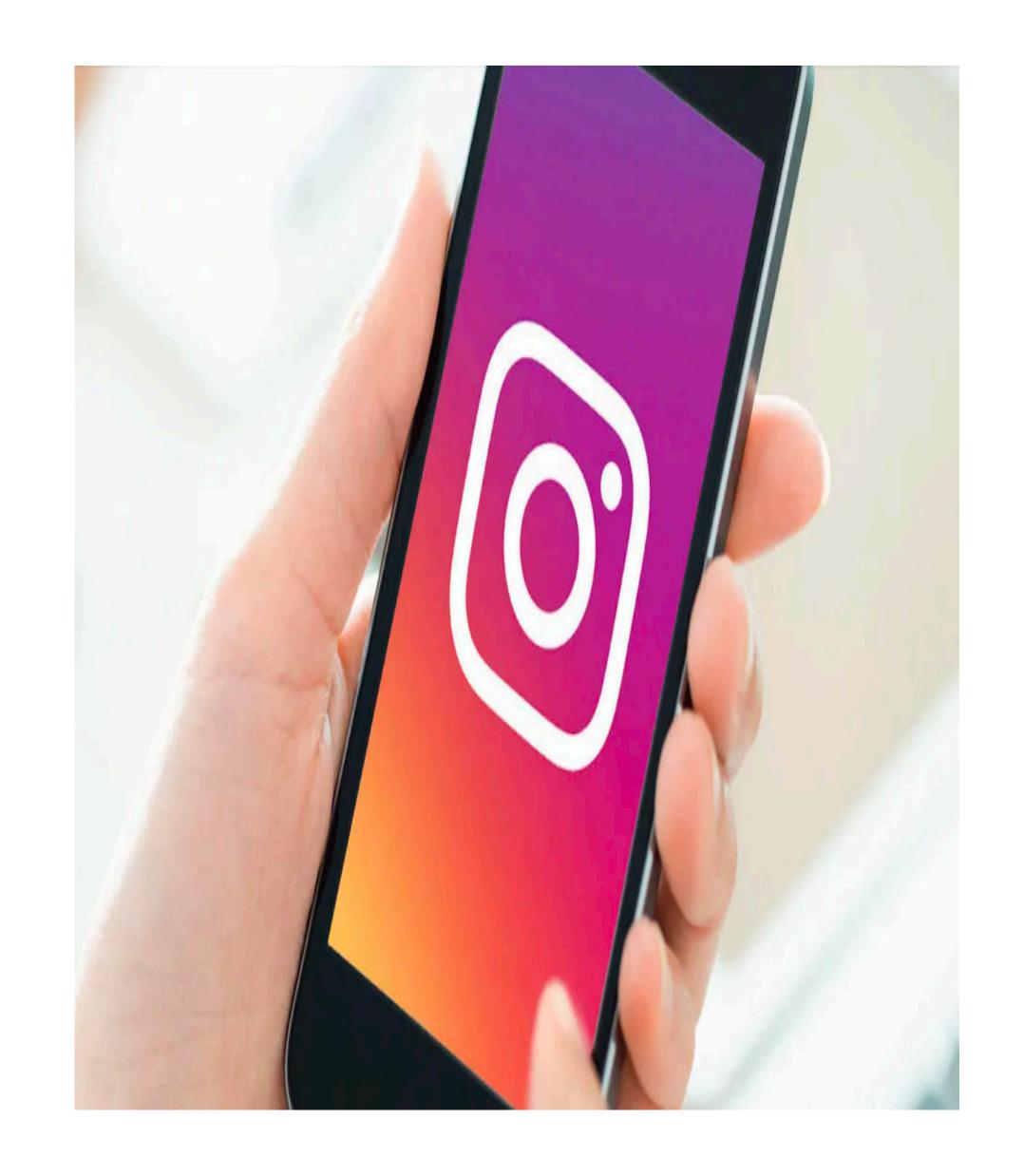# INSTAGRAM USER ANALYTICS

A PROJECT BY SHOAIB KHAN UNDER TRAINITY

PROJECT DESCRIPTION

Description:
We track how users engage and interact with INSTAGRAM to derive business insights for marketing, product & development teams.

I have been provided with a dataset and have to provide insights on the following -
A) **Marketing:** The marketing team wants to launch some campaigns, and they need insights on
   - **Rewarding Most Loyal Users**
- **Remind Inactive Users to Start Posting**
- **Declaring Contest Winner:** The team started a contest and the user who gets the most likes on a single photo will win the contest now they wish to declare the winner.

