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Overview

- ❖ Now a days, Instagram is the most used social media platform across the world.
- ❖ In these days, Analytics can help us get insight about peoples usage of this platform.
- ❖ This Insights can help the authorities or organizations to make various decision. It can also help to identify how people using the platform, is it a successful project or not? Measure user engagement and improve the experience altogether while helping the platform to grow



Approach

- ❖ **The main objective behind the project is to identify and provide solutions related to this platform.**
- ❖ **This projects uses the SQL and excel analytics to provide better solutions.**



Marketing Insight

**REWARDING MOST
LOYAL USERS**

Find the 5 oldest users of the Instagram from the database provided

**REMIND INACTIVE
USERS TO START
POSTING**

Find the users who have never posted a single photo on Instagram

**DECLARING
CONTEST WINNER**

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

**HASHTAG
RESEARCHING**

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

**LAUNCH AD
CAMPAIGN**

**What day of the week do most users register on?
Provide insights on when to schedule an ad campaign**

Rewarding Most Loyal User

- In this days, the number of people that uses this kind of platform is quite huge. So to make a platform sustainable, the platform itself should acknowledge old user cause this users are the most loyal through their entire journey.
- The platform should show their application towards these user for staying with them for this long journey. Because these are the people that encouraged this platform through their ups and down.

Finding The Most Loyal User:-

```
SELECT * FROM users  
ORDER BY created_at ASC  
LIMIT 5;
```

	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
*	NULL	NULL	NULL

Reminding Inactive User To Start Posting

- ❖ As we know there are 500million daily active user on Instagram. And there are multiple user who registers and becomes inactive. Instagram should notify these inactive users by email or notification to become active.
- ❖ One way to identify these kind inactive user is by checking the number of post they made since creating the account.

Query To Find Inactive Accounts With No Post

```
SELECT username  
FROM users  
LEFT JOIN photos ON users.id = photos.user_id  
WHERE photos.id IS NULL
```

	username
▶	Aniya_Hackett
	Kasandra_Homenick
	Jadyn81
	Rocio33
	Maxwell.Halvorson
	Tierra.Trantow
	Pearl7
	Ollie_Ledner37
	Mckenna17
	David.Osinski47
	Morgan.Kassulke
	Linnea59
	Duane60
	Julien_Schmidt
	Mike.Auer39
	Franco_Keebler64
	Nia_Haag
	Hulda.Macejkovic
	Leslie67

	Janelle.Nikolaus81
	Darby_Herzog
	Esther.Zulauf61
	Bartholome.Bernhard
	Jessyca_West
	Esmeralda.Mraz57
	Bethany20

Declaring Contest Winner

- ❖ As we can see now days there are multiple trends running on Instagram. These kind of trends helps people to know about the platform.
- ❖ These kind of trends and contests helps to understand people's taste, what they are liking and disliking ,What to watch and what not to. These helps the Instagram algorithm develop for every individual.

Identifying The Winner Of Contest With The Most Likes:-

	username	id	image_url	total
▶	Zack_Kemmer93	145	https://jarret.name	48

```
SELECT username,  
photos.id,  
photos.image_url,  
COUNT(*) AS total  
FROM photos
```

```
INNER JOIN likes  
  ON likes.photo_id = photos.id  
INNER JOIN users  
  ON photos.user_id = users.id  
GROUP BY photos.id  
ORDER BY total DESC  
LIMIT 1;
```

Hashtag Researching

- ❑ Hashtags are used to identify and connect posts with trends. This Hashtags helps peoples discover posts of people.
- ❑ Trendy Hashtags also boosts the reach of posts for the masses.

Identifying The Top 5 Most Used Hashtags:-

```
SELECT tags.tag_name,  
       Count(*) AS total  
FROM   photo_tags  
       JOIN tags  
       ON photo_tags.tag_id =  
tags.id
```

```
GROUP BY tags.id  
ORDER BY total  
DESC  
LIMIT 5;
```

	tag_name	total
▶	smile	59
	beach	42
	party	39
	fun	38
	concert	24

Launching Ad Campaign

- ❖ Ad Campaign is the most effective way to market any product to a larger scale of audience.
- ❖ Ad campaign helps the growth of a product and helps in the overall marketing of the products. So by understanding the day, people are most active, It can help make the campaign a success.

Most Popular Registration Days:-

```
SELECT DAYNAME(created_at)
AS day,
      COUNT(*) AS total
FROM users
GROUP BY day
ORDER BY total DESC
LIMIT 3;
```

	day	total
▶	Thursday	16
	Sunday	16
	Friday	15

- From the result, we can see that the most of the users are registered on **Thursday** and **Sunday**. So, the campaign is suggests us to schedule the campaign on these two fays.

The background of the slide is a complex, swirling pattern of teal and black, resembling marbled paper or liquid in motion. The pattern consists of numerous concentric and intersecting swirls, creating a sense of depth and movement. The colors range from a vibrant, light teal to a deep, almost black teal, with the black appearing in the shadows of the swirls.

Investors Metrics Insight

User Engagement

- ❖ **The success of any projects depends on Investors and the revenue generated from the project. Sometime Investors request the data of revenue and the analytics to ensure their investment is in right project.**
- ❖ **So to check their revenue and return on the investment. The data about the activeness of the platform is required.**

Finding average user posts on Instagram:-

```
SELECT (SELECT Count(*)  
FROM photos) / (SELECT Count(*)  
FROM users) AS avg;
```

	avg
▶	2.5700

From The Result We Can see That Instagram Accounts Has 2.57 Photos Per User.

Bots and Fake Account

- ❑ Now a days, Many peoples uses the Instagram Bot services to boost the reach a of their account. As we know the Instagram's algorithm pushes content of accounts which are active than most users.
- ❑ This kind of Bots or fake accounts creates anomaly which makes it harder to Analize the data and provide solutions to the teams working on it.

Query To Find Bots and Fake Accounts:-

```
SELECT username,  
       Count(*) AS num_likes  
FROM   users  
       INNER JOIN likes  
       ON users.id =  
likes.user_id
```

```
GROUP BY likes.user_id  
HAVING num_likes =  
(SELECT Count(*)  
 FROM photos);
```

	username	num_likes
▶	Aniya_Hackett	257
	Jadyn81	257
	Rocio33	257
	Maxwell.Halvorson	257
	Ollie_Ledner37	257
	Mckenna17	257
	Duane60	257
	Julien_Schmidt	257
	Mike.Auer39	257
	Nia_Haag	257
	Leslie67	257
	Janelle.Nikolaus81	257
	Bethany20	257

- To find bots and fake accounts is by looking into the data of the posting habits or interaction habits. Most of Bots are trained to like all posts from a particular account. By using this logic we can identivf them.

we can see that **13** accounts has liked all **257** posts in Instagram. Which makes them a possible anomaly.

Conclusion

- ❖ In conclusion, We can say that the analysis we done on this particular platform can help us to discover possible solution for the problems associated with it.
- ❖ From the marketing insight, With the help of a query language we identified some key information which can help in total growth of the platform. Such as finding out loyal and old users and provide privileges, finding out inactive users and encouraging them to post.
- ❖ From further analysis, we found out about the trends and hashtags, Identifying the best days to launch ad campaigns. Which also helps improve reach of the platform to the users.
- ❖ The data provided from the above, can also help the investors to determine the right decision.



Thank You