QSO 355: Final Project I

Jo De Leon

Southern New Hampshire University

**Table of Contents**

Introduction

1. Project Overview
   1. Roles and Responsibilities
   2. Scope and Schedule
2. Tasks
   1. Description
   2. Time
   3. Dependencies
3. Resources
   1. Alignment
   2. Evaluation
4. Risk
   1. Sources
   2. Strategies
5. Budget
6. Schedule

[Exhibit 1 - WBS](#_Exhibit_1_–_1)

[Exhibit 2 – Resource Alignment](#_Exhibit_2_–)

[Exhibit 3 – Risk Register](#_Exhibit_3_–)

[Exhibit 4 – Budget](#_Exhibit_4_–)

**Introduction**

**Background**

Purpose of Project Plan:

This project plan provides a general framework and establishes determined strategies for the creation of an A&D online store. This plan defines the requirements necessary for the project outlining the business goals and its objectives in collaboration between the project manager, executive sponsor, project team, and all other management pertinent to the project.

**Background**

Background Information:

While A&D was reluctant with adopting the Internet as a sales channel, the company’s products approached commodity status, thus, making it clear that the company would gain significant advantage through an online store. With the steady increase of competition and the holiday season coming up, the project was prioritized at the top in order to launch and take advantage of the holiday coming up.

**Project Approach**

Project Approach:

Development of an online store for A&D High Tech will be based on the processes of preceding projects which will aid with assessing, forecasting, and identifying the desired outcomes and conditions of this project.

# Project Overview

Project Overview:

This project outlines the roles, responsibilities, scope, and schedule in order to meet the expectations and properly execute the project within the resources and budget provided.

**A. Roles and Responsibilities**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Stakeholder** | **Role** | **Influence** | **Needs** | **Responsibility** | **Notes** |
| 1 | Chris Johnson | Project Manager | High | Execute project timely and as expected | Manage entire project | Transition from Eric Robertson to take over project |
| 2 | Matt Webb | CIO | High | Create an online store | Oversee the project to ensure proper execution | Decided on the build option for cost and customization purposes |
| 3 | Jeff White | VP of Sales | High | Increase sales of the company | Give feedback and analysis and approval | Advised CEO that the company was losing sales by not selling online |
| 4 | Ted Walter | CEO | High | Maintain success and increase sales of the company | Give feedback, analysis, and approval of project | Hopes to launch by the holiday season |
| 5 | Chuck Gagler | VP of E-Commerce | Low |  |  |  |
| 6 | Todd Fredson | Sales Manager | Medium | Increase sales of the company |  |  |
| 7 | Kara Siposki | Test Lead | High | To make sure that testing is comprehensive and efficient | Manage testing and configuration |  |
| 8 | Todd Eliason | Tester | High | To give feedback on all testing done | Test product for quality assurance |  |
| 9 | Ryan Neff | Functional Lead | High | To identify tasks and interrelationships | Evaluate functional and cross-functional requirements |  |
| 10 | Stacy Lyfe | Functional Analyst | High | Gather information and study procedures and systems currently in place | Analyze information gathered and test to ensure specifications are met for functionality |  |
| 11 | Marc Sanders | Development Lead | High | Decides the methodologies and techniques to be used by developers | Ensures that development meets the program specifications |  |
| 12 | Rick Burke | Infrastructure Lead | High | Network between staff, maintain servers and physical cabling | Manage the design, installation, and maintenance of the systems |  |
| 12 | Sanjay Vohra | DBA | High | Store and organize data | Maintaining a fully functional and successful database environment |  |

**B. Scope and Schedule**

Scope:

The project aims to create an online store and should include minimum changes in order to reach the project objective.

**Key Deliverables**

The project shall have the following deliverables:

- Software Requirements

- Detailed Design

- Test Planning

- Technical Infrastructure

- Development & Unit Test

- Testing

- Deployment

**Justification**

Due to a decrease in competitive advantage by not selling online, the company decided to create an online store to maintain their competitive advantage while also decreasing costs.

**Constraints**

- Contracted developers

- Project turnover from original project manager to Chris Johnson

- Project plan to be put together by the next week

**Assumptions**

**-** No expectations to incur any expenses from procuring software since A&D has been operating using the Windows 2000 operating system.

