Boolean Expression Evaluator

Risk Assessment

Version 1.0

Revision History

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# Software Development Risk Assessment

***Note****: This document is derived from the framework established by the U.S. Department of Energy Software Engineering Methodology. The original document can be found at [https://www.energy.gov/sites/prod/files/cioprod/documents/riskasmt.pdf].*

**The following is a list of potential project risks. Each risk that receives a high score should have a corresponding plan for management and control of that risk. Circle the one that best describes that item’s risk.**

**Apply the following criteria when selecting the appropriate risk level.**

**Low** - Very unlikely that this will occur during the life of the project

**Medium** - There is a 50-50 chance that this will occur during the life of the project

**High** - Very likely that this will occur during the life of the project

1. Acquisition of items critical to project success (e.g., hardware and/or software resources) could be delayed in the procurement process. **Low Medium High**
2. Project schedule will exceed one fiscal year. **Low Medium High**
3. Burden rates (i.e., cost of labor), support costs, or other charges will increase from year to year. **Low Medium High**
4. Project team member(s) will not be in place when required. **Low Medium High**
5. Risks associated with using off-the-shelf packages. **Low Medium High**
6. Risks associated with any conversions of existing data required before implementation of a new system. **Low Medium High**
7. Risks with the hardware and software (the development platform) chosen to perform project development. e.g., can this hardware and software handle the workload required to complete the project? **Low Medium High**
8. Chance that the workstation environment of the intended user will change after requirements are gathered. **Low Medium High**
9. Risks to the project caused by requirements that are inadequately defined. **Low Medium High**
10. Chance that changes, in critical personnel on either the government or contractor side, will occur during the life of the project. **Low Medium High**
11. Risk to the project of a facility move during the project. **Low Medium High**
12. Risks associated with personnel assigned to the project who may be pulled off anytime for another assignment. **Low Medium High**
13. Risk to cost and schedule involved with the use of subcontractors as a part of the development effort. **Low Medium High**
14. Chance that system owner or user support staff required to be available to the development team during the software development cycle will not be available. (Take into account situations such as use/lose leave, vacation, training, travel, and meetings). **Low Medium High**
15. Risk caused by a system owner's or user's representative not participating in the change control process used to manage all proposed changes to the software product from the Requirements Definition Stage forward. **Low Medium High**
16. Risk to the project resulting from a mandated/mandatory completion date for the project. **Low Medium High**

**The following risks are either present or absent. A red answer acknowledges that the risk exists and that a plan must be in place to deal with it.**

1. Elements of the project are being supplied by groups over which the project manager does not have direct control. **Yes No**
2. Two or more separate groups are developing parts of the software being delivered. **Yes No**
3. The development team is unfamiliar with the environment being used (e.g., is the technology unfamiliar, has the team done this type of work before?). **Yes No**
4. This is a first-time assignment for the project manager. **Yes No**
5. The project is significantly larger or smaller than what the team is used to working on. **Yes No**
6. The project team has correct skills and can operate at the proper level to complete the needed work. **Yes No**
7. Additional skilled persons or resources are readily available in the event that problems occur on the project. **Yes No**
8. Development and support groups are at different sites. **Yes No**
9. The Project Plan accounts for vacation and sick leave by assigned personnel. **Yes No**
10. The client or system owner supports a disciplined approach to software development, starting with a formal project plan. **Yes No**
11. The project will receive the necessary level of support in terms of using repeatable processes (e.g., approvers will fully exercise their concurrence authority at stage exit). **Yes No**