INSTAGRAM USER ANALYTICS

Project report

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Project Description

The project aims to analyze user interactions and engagement with the Instagram app to provide valuable insights that can help a business grow.

The user analysis involves tracking how users engage with a digital product, such as a software application or a mobile app. The insights derived from this analysis can be used by various teams within the business.

Approach

The basic steps involved the creation of the many databases and it was followed by effectively addressing the interaction and relevant behaviour, the focus was on the following:

A) Marketing Analysis:

- 1. **For the Loyal User Reward-** the five oldest users on Instagram from the database were opted for.
- 2. **For Inactive User Engagement-** users who have never posted a single photo on Instagram were identified.
- 3. **For Contest Winner Declaration-** the user with the most likes on a single photo was found and their details were provided to the team.
- 4. **For Hashtag Research-** the top five most commonly used hashtags on the platform were chosen.
- 5. **For Ad Campaign Launch-** the day of the week when most users register on Instagram was determined.

B) Investor Metrics:

- 1. **For User Engagement-** the average number of posts per user on Instagram was determined besided the total number of photos on Instagram divided by the total number of users.
- 2. **For Bots & Fake Accounts-** users (potential bots) who have liked every single photo on the site, were determined.

Tech-Stack Used

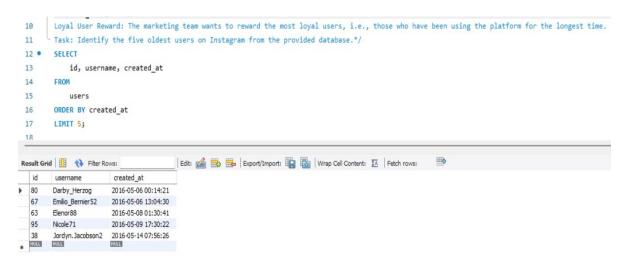
MySQL Workbench and Ms-Excel were used to carry out the following analysis. It allowed for the approach to be simpler and the results could be achieved in a comprehensive and user-friendly way.

Insights

The following insights were gained based on the focused approach:

A) Marketing Analysis:

• **For the Loyal User Reward-** the five oldest users on Instagram from the database were opted for.



Inference: The five oldest users were hence determined.

• **For Inactive User Engagement-** users who have never posted a single photo on Instagram were identified.

	id	username	created_at
>	5	Aniya_Hackett	2016-12-07 01:04:39
	7	Kasandra_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	Mckenna 17	2016-07-17 17:25:45
	45	David.Osinski47	2017-02-05 21:23:37
	49	Morgan.Kassulke	2016-10-30 12:42:31
	53	Linnea59	2017-02-07 07:49:34
	54	Duane60	2016-12-21 04:43:38
	57	Julien_Schmidt	2017-02-02 23:12:48
	66	Mike.Auer39	2016-07-01 17:36:15
	68	Franco_Keebler64	2016-11-13 20:09:27
	71	Nia_Haag	2016-05-14 15:38:50
	74	Hulda.Macejkovic	2017-01-25 17:17:28
	75	Leslie67	2016-09-21 05: 14:01
	76	Janelle.Nikolaus81	2016-07-21 09:26:09
	80	Darby_Herzog	2016-05-06 00:14:21
	81	Esther.Zulauf61	2017-01-14 17:02:34
	83	Bartholome.Bernhard	2016-11-06 02:31:23
	89	Jessyca_West	2016-09-14 23:47:05
	90	Esmeralda.Mraz57	2017-03-03 11:52:27
	91	Bethany20	2016-06-03 23:31:53

Inference: Inactive users were hence determined as mentioned above.