- Total project estimate will be really close to the actual

- Expected launch by Christmas

- Effective transition between Robertson and Johnson

**Exclusions**

- Software updates for changes in the market demands

- Adding new features to the software after launch

**Schedule**

**Project Deadline: December 25, 2003**

- System Requirements

Deadline:

- Software Requirements

Deadline:

- Detailed Design

Deadline:

- Test Planning

Deadline:

- Technical Infrastructure

Deadline:

- Development & Unit Test

Deadline:

- Testing

Deadline:

- Deployment

Deadline:

# Tasks

Introduce the project tasks section. Only a couple of sentences are needed. This section should also indicate the below upcoming subtopics.

Tasks Overview:

This section includes the work breakdown structure and time estimates for the project. The work breakdown structure details all the necessary tasks and subtasks for the final production of this development. The time estimate for each task completion and any dependencies a task may have is analyzed in this section.

**A. Description**

[See Work Breakdown Structure Dictionary](#_Exhibit_1_–_1)

**B. Time**

[See Work Breakdown Structure Dictionary](#_Exhibit_1_–_1)

**C. Dependencies**

[See Work Breakdown Structure Dictionary](#_Exhibit_1_–_1)

# Resources

Resources Overview:

This section outlines the resources needed to carry out all the tasks and subtasks. The resource alignments are outlined and evaluated.

**A. Alignment**

[See WBS Resource Alignment](#_Exhibit_2_–)

**B. Evaluation**

Resource Evaluation:

While the company has a multitude of resources for the project, it still does not have available resources to support the entire project. Developers needed to build are unoccupied.

# Risk

Risk Overview:

This section outlines the risks of the project. It identifies the likely sources of the risk with risk mitigations determined for each risk to reduce the impact on the project.

**A. Sources**

[See Risk Register](#_Exhibit_3_–)

**B. Strategies**

[See Risk Register](#_Exhibit_2_–)

# Budget

[See Budget](#_Exhibit_4_–)

