Supervisor Meeting Minutes 01

Date/Time 15th January 2018, 2pm-2.40pm

Venue SIS building Meeting Room 4.5

Team Attendees Kevin Chong, Lim Yan Ling, Tee Yu Xuan

Supervisor Prof Kam

Agenda:

1. Review project scope and details

S/N	Note/Task	Actor	Follow-up Action
1.	• Yu Xuan and Kevin explained the proposal, our methodology, work scope etc. • Prof is concern about the pricing data our team is analysing. He explained that it is only minute tick data for a currency pair. With the data, our team is doing a forecasting model not a predictive model.		
2.	Professor's methodology advice: • Data exploration: look at the top 20 counters in Forex and see if they are forming a family • Look at multiple currency instead of just limiting to USD and Yen. E.g SGD vs Other countries' currencies. Do a time series and use data pattern methods to group them into clusters • Do segmentation and clustering. Apply time series clustering. • Look at the algorithm that can do wrapping and cross sectional. Group them together and do a forecast • Don't have to build a sophisticated algorithm • 2 stages of analysis: 1. Explorations to group 2. Time series to forecast and monitor next month's results and compare • When exploring data, look at short time period. Look at hourly transaction or 15 mins interval. Check if they are forming a cluster if they are doing a daily transaction. • Every week when there is new data update, forecast every week. Update and track everyday.		

3.	Professor's advice for analytics tools: • Team should look into **Tidyquant**. • **TS package** for time series. • **XTS** for time series. Do time series clustering. It is already in R programming for time series clustering • Use **R Markdown** for reporting, generate PDF, PowerPoint, share with intranet. • Use **R Shiny** for interactive web based application Professor inquired about the algorithms that our sponsor uses: • Yu Xuan explained our sponsor uses R studio but we use Python • Professor thinks that switching to python is not important. Stay with R Studio. The modern way is no longer using R as many don't understand how R works • Prof: Programming in R is relatively easier because they are syntax • Prof: R has better graphic representation output than python. To prepare the data for quant analysis.		
4.	Prof's views on our proposal: • Adjust and relook at the project scope. • To understand relationship of USD and Yen, a lot of time and effort are needed. • In order to build an AI model, our team has to track day to day transaction, all the events that happen daily , every country's data and build a database. Require 3 years to build and we need to track everyday. Too much time and effort are needed. pHD level work. • Need to track trade and bilateral relationships too. Sponsor need to have all these news and subscription to CNN etc. Have to collect all these data and analyse it. Machine will integrate and synthesize but we need all the data. • We also have to capture trader's behaviour data i.e how they behave (when they buy in/sell) but we may not have that • Price may not be a reflection of trader's behaviour of buying/selling because some traders invest on gains/lost.		

5.	• Prof advise us to relook at the project scope • There are many groups who will be revising their project scope these 2 weeks • Review and discuss with our sponsor • Can look for prof to finalise scope and details before meeting sponsor • Prof will email us and provide us with examples of time series clustering for our reference this evening.	All Yan Ling Yan Ling	Revise project scope (Completed) Book next consultation slot with prof (Completed) Check email and follow up with prof for time series clustering reference email this evening. (Completed)