

Accountancy (MS) – BUS

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Step 1: Student Learning Outcome

DLO 7.1: Students will aggregate relevant data from different sources into a secure dataset and use appropriate analytics solutions to visualize data, perform multivariate analysis, and communicate insights.

Step 2: Assessment Methods and Measures

The instrument used for this analysis is a supervised machine learning assignment in ACCTG790, “Analytics in Accounting”, the capstone in the MSA program. The activity is assigned to predict sales quantities for use with inventory management and production scheduling using a predictive machine learning technique-regression analysis. Students are asked to merge two datasets, the fictional company Global Bike’s historical data and the data for sales prediction. There are anomalies in the data set that need to be handled during the data clean up and during the analysis. Students need to use the historical data to train a prediction model and then apply the model to predict sales quantity for the future.

The report must use effective visualizations, and the supervised machine learning technique “regression analysis” in the analysis. The assignment is one of the six major assignments during the semester. The grading parameters are as follows:

- 1) Data cleaning.
- 2) Proper choice and design of visualizations.
- 3) Proper training for the regression model, model examination, and model improvement.
- 4) Proper forecast of future sales using the trained model.

Step 3: Criteria for Success

80% of students are expected to meet or exceed expectations.

Step 4: Summary of Results

92.3% students meet or exceed expectation; only 7.69% students failed to meet the expectation

Step 5: Action Plan

No action plan needed at this time.