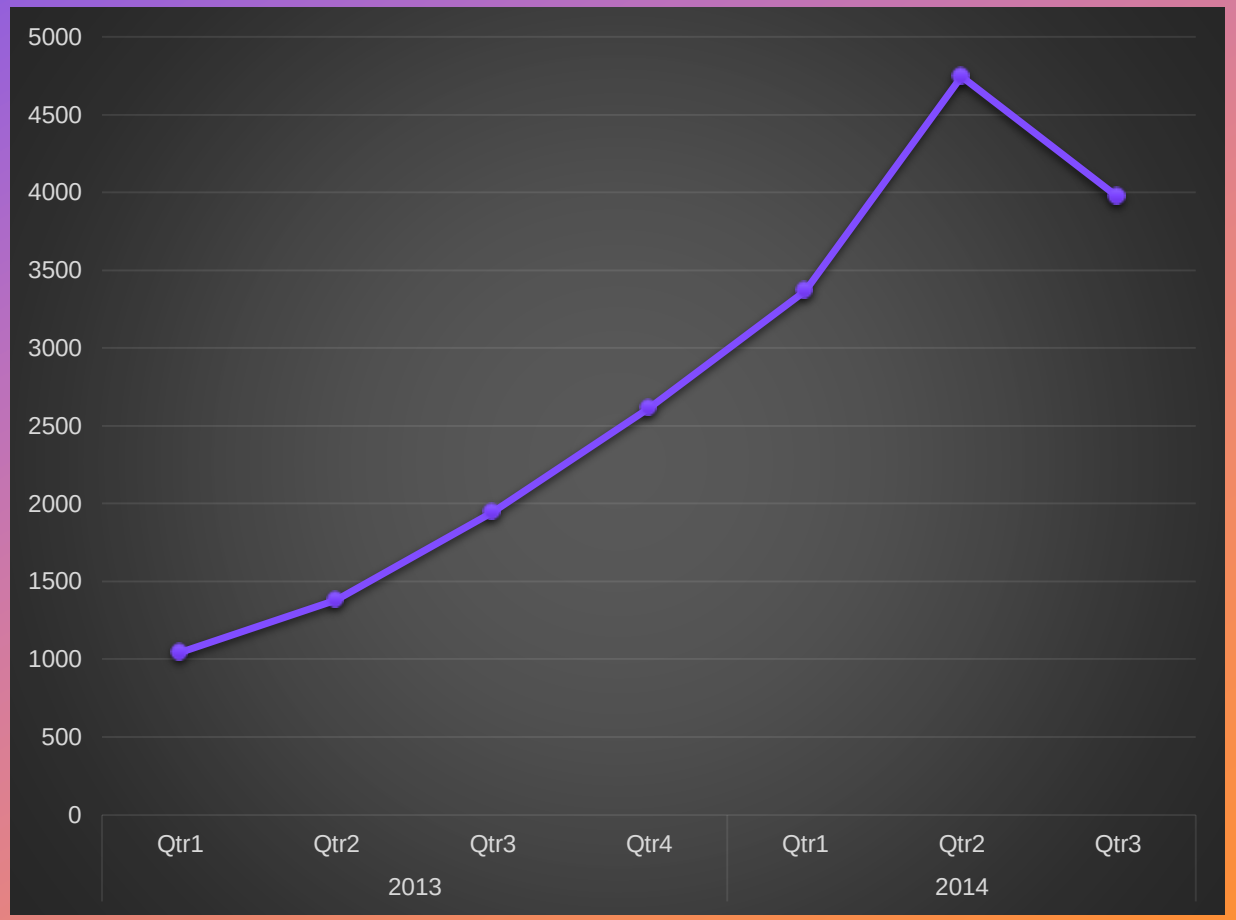
1.USER ENGAGEMENT

The following charts shows the weekly user engagement with y-axis showing total events and x-axis showing weeks



2. USER GROWTH

The following chart shows us about the user growth from 2013 to 2014. x-axis showing the timeperiod quarterly and y-axis showing the no of users



3. Weekly retention

This used to check if the users are coming back to the platform after signing back. We separate the data with user how completed the sign-up process and then join the events table with engagement and count the instances of activites.

