

Project Description

User analysis is the process by which we track how users engage and interact with our digital product in an attempt to derive business insights for marketing, product & development teams.

These insights are then used by teams across the business to launch a new marketing campaign, decide on features to build for an app, track the success of the app by measuring user engagement and improve the experience altogether while helping the business grow.

Approach

The approach to Instagram user analytics typically involves collecting and analyzing data on the user's activity and engagement on the platform.

This includes metrics such as number of followers, post engagement , audience demographics and more.

This information can then be used to better understand the user's audience, identify trends and patterns in their behavior, and inform decisions about content creation and marketing strategies.

Tech-Stack Used

MySQL Workbench-

Version - 8.0.32

MySQL is a popular open-source relational database management system. The purpose of using MySQL is to store, organize, and manage large amounts of data efficiently and effectively.

A) Marketing

Insights-

Rewarding Most Loyal Users:

People who have been using the platform for the longest time.
We have to find the 5 oldest users of the Instagram from the database provided

Result-

85 • `SELECT * FROM users ORDER BY created_at limit 5;`

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Fetch rows:

	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
•	total	total	total

Insights

We have to Remind Inactive Users to Start Posting By sending them promotional emails to post their 1st photo.
We have to find the users who have never posted a single photo on Instagram

results-

84

85 • `SELECT * FROM users left join photos on user_id = photos.user_id where image_url is Null;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	id	username	created_at	id	image_url	user_id	created_dat
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Insights

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.

Identify the winner of the contest and provide their details to the team

Result-

```
84 • select users.id, username, likes.photo_id, count(likes.user_id) as Most_likes From users
85 join photos on photos.user_id = users.id
86 join likes on photos.id = likes.photo_id
87 group by photo_id order by count(user_id) DESC limit 1;
88
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

	id	username	photo_id	Most_likes
▶	52	Zack_Kemmer93	145	48

Insights

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

Identify and suggest the top 5 most commonly used hashtags on the platform

results-

```
89 • SELECT TAGS.ID,TAGS.TAG_NAME,COUNT(TAG_ID) FROM tags
90 JOIN PHOTO_TAGS
91 ON TAGS.ID = PHOTO_TAGS.TAG_ID
92 GROUP BY TAG_ID
93 ORDER BY COUNT(TAG_ID) DESC
94 Limit 5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

ID	TAG_NAME	COUNT(TAG_ID)
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Insights

We have to Launch AD Campaign

The team wants to know, which day would be the best day to launch ADs.

What day of the week do most users register on

results-

```
89 • select DAYNAME(created_at), count(*) from users
90 group by DAYNAME(created_at) order by count(*) desc;
```

DAYNAME(created_at)	count(*)
Thursday	16
Sunday	16
Friday	15
Tuesday	14
Monday	14
Wednesday	13

B) Investor Metrics:

Insights

1. User Engagement: Are users still as active and post on Instagram or they are making fewer posts

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

```
89 • select avg(cnt) as average from (select user_id, count(*) as cnt from photos group by user_id order by cnt desc) sub
```

average
10.4189

```
91 • select count(id) from photos
```

count(id)
771

```
90
91 • select count(id) from photos;
92 • select count(id) from users;
```

count(id)
100

Insights

Bots & Fake Accounts-

The investors want to know if the platform is crowded with fake and dummy accounts

Provide data on users (bots) who have liked every single photo on the site.

Results-

```
90 • select username as Bots, count(*) as photos_likes from likes
91 inner join users on users.id = user_id group by user_id
92 having photos_likes = max(photo_id);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	Bots	photos_likes
	Aniya_Hackett	257
	Jaclyn81	257
	Rocio33	257
	Maxwell.Halvorson	257
	Ollie_Ledner37	257
	Mckenna17	257