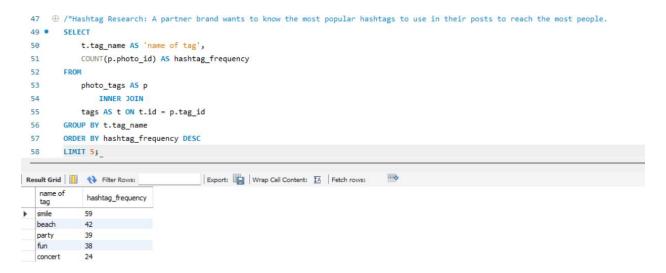
• **For Contest Winner Declaration-** the user with the most likes on a single photo was found and their details were provided to the team.

```
30 \ominus /*Contest Winner Declaration: The team has organized a contest where the user with the most likes on a single photo wins.
31 Task: Determine the winner of the contest and provide their details to the team.*/
  32 • SELECT
  33
           users.username,
           photos.id,
  34
            photos.image_url,
  35
             COUNT(*) AS max_likes
  36
  37
       FROM
  38
                 INNER JOIN
  39
           likes ON likes.photo_id = photos.id
  40
                 INNER JOIN
             users ON photos.user_id = users.id
  42
  43
        GROUP BY photos.id
         ORDER BY max_likes DESC
         LIMIT 1;
  45
| Export: | Wrap Cell Content: 🖽 | Fetch rows:
| username | id | image_url | max_likes |

▶ Zack_Kemmer93 145 https://jarret.name 48
```

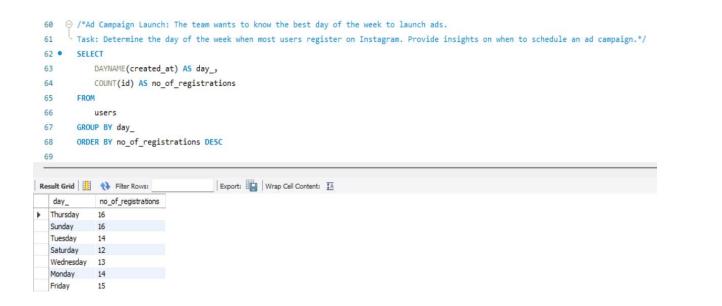
Inference: The winner was hence located.

• **For Hashtag Research-** the top five most commonly used hashtags on the platform were chosen.



Inference: The 5 most hashtags were found as mentioned above.

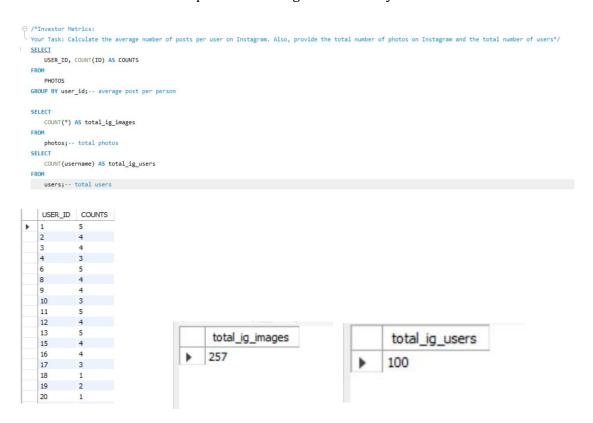
 For Ad Campaign Launch- the day of the week when most users register on Instagram was determined.



Inference: Thursdays and Sundays were when most users registered.

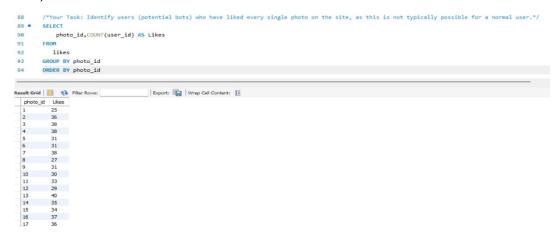
B) Investor Metrics:

• **For User Engagement-** the average number of posts per user on Instagram was determined besided the total number of photos on Instagram divided by the total number of users.



Inference: The average post per user and total number of images and users were thus found.

• **For Bots & Fake Accounts-** users (potential bots) who have liked every single photo on the site, were determined.



Inference: Bots were possibly absent since no users has liked all images.

Result

The obtained results provided a better insight into the behaviour of the users and helped us better understand and determine different aspects relevant to the needs of the team to optimize their approach and gain satisfactory results.