The Probability and Impact Matrix is a grid for mapping the probability of each risk occurrence and its impact

on project objectives if that risk occurs. The Probability and Impact Assessment determines the probability and

impact of the risk. It may be constructed for threats and opportunities. This matrix provides a helpful way to view

the various risks on the project and prioritize them for responses. It also provides an overview of the amount of

risk on the project. The project team can get an idea of the overall project risk by seeing the number of risks in

each square of the matrix.

The organizations overall risk tolerance is usually indicated by the shading or range of cells within the matrix.

For example an organization with a low risk threshold may rank events that fall in the very high or high range for

both impact and probability as high risk. An organization with a higher risk threshold may only rank risk with a

very high probability and impact as high risk.

The organization may use the relative risk rankings to specify what type risk response should be taken.

For example, the organization may specify an avoidance strategy for all threats that are ranked as high risks.

A project with many risks in the dark gray zone will need more contingency to absorb the risk and likely more

time and budget to develop and implement risk responses. In some situations a decision is made not to pursue a

project because there is more risk than the organization is willing to absorb.

A sample Probability and Impact Matrix follows. The needs of your project will determine the exact layout of

the matrix.

The Probability and Impact Matrix can receive information from:

• Probability and Impact Risk Assessment

• Risk Register

It provides information to the Risk Register.

The Probability and Impact Matrix is a tool used in 11.3 Perform Qualitative Risk Analysis in the *PMBOK®*

*Guide—*Fifth Edition.

**PROBABILITY AND IMPACT MATRIX**

|  |  |  |  |
| --- | --- | --- | --- |
| **Project Title:** |  | **Date Prepared:** |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Very High** |  |  |  |  |  |
| **High** |  |  |  |  |  |
| **Medium** |  |  |  |  |  |
| **Low** |  |  |  |  |  |
| **Very Low** |  |  |  |  |  |
|  | **Very Low** | **Low** | **Medium** | **High** | **Very High** |