Northeastern University

Practice Sheet
ALY6130 71690 Risk Management Analytics
Spring 2025

In_Class Activity- Risk Assessment

Part 1: Qualitative Assessment

Expand on the risk identification In_class activity under Module 2 and make an exhaustive list of potential risks (negative and positive). Based on this diverse set of risks:

1) Review news articles, industry reports, policy debates, and other online materials regarding the organization and the industry in which it operates.
2) Create a category of risks (reasonable)
3) Analyze possible patterns/relationships between different categories of risks. Note this will help you with the risk prioritization and impact assessment.
4) Complete the risk calculation sheet with four risk types to assess likelihood-by-impact.
5) Update your risk log from In_class activity based on the likelihood and impact of the risk you identified.
6) Develop your risk heat map (see sample risk matrix here) using Excel to depict risk likelihood ("X" axes) by impact ("Y" axes). Do NOT use 1 to 10 as your values are not 1 to 10. You must reflect what is in the risk calculation sheet.
7) Plot your scores in relation to the total risk score in a risk heat map and with a range of high, medium, and low risk colored in red, yellow, and green, respectively.

Part 2: Risk Assessment- Predictive Analysis

Refer to the sample in this Mock project repo for replication strategies.

Prepare the risk log dataset

Train a machine learning classifier (Random Forest) to predict severity

Create a heatmap of likelihood vs. impact