# Schedule

See Gantt Chart

# Exhibit 1 – WBS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Task ID** | **WBS Code** | **Task Name** | **Task Description** | **Work Estimate Days** | **Predecessors** |
| 1 | 1 | Overall Project | All work applicable to develop and deploy final product |  |  |
| 2 | *1.1* | *Project Management* | Management necessary to manage project |  |  |
| 3 | 1.1.1 | Manage Project | Manage the project | 127 | 59FF |
| 4 | *1.2* | *System Requirements* | All system requirements necessary for the project |  |  |
| 5 | 1.2.1 | Gather Business Requirements | List and gather out all of the business requirements | 8 |  |
| 6 | 1.2.2 | Design Business Process Flows | Analyze all of the process flow of each department in the business and design it | 4 | 5 |
| 7 | 1.2.3 | Finalize Technical Requirements | Review and finalize the technical requirements | 6 |  |
| 8 | 1.2.4 | Create Operational Requirements | Based on the business requirements and process flows, create the operational requirements | 15 | 5, 6 |
| 9 | 1.2.5 | Identify Technical Infrastructure Needs | Review the technical and operational requirements to identify the technical infrastructure needs | 2 | 7, 8 |
| 10 | *1.3* | *Software Requirements* | All software requirements necessary for the project |  |  |
| 11 | 1.3.1 | Create Functional Requirements | Based on the business requirements, process flows, and operational requirements, create the functional requirements |  | 5, 6, 8 |
| 12 | 1.3.1.1 | Capture Customer Profile | Create functional feature that captures customer profile | 4 |  |
| 13 | 1.3.1.2 | View and Search Product Catalog | Create functional feature that can view and search product catalog | 6 |  |
| 14 | 1.3.1.3 | Updating and Calculating Shopping Cart | Create functional feature that updates and calculates shopping cart | 3 | 13 |
| 15 | 1.3.1.4 | Taking Payments | Create functional feature that will take payments | 6 |  |
| 16 | 1.3.1.5 | Submit Order | Create functional feature for submission of orders | 4 | 12, 13, 14, 15 |
| **Task ID** | **WBS Code** | **Task Name** | **Task Description** | **Work Estimate Days** | **Predecessors** |
| 17 | 1.3.1.6 | Check Order History & Order Status | Create functional feature to allow customers to check order history and order status | 3 | 16 |
| 18 | 1.3.2 | Create Data Requirements | Create the data requirements for the software | 3 | 12, 13 |
| 19 | 1.3.3 | Create ERP Interface Requirements | Create the ERP Interface requirements for the software | 7 | 16SS |
| 20 | 1.3.4 | Create User Interface Requirements | Create the User Interface requirements for the software | 4 | 11SS |
| 21 | *1.4* | *Detailed Design* | All detailed designs necessary for the project |  | 10 |
| 22 | 1.4.1 | Design Capture Customer Profile Pages & Components | Design Capture Customer Profile Pages & Components for the software | 13.5 |  |
| 23 | 1.4.2 | Design View and Search Product Catalog Pages & Components | Design View and Search Product Catalog Pages & Components for the software | 13.5 |  |
| 24 | 1.4.3 | Design Updating and Calculating Shopping Cart | Design Updating and Calculating Shopping Cart for the software | 6 | 23 |
| 25 | 1.4.4 | Design Taking Payments Pages & Components | Design Taking Payments Pages & Components for the software | 6 |  |
| 26 | 1.4.5 | Design Submit Order Pages & Components | Design Submit Order Pages & Components for thee software | 16 | 22, 23, 24, 25 |
| 27 | 1.4.6 | Design Check Order History & Order Status Pages & Components | Design Check Order History & Order Status Pages & Components for the software | 4 | 26 |
| 28 | 1.4.7 | Design Logical & Physical Data Model | Design Logical & Physical Data Model for the software | 18 |  |
| 29 | 1.4.8 | Design ERP Interface | Design ERP Interface for the software | 20 | 22, 23, 24, 25 |
| 30 | *1.5* | *Test Planning* | All test planning necessary for the project |  |  |
| 31 | 1.5.1 | Gather Testing Requirements | List out all testing requirements | 14 | 11 |
| 32 | 1.5.2 | Create System Test Plan & Test Cases | Create the system test plan and its test cases | 20 | 31, 21 |
| **Task ID** | **WBS Code** | **Task Name** | **Task Description** | **Work Estimate Days** | **Predecessors** |
| 33 | 1.5.3 | Write System Test Scripts | Write the system test scripts | 22 | 32 |
| 34 | *1.6* | *Technical Infrastructure* | All technical infrastructure necessary for the project |  |  |
| 35 | 1.6.1 | Create Development Environment | Create the development environment for the developers | 20 | 9 |
| 36 | 1.6.2 | Create Testing Environment | Create the testing environment for the developers | 34.2 | 35 |
| 37 | 1.6.3 | Support Development Environment | Support the created development environment | 3.8 | 35 |
| 38 | 1.6.4 | Support Testing Environment & Deployment | Support the created testing environment and deployment | 46 | 36 |
| 39 | 1.6.5 | Support Database | Support the database of the system | 4.6 | 47 |
| 40 | *1.7* | *Development & Unit Test* | All development and unit testing necessary for the project |  | 35 |
| 41 | 1.7.1 | Build Capture Customer Profile Pages & Components | Build the capture customer profile pages and components for the software | 13 | 22 |
| 42 | 1.7.2 | Build View and Search Product Catalog Pages & Components | Build View and Search Product Catalog Pages & Components for the software | 12 | 23 |
| 43 | 1.7.3 | Build Updating and Calculating Shopping Cart | Build Updating and Calculating Shopping Cart for the software | 7 | 24, 42 |
| 44 | 1.7.4 | Build Taking Payments Pages & Components | Build Taking Payments Pages & Components for the software | 6 | 25 |
| 45 | 1.7.5 | Build Submit Order Pages & Components | Build Submit Order Pages & Components for the software | 24 | 26, 41, 42, 43, 44 |
| 46 | 1.7.6 | Build Check Order History & Order Status Pages & Components | Build Check Order History & Order Status Pages & Components for the software | 6 | 27 |
| 47 | 1.7.7 | Build Logical & Physical Data Model | Build Logical & Physical Data Model for the software | 15.5 | 28 |
| 48 | 1.7.8 | Build ERP Interface | Build ERP Interface for the software | 18 | 29 |
| **Task ID** | **WBS Code** | **Task Name** | **Task Description** | **Work Estimate Days** | **Predecessors** |
| 49 | 1.7.9 | Support Development & Assembly Test | Support the development and assembly test of the software | 46 | 21 |
| 50 | *1.8* | *Testing* | All testing necessary for the project |  |  |
| 51 | 1.8.1 | Perform Assembly Testing | Test assembly of the software |  | 31 |
| 52 | 1.8.1.1 | Perform Phase 1 Testing | Test phase 1 | 12 | 41, 42, 43 |
| 53 | 1.8.1.2 | Perform Phase 2 Testing | Test phase 2 | 20 | 44, 45, 46, 52 47, 48 |
| 54 | 1.8.2 | Perform System Testing | Test the system | 160 | 51, 32, 33 |
| 55 | 1.8.3 | Perform Validation Testing | Test the validation of the system | 80 | 54 |
| 56 | *1.9* | *Deployment* | All deployment necessary for the project |  | 50 |
| 57 | 1.9.1 | Implement System | Implement the entire system for preparation to deploy | 80 |  |
| 58 | 1.9.2 | Deploy to Production | Deploy the software | 8 | 57 |
| 59 | 1.9.3 | Project Wrap-Up | Close all tasks of the project and gather feedback of the performance of the entire project development, complete all paperwork, release resources, archive documents | 90 | 58 |