- **Hashtag Researching:** A partner brand wants to know, which hashtags to use in the post to reach the most people on the platform.

- **Launch AD Campaign:** The team wants to know, which day would be the best day to launch ADs.

B) Investor Metrics: Our investors want to know if Instagram is performing well and is not becoming redundant like Facebook, they want to assess the app on the following grounds

- **User Engagement:** Are users still active and posting on Instagram or they are making fewer posts?

- **Bots & Fake Accounts:** The investors want to know if the platform is crowded with fake and dummy accounts.

APPROACH

- **Rewarding Most Loyal Users:** People who have been using the platform for the longest time.
  So we will Find the 5 oldest users of Instagram from the database provided.
- **Remind Inactive Users to Start Posting:** By sending them promotional emails to post their 1st photo.
  So we will Find the users who have never posted a single photo on Instagram
- **Declaring Contest Winner:** The team started a contest and the user who gets the most likes on a single photo will win the contest now they wish to declare the winner.
  So we will Identify the winner of the contest and provide their details to the team
- **Hashtag Researching:** A partner brand wants to know, which hashtags to use in the post to reach the most people on the platform.
  So we will Identify and suggest the top 5 most commonly used hashtags on the platform
- **Launch AD Campaign:** The team wants to know, which day would be the best day to launch ADs.
  So we will find What day of the week most users register on to Provide insights on when to schedule an ad campaign

- **User Engagement:** Are users still as active and post on Instagram or they are making fewer posts
  So we will Provide how many times does average user posts on Instagram.
- **Bots & Fake Accounts:** The investors want to know if the platform is crowded with fake and dummy accounts
  So we will Provide data on users (bots) who have liked every single photo on the site (since any normal user would not be able to do this).

TECH-STACK USED

- MySQL Server(8.0.33-arm64)

- MySQL Workbench(8.0.28.CE)

Purpose -

Instagram has a huge dataset and managing them with MS Excel or Manually is very difficult so I preferred to use MySQL as it can handle data with commands, manage multiple tables and connect them,easy to use,etc

INSIGHTS

TOP 5 OLDEST USERS

id	username	created_at
▶ 80	Darby_Herzog	2016-05-06 00:14:21
67	Emilio_Bernier52	2016-05-06 13:04:30
63	Elenor88	2016-05-08 01:30:41
95	Nicole71	2016-05-09 17:30:22
38	Jordyn.Jacobson2	2016-05-14 07:56:26

People with 0 posts

user_id	username
▶ 5	Aniya_Hackett
7	Kasandra_Homenick
14	Jaclyn81
21	Rocio33
24	Maxwell.Halvorson
25	Tierra.Trantow
34	Pearl7
36	Ollie_Ledner37
41	Mckenna17
45	David.Osinski47
49	Morgan.Kassulke
53	Linnea59
54	Duane60
57	Julien_Schmidt
66	Mike.Auer39
68	Franco_Keebler64
71	Nia_Haag
74	Hulda.Macejkovic
75	Leslie67
76	Janelle.Nikolaus81
80	Darby_Herzog
81	Esther.Zulauf61
83	Bartholome.Bernhard
89	Jessyca_West
90	Esmeralda.Mraz57
91	Bethany20

PHOTO WITH ID NO. 145 GOT Max likes
and it belongs to user id 52 who is username:Zack_Kemmer93

LIKES	photo_id
► 48	145
43	127
43	182
42	123
41	30
41	52
41	61
41	147
41	174
41	192
41	256
40	13
40	97
40	153
40	161
40	244
39	44
39	62

Top 5 most used HashTags

tag_id	tag_name	Total_use
► 21	smile	59
20	beach	42
17	party	39
13	fun	38
18	concert	24

MOST REGISTRATIONS OCCUR ON THURSDAY AND SUNDAY

WEEK_DAY	Total_Registered
3	16
6	16
4	15
1	14
0	14
2	13
5	12

TOTAL NO. OF PHOTOS = 257
TOTAL NO. OF USERS = 100
TOTAL NO. OF PHOTOS/TOTAL NO. OF USERS = 2.57 = Average no. of posts by a user

USER ID OF USERS WHO HAVE LIKED ALL 257 PHOTOS -

user_id	TOTAL_LIKES
5	257
14	257
21	257
24	257
36	257
41	257
54	257
57	257
66	257
71	257
75	257
76	257
91	257

RESULT

THROUGH THE PROJECT WE -

- We learnt how much data analysis is important for an organisation.

- Took meaningful insights from a huge dataset

- Learn how to analyse simultaneously many tables at a time