

# Financial Forecasting & Budget Decision Support

Excel-based ARIMA Forecast | Scenario Analysis | Goal Seek

<b>Approach</b> <ul style="list-style-type: none"><li>• Historical monthly sales &amp; cost data</li><li>• Excel-based ARIMA-style forecasting model</li><li>• Forecast validation using MAPE &amp; RMSE</li><li>• Scenario analysis using Data Tables</li><li>• Goal Seek for profit-driven planning</li></ul>	<b>Key Results</b> <ul style="list-style-type: none"><li>• Forecast Accuracy:<ul style="list-style-type: none"><li>– MAPE: 55.3%</li><li>– RMSE: ■24,211</li></ul></li><li>• Base Case Profit: ■82,868</li><li>• Target Profit: ■100,000</li><li>• Required Sales Increase: ~5%</li></ul>
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## Business Insight

Profitability is primarily driven by revenue growth under the current cost structure. Even modest sales improvements can significantly improve profit, while sales decline poses substantial downside risk.

Tools Used: Microsoft Excel | Analysis ToolPak | Data Tables | Goal Seek