



SPONSOR MEETING 1

Date	12 January 2017
Time	4pm to 5pm
Venue	Li Ka Shing Library level 3 Research Room
Attendees	Aaron Tay (Sponsor) Wei Xiaoxin Wu Di Zheng Xiye
Absentees	Nil
Agenda	<ol style="list-style-type: none"> 1. Discussing project scope 2. Clarifying doubts regarding the project

AGENDA

No.	Task	Follow-up
1	<p>Discussing project scope</p> <ul style="list-style-type: none"> ✓ Mr. Aaron briefly introduced library's daily operations to us so as to give us a rough overview of the business context. ✓ Mr. Aaron also walked us through some of library's operation optimization problems, which potentially can be resolved with effective data analytics insights. ✓ After which, we started brainstorming ideas and approaches that may be beneficial in resolving persisting problems or optimizing operational efficiency. ✓ Mr. Aaron first suggested a topic on web analytics. Mr. Aaron has implanted Google Analytics on library's web page. Based on the data collected, we might be able to analyse the traffic flow as well as the popular sites with more visitors. 	<p>Further discuss on project scope as to:</p> <ol style="list-style-type: none"> 1. How are we going to link different pieces of data together for analytical purposes? 2. What model are we aiming to build? More generally, the final output should be description, prescriptive or

	<p>However, we feel that most of the insights can be drawn from the dashboard prepared by Google Analytics. Meanwhile, text mining techniques may be essential in cases like, search keywords analysis, which is an area that none of us has prior experience with. More importantly, we are concerned about the overlap of the analytics part with the user interface re-designing part, which may cause confusion in later stage of the project.</p> <p>✓ Mr. Aaron then brought up one of the ‘grey areas’ in library’s upcoming renovation – determining where students from different schools prefer to study inside the library. This is to facilitate library management team’s decision on acquiring what kind of facilities to suit which student groups needs in different sections inside library. We perceived this idea interesting and worth looking further into. As such, we decided to move forward by looking for suitable data for our EDA process.</p> <p>Mr. Aaron presented us with two pieces of data, library gantry access data and wifi access data. He further explained his rationale: wifi access data monitors number of devices connecting to the wifi in different sections of the library. Based on his sampling data, roughly 1.5 devices connecting wifi equivalent to one student staying inside the library. As such, by monitoring traffic flow within library during off-peak hours, we would be able to find out different student groups’ preference as to where they want to sit inside library. However, one critical limitation of which is that, wifi access data tells us minimum info on the students’ demographics. On contrary, gantry access data logs all demographics-related info, which may help us in understanding students’ personal info inside library. However, we immediately realized that, gantry access data only gives us info as to who are inside library. Yet, it does not tell us the demographics distribution across all sections inside library.</p> <p>e.g. 5 SIS and 5 SOA students tapped into library through gantry. Wifi access data indicates that 4 students sit at level 2 quiet area and 6 students sit at level 3 quiet area. We have minimum info as to whether all 4 students are SIS students or there is a mix of both.</p> <p>On top of which, uncontrolled elements like, the number of students entering library through other entrance, may affect our analysis itself.</p> <p>✓ As constraints from demographics info is critical to our analysis, we continue to think about other scenarios that put more emphasis on traffic flow and if possible, make use of the two pieces of data. Mr. Aaron pointed out that the library management team is still disputing regarding library’s opening hours. He further explained that closing hours can be easily monitored by the number of students inside</p>	<p>predictive in nature?</p> <p>3. Constructing a detailed timeline and work plan in order to catch up with the progress while taking into consideration all group members’ areas of specialization into consideration. Meanwhile, we may need to leave out some buffer time towards the end of the project.</p>
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	<p>library based on wifi connection data while same is not applicable in terms of opening hours. Optimal opening hours is crucial in cutting back operational costs and yet, fulfilling students' academic needs across different time periods. In this case, wifi connection data gives us an overview on internal traffic flow, especially during the period when library just opens, the traffic flow from 24-hours section to other parts of the library.</p> <ul style="list-style-type: none"> ✓ Building upon which, Mr. Aaron mentioned that he had another piece of data, showcasing traffic flow in between SMU buildings across different time periods. We perceived this essential as it indicates traffic flow from other school buildings to the library around its opening hours. 	
2	<p>Clarifying doubts regarding the project</p> <ul style="list-style-type: none"> ✓ Since Mr. Aaron still needs to do some data pre-processing to block out some sensitive student demographics info, we asked as to when we would be getting the data. Mr. Aaron promised to give us the data by next Monday, 16th Jan 2017. ✓ As we realized that three other Analytics Practicum groups were doing projects sponsored by Mr. Aaron, we inquired on whether there will be any overlap between us and the rest of the groups. Mr. Aaron re-assured us the scope of our project is totally different from that of other groups, which relieved us from our initial concerns. 	<p>1. Follow-up email to Mr. Aaron regarding today's meeting and reminder for him to send over data requested.</p> <p>2. Email notification to Prof. Kam Tin Seong that our group decides to embark on this new project.</p>

The meeting was adjourned at 5pm. These minutes will be circulated and adopted if there are no amendments reported in the next three days.

Prepared by,

Zheng Xiye

Vetted by,

Wei Xiaoxin, Wu Di