Cantab PI Report on the data analysis of optimal email times for maximum interaction
Part 1 – Overall opening and interaction with the emails

In short, the optimal times to send an email in general, are later in the day (evening times), as well as later in the week, starting with Wednesday.

Emails sent on Friday afternoon (starting at 2PM) had the highest likelihood of being opened of any other time in the week. Additionally, emails sent on Wednesday mid-day had the highest likelihood of being interacted with, that is – clicked on [see box plots below].
This was measured with *relative-opening*, and *relative-clicking* measures, that is – the proportion of opened/interacted-with emails divided by the total amount of emails sent out at a particular time.

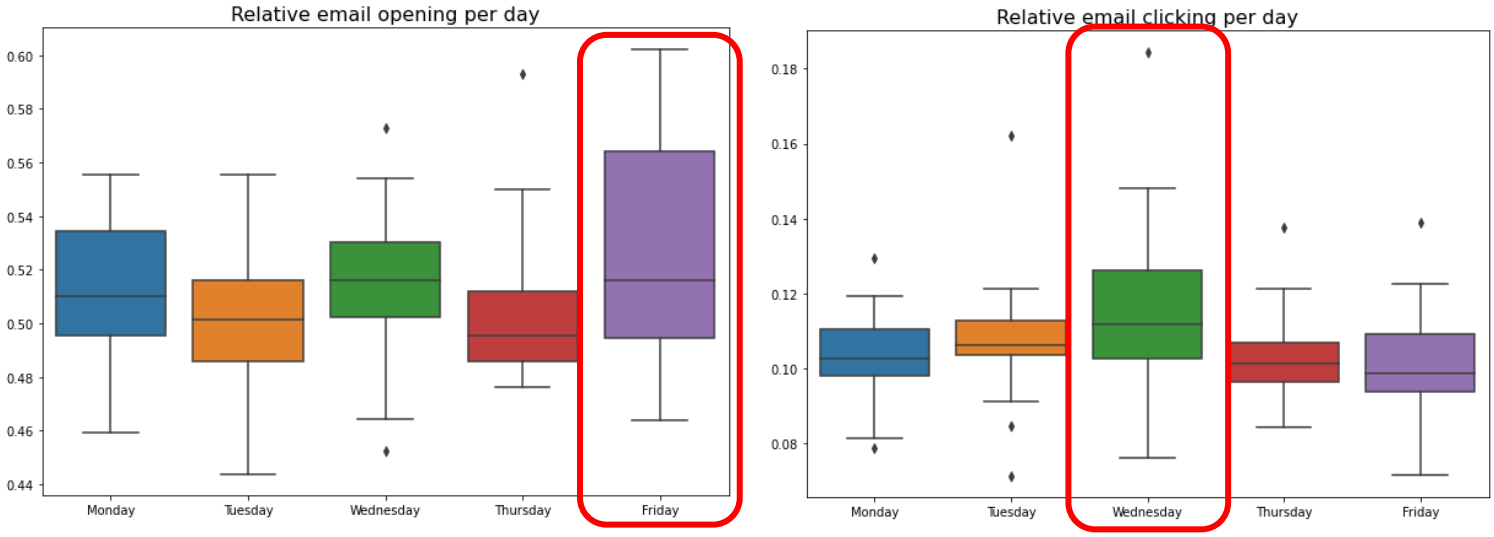


Fig. 1 - Box plots for relative opening – Friday showing the highest values, and relative clicking – Wednesday showing the highest values.

