



Hands-On Learning Activity: Predictive Modeling Basics



In this Hands-On Learning activity, you will apply the fundamentals of predictive modeling and explore how Generative AI assists in forecasting key financial metrics. This activity uses content from this section only and will take exactly 60 minutes to complete.

Step 1: Define a Predictive Modeling Objective



- ▶ Choose one predictive task relevant to finance (e.g., forecast monthly revenue or future expenses).
- ▶ Briefly describe the business case and expected outcome of your prediction.

Step 2: Select Inputs and Justify Variables



- ▶ List at least 5 input variables you would use for your prediction (e.g., past revenue, seasonality, marketing spend).
- ▶ Explain why each variable is relevant and what data source you would use to obtain it.

Step 3: Simulate a Revenue Forecast



- ▶ Use the following data to forecast the next 3 months of revenue using a simple linear trend:
- ▶ Previous 3 months: \$12,000, \$13,200, \$14,520
- ▶ Assume the same growth rate continues. Calculate revenue for the next 3 months.
- ▶ Show all calculations and total projected revenue.

Step 4: Integrate Generative AI into the Workflow



- ▶ List 3 specific ways you would use Generative AI in this forecasting task.
- ▶ Examples may include cleaning data, generating predictive models, or explaining forecasts to stakeholders.

Step 5: Risk Factors and Confidence Levels



- ▶ List 3 potential risks or uncertainties in your forecast.
- ▶ For each, describe how you would increase your confidence in the prediction or manage the uncertainty.