Supervisor Meeting #7

Drafted by: Liam Pang (23/03/2018)
Edited and Vetted by: Ong Geok Ting (23/03/2018)

Date	Time	Venue
23/03/2018	1400Hrs – 1500Hrs	SIS MR 4-06

Participants: Mdm Meenakshi, Liam Pang, Ong Geok Ting and Tan Rui Feng
Agenda:

1. **To discuss the application of Latent Class Clustering to the current project**
2. **To discuss and clarify issues with the abstract**
3. **To consolidate suggestions on the body of the research paper**

Meeting Item 1:				
S/N	**Issue**	**Action**	**By**	**Due**
1	Clarifying how the latent clustering works with supervisor. The problems raised were: - Unable to put the data into quantile - Not sure of how to interpret results - Not sure how to treat 0 for this clustering exercise - Not sure to determine which is a better cluster fit Supervisor recommended the team to read up on this clustering method through research paper so as to understand this method better.	- Interpret latent class results by looking at highlighted values. Study the high, low values and proportion with business sense. - Label all the 0 as a bin itself, then the rest of the data can be put into 4 other bins. E.g. all 0s = No sessions - Recommended bins to create can be quantiles. - Refer to AIC to determine which is the best no. of cluster. The lower	Tan Rui Feng	25/3/18

		the score, the better the fit.		
2	The team wanted to clarify what are the best ways to report the findings of the cluster. Supervisor advised the team to use these steps as guidance: 1. Report the percentages from the latent class analysis results 2. Provide characteristics of each cluster 3. Reference to the distribution of the data E.g. What is the min, max, median, what does it mean? 4. Interpret with business context to make it understandable for the client	To conduct latent class analysis and follow the recommended steps from the supervisor.	Tan Rui Feng	25/3/18
3	Supervisor proposed adding the clusters into the dashboard to provide client with more business meaning.	To test and view if this option adds further value to the dashboard as a whole.	Ong Geok Ting	30/3/18
Meeting Item 2: Abstract				
S/N	**Issue**	**Action**	**By**	**Due**
1	Mdm Meenakshi had discussed the abstract with Prof. Kam. These are the suggested changes from the supervisors: - Removal of visualisation from the title and replace it with clustering analysis - Describe the EDA techniques better as part of methodology discussion - Discuss the cluster analysis in greater detail	To amend the abstract as suggested.	Liam Pang	25/3/18

	- Keep the abstract more high level with no needs for greater details			
2	The supervisors also provided some feedback with regards to the content of the paper. - Describe how K-Means was done and why the results were not ideal - Discuss why latent class clustering was explored - Conduct literature review which discusses these methods - Discuss the skewness of the data	To conduct research into the details of the clustering techniques.	All	28/3/18
Meeting Item 3: Dashboard				
S/N	**Issue**	**Action**	**By**	**Due**
1	The supervisors provided some feedbacks to improve on the dashboard. - As the data contain a high proportion of 0s, the team should think of meaningful ways to utilise these data, such as having an inactive/low-engagement counter - Study the recommendations of Stephen Few, which is an expert in visualisation	Team to brainstorm ways to improve existing visualisation by using the 0s. To acquire and read Stephen Few's book.	All	30/3/2018