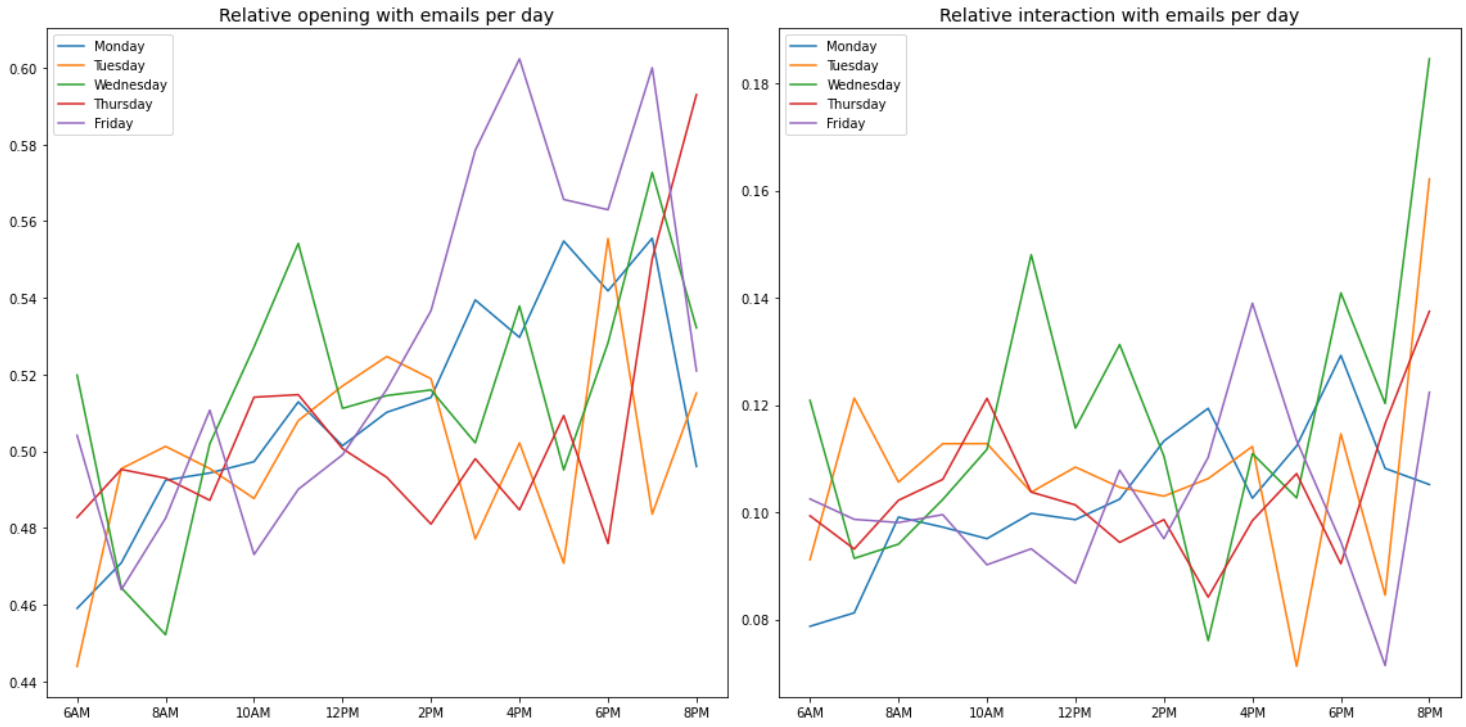
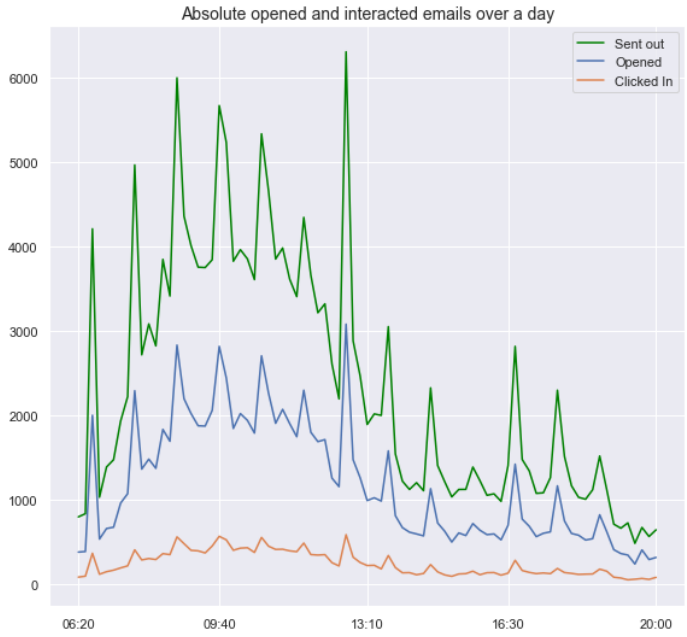


Fig. 2 - Line graphs for relative opening and clicking times for each day, across time of day (across one-hour periods). Data from before 6AM and after 8PM was excluded due to relatively small amounts of emails sent at this time.

Additionally, checking for the optimal time of day for sending an email regardless of which day, showed a significant trend (r=0.53). In other words, the later in a day an email is sent, the higher the probability it will be opened. This did not hold true for the amount of clicking-in/interacting with an email.



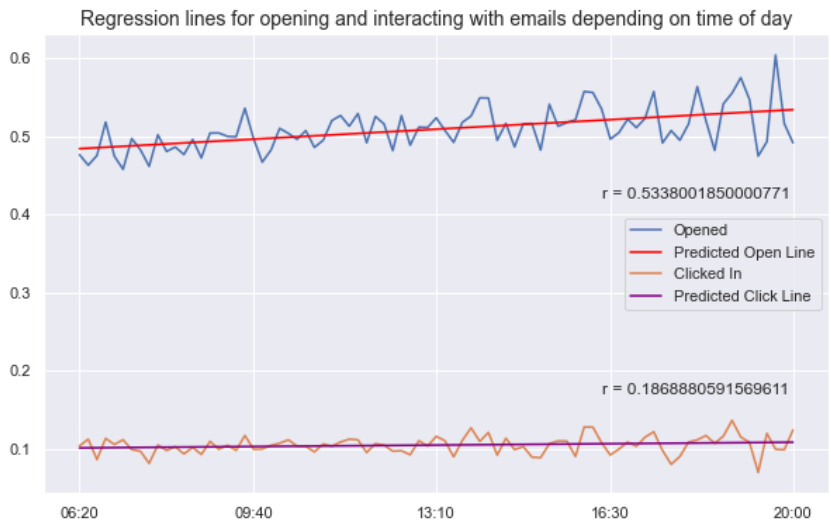


Fig. 3 – data is segmented into 10-minute segments and chosen from 06:20 to 20:00, as the amount of emails sent out before and after that period was low. A regression analysis on time of day shows a rather significant correlation of time of day (red line) – the later the time the email is sent, the bigger the probability it will be opened.

<u>Part 2 - Email opening and interaction per category of email</u>

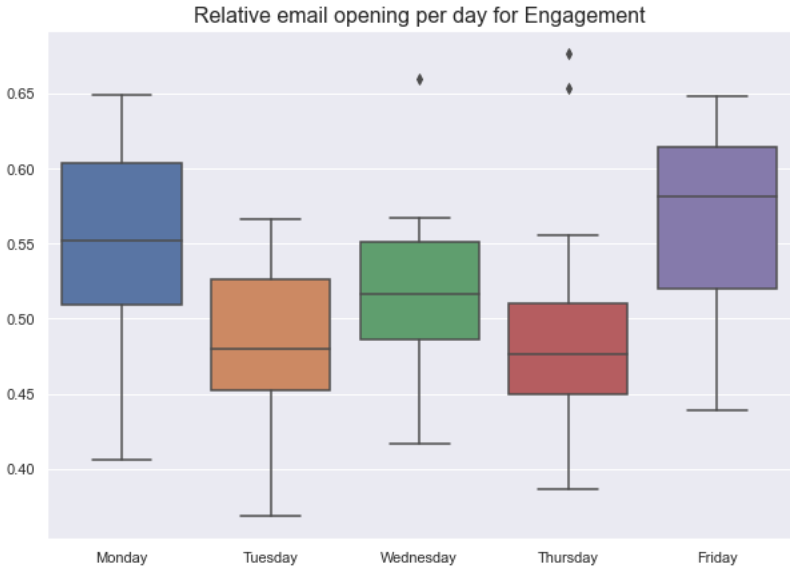
Educational

The mean opening and interaction with the emails remained the same across days, however the variance was apparent. More specifically, emails sent on **Friday and Tuesday** had the largest variance. Roughly speaking, these days did yield the largest chance of being opened for the Education category.

