

Risk Management Plan

Project Enlightenment

*Computer Training For Visually Impaired Automation Tool
(CTVIAT)*

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1.0	30/11/10	Project Enlightenment	Phase 1 - Preliminary draft for Phase 1

Definition

The following are definitions of terms, abbreviations and acronyms used in this document.

Term	Definition
RMP	Risk Management Plan

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1. Executive Summary

Risk is a measure of the inability to achieve overall program objectives within defined cost, schedule, and technical constraints and has two components: (1) the probability of failing to achieve a particular outcome and (2) the consequences/impacts of failing to achieve that outcome. For processes, risk is a measure of the difference between actual performance of a process and the known best practice for performing that process.

Risk events are those events within the Computer Training for Visually Impaired Automation Tool that, if they go wrong, could result in problems in the development, production, and fielding of the system. Risk events should be defined to a level such that the risk and causes are understandable and can be accurately assessed in terms of probability/likelihood and consequence/impact to establish the level of risk. For processes, risk events are assessed in terms of process variance from known best practices and potential consequences/impacts of the variance.

Moreover, technical risk, cost risk, and schedule risk are three important issues need to be defined. Technical risk is associated with the evolution of the design and the production of the automation tool affecting the level of performance necessary to meet the operational requirements. The contractor's and subcontractors' design, test, and production processes (process risk) influence the technical risk and the nature of the product.

Secondly, cost risk is associated with the ability of the program to achieve its life-cycle cost objectives. Two risk areas bearing on cost are (1) the risk that the cost estimates and objectives are accurate and reasonable and (2) the risk that program execution will not meet the cost objectives as a result of a failure to handle cost, schedule, and performance risks.

Schedule risk is associated with the adequacy of the time estimated and allocated for the development, production, and fielding of the system. Two risk areas bearing on schedule risk are (1) the risk that the schedule estimates and objectives are realistic and reasonable and (2) the risk that program execution will fall short of the schedule objectives as a result of failure to handle cost, schedule, or performance risks.

The identification of risk normally starts before the project is initiated, and the number of risks increase as the project matures through the lifecycle. When a risk is identified, it's first assessed to ascertain the probability of occurring, the degree of impact to the schedule, scope, cost, and quality, and then prioritized. Risk events may impact only one or while others may impact the project in multiple impact categories. The probability of occurrence, number of categories impacted and the degree (high, medium, low) to which they impact the project will be the basis for assigning the risk priority.

1.1 Purpose

This Risk Management Plan (RMP) presents the process for implementing proactive risk management as part of the overall management of the Computer Training Automation Tool. Risk management is a program management tool to assess and mitigate events that might adversely impact the program. Therefore, risk management increases the probability/likelihood of program success. This RMP will:

- Serve as a basis for identifying alternatives to achieve cost, schedule, and performance goals,
- Assist in making decisions on budget and funding priorities,
- Provide risk information for Milestone decisions, and
- Allow monitoring the health of the program as it proceeds.

The RMP describes methods for identifying, analyzing, prioritizing, and tracking risk - drivers; developing risk-handling plans; and planning for adequate resources to handle risk. It assigns specific responsibilities for the management of risk and prescribes the documenting, monitoring, and reporting processes to be followed.

This plan documents the processes, tools and procedures that will be used to manage and control those events that could have a negative impact on the Computer Training for Visually Impaired Automation Tool. It's the controlling document for managing and controlling all project risks. This plan will address:

- Risk Identification
- Risk Assessment
- Risk Mitigation

The risk management approach is tailored to effectively anticipate and mitigate the risks that have critical impact on project objectives. While technical issues are a primary concern both early on and throughout all project phases, risk management considers both internal and external sources for cost, schedule and technical risk.

2. Risk Management Strategy

2.1 Risk Identification

A risk is any event that could prevent the project from progressing as planned, or from successful completion. Risks can be identified from a number of different sources. Some may be quite obvious and will be identified prior to project kickoff. Others will be identified during the project lifecycle, and a risk can be identified by anyone associated with the project. Some risk will be inherent to the project itself, while others will be the result of external influences that are completely outside the control of the project team.

The basic risk management strategy is intended to identify critical areas and risk events, both technical and non-technical, and take necessary action to handle them before they can become problems, causing serious cost, schedule, or performance impacts.

Risk awareness requires that every project team member be aware of what constitutes a risk to the project, and being sensitive to specific events or factors that could potentially impact the project in a positive or negative way.

Özge İnan has been assigned by team members as the person responsible for administering risk management processes and activities for Project Enlightenment.

Main risks of the automation tool can be listed as following:

- **Difficult to use:** This automation tool is supposed to be used by visually impaired people. While execution of the tool, some devices which include visual stuffs such computer screen, keyboard are used which makes the tool to be used by visually impaired.
- **Hardware Integration:** In addition to the automation tool, there should be used some devices like Braille screen and Braille keyboard. So, hardware integration is one of the main risks of the system.
- **Database:** The system needs database to hold some information such as users, questions, answers, tests... So, database processes like connection of database and transmission of data are also considered as one of risks of the system.
- **Code Integration:** The system is developed by team members and any processes like code implementation, document preparation, etc. are submitted to TortoiseSVN. So, the integration can be considered as a risk.

2.2 Risk Assessment

Risk assessment is the act of determining the probability that a risk will occur and the impact that event would have, should it occur. During the assessment phase, the project analyzes each risk to isolate its cause and to determine its effects. The project rates the risk in terms of its probability of occurrence and its severity of impact to cost (i.e. dollars), schedule (i.e. time) and technical performance; as applicable.

2.3 Risk Mitigation

Risk mitigation is the process that identifies, evaluates, selects, and implements options to set risk at acceptable levels given project constraints and objectives. This includes the specifics on what should be done, when it should be accomplished, who is responsible, and associated with cost and schedule. The handling strategy is determined by the overall risk assessment rate as indicated below.

Risks are divided into four main groups. Firstly, since some users of the system are visually impaired, the system is difficult to use for them. This risk will be decreased by implementation and using special devices.

Secondly, hardware integration is needed to help visually impaired people to use keyboard and screen. Braille keyboards and Braille screens will be integrated to the system which is another risk. So, if these devices can be provided, this risk can be decreased.

Third risk comes from using database for the system. If computers which execute the system can set larger memory to the database, this risk can be decreased.

Last risk is code integration. Since team members are not experienced in using TortoiseSVN to integrate the codes of the system, this becomes another risk for the system. But, team members are educated, this risk may be handled.

