

Project on Instagram User Analytics



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Project description

The project is basically based on tracking the users engagement with Instagram. There are various teams like digital marketing, development and product teams who track this records so that they can utilize this information for launching a new marketing campaign or adding new features to build for an app which will be beneficial for their business. So, here I am working with product team of instagram, we are supposed to provide a detailed report for the Marketing and Investor metrics department. this analysis will help them make a decision based on different metrics and insights.

Analysis- Marketing department

Marketing team wants to launch some Campaign ,So we have to provide some details about instagram users.

- **Rewarding most loyal users** -5 oldest users of the instagram from the database provided
- **Remind inactive users to start posting** -the user who have never been posted a single photo on instagram
- **Declaring contest winner** -identify the winner, who gets most likes on a single photo 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?

Outputs-

Rewarding the most loyal users- top 5 oldest users

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

Remind Inactive users to start posting-

We have found a list of 26 people with their user id who have never posted a single photo on Instagram. they'll be receiving promotional emails to post their 1st photo.

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

Declaring contest winner

In the contest, the user with the most likes on a single picture won

photo_id	Username	like_user
145	Zack_Kemmer93	48

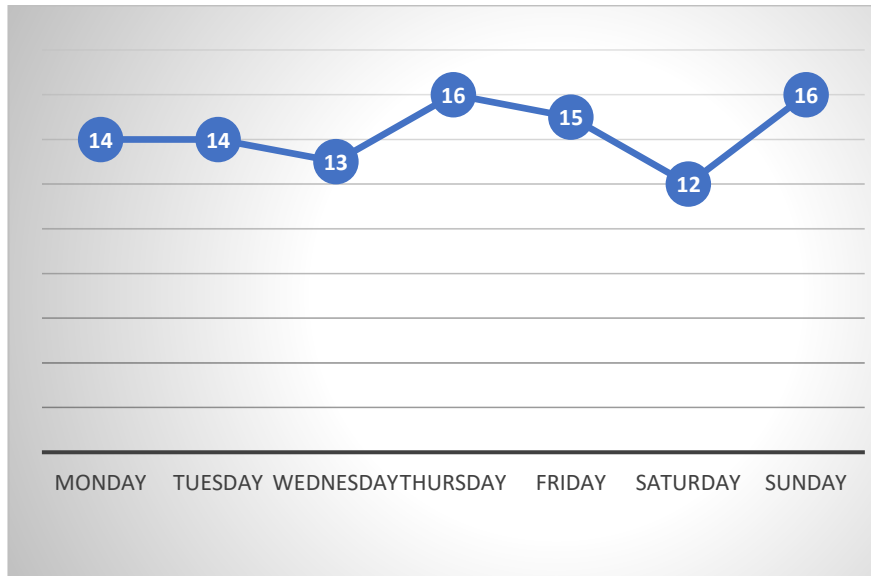
Hashtag Researching-Top 5 hashtags that are most frequently used on Instagram

tag_name	num_tags
smile	59
beach	42
party	39
fun	38
concert	24

Launch AD campaign -Registrants are most active on this day of the week

THURSDAY-16

SUNDAY-16



The best time to schedule an advertisement campaign is on Thursday and Sunday

Investor Metrics-

User Engagement:

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

Bots & Fake Accounts:

users (bots) who have liked every single photo on the site which is not possible for any normal user.

User Engagement

74 Active users who have posted at least once.

100 Total users (as per the data) 257 Total posts made.

Total Photos/Total users = $257/100 = 2.57$

Based on the results, there are - so the average will be $257/74 = 3.47$

Based on the data we can say that an average user posts 3-4 times.

Bots & Fake Accounts

The users who have liked every single photo on the site will be considered as bots. We have 13 such users based on the data who have liked all 257 posts, user-id for the same are specified below

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

Approach-

For this project, I have used My SQL to extract the required data from the given database using the Join function, subqueries, Aggregation, where condition, Group by, Distinct and other functions required. keeping the Primary key and foreign key in consideration provided all the reports asked by the marketing department and Investor metrics department.

Insights-

Through this project, I gained valuable insights into how business and data analysts work with real-time data to drive data-informed decisions. This experience significantly enhanced my understanding of the analysis process and how to generate insights that support effective decision-making. I also developed a clear perspective on the role of analytics in helping companies gain a deeper understanding of their customers. This understanding enables companies to optimize marketing efforts, enhance their products, and improve overall customer experience. Analytics provides the quantitative data needed for companies to make informed decisions and refine their services continuously. For instance, I learned how platforms like Instagram leverage analytics to understand user behavior, tailor content, and optimize engagement. By utilizing data strategically, Instagram improves user experience and drives business growth—demonstrating the impact of analytics in today's business environment.

For a detailed view of my projects, datasets, and outputs, please visit my GitHub: [**https://github.com/meghadas927/Instagram-User-Analytics-by-using-MY-SQL**](https://github.com/meghadas927/Instagram-User-Analytics-by-using-MY-SQL)