

## **Prof Meeting Minutes #2**

Date/Time 13th Jan 2017, 10am to 11am

**Venue** School of Information System, Meeting Room 4.3

Attendees Aishwarya Agarwal & Nasrullah Bin Khairullah

**Agenda** 1. Share our project sponsor's discussion with Prof Kam

2. Share our secondary research with Prof Kam

3. Share our initial data exploratory findings with Prof Kam

S/N	Notes/Task	Actor	Follow up Action
1.	As the research paper 'Predictive Analytics of Outpatients' is no longer available in SMU Library Database, Prof Kam advised us to contact Dr Ma Nang Laik directly for the paper.	Nas	To email Dr Ma Nang Laik  (Completed: She could not find the actual paper but she offered an alternative research paper "Service Innovation using Analytics for Outpatient appointments")
2.	Prof Kam suggested that we should broaden the motivation for looking into the no-show appointments. It should not just focus on increasing the productivity of the employees but also to reduce the opportunity cost of a patient being unable to book a slot as other patient has booked it and did not attend the appointment.	Zoey, Nas, Aishwarya	To rethink on the reasons for looking into no-show appointments
3.	<ul> <li>While it is good that we did our secondary research on no-show appointments, Prof Kam talks about bridging the literature review and our data together.</li> <li>What are the variables that the literature use?</li> <li>What are the variables that we are missing?</li> <li>Are we able to obtain these missing variables from our project sponsor?</li> </ul>	Nas	To relook into the literature review and compare it to the data
	We have identified the variables that have missing values and Prof Kam advised us to consider the models that we are planning to use in order to tackle the missing values.		



	We decided to exclude the variable 'Diagnostic' from further analysis as it is too unreliable and has a lot of missing values.  Initially, Nas suggested to exclude the variable 'Visit_Date' but Prof Kam advised us that this variable can be useful analysing the no-show appointments.  For variable 'Plan_IND', Aishwarya suggested to compare patients who cancelled their appointments to patients who did not show up for their appointments based on the scheduled appointment times.		
5.	Our project sponsor offers a possibility of giving us an additional data, pertaining to medicine used by the patients. Prof Kam advised us on how the medicine data can tie in with our project	Zoey, Nas & Aishwarya	To clarify the medicine data with the client
6.	Finally, Prof Kam gave us guidance on how we should proceed to the next phases:  Variable Selection  Examine the distributions, check for skewness. (if so, carry out data transformation)  Check for variables that may have high correlation  Check for biases. (See the example of HR data on National Service during his kickstart lesson)  Compare the independent variables	Zoey & Nas Aishwarya	Will finish up cleaning the data and start looking into variable selection  To explore the different models in literature review
	<ul> <li>Model Building</li> <li>Explore the different models in literature papers</li> <li>In our case, there are 3 outcomes; (1) patients attend their appointments, (2) patients did not attend their appointments &amp; (3) patients cancel their appointments</li> <li>Try to look for examples of models that focus on 3 outcomes</li> </ul>		
7.	Preparation for next meeting     Update Prof Kam on variable selection with screenshots and explanation     Share our exploratory analysis with Prof Kam		

