Supervisor Meeting Minutes 04

Date/Time 19th February 2018, 1.30-2.30pm

Venue SIS building Meeting Room 4.3

Team Attendees Kevin Chong, Lim Yan Ling

Supervisor Prof Meena

Agenda:
1. Update progress of project
2. Clarify queries on project and mid-term deliverables (sandbox and interim report)

S/N	Note/Task	Actor	Follow-up Action
1.	• Kevin explained that we will be doing forecasting • Researched on time series. Arima method. Auto regressive moving average method • We are using R • Our methodology. Get plot, do moving average. Do decomposition base on methods. Use ADF test. • Tried with daily forecasting on Arima. Japanese yen and dollar. Tried with moving average but not doing well. Tried exponential average as well • We also did differencing • Seasonal trend. Model removes seasonal trend and did the predicting. • Client told us that R does not work. We manage to connect to live brokerage for R. Can get a live rate. Once model is up, we can run it for day. Able to see how much money u can make. Can tell client how much profitability. Platform - validating of model. • Kevin explained rationale for using closing price for forecast. High and low difficulty to forecast. Safer would be to use closing price. Might hit a few times in a min, higher chance of success.		

2.	• We asked prof if we should try other models or improve Arima if the prediction does not produce good results • Prof: try lower level prediction • Kevin: Should we use one currency pair or more currency pairs? • Prof say try at least 5 for forecasting. Combine them to give them an insight. Find correlation. Do forecasting. Other trends you have seen, highlight in your analysis. • Prof: Have to do high frequency (short time frame, multiple trade executions) because Arima methods is traditionally forecast better for short time frame, • We asked if there is a particular time frame for a good prediction. • Prof: Not really. Depends on EDA, auto correlation function. Depends on how well it is close to previous lag point. When more data you put in. Model prediction. The more you give, the better the results. • Prof: Mention time series analysis in mid-term presentation. • Yu Xuan: Do we present JMP pro analysis in midterm presentation? • Prof: May not make much sense because aggregated level. Not very meaningful to show. Show Arima time series more meaningful • Kevin: We discovered another model dynamic Bayesian Network. Should we work on that? Discovered 3 models: Classic approaches to timer series prediction, problems with classic approaches, state space models. • Prof: Due to time constraints, focus on Arima first. Moving forward, try these 3 models. • Prof: Arima using raw data. Two transformed data are not applicable. • Prof: Will they give u more currency pairs? • Kevin: Client does not know how many currency pairs there are in the database • Prof: Could get from open sources. • Yan Ling asked difference in deliverables for sandbox and interim report. • Prof: Will get back to us after discussing with prof kam. For now, include everything in	All Yan Ling	Try at least 5 for forecasting Upload JMP pro EDA into Elearn dropbox

	Sandbox. Prepare specific questions u want to ask in the presentation • Kevin: For Mid-term should we test on more currency pairs, all 5 currency pairs? For EDA, that will be too long, do u have any suggestions on that? • Prof: Just focus on USD and JPY pair. The rest just do a comparison. Moving average. Do a few as well. • Prof: Any plans on the connection to live brokerage with sponsor? • Kevin: We will discuss with client on wed. Can be a simple moving average to buy above or sell below. We will mention it in presentation. Brokerage don’t have guides on R	All	Update client on connection to live brokerage via R programming