

INSTAGRAM ANALYTICS

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AGENDA

Project description

Approach

Tech-stack used

Insights

PROJECT DESCRIPTION



This project involves tracking how users engage with Instagram Application.

Analysis of user data is done to understand the trends and user engagement with the digital product , This Project results can aid the product team to take steps for Business Growth and to improve user experience.

We basically aim to observe the user activity with the product.



APPROACH & TECH STACK USED

User data , Photos , Likes, Hash tags, follows, comments.

Separate table data has been collected for the above variables. Analysis is done on SQL Workbench. Used SQL queries to get the desired output.

Excel was used to visualize few results

58

59 • `select * from users order by created_at asc limit 5;`

60

Result Grid



Filter Rows:

Edit:



Export/Import

	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

INSIGHTS

Loyal User Reward: Five oldest users on Instagram from the provided database.

To reward most loyal users, we had to see , who is using Instagram from longer period.

5 users have been identified from the taken data base, Their details were presented in the given snapshot along with the SQL Query.

```
60 • select *from users,photos ;
61 • show create table photos;
62 • select * from users where id not in (select user_id from photos);
63
```

Result Grid			
Filter Rows: <input type="text"/>			
Edit: Export/Import: Wrap Cell Content:			
	id	username	created_at
▶	5	Aniya_Hackett	2016-12-07 01:04:39
	7	Kassandra_Homenick	2016-12-12 06:50:08
	14	Jadyn81	2017-02-06 23:29:16
	21	Rocio33	2017-01-23 11:51:15
	24	Maxwell.Halvorson	2017-04-18 02:32:44
	25	Tierra.Trantow	2016-10-03 12:49:21
	34	Pearl7	2016-07-08 21:42:01
	36	Ollie_Ledner37	2016-08-04 15:42:20
	41	Mckenna17	2016-07-17 17:25:45
	45	David_Osinski47	2017-02-05 21:23:37

INSIGHTS

INACTIVE USER ENGAGEMENT:
Identify users who have never posted
a single photo on Instagram.

Set of inactive users need to be found, so that team can encourage them to be active.

With the help of SQL query, I was able to find 26 users who were inactive and didn't post a picture from their account. This information can help marketing team to concentrate on them and make them active.

Same details have been presented in the snapshot.

