## **REPORT**

# **User Engagement Analysis for Instagram**

#### Introduction:

Instagram is one of the world's leading social media platforms, boasting millions of active users worldwide. Understanding how users engage with the platform is crucial for driving growth and enhancing user experience. This report delves into user behavior and engagement metrics to provide actionable insights for the product team.

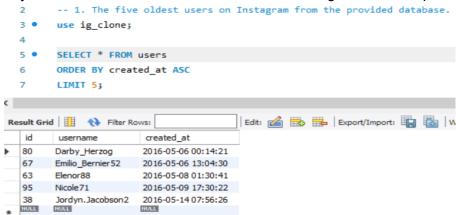
## **Analysis:**

It is based on two factors:

- A. Market analysis
- B. Investor matrices

#### Market Analysis:

1. Loyal user rewards: The five oldest users on Instagram from the provided database



2. Inactive user engagement: There are a total of 14 users who have never posted a single photo

```
photo
             -- 2. Identify users who have never posted a single photo on Instagram.
     9
             SELECT photos.user_id,photos.image_url,users.id,users.username
             from users
   11
             left join photos on photos.user id=users.id
   12
              where photos.user id is null ;
    13
    14
                                                     Export: Wrap Cell Content: TA
    esult Grid 🔢 🚷 Filter Rows:
      user id
               image_url
                           id
                                  username
     NULL
              NULL
                                 Aniya_Hackett
     NULL
              NULL
                          7
                                 Kasandra_Homenick
     NULL
              NULL
                          14
                                 Jadyn81
     NULL
              NULL
                          21
                                 Rocio33
     NULL
              NULL
                          24
                                 Maxwell.Halvorson
     NULL
              NULL
                          25
                                 Tierra.Trantow
     NULL
              NULL
                          34
                                 Pearl7
     NULL
              NULL
                          36
                                 Ollie_Ledner37
     NULL
              NULL
                                 Mckenna 17
                          41
3. Contest winner declaration:
             -- 3. Determine the winner(most like on single photo) of the contest and provide their details to the team.
      15
      16 •
             SELECT users.username, photos.image_url, COUNT(likes.user_id) AS total_likes
      17
             FROM users
             JOIN photos ON users.id = photos.user_id
      18
      19
             JOIN likes ON photos.id = likes.photo_id
             GROUP BY users.username, photos.image_url
      20
             ORDER BY total_likes DESC
      21
      22
             LIMIT 1;
```

Export: Wrap Cell Content: TA Fetch rows:

Result Grid

username

Zack\_Kemmer93

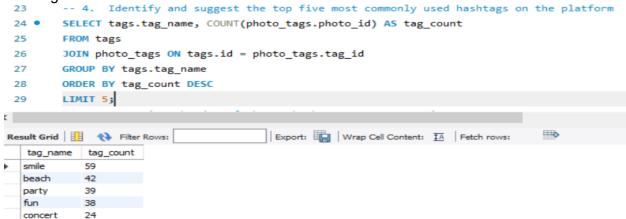
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image\_url

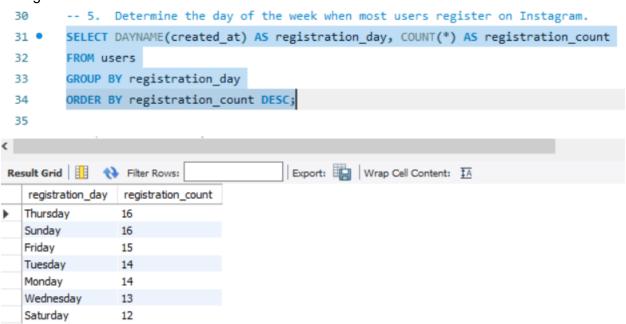
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total\_likes

4. Hashtag Research:

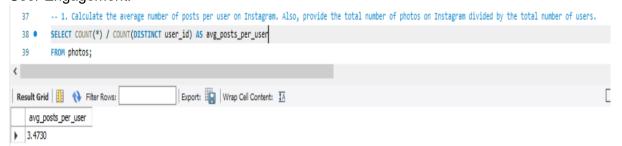


5. Ad Campaign Launch: Thursday and Sunday of the week when most users register on Instagram

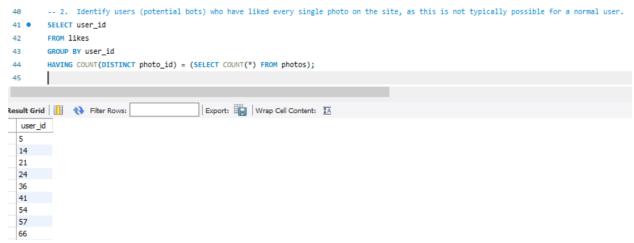


#### Investor metrics:

1. User Engagement:



2. Bots and Fakes Account: There are a total of 18 user-id, who look like bots.



\*All analyses are based on given data

### **Software and Versions Used:**

MySQL Workbench (Version 8.0.32): MySQL Workbench was chosen as the primary tool for data analysis due to its robust features for SQL development. Its user-friendly interface and powerful query capabilities made it well-suited for extracting and analyzing data from the Instagram database.

## **Summary:**

This report presents insights from an analysis of user engagement on Instagram, using MySQL Workbench (Version 8.0.32) for data analysis. Key findings include

- User Activity: Peak engagement occurs mainly on Sunday and Thursday.
- Inactive user engagement: There are a total of 14 users who have never posted a single photo.
- Hashtag Usage: Popular hashtags reflect emerging trends and user interests. "Smile" is the most useable hashtag in all of them.
- Contest winner declaration: The team has organized a contest where the user with the most likes on a single photo and the winner of the contest user name is Zack Kammer93.
- The average number of posts per user on Instagram is 3.470
- There are total of **18** user-id, who look like bots.

#### **Recommendations:**

- Content Strategy: Prioritize visually appealing and relatable content.
- Engagement Tactics: Implement interactive features to boost community engagement.
- User Acquisition: Forge partnerships with influencers for audience expansion.

•	Platform Enhancements: Continuously improve user experience and algorithmic recommendations.	