Growth Analyst Challenge

Explanation

For the purposes of this challenge, assume The Information is experimenting with new types of subject lines for our article emails to increase performance. Thus far, five articles have been sent since the experiment started. Two of these articles contain normal subject (article title), two have slight variations from normal subject lines, and the last has a wildly experimental subject.

The accompanying spreadsheet contains the outlines of two tables: email\_events and articles. The relationship between the two tables is a one-to-many in that articles can have many email\_events while an email can only be associated with one article. Please note, an article email that was opened will have both a delivered and an open event.

*(These are not real numbers nor are we actually running a test like this. We have also set an arbitrary delivery amount to keep the number of rows reasonable.)*

By using this spreadsheet, please answer the below questions:

Challenge Questions

1. Management has asked to see a report with the preliminary results of the experiment. Specifically, they would like to see which articles / subject lines have performed the best in terms of open rate, click rate, and click-to-open rate. By using the tool of your choice, please provide management with an analysis of the results from the first five emails.
2. Please provide management with some suggestions on how they could scale or change this test to get a better understanding of the effectiveness of the changes being tested.
3. As a thought exercise, assume the number of email\_events being generated is now on the order of ~3M per day. What strategies, tools, or technologies would you advise management that we should be using in order to effectively and performantly analyze the data?
4. Please construct a SQL statement using the two tables (in the spreadsheet, just assume they’re sql tables) with the following columns in the output ordered by the open rate from highest to lowest:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Article id | Article Title | Email Subject | Delivered | Opened | Clicked | Open Rate | Click rate | Click-to-Open |

Timeline

Please return answers to the above two questions in whatever format you best see fit to communicate the results within 24 hours. If you have any questions or concerns, please feel free to send an email to andy@theinformation.com.