INSIGHTS

```
66 • select* from likes,users,photos;
67 • show create table likes;
68
69 • select likes.photo_id,users.username, count(likes.user_id) as Total_likes
70 from likes inner join photos on Likes.photo_id=photos.id
71 inner join users on photos.user_id=users.id group by likes.photo_id,users.username order by Total_likes desc limit 3;
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:	Fetch rows:
photo_id	username	Total_likes		
145	Zack_Kemmer93	48		
182	Adelle96	43		
127	Malinda_Streich	43		

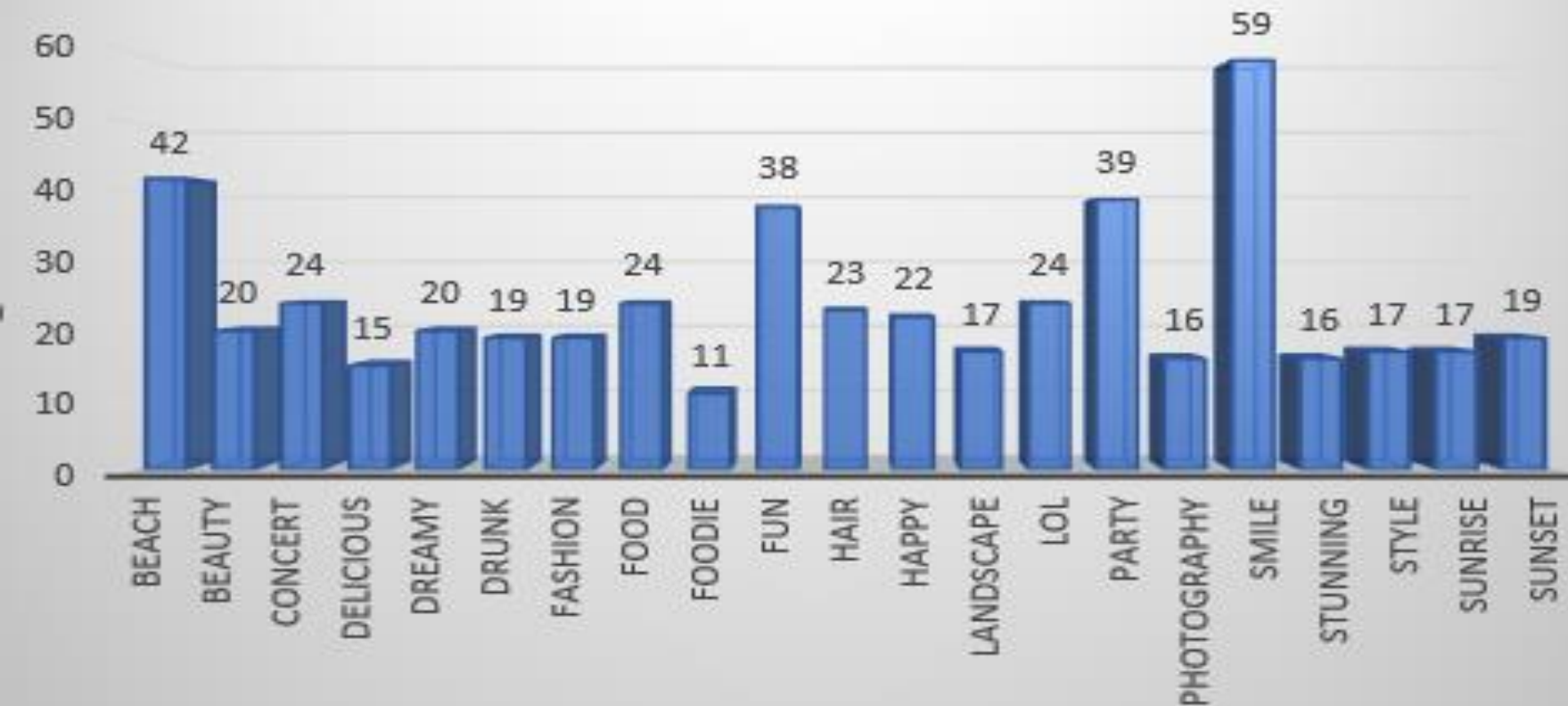
Contest Winner

Declaration: Determine the winner of the contest and provide their details to the team.

Product team has announced a contest to improve user participation on the application. We were asked to find the top 3 people who won the contest. SQL Query was used to find the which user got more likes on his photo.

Result has been presented in the above snapshot.

ht

**Hashtag Research:**

Identify and suggest the top five most commonly used hashtags on the platform.

To promote and for business reasons , we were asked to find which Hashtag is mostly used by the users. So that information can be used for brand promotion and all.

We can observe the above graph , in which 'smile' tag has been used highest and followed by 'beach' and 'party'. This information is helpful for marketing team to take further steps in their marketing strategies.

**SQL query is shown in the next slide.

HASHTAG RESEARCH