[Back](#_Tasks)

# Exhibit 2 – WBS Resource Alignment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task ID** | **WBS Code** | **Task Name** | **Resource Name** | **Resource Reasoning** |
| 1 | 1 | Overall Project |  |  |
| 2 | *1.1* | *Project Management* |  |  |
| 3 | 1.1.1 | Manage Project | Chris Johnson (Project Manager) | The project needs an overall project manager to ensure the success of the project and to ensure the project is within budget and finished within the schedule. |
| 4 | *1.2* | *System Requirements* |  |  |
| 5 | 1.2.1 | Gather Business Requirements | Ryan Neff (Functional Lead), Stacy Lyle (Functional Analyst) | To accurately and comprehensively gather business requirements |
| 6 | 1.2.2 | Design Business Process Flows | Ryan Neff (Functional Lead), Stacy Lyle (Functional Analyst) | To accurately and comprehensively design the business process flows |
| 7 | 1.2.3 | Finalize Technical Requirements | Rick Burke (Infrastructure Lead) | To accurately finalize the technical requirements |
| 8 | 1.2.4 | Create Operational Requirements | Ryan Neff (Functional Lead), Stacy Lyle (Functional Analyst), Rick Burke (Infrastructure Lead) | To accurately and comprehensively create the operational requirements |
| 9 | 1.2.5 | Identify Technical Infrastructure Needs | Rick Burke (Infrastructure Lead) | To accurately and comprehensively identify the technical infrastructure |
| 10 | *1.3* | *Software Requirements* |  |  |
| 11 | 1.3.1 | Create Functional Requirements |  |  |
| 12 | 1.3.1.1 | Capture Customer Profile | Ryan Neff (Functional Lead) | To accurately and comprehensively create Capture Customer Profile |
| 13 | 1.3.1.2 | View and Search Product Catalog | Ryan Neff (Functional Lead) | To accurately and comprehensively create View and Search Product Cataglog |
| 14 | 1.3.1.3 | Updating and Calculating Shopping Cart | Ryan Neff (Functional Lead) | To accurately and comprehensively create Updating and Calculating Shopping Cart |
| 15 | 1.3.1.4 | Taking Payments | Stacy Lyle (Functional Analyst) | To accurately and comprehensively create Taking Payments |
| 16 | 1.3.1.5 | Submit Order | Ryan Neff (Functional Lead) | To accurately and comprehensively create Submit Order |
| 17 | 1.3.1.6 | Check Order History & Order Status | Ryan Neff (Functional Lead) | To accurately and comprehensively create Check Order History and Order Status |
| 18 | 1.3.2 | Create Data Requirements | Stacy Lyle (Functional Analyst) | To accurately create Data Requirements |
| 19 | 1.3.3 | Create ERP Interface Requirements | Stacy Lyle (Functional Analyst) | To accurately create ERP Interface Requirements |
| 20 | 1.3.4 | Create User Interface Requirements | Stacy Lyle (Functional Analyst) | To accurately create User Interface Requirements |
| 21 | *1.4* | *Detailed Design* |  |  |
| **Task ID** | **WBS Code** | **Task Name** | **Resource Name** | **Resource Reasoning** |
| 22 | 1.4.1 | Design Capture Customer Profile Pages & Components | Marc Sanders (Development Lead), Ryan Neff (Functional Lead) [50%] | To sufficiently and excellently design Capture Customer Profile Pages & Components |
| 23 | 1.4.2 | Design View and Search Product Catalog Pages & Components | Developer 1 (TBD), Ryan Neff (Functional Lead) [50%] | To sufficiently and excellently design View and Search Product Catalog Pages & Components |
| 24 | 1.4.3 | Design Updating and Calculating Shopping Cart | Developer 1 (TBD), Ryan Neff (Functional Lead) | To sufficiently and excellently design Updating and Calculating Shopping Cart |
| 25 | 1.4.4 | Design Taking Payments Pages & Components | Marc Sanders (Development Lead), Stacy Lyle (Functional Analyst) | To sufficiently and excellently design Taking Payments Pages & Components |
| 26 | 1.4.5 | Design Submit Order Pages & Components | Marc Sanders (Development Lead), Ryan Neff (Functional Lead) | To sufficiently and excellently design Submit Order Pages & Components |
| 27 | 1.4.6 | Design Check Order History & Order Status Pages & Components | Marc Sanders (Development Lead), Ryan Neff (Functional Lead) | To sufficiently and excellently design Check Order & Order Status Pages & Components |
| 28 | 1.4.7 | Design Logical & Physical Data Model | Sanjay Vohra (DBA), Stacy Lyle (Functional Analyst) | To sufficiently and excellently design Logical & Physical Data Model |
| 29 | 1.4.8 | Design ERP Interface | Developer 1 (TBD), Stacy Lyle (Functional Analyst) | To sufficiently and excellently design ERP Interface |
| 30 | *1.5* | *Test Planning* |  |  |
| 31 | 1.5.1 | Gather Testing Requirements | Kara Siposki (Test Lead), Todd Eliason (Tester) | To accurately gather testing requirements |
