Project Description

The project's description reads, "Instagram User Analysis." To gather business insights for the marketing, product, and development teams, we track how consumers connect with and interact with our digital product (software or mobile application). Teams from throughout the company utilize this information to develop new marketing campaigns, choose which features to include in apps, gauge the performance of the apps by looking at user interaction, and generally improve the user experience while assisting in business expansion.

I am going to conduct some research using MySQL Workbench to provide accurate insights that will aid in the expansion of Instagram.

I will learn the following information throughout this process:

1. Find the 5 oldest users of the Instagram from the database provided
2. Find the users who have never posted a single photo on Instagram
3. Identify the winner of the contest and provide their details to the team
4. Identify and suggest the top 5 most commonly used hashtags on the platform
5. What day of the week do most users register on? Provide insights on when to schedule an ad campaign
6. Provide how many times does average user posts on Instagram. Also, provide the total number of photos on Instagram/total number of users
7. 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).

Approach

As I mentioned earlier, I am working on a MySQL Workbench project. I am going to start by setting up a database on MySQL Server for my analysis in order to proceed. This data is then analyzed by running the query in order to gain a thorough understanding of what is going on.

In order to determine what kind of material is connecting with your audience, I use a metrics-based approach to such initiatives, looking at engagement indicators like likes, comments, tags and posts. As part of my analysis, I may also look at your follower demographics in order to identify your target audience and modify your material in order to better reflect their preferences.

Tech-Stack Used

I am using MySQL 8.0.33. Businesses may improve their operations, make better choices, and get a competitive edge in their industries by adopting MySQL 8.0.33 for analysis. There are following benefits for using MySQL 8.0.33:

1. **Enhanced efficiency:** In comparison to older versions, MySQL 8.0.33 delivers considerable speed enhancements, making it quicker and more effective for analyzing huge datasets.
2. **Enhanced security:** With its increased encryption and password management capabilities, MySQL 8.0.33 is more secure for storing and processing sensitive data.

3. **Increased scalability:** since of its enhanced scalability capabilities, MySQL 8.0.33 is the best option for data analysis since it can manage huge datasets and support rising data volumes.
4. **Advanced analytics:** It is simpler to do difficult analytical jobs using MySQL 8.0.33's advanced analytics features, which include support for window functions, Common Table Expressions (CTEs), and JSON capability.
5. **Simple fusion:** Due to its popularity and thorough documentation, MySQL 8.0.33 is simple to interface with other platforms and tools for data analysis, like Tableau and R.

Insights

1. Five oldest users of the Instagram:

1. Five oldest users of the Instagram: Username	Date
Darby Herzog	2016-05-06 00:14:21
Emilio_Bernier52	2016-05-06 13:04:30
Elenor88	2016-05-08 01:30:41
Nicole71	2016-05-09 17:30:22
Jordyn.Jacobson2	2016-05-14 07:56:26

Observation: Observing the five oldest Instagram users reveals user loyalty.

2. Users who have never posted a single photo on Instagram:

1. Aniya Hackett
2. Kasandra Homenick
3. Jaclyn81
4. Rocio33
5. Maxwell.Halvorson
6. Tierra.Trantow
7. Pearl7
8. Ollie_Ledner37
9. Mckenna17
10. David.Osinski47
11. Morgan.Kassulke
12. Linnea59
13. Duane60
14. Julien_Schmidt
15. Mike.Auer39
16. Franco_Keebler64

17. Nia_Haag
18. Hulda.Macejkovic
19. Leslie67
20. Janelle.Nikolaus81
21. Darby_Herzog
22. Esther.Zulauf61
23. Bartholome.Bernhard
24. Jessyca_West
25. Esmeralda.Mraz57
26. Bethany20

Observation: This is a list of users who have never posted any photos on Instagram. Therefore, we can say that they are not active users of Instagram.

3. Winner of the contest and provide their details to the team

Username	id	Image_url	Total Likes
Zack_Kemmer93	145	https://jarret.name	48

Observation: Zack_Kemmer93 won the contest and gets more likes than others get. So we can say that he is a more popular and active user as compared to others.

4. Top five most commonly used hashtags on the platform

Tag name	Used Number
smile	59
beach	42
party	39
fun	38
concert	24

Observation:

Smile is a hashtag that is frequently used to express happiness, positivism, and positive feelings. It is frequently used in postings that feature pleasant or smiling persons or events. It is frequently used in articles on self-care and mental wellness.

Beach: This hashtag is related to summer, travel, and leisure. It is frequently used in postings that include pictures or videos of individuals enjoying the beach, whether alone, with companions, or participating in beach sports like surfing or swimming.

Party is a hashtag that is used to describe parties, nightlife, and socializing. It is frequently used in articles on birthdays, marriages, and other important events. Additionally, it is frequently used in articles about concerts and music.

Fun: This hashtag is related to having fun, relaxing, and being entertained. It is frequently used in articles on sports, hobbies, and outdoor activities. It is frequently used in articles about travelling and discovering new areas.

Concert: This hashtag is related to live entertainment, music, and performances. It is frequently employed in articles about going to concerts or music festivals. Additionally, it is frequently used in posts about musicians and artists, such as those about new albums and upcoming tours.

5. Day of the week do most users register on/ Provide insights on when to schedule an ad campaign

Day_of_week	Num_registrations
Thursday	16
Sunday	16

Observation: There are two weekdays (Thursday and Sunday) that have a large number of registrations. Therefore, we can **schedule an ad campaign** in those two days because here the number of users is higher than on any other weekday.

6. Provide how many times does average user posts on Instagram. Also, provide the total number of photos on Instagram/total number of users

Average user posts	Total Number of users	Total Number of photos
2.57	100	257

Observation: Here we find the total number of users and the total number of photos uploaded by users.

7. 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).

Id	Username	Total Likes
5	Aniya Hackett	257
14	Jaclyn81	257
21	Rocio33	257
24	Maxwell.Halvorson	257
36	Ollie_Ledner37	257
41	Mckenna17	257
54	Duane60	257
57	Julien Schmidt	257
66	Mike.Auer39	257
71	Nia_Haag	257
75	Leslie67	257
76	Janelle.Nikolaus81	257
91	Bethany20	257

Observation: This is a list of users who have liked all the photos, so we can say that they are all active users.

Result

1. Observing the five oldest Instagram users, which help me for to understand the royal users

2. In our second observation, we found out about users who have never posted a photo, so we can reach out to those users so that they also engage in Instagram.

3. Zack_Kemmer93 user is more active, so we can give some offers so that more users engage on Instagram and continue to take offers from Instagram.

4. The fourth conclusion is that we found out the top hashtags, which help users engage with them to gain more reach.

5. In our fifth observation, we found out two days that had a higher number of registrations so that we could schedule an ad campaign.

6. We got average user posts (2.57), which helped me increase the number of posts.

7. In our seventh observation, we found the list of users who have liked every single photo, which shows that all those users are more active on Instagram, so we can focus on all those users to increase engagement on Instagram and give some offers.