```
73 • select* from photo_tags, tags;
```

```
74 • select t.tag_name, count(p.photo_id)as ht from photo_tags p inner join tags t on t.id=p.tag_id group by t.tag_name order by ht desc ;
```

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

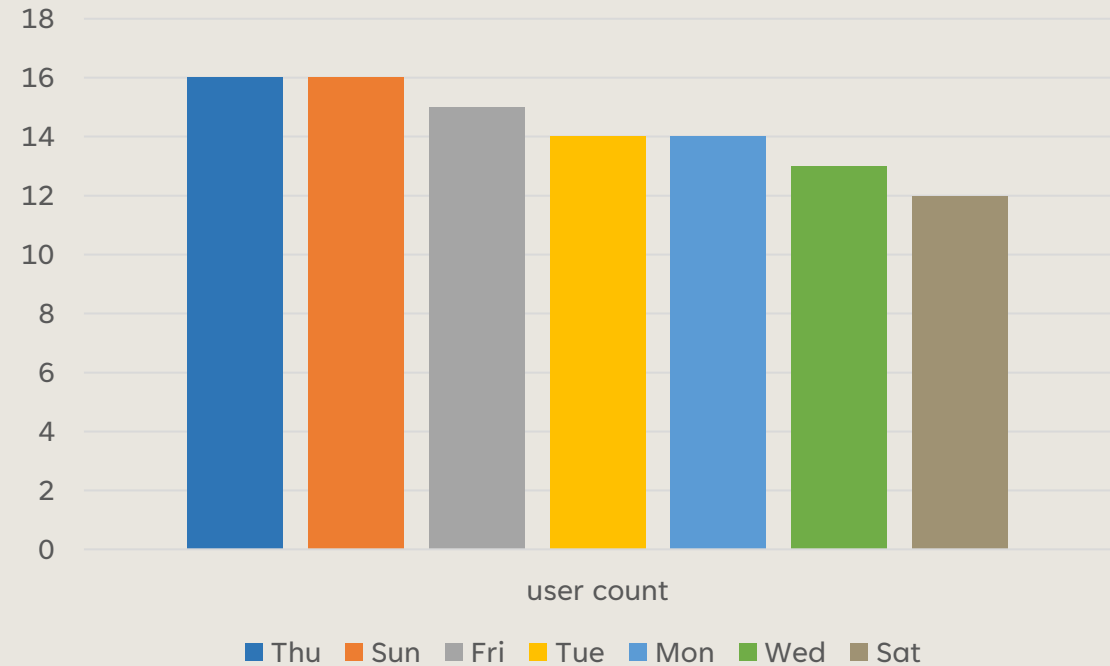
	tag_name	ht
▶	smile	59
	beach	42
	party	39
	fun	38
	concert	24
	food	24
	lol	24

INSIGHTS

Ad Campaign

Launch: Determine the day of the week when most users register on Instagram. Provide insights on when to schedule an ad campaign.

New user registration day-wise



Team wants to know that which Day in a week that new users are registering.

We could see from the above graph that; Sunday and Thursday has seen highest registrations. There is not much difference in comparing with other days also. All the days were almost following the mean.

INSIGHTS

```
76 • select DATE_FORMAT((created_at), '%a') as day ,count(username) from users group by 1 order by 2 desc;
```

Result Grid



Filter Rows:

Export:



Wrap Cell Content:



	day	count(username)
▶	Thu	16
	Sun	16
	Fri	15
	Tue	14
	Mon	14
	Wed	13
	Sat	12

INSIGHTS

```
79 • select* from users,photos;
80 • with base as(
81   select u.id as userid,count(p.id)as photoid from users u left join photos p on p.user_id=u.id group by u.id)
82   select sum(photoid)as total_photos, count(userid) as total_users,sum(photoid)/count(userid) as photoperuser
83   from base;
```

Result Grid Filter Rows: Export: Wrap Cell Content:			
	total_photos	total_users	photoperuser
▶	257	100	2.5700

Calculate the average number of posts per user on Instagram. Also, provide the total number of photos on Instagram divided by the total number of users.

Investors want to know; How many users are present and how many photos they are posting. With help of SQL query we have seen 100 users are there and they are posting 2.5 photo per person.

This statistically tells each user is posting around 3 photos. This results can encourage investors to invest in Instagram.

INSIGHTS

Bots & Fake Accounts:

Investors want to know if the platform is crowded with fake and dummy accounts.

```
86 • select* from users,likes;
87
88 • with base as(select u.username,count(l.photo_id)as likes from likes l inner join users u on u.id=l.user_id group by u.username)
89 select username,likes from base where likes=(select count(*)from photos) order by username;
```

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

username	likes
Janelle.Nikolaus81	257
Julien_Schmidt	257
Leslie67	257
Maxwell.Halvorson	257
Mckenna17	257
Mike.Auer39	257
Nia_Haag	257
Ollie_Ledner37	257
Rocio33	257

Always investors are risk averting in nature. So, they wanted to know about the Bot accounts on Instagram. So, we have decided to look for users who is liking every picture in the Instagram.

We have found total of 13 users , liked every picture. Which is not natural for human beings. So, this information will be communicated to the development team to remove such accounts from the platform which affects the business and fame of Instagram.

A series of white, overlapping geometric lines and polygons on a black background, located on the left side of the slide.

THANK YOU

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