# Analytics Practicum, Team DHL – Project Supervisor Meeting 3

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| **Meeting Date & Time** | 2:00 – 2:30 pm, 23rd March 2018 |
| **Meeting Location** | Meeting Room 4.1, School of Information Systems, SMU |
| **Agenda of the Meeting:** | Updates on Project |

| Attendance | | |
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| Prof. Kam Tin Seong | Project Supervisor | [Present] |
| Akshay Nayak | Team DHL, SMU | [Present] |
| Rikin Khanna | Team DHL, SMU | [Present] |
| Shalabh Verma | Team DHL, SMU | [Present] |

| S/No. | Task List | Actionable by |
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| 1. | Shalabh mentioned to Prof. Kam, the limitations from the mid-term presentation and how we went further in the last two weeks. Mentioned, how the promised contract vs. actual performance variance was calculated - as mentioned during the mid-term as we were awaiting that data | Team SMU |
| 2. | Rikin presented the data the results of the ANOVA test - mentioned our findings as to why we decided to do the analysis in terms of Business Units | All |
| 3. | Prof. Kam mentioned not to separate the delayed and not delayed shipments, all have to be together. If we want to see the analysis for delayed, then we only filter out the delayed ones | Team SMU |
| 4. | Prof Kam mentioned - Is a one-way ANOVA test the best way to analyze results when you have a 0,1 variables which is delayed, not delayed? Status is not continuous data, it is categorical data. Need to aggregate to the business units and then do a Chi-Square test and not ANOVA test. | Team SMU |
| 5. | Prof's recommended path - Do a cross tab between status and business units. Look at the specifications of the other options, is it nominal or ordinal, we have all NOMINAL data, now use the ticks within | Team SMU |

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| | nominal data. When/why would I use Phi and Cramer's, Lambda etc? Study these statistical tests before trying | |
| **6.** | Prof mentioned to the team to notice the answers in the Status * BU Cross tabulation - shows the performance 0 = not delayed,   1 = delayed for the individual business units. Now, the data needs to be split into 3 years, keep the data together and then do an overall analysis whether DHL is doing worse or better in the last 3 years. Generate the same outputs for individual months and then month-on-month comparison on whether they are statistically significant or not. All of this should be in the graphical form Use a mosaic chart to show the same analysis mentioned above ^ | Team SMU |
| **7.** | Prof mentioned, before using the mean, need to confirm that the mean is not skewed. Need to use a statistical test to show that it is skewed/not skewed and we go ahead with the analysis. Once we test that is skewed, we cannot use ANOVA test with mean, you have to use the Non-Parametric Tests, which uses the median instead of the mean. | Team SMU |
| **8.** | Prof mentioned, once the categorical analysis (0,1) is done, then do a delay day analysis. Look at Histogram distributions as well | Team SMU |