BA710

Winter 2022 Case

25 Marks

Due Monday April 11, 2022

**Deliverable details:**

Complete all questions in this Word document.

Complete the SQL template.

Your source data must be loaded to a schema called BA710case.

Your work data must be loaded to a schema called Work.

Your work tables must include “case\_” as a prefix to the table name you choose.

**Premise:**

You work at a company that manufactures and sells electric scooters. You have been told that the pre-orders for the Bat Scooter were initially good, but the orders suddenly dropped by 20%.

Your job is to investigate the situation and test some general hypotheses on why this might have occurred, post hoc.

Since our company headquarters is in Toronto, we need to make sure your dates are stored in Eastern time. The easiest way to do this is to set the time zone in the top of your code:

**/\*Set Time Zone\*/**

**set time\_zone='-4:00';**

**Part 1:**

Complete an analysis of the sales patterns for the Bat scooter. Perform a comparative analysis with the Bat Limited Edition and the Lemon 2013 scooters. Your resulting table for each scooter should have:

1) Daily sales amount

2) Cumulative sales

3) Cumulative sales for a seven day period beginning with the current record and adding the previous 6 records.

4) Percentage change in cumulative sales compared to the same point seven days prior.

**Example Sales Analysis for the Blade Scooter:**

**Table

Description automatically generated**

Percentage growth in cumulative\_sales from 6/23 to 6/30

Total sales 7/2 – 7/8

Total sales 6/23 – 6/29

Counts up for each record

Percentage growth in cumulative\_sales from 7/8 to 7/1

(63559 – 39899) /39899 = 59.29

**Paste your Bat Sales Analysis table:**

Graphical user interface, text, application

Description automatically generated

Question: On what date does the cumulative weekly sales growth drop below 10%?

Answer:

2016-10-23

Question: How many days since the launch date did it take for cumulative sales growth

to drop below 10%?

Answer:

13 days

**Paste your Bat Limited Sales Analysis table:**

Graphical user interface, application

Description automatically generated

Question: On what date does the cumulative weekly sales growth drop below 10%?

Answer:

2017-02-27

Question: How many days since the launch date did it take for cumulative sales growth

to drop below 10%?

Answer:

2 days

Question: Is there a difference in the behavior in cumulative sales growth

between the Bat edition and the Bat Limited edition? (Make a statement comparing

the growth statistics.)

Answer:

Yes. Bat Limited edition is worse than Bat edition. Bucause It takes shorter duration for Bat Limited edition to drop below 10%

**Paste your Lemon 2013 Sales Analysis table:**

Graphical user interface, application

Description automatically generated

Question: On what date does the cumulative weekly sales growth drop below 10%?

Answer:

2013-05-13

Question: How many days since the launch date did it take for cumulative sales growth

to drop below 10%?

Answer:

12 days

Question: Is there a difference in the behavior in cumulative sales growth

between the Bat edition and the 2013 Lemon edition? (Make a statement comparing

the growth statistics.)

Answer:

Yes. 2013 Lemon edition is worse than Bat edition. Bucause It takes shorter duration for Bat Limited edition to drop below 10%

**Part 2:**

**Complete a marketing analysis of the email campaign for the Bat scooter and run a comparative analysis for the Lemon 2013 scooter. Complete the following table:**

|  |  |  |
| --- | --- | --- |
|  | **Bat scooter** | **Lemon 2013 scooter** |
| **# Emails** | 16907 | 16036 |
| **# Opened emails** | 3369 | 3293 |
| **% Emails opened** | 19.93% | 20.54% |
| **# Customers with purchase** | 6659 | 13854 |
| **% Customers with purchase after receiving an email** | 56.49% | 47.06% |
| **% Customers with purchase after opening an email** | 35.76% | 26.81% |

Question: What is your commentary to management? Was the Bat email campaign successful compared to the Lemon 2013 campaign? What recommendations might you have?

Answer:

In terms of % Customers with purchase after opening an email, the percentage of Bat scooter is higher than Lemon 2013.

Yes, the Bat email campaign was successful compared to the Lemon 2013 campaign.

Lemon 2013 scooter should learn from Bat scooter and make some efforts in the email campaign.