Link - https://drive.google.com/file/d/1aLBMy2fy_062M1zu-cJI8uMUFx_LdYTj/view?usp=sharing

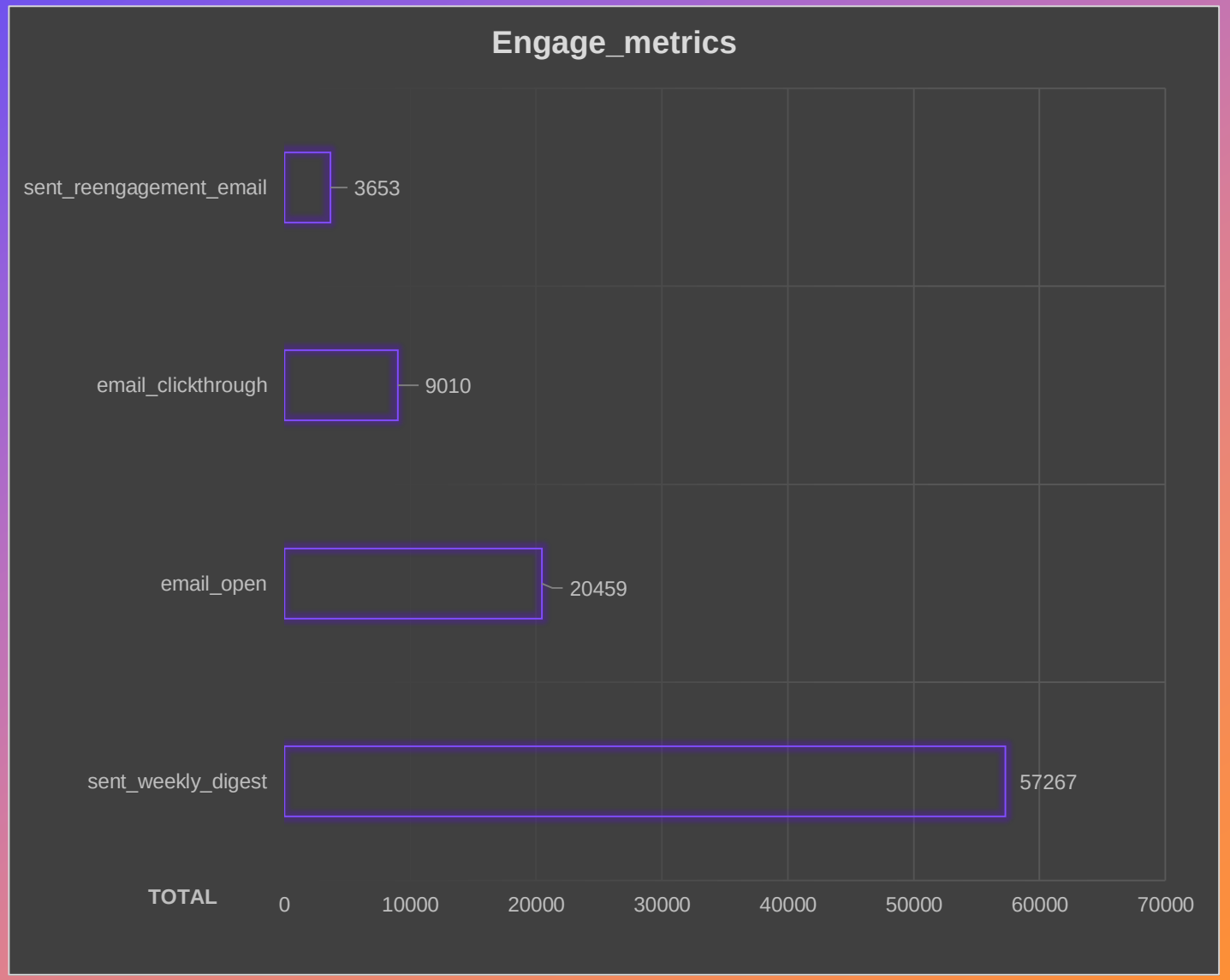
4. Weekly Engagement

We extract the week details from the table and then extract the engagement using where clause and then by we group by device.
The following link shows us the weekly engagement per device

Link – https://drive.google.com/file/d/1ybQThMx8CMQ6-yQoNB1IwZp0_RU9Qt9T/view?usp=share_link

5. Email Engagement

The given bar chart shows us the various email services used by the account holders in the given time period



THANK YOU