

Bio-Film Buster Project

Risk Management Plan

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Bio-Film Buster Project	Version:
Risk Management Plan	Page: i

Revision History

Bio-Film Buster Project	Version:
Risk Management Plan	Page: ii

Table of Contents

1. Description	4
1.1 Objective	4
1.2 Project	4
1.3 Project Description	4
1.4 Key Functions	4
2. Risk Management Plan Summary	5
2.1 Management	5
2.2 Integrated Schedule	5
3. Approach to Risk Management	5
3.1 Definitions	6
3.2 Schedule Risk	6
3.3 Structure	6
3.4 Methods Overview	6
3.5 Techniques Applied	7
3.6 Implementation	8
4. Application	9
4.1 Risk Assessment	9
4.2 Risk identification	10
4.3 Risk Qualitative & Quantitative Analysis	10
4.3.1 Risk Prioritization	11
4.4 Risk Response Development	11
4.5 Risk Monitoring & Control	11
4.5.1 Control Evaluation	11
4.6 Risk Documentation & Risk Register	12
5. Other Relevant Plans	12
5.1 Quality	12
5.2 Communication	12
5.3 Contracting	12
5.4 Testing	13
5.5 Training	13
6. Summary	13
6.1 Risk Process Summary	13
6.2 Technical Risk Summary	14
6.3 Supportability Risk Summary	14

Bio-Film Buster Project	Version:
Risk Management Plan	Page: iii

6.4	Cost Risk Summary	14
6.5	Schedule Risk Summary	14
6.6	Conclusions	15

Bio-Film Buster Project	Version:
Risk Management Plan	Page: 4

Risk Management Plan

1. Description

Risks concern the relative probability of the occurrence of an uncertain event with the potential to positively or negatively impact the PMO Project's mission relative to technical, cost, schedule, or overall project objectives.

The over-riding view of risk management should be based on principles that are forward looking, structured, informative, and continuous. The key to successful risk management is early planning and aggressive execution. Good planning enables an organized, comprehensive, and iterative approach for identifying and assessing all project risks.

1.1 Objective

This document describes a risk management process for the Project Management Office (PMO) Project. The purpose of the risk management process is to:

- Identify risks related to the successful completion of the PMO Project
- Perform qualitative and quantitative risk analysis on identified risks
- Classify and rank risks as acceptable or unacceptable
- Coordinate the development of risk response strategies
- Develop risk response budgets and contingency budgets, update project plans and notify appropriate project stakeholders
- Oversee the execution of risk response strategies and the ongoing monitoring and controlling of new potential project risks
- Identify and escalate new risks to the appropriate management or decision making level

1.2 Project

The scope of this Risk Management Plan coincides with that of the Project Management Office Project for Bio-Film Buster 2006 and its specific tasks. Consequently, this document will address risks directly associated with the project.

1.3 Project Description

This project will establish a new manufacturing facility for Bio-Film Manufacturing Corporation.

1.4 Key Functions

The Project's own scope is defined by the following:

- sourcing property for the new facility
- contracting the design of the new facility to an architectural firm

Bio-Film Buster Project	Version:
Risk Management Plan	Page: 5

- hiring and managing a general contractor and all sub-contractors to construct the new facility
- oversee the layout and design of the manufacturing line to be installed
- manage the design and development of the new facilities HVAC system, electrical system, water system, security system, fire sprinkler system, and gas system
- manage sourcing and procurement of the Bio-Film materials needed for manufacturing
- manage the quality planning and testing of the Bio-Film product
- manage the design, sourcing, installation, start-up and commissioning of new computer system and software used to automate the manufacturing line
- manage the design, sourcing, installation, start-up and commissioning of new computer system and software used for sales, purchasing and accounting
- manage plant automation of manufacturing line, packaging system, conveyor system, shipping and receiving

It will also address any external factors that may influence any of these PMO Project requirements.

2. Risk Management Plan Summary

The primary aim of this plan is the development and implementation of a project risk management methodology. At first glance, overall risk to Bio-Film might appear relatively low. Nevertheless, a key to successful risk management is early planning and aggressive execution with thorough monitoring and controlling.

2.1 Management

Management is required at every phase of the project life cycle, to determine proper execution of the project plan while watching for any risk triggers that might impact the project in terms of cost, schedule and quality.

2.2 Integrated Schedule

The various elements of the project management process have to be properly coordinated. The processes involved are:

- Project plan development - integrating and coordinating all project plans to create a consistent, coherent document
- Project plan execution – performing the activities included in the project plan
- Integrated change control – coordinating changes across the entire project

3. Approach to Risk Management

Risk management is a collaborative effort among the Program Sponsor, Project Manager,

Bio-Film Buster Project	Version:
Risk Management Plan	Page: 6

and Project Team Members as well as all other stakeholders of the Bio-Film Manufacturing Corporation's business division.

3.1 Definitions

Risk Management Planning is the process of deciding how to approach and plan the risk management activities for a project.

3.2 Schedule Risk

Project schedule uncertainties and time constraint of the single IT staff member allowing only 40% of his time for a three-month period. Progress will be monitored against the planned schedule for critical path activities, and any schedule slippage in an activity's completion will increase the risk level for that activity. An activity that is not a critical path activity will be monitored to evaluate the amount of float that exists in the schedule, and to take the necessary action to ensure that the activity will not be added to the critical path.

3.3 Structure

The Risk Management Plan details the procedures employed for managing the risks to the PMO Project. It describes the tools and techniques that will be applied to risk management, and the risk items to be managed.

This plan is organized into the following sections:

- Project Description
- Project Summary
- Approach to Risk Management
- Project Application
- Other Relevant Plans
- Summary

3.4 Methods Overview

Risk management is the means by which uncertainty is systematically managed to increase the likelihood of meeting project objectives. All project management can be construed as managing risk, but the risk management process is a specific set of activities performed to identify and manage risks on the project. The next two sections will describe the techniques to be used and how they will be implemented.

Bio-Film Buster Project	Version:
Risk Management Plan	Page: 7

3.5 Techniques Applied

There are generally 5 steps necessary to the risk management process. The techniques applied are:

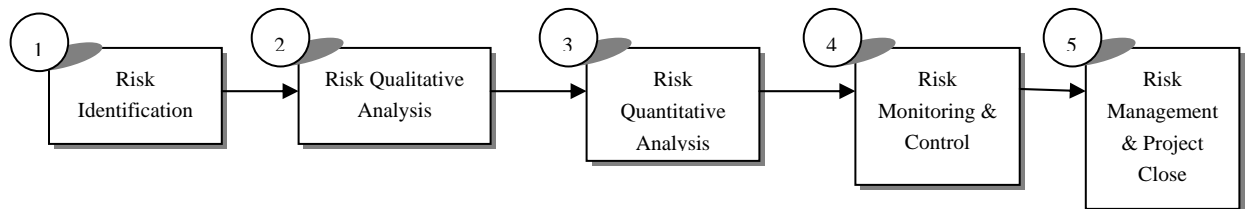


Figure 1: Risk Management Process Steps

All techniques try to increase the satisfaction of every stakeholder and increase the chances of success.

The weekly report will be used to quickly identify risk items that have the potential for technical or schedule impact on the project. The monthly report will provide more detailed information pertaining to any risk items that have been flagged.

The Risk Management Plan itself is a dynamic document, and will be modified as necessary to reflect any major changes to the risks to the project, both in terms of identified risks and developed risk response strategies.

Bio-Film Buster Project	Version:
Risk Management Plan	Page: 8

3.6 Implementation

The risk management process in figure 2 is repeated throughout the project. The first pass will identify initial risks, while subsequent iterations will identify and manage risks that appear later in the project.



Figure 2: The Risk Management Process

Bio-Film Buster Project	Version:
Risk Management Plan	Page: 9

4. Application

The following processes are to be performed and applied to every phase of the project execution process.

4.1 Risk Assessment

In order to complete this Risk Management Plan, please fill in the following table with Strategic Risks that your group has identified and agreed to after reviewing the Bio-Film Buster project introduction.

Table 1 lists the risk items associated with the project. Also, it identifies the degree of risk (high, medium, or low) estimated for each item:

Item Number	Strategic Risk Item	Degree of Risk
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Table 1: Project Risks

Bio-Film Buster Project	Version:
Risk Management Plan	Page: 10

4.2 Risk identification

As stated previously, a risk is the probability of an event occurring that positively or negatively impacts a project relative to cost, schedule, and objectives. Risks may be identified either during the normal course of development or installation, or through the on-going cycle of assessments performed by the Project Management Team or by internal or external audits, assessments or other oversight activities. Identification is conducted by drawing from a number of resources that include:

- Brainstorming sessions
- Use of checklists/Lessons learned
- Expert interviews
- Discussing worst case scenarios

Consulting industry literature as potential risks are identified and conveyed to the Project Manager, they are scheduled for presentation at periodic management meetings for discussion and analysis or at meetings called to address a specific potential or identified risk. Virtually anyone can identify a potential risk. However, the Project Manager has overall responsibility for potential risks, and will present a written risk assessment to the project team. Only when the risk is discussed and analyzed can it be considered a formal risk with a managed risk response strategy.

4.3 Risk Qualitative & Quantitative Analysis

Once the risk is clearly articulated, the team assigns the risk a severity. The severity of each risk is determined using a balanced score card that contrasts the probability that an impact will occur against the severity of the impact on project success. The result is a numeric severity rating.

QUALITATIVE VALUE	PROBABILITY	SEVERITY	QUANTITATIVE VALUE
HIGH	ASSURED	WILL IMPACT	1
MEDIUM	POSSIBLE	POTENTIAL IMPACT	2
LOW	UNLIKELY	UNLIKELY IMPACT	3

Table 2: Risk Management probability and Severity Ratings

Bio-Film Buster Project	Version:
Risk Management Plan	Page: 11

4.3.1 Risk Prioritization

Post qualitative and quantitative analysis, risks that are high probability, high impact and high severity will be classified as unacceptable risks. Risks that are determined to be medium to low probability, medium to low impact with a resulting medium to low severity will be classified as acceptable risks.

4.4 Risk Response Development

Risks that were classified as unacceptable will then go through a risk response planning session. Acceptable risks will be reviewed for actuarial cost, and that cost will be summed and used as the contingency budget needs of the project.

Unacceptable risks will undergo risk response planning to determine ultimate risks response budgets needed for the project.

4.5 Risk Monitoring & Control

This is the last step in the risk management process and involves executing risk response strategies, monitoring risks, and watching for new risk.

4.5.1 Control Evaluation

The Project Manager is responsible for maintaining information about each risk. The Project Manager will provide ongoing correspondence to the Project sponsor for high-risk items. Anyone on the team may propose new risks or updates to risks. Consensus among the team members or direction from the Program Manager is required before risk information is officially changed.

Executing and monitoring risk response strategies is done in a systematic way by keeping a Risk Register of all known risks and recording their status on a routine basis until the risk has passed.

Updating this Risk Register requires the following:

- Update the Risk Register after risk identification, qualitative analysis, risk ranking, quantitative analysis, risk response planning, and as an ongoing iterative process throughout the entire life cycle of the project
- Assign identified risks to someone
- Update the status of the risk routinely and track the probability of the risk
- The Risk Register will be treated as a living document

Bio-Film Buster Project	Version:
Risk Management Plan	Page: 12

4.6 Risk Documentation & Risk Register

As each risk is analyzed and tracked, the Project Manager captures new information as well as changes in risk response strategies, risk severity, and risk response action due dates. Everything pertaining to risk management is recorded in the project Risk Register, in the meeting minutes and is reported at regularly scheduled project risk status meetings and/or general project status meetings.

The Risk Management Plan will be modified as necessary to reflect any major changes to the risks of the project, both in terms of identifying the risks and in terms of the developed risk response strategies and workarounds. Any changes as such will require stakeholder approval and be included in the project change control process described in the Project Management Plan for this project.

5. Other Relevant Plans

5.1 Quality

The process of quality management consists of:

- Quality planning - identifying the quality standards that are relevant to the project, and determining how to satisfy them
- Quality assurance – evaluating project performance on a regular basis to provide confidence that the project will satisfy the quality standards
- Quality control - Monitoring specific project results to determine if they comply with relevant organization quality standards and identifying ways to eliminate causes of unsatisfactory performance

5.2 Communication

The processes required to ensure timely and appropriate generation, collection, dissemination, storage and ultimate disposition of project information consists of:

- Communication planning – determining the information and communication needs of the stakeholders: who needs what information, when they will need it, and how it will be given to them.
- Information distribution – ensuring that needed information is available to project stakeholders in a timely manner.
- Performance reporting – includes status reporting, progress measurement, and forecasting.
- Administrative closure – generating, gathering, and disseminating information to formalize phase or project completion.

5.3 Contracting

The processes required to acquire goods and services to meet project goals from an

Bio-Film Buster Project	Version:
Risk Management Plan	Page: 13

external performing organization consists of:

- Procurement planning – determining what to procure and when.
- Solicitation planning – documenting, product requirements and identifying potential sources.
- Solicitation – obtaining quotations, bids, offers, or proposals.
- Vendor selection – choosing from among potential sellers.
- Contract administration – managing the relationship with the seller.
- Contract closeout – completion and settlement of the contract, including resolution of any open items.

5.4 Testing

The processes required to test the effectiveness of any and all project deliverables:

- Identifying and selecting documentation projects of all possible types for test purposes.
- Prioritization of projects according to its project type.
- Executing the projects with regard to its priority.
- Measuring its overall effectiveness against time.

5.5 Training

Develop training manuals/courses outlining all the processes and methods that will be required training for the new **Bio-Film** manufacturing plant.

6. Summary

6.1 Risk Process Summary

Once a risk is identified, analyzed, documented, and under control, the Project Manager oversees the on-going risk management. The typical course of action includes the following steps:

- Status meetings are used to collect information specific to risk activities and risk response plans
- Agreed risk response strategies including for example: avoidance, transference, mitigation, and/or acceptance
- Changes to risk severity require additional or revised risk response plans
- Closure of the risk item is suggested when the risk has been mitigated, transferred or effectively closed

Bio-Film Buster Project	Version:
Risk Management Plan	Page: 14

- The Project Manager determines when to escalate risk for additional risk response support

6.2 Technical Risk Summary

The software application selected to achieve the project objectives may **not** meet the following goals:

- Networkable software that can handle peak loads effectively of up to 100 users at any given time
- Includes all features and benefits to meet project management methodology requirements

6.3 Supportability Risk Summary

Lack of support and limited availability that might cause cost and schedule slippage include the following:

- Time constraint on the single IT staff member allowing only 40% of his time for a three-month period
- Limited availability of the two subject matter experts (SMEs) for the plant automation work
- Lack of support from Finance department
- Lack of support from Human resources department

6.4 Cost Risk Summary

Progress will be monitored against the cost breakdown structure of the planned cost estimate and any cost overruns in an activity's completion will increase the risk level for that activity. When the risk level becomes medium or high, the activity will be reported to the head of the commercial business division. The budget for risk response planning and execution is part of the budget allocation for each activity and is managed within the entire project budget.

6.5 Schedule Risk Summary

Progress will be monitored against the planned schedule for critical path activities, and any schedule slippage in an activity's completion will increase the risk level for that activity. The corrective action may be either an addition of resources to address the problem, or a solution that focuses on increased amount of attention on the activity.

Bio-Film Buster Project	Version:
Risk Management Plan	Page: 15

6.6 Conclusions

Risk management is a collaborative effort among the Program Sponsor, Project Manager, and Project Team Members as well as all other stakeholders of the **Bio-Film Manufacturing Corporation's** commercial business division. Team activities with regard to risk management are facilitated by the Project Manager and supported by the entire team. The Program Manager guides the team through the risk management process and ensures that the team has the required tools to perform and to support overall project risk mitigation.

When the risk level becomes medium or high, the activity will be reported to the head of the commercial business division. The corrective action may be either an addition of resources to address the problem, or a solution that focuses on increased amount of attention on the activity.

6. Approvals