Fig. 4 – Tuesday evening (6PM) and Friday afternoon (4PM onwards) showed highest chance for interaction, though <u>the effects are modest</u>.

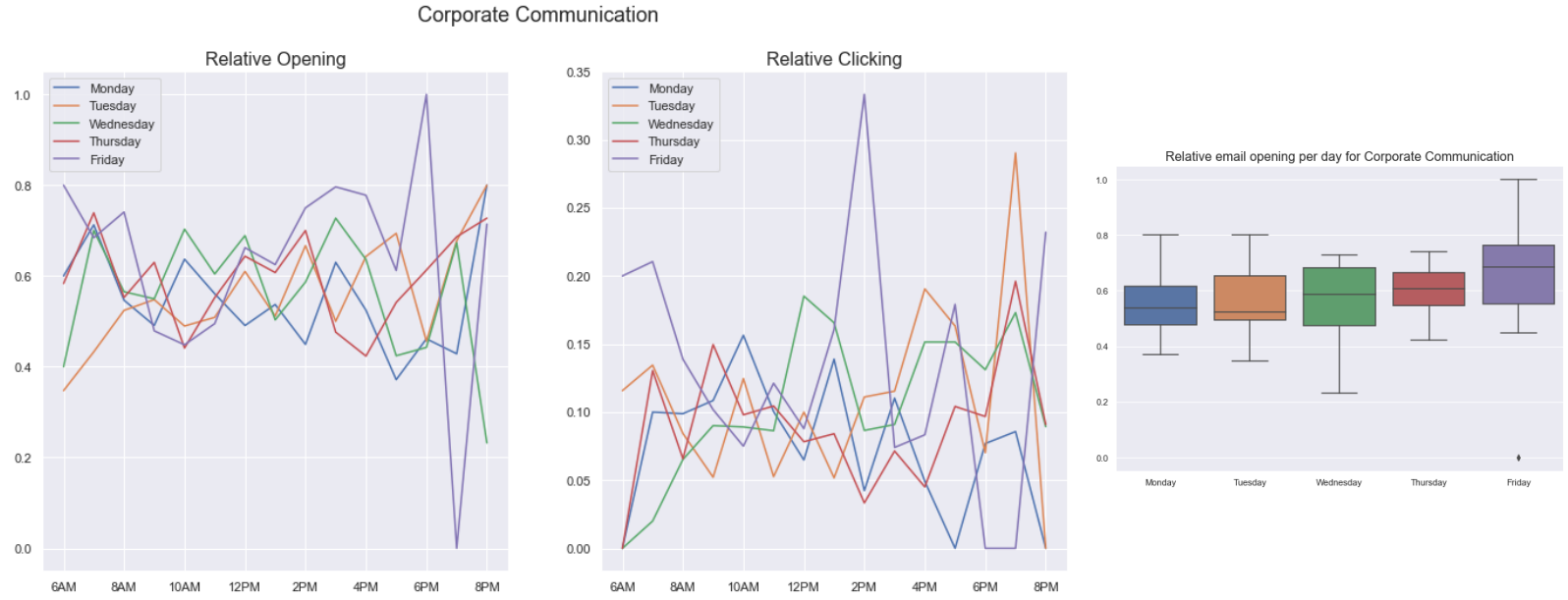
Engagement

Time of week was very significant in how much the emails for this category. **Monday and Friday** were the days that showed highest promise for both opening and interaction with the emails. In particular, it was Monday and Friday afternoon. **Tuesday** was the least promising day.



Corporate Communication

It seems that **Wednesday is the worst** day for sending out this kind of email, while **Friday seems to be the best**.



In particular, Friday afternoon (2PM) seems to be the most interactive time for this kind of email.

Promotional

Unlike other categories, **Friday was the worst** day for this kind of email, while **Wednesday was the best**, in that Wednesday had the highest chance for the recipients to click on links in the email. Overall, emails received on Wednesday afternoon had the highest chance of being opened.