| 32 | 1.5.2 | Create System Test Plan & Test Cases | Kara Siposki (Test Lead), Todd Eliason (Tester) | To comprehensilvey create system test plan & test cases |
| 33 | 1.5.3 | Write System Test Scripts | Kara Siposki (Test Lead), Todd Eliason (Tester) | To accurately and comprehensively write system test scripts |
| 34 | *1.6* | *Technical Infrastructure* |  |  |
| 35 | 1.6.1 | Create Development Environment | Rick Burke (Infrastructure Lead) | To sufficiently create a development environment |
| 36 | 1.6.2 | Create Testing Environment | Rick Burke (Infrastructure Lead) [90%] | To sufficiently create a testing environment |
| 37 | 1.6.3 | Support Development Environment | Rick Burke (Infrastructure Lead) [10%] | To adequately support the development environment |
|  |  |  |  |  |
|  |  |  |  |  |
| **Task ID** | **WBS Code** | **Task Name** | **Resource Name** | **Resource Reasoning** |
| 38 | 1.6.4 | Support Testing Environment & Deployment | Rick Burke (Infrastructure Lead) | To adequately support testing environment & deployment |
| 39 | 1.6.5 | Support Database | Sanjay Vohra (DBA) [10%] | To adequately support database |
| 40 | *1.7* | *Development & Unit Test* |  |  |
| 41 | 1.7.1 | Build Capture Customer Profile Pages & Components | Developer 2 (TBD) | To accurately and comprehensively build Capture Customer Profile Pages & Components |
| 42 | 1.7.2 | Build View and Search Product Catalog Pages & Components | Developer 3 (TBD) | To accurately and comprehensively build View and Search Product Catalog Pages & Components |
| 43 | 1.7.3 | Build Updating and Calculating Shopping Cart | Developer 3 (TBD) | To accurately and comprehensively build Updating and Calculating Shopping Cart |
| 44 | 1.7.4 | Build Taking Payments Pages & Components | Developer 2 (TBD) | To accurately and comprehensively build Taking Payments Pages & Components |
| 45 | 1.7.5 | Build Submit Order Pages & Components | Developer 2 (TBD), Developer 3 (TBD) | To accurately and comprehensively build Submit Order Pages & Components |
| 46 | 1.7.6 | Build Check Order History & Order Status Pages & Components | Marc Sanders (Development Lead) | To accurately and comprehensively build Check Order History & Order Status Pages & Components |
| 47 | 1.7.7 | Build Logical & Physical Data Model | Sanjay Vohra (DBA) [50%] | To accurately and comprehensively build Logical & Physical Data Model |
| 48 | 1.7.8 | Build ERP Interface | Developer 1 (TBD) | To accurately and comprehensively build ERP Interface |
| 49 | 1.7.9 | Support Development & Assembly Test | Ryan Neff (Functional Lead), Stacy Lyle (Functional Analyst) | To adequately support development & assembly test |
| 50 | *1.8* | *Testing* |  |  |
| 51 | 1.8.1 | Perform Assembly Testing |  |  |
| 52 | 1.8.1.1 | Perform Phase 1 Testing | Marc Sanders (Development Lead) | To adequately test Phase 1 |
| 53 | 1.8.1.2 | Perform Phase 2 Testing | Marc Sanders (Development Lead), Developer 1 (TBD), Developer 2 (TBD), Developer 3 (TBD) | To adequately test Phase 2 |
| 54 | 1.8.2 | Perform System Testing | Kara Siposki (Test Lead), Todd Eliason (Tester), Marc Sanders (Development Lead), Developer 1 (TBD), Developer 2 (TBD), Developer 3 (TBD), Ryan Neff (Functional Lead), Stacy Lyle (Functional Analyst) | To adequately testing the system |
| **Task ID** | **WBS Code** | **Task Name** | **Resource Name** | **Resource Reasoning** |
| 55 | 1.8.3 | Perform Validation Testing | Kara Siposki (Test Lead), Todd Eliason (Tester), Marc Sanders (Development Lead), Developer 1 (TBD), Developer 2 (TBD), Developer 3 (TBD), Ryan Neff (Functional Lead), Stacy Lyle (Functional Analyst) | To adequately test validation |
| 56 | *1.9* | *Deployment* |  |  |
| 57 | 1.9.1 | Implement System | Kara Siposki (Test Lead), Todd Eliason (Tester), Marc Sanders (Development Lead), Developer 1 (TBD), Developer 2 (TBD), Developer 3 (TBD), Ryan Neff (Functional Lead), Stacy Lyle (Functional Analyst) | To adequately and successfully implement system |
| 58 | 1.9.2 | Deploy To Production | Kara Siposki (Test Lead), Todd Eliason (Tester), Marc Sanders (Development Lead), Developer 1 (TBD), Developer 2 (TBD), Developer 3 (TBD), Ryan Neff (Functional Lead), Stacy Lyle (Functional Analyst) | To adequately and successfully deploy to production |
| 59 | 1.9.3 | Project Wrap-Up | Kara Siposki (Test Lead), Todd Eliason (Tester), Marc Sanders (Development Lead), Developer 1 (TBD), Developer 2 (TBD), Developer 3 (TBD), Ryan Neff (Functional Lead), Stacy Lyle (Functional Analyst), Rick Burke (Infrastructure Lead) | To comprehensively wrap up project |

[Back](#_Resources)

# Exhibit 3 – Risk Register

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **RISK NO.** | **RISK DESCRIPTION (Event, Causes, Impacts)** | **COMMENT ON RISK (Trends, Background, etc.)** | **CONSEQUENCE (SEVERITY) SCORE (1–5)** | **LIKELIHOOD SCORE (1–5)** | **NUMERIC RISK VALUE** | **CHANGE IN RISK (Improving, No Change, Getting Worse)** | **RISK STRATEGY (Avoid, Reduce, Transfer, Do Nothing)** |
| 1 | Project Manager Transition | The team is already established with the original assigned project manager | 2 | 5 | 10 | Improving | Reduce - get on board right away with the stakeholders and sit down with the originally assigned project manager |
| 2 | Unavailable resources | The project is currently missing resources to fullfill the entire project. | 5 | 1 | 5 | Improving | Reduce - hire contractors |
| 3 | Missing deadlines / delays | Given the targeted finish date of the project, it presents a very tight schedule. | 5 | 4 | 20 | Improving | Reduce - Ensure project scope and tasks are comprehensive, closely manage the project, designate resources to tasks they will perform the best in |
| **RISK NO.** | **RISK DESCRIPTION (Event, Causes, Impacts)** | **COMMENT ON RISK (Trends, Background, etc.)** | **CONSEQUENCE (SEVERITY) SCORE (1–5)** | **LIKELIHOOD SCORE (1–5)** | **NUMERIC RISK VALUE** | **CHANGE IN RISK (Improving, No Change, Getting Worse)** | **RISK STRATEGY (Avoