



Supervisor Meeting #4

Drafted by: Liam Pang (23/02/2018) Edited and Vetted by: Tan Rui Feng (24/02/2018)

| <u>Date</u> | <u>Time</u> | <u>Venue</u> |
|-------------|-------------------|--------------|
| 23/02/2018 | 1400Hrs – 1500Hrs | SIS MR 4-06 |

Participants: Liam Pang, Ong Geok Ting, Tan Rui Feng, Prof Kam Tin Seong (Advisor) **Agenda:**

- 1. Update on outputs of clustering and its corresponding issues
- 2. Clarification on Interim Presentation
- 3. Discussion on Google Data Studio

| S/N | Issue | Action | By | Due |
|-----|-------------------------------------|--------|----|-----|
| 1 | Tan shared the modification of | - | - | - |
| | variables for clustering. | | | |
| 2 | Supervisor asked about the reason | - | - | - |
| | for studying activity based on | | | |
| | weekends, weekdays and time | | | |
| | slots. Tan shared that this is part | | | |
| | of data exploration and this is | | | |
| | important because agents have | | | |
| | flexible working hours. Pang | | | |
| | shared that a potential business | | | |
| | application could be for when | | | |
| | customer service should be | | | |
| | provided. | | | |
| 3 | Supervisor reminded the team to | - | - | - |
| | be careful with removal of | | | |
| | outliers as that could be a group | | | |
| | by itself. Tan mentioned that the | | | |
| | team is aware of that and the | | | |
| | outliers are few in numbers. | | | |
| | Supervisor say if the count is | | | |
| | handful (<10), the removal of | | | |
| | them should be fine. | | | |

| 4 | Based on the clustering analysis produced by JMP Pro, Tan have calculated the Z-scores for easy comparison between segments. He shared that there are four observable groups. The first group | - | - | - |
|------|---|--|-----|-------|
| | are high performers with high activity and high enquiries. The second group are not very active but they received a high number of co-broke requests. Third group have very low activity and enquiries, so the team hypothesized that they are | | | |
| | inactive. The fourth group has the highest count and they have | | | |
| 5 | average performance. Supervisor proposed thinking about potential recommendations for each of these clusters. The solutions can be co-created with the project sponsors. Potentially, the team can request for more data for the individual segments for further investigation. | The team needs to look at recommendations for each cluster for upcoming interim presentation | Tan | 25/02 |
| Meet | ting Item 2: Clarification on Interi | m presentation | | |
| S/N | Issue | Action | By | Due |
| 1 | Supervisor reminded the team about the confidentiality of information during interim. She advised the team to consult the project sponsor if there are other ways to look at agents' behaviour or if other data can be obtained. | The team needs to update the sponsor about project progress | All | 27/02 |
| 2 | Supervisor asked if the team is aware of what exactly does the sponsor is expecting to see for the data visualisation. Ong explained that the sponsor requested an overview. Supervisor proposed presenting at least a draft for the interim presentation so as to ensure that the client and team is | The team will prepare discussion materials with sponsor regarding visualisations on Google Data Studio | Ong | 27/02 |

| | aligned on how the end product | | | |
|---|---|--|------|-------|
| | should look like. | | | |
| 3 | Supervisor advised the team to produce parallel plots for the visual communication of the segments characteristics. | The team will produce parallel plots for visualisation of cluster features | Tan | 25/02 |
| 1 | | | Dong | 25/02 |
| 4 | Supervisor advised the team to produce some exploratory analysis on the free users, even if clustering is not possible. They can be group into different segments after identifying any patterns or meaningful variables manually without running a kmeans clustering analysis. Supervisor stressed that the team should investigate free users with sessions count greater than 0 as they are still using the platform. | The team will explore exploratory data analysis for free users | Pang | 25/02 |
| 5 | Supervisor remind the team to discuss with the sponsors what metrics/design is expected for the dashboard. Ong asked for advice on how to manage the sponsor because if the team present most of the work during the interim, it might appear lacking when the team present again during the final presentation. The supervisor mentions that this is part of client management strategy. Ong mentions that the team will prepare a draft of the visualisation, which the supervisor advised for as well. Supervisor recommend the team to think about scalability of the visualisation as well. If the team struggles to produce the visualisation, the project sponsor would not be able to do so on their own for future dashboards. | The team needs to consider scalability of project by investigating whether there are better ways to construct data set | Ong | 25/02 |

| 6 | Tan asked what is expected for | The team will prepare the | All | 25/02 | |
|-----|--|----------------------------|------|-------|--|
| | the interim presentation. | deliverables for interim | | | |
| | Supervisor said the important is | presentation | | | |
| | on how the team collected, | | | | |
| | cleaned and prepared the data. | | | | |
| | Even if these stages are not | | | | |
| | completed, the team should have | | | | |
| | thought through these stages and | | | | |
| | have a concrete plan in place. | | | | |
| 7 | Supervisor recommended the | The team will commence | Pang | 01/03 | |
| | team to prepare the content early | the preparation of the | | | |
| | as the research paper for the | research paper | | | |
| | analytics conference is a key | | | | |
| | deliverable which the team should | | | | |
| | not neglect. | | | | |
| 8 | Supervisor ask the team to update | The team will update the | Ong | 25/02 | |
| | the wiki when possible, although | wiki regularly | | | |
| | this can also be done at the end of | | | | |
| | the project. | | | | |
| Mee | Meeting Item 3: Discussion on Google Data Studio | | | | |
| S/N | Issue | Action | By | Due | |
| 1 | Ong share with the supervisor on | The team will look at how | Ong | 25/02 | |
| | | 1 | 1 | | |
| 1 | issues faced on Google Data | to import data into Google | | | |
| | Studio. One issue is the inability | Data Studio | | | |