

TEAM V  
 ANLY482 SUPERVISOR MEETING  
 MINUTES 10

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<b>Date</b>	22 March 2017
<b>Time</b>	17:15 - 17:45
<b>Venue</b>	SIS Meeting Room 4.5
<b>Attendees</b>	Team V: Andrew, Sarah Supervisor: Prof Kam
<b>Agenda</b>	1. Update supervisor on Cluster Analysis results and EDA on the cluster 2. Discuss with supervisor on Association Analysis results 3. Queries on finalising project

<b>S/N</b>	<b>Item Discussed</b>	<b>Remarks</b>
1	Cluster Analysis	<ul style="list-style-type: none"> <li>- Andrew showed Prof Kam the EDA results on the clusters. Prof Kam acknowledged.</li> <li>- Upon showing Cluster 3 which had no definite age range to Prof Kam, he said that we should separate those aged 24 years old and above and below and look at them. We can view it by the percentage to know how much falls into each sub groups. The purpose of this is because women 24 years old and above typically would have started work and will be able to spend compared to those below that age.</li> <li>- In Cluster 4, Prof Kam said it is the cluster that Vanitee can consider targeting because they are the customers that have spent recently and approximately \$60. Even though they did not transact many bookings, Vanitee can work towards retaining these set of customers or have mechanisms in place to attract them to purchase more in future.</li> <li>- Andrew moved on to show Prof Kam the results</li> </ul>

		<p>of Cluster 5. Similar to Cluster 3, the age range is rather wide but is more distributed towards working adults. Hence, Prof Kam also suggested to do a distribution analysis on their age. From there onwards, we can focus on the middle portion which is the range of 25% to 75%.</p> <ul style="list-style-type: none"> <li>- Prok Kam also mentioned that we could do the distribution for all clusters for a better understanding.</li> </ul>
2	Association Analysis	<ul style="list-style-type: none"> <li>- Andrew raised some challenges that we faced during the preparation of the data for association analysis. One of the main challenge is that we were not able to locate the category of some services. This was due to the fact that we removed those services that had "deleted_at". To counter this problem, we decided to use the initial services data set.</li> <li>- Andrew then went through some of the steps we took before doing the analysis such as transposing the data.</li> <li>- Andrew then briefed Prof Kam that we did the analysis based on two different sets of data. One set will include transactions with only 1 item in a set while the other will exclude transactions with 1 item in the set.</li> <li>- Andrew then told Prof Kam about some issues we faced during the analysis such as getting blank results when we used the default setting of min support, confidence and lift. But after we changed it to 0.001 (including bookings with 1 transaction) and 0.01 (excluding bookings with 1 transaction) then we were able to get results.</li> <li>- Andrew also mention to Prof Kam that we decided to split the services into sub-categories because the main categories might be too general to get meaningful results. For example, Nails is split into Classic, Nail Art, Express etc.</li> <li>- After showing Prof Kam the results, he said that it would be good to show Vanitee the results as well to have a check if they also have the same impression about the transactions as what we see in the results.</li> <li>- For the lift results, Prof Kam said that a number that is more than 1 or close to 1 is good enough.</li> <li>- By splitting the services up into sub-categories, Prof Kam said the results will look more meaningful because there is a distinct difference</li> </ul>

		<p>between two sub categories. For example, Nail Art and Express are two different types of services.</p> <ul style="list-style-type: none"> <li>- Prof Kam suggested that we can include another dimension - time sequence. But this cannot be done in JMP. It can be done in Enterprise Miner. The additional dimension from one time to another how the customers come back. For example, if they were to buy a Nails service now, would they also buy a Nail service the next time.</li> <li>- Prof Kam said that we can tidy up the analysis and wrap up the project.</li> </ul>
3	Queries - Concluding the Project	<ul style="list-style-type: none"> <li>- Andrew mentioned to Prof Kam that in the early stage of the project we aimed to analyse how attractive a Beauty Professional might be however, due to the shortage of time we are not able to do so. Moreover, we did mention in the initial phase that we will touch on this only when we have adequate time. Prof Kam said it is okay and acknowledged.</li> <li>- We also talked about wanting to look at the why customers drop out. But after discussion, we know that we do not have the specific set of data needed for this analysis. Perhaps, we can only do a simple EDA to find out the number of customers who moved from booking online to making manual bookings.</li> </ul>

S/N	Action Item	Action By	Deadline
1	Arrange meeting with Vanitee for coming Monday	Andrew, Sarah	By 24 Mar 2017
2	Prepare presentation slides for meeting with Vanitee	Andrew, Sarah	By 26 May 2017
3	Analyse Association Analysis results	Andrew, Sarah	By 28 Mar 2017