

**Time: 10.30am**

**Location: SIS MR4-1**

**Attended By: Siong Min, Hui Shia**

**Absent with Apologies: Janice**

No	Agenda:	Action By:
1	<p><b>Midterm feedback</b></p> <p>Prof Kam: Your project is slightly different as your group just gotten the data. You should just focus more on the issue that transpires along the line.</p> <p>Practicum has both process component and results review. The important part is the changed process of the project – what causes the change and what have you learnt from this change (need to document it down).</p>	
2	<p><b>Consult if we should use sum of utilization rate or average of utilization rate for a particular trade lane</b></p> <p>Prof Kam: It all depends on what you want to report. Use appropriate tools. Use JMP – Distribution analysis – We might want take note of route distribution. E.g. Shanghai and Long Beach and use graph builder to narrow down, using utilization rate to see how is it like.</p> <p>Boxplot – Some months are very long while some have less than 15%. Are they coming from the same shipping companies? What constitutes to the differences? Is it the type of container? Usually more than 85% for industry standards is considered very good. Find out more about differences between different companies.</p> <p>E.g. the middle line is low for SS HAN. 50% of the containers are only 45% filled. Others are at least 60% filled. Then use data filter to see the monthly data. There are months that they are doing well. Then choose those that are below 45% then analyse those – what is happening to them? What factors are contributing to them? Is it the company?</p> <p>Then subsequently – 2 methods – Classification methods (Can I find commonality so that I can group them together, group them with homogenous group) or Model construct.</p> <p>Predictive model – use the data to build the model and explain the model. Derive new variables out of this. May end up building different models for different routes. Address this sub-market analysis. Two approaches - Build explanatory (emphasis: significance on the statistic, global model, parameters estimates) or predictive models (emphasis: accuracy and prediction).</p> <p><i>If we choose to use predictive model, Prof Kam will guide us through</i></p>	

	<p><i>the procedures of this. We can always start with an explanatory model. With good data points to work with, then we can up with predictive model. For this dataset, even with explanatory model we will get interesting insights.</i></p>	
<b>3</b>	<p><b>We may face multicollinearity issues.</b></p> <p>E.g. Nov and Dec has high values from box plot diagram. Is it possible that it resulted from the festive season? Maybe the marketing people can take note which time period, months to focus on in their marketing strategy.</p> <p>Find a response variable (which is utilization rate) &amp; a collection of predictors (e.g. month of the year, route, port of dest, port of lod, ...)</p> <p>Note: must have a few continual data</p> <p>Then use multi-regression. Click Analyse&gt; Fit Model</p> <p>Prof Kam will be having a make-up lesson on Friday 3:30 -5pm on how to use regression analysis. Our group may sit-in.</p>	
<b>4</b>	<p><b>Determine the accuracy of the model</b></p> <p>HS: How to determine accuracy of the model?  Prof Kam: It tells you how good the explanatory power of the model. Not about the accuracy. The important thing is the explanatory part. You don't want to make the continuous data into discrete. You would explain these to them.</p> <p>For prediction, you need to create 2 sets of data. One to train, one to test. So that you will know how accurate your model. In order to have a good prediction, need to have at least 10,000 data points. If the factors are not significant, can remove them.</p>	
<b>5</b>	<p><b>Confidential contents of project</b></p> <p>Make the client anonymous – But check with project sponsor on further details.</p> <p>Final Poster Day, 7-830pm, Tentatively 22<sup>nd</sup> April</p>	

Prepared by: Tan Siong Min