# Assignment: Risk Management

# Context:

You are consulting for a company specializing in web development widgets that traditionally sells to wholesalers. One of their wholesalers has begun selling their widgets on eBay, prompting the company to explore direct online sales. You are tasked with assessing the security risks involved in setting up and managing their online sales presence without creating an actual plan.

# Objectives:

Your assessment should cover the following three scenarios for managing the company's online presence, including future support considerations:

1. **Third-Party Hosted Solution**: Evaluate the risks of managing the website entirely on a third-party hosted platform.
2. **In-House Hosting Solution**: Assess the risks of managing the website entirely in-house.
3. **Hybrid Management with Third-Party Web Services**: Analyze the risks of using third-party web services for page creation and server hosting.

# Assignment Instructions:

* **Asset Identification (3 Marks)**: Identify at least 5 unique assets for each scenario that are critical to the online sales initiative. While there may be overlap, strive for a variety of assets across scenarios to encourage diverse risk considerations.

**Example**:

A table with text on it

AI-generated content may be incorrect.

* **Impact Assessment (3 Marks)**:
  + **Impact Categories**: Assess each asset against the following impact categories: Revenue, Public Image, and Ability to do the job effectively.
  + **Weighted Values**: Assign a weighted value to each category totaling 100, indicating the relative importance to your company.
  + **Asset Impact Scoring**: For each asset in every scenario, assign a value from 0 to 1, indicating the impact on the category. A score of 1 indicates extreme impact, while 0 indicates no impact. Calculate the weighted score by multiplying the impact score by the category value for each asset.

**Example**:

A table with numbers and text

Description automatically generated

* **Vulnerability and Risk Assessment (3 Marks)**:
  + **Vulnerability Identification**: Choose a minimum of 3 vulnerabilities for each asset in every scenario. Assess the likelihood of each vulnerability occurring as a percentage.
  + **Risk Rating Calculation**: Multiply the likelihood percentage of each vulnerability by the asset's weighted score to determine the risk rating factor for each vulnerability. Document a total of 45 vulnerabilities across all scenarios.

**Example**:

A screenshot of a computer

Description automatically generated

* **Scenario Evaluation (1 Mark)**:
  + Conclude by indicating which scenario you believe is the most secure based on your risk assessment. Justify your choice in 2-3 sentences.

# Documentation and Submission:

* Create a detailed report documenting your findings. This report can be submitted as a single Excel file or a well-organized Word document. Each scenario should be clearly tabulated or sectioned.
* Include links or descriptions of sources where you found your values for vulnerabilities or state if they are based on personal intuition or experience.

# Notes & Assumptions:

* The focus is on risks associated with online presence and management. The risks related to the fabrication and delivery of widgets are out of scope.
* Summary of mitigation plans is not required for this assignment.
* Consider unknown variables and the potential impact of trusting another company’s policies and security measures when evaluating hosting and third-party subscription services.
* The exercise is about thinking through the risks rather than obtaining correct values and weights. Feel free to use the example spreadsheet for inspiration, but ensure your submission is original.

# Rubric:

**1. Asset Identification (3 Marks)**

| **Criteria** | **3 Points** | **2 Points** | **1 Point** | **0 Points** |
| --- | --- | --- | --- | --- |
| **Unique Asset Identification** | Identified 5 or more unique assets for each scenario with clear relevance and diversity. | Identified 5 or fewer assets for each scenario, with some overlap or less clear relevance. | Identified fewer than 5 assets for each scenario, with minimal relevance or variety. | Identified less than 3 assets for each scenario or assets are irrelevant. |

**2. Impact Assessment (3 Marks)**

| **Criteria** | **3 Points** | **2 Points** | **1 Point** | **0 Points** |
| --- | --- | --- | --- | --- |
| **Impact Categories & Weighted Values** | Effectively assigned and justified weighted values. Detailed impact scoring for each asset. | Assigned weighted values with basic justification. Adequate impact scoring for each asset. | Assigned weighted values with minimal or no justification. Limited impact scoring. Mistakes made in weighted values. | Weighted values or impact scoring not provided or irrelevant. |

**3. Vulnerability and Risk Assessment (3 Marks)**

| **Criteria** | **3 Points** | **2 Points** | **1 Point** | **0 Points** |
| --- | --- | --- | --- | --- |
| **Vulnerability Identification & Risk Rating** | Identified 3 relevant vulnerabilities for each asset and calculated risk rating factors accurately. | Identified 2-3 vulnerabilities per asset with mostly accurate risk ratings. | Identified an inadequate number of vulnerabilities per asset with little or no explanations. | Failed to identify vulnerabilities or calculate risk ratings correctly. |

**4. Scenario Evaluation (1 Mark)**

| **Criteria** | **1 Point** | **0 Points** |
| --- | --- | --- |
| **Best Scenario Justification** | Provided a clear, concise justification for the chosen scenario. | No justification provided or the justification is irrelevant or unclear. |

General Assessment Criteria for All Sections:

* **0 Points**: The student did not attempt the section, or the work is completely irrelevant or incorrect.
* **1 Point**: The student made an attempt but the work is significantly lacking in detail, relevance, or correctness.
* **2 Points**: The student completed the task with a satisfactory level of detail and correctness but could improve in clarity, depth, or precision.
* **3 Points**: The student excelled in the task, providing detailed, relevant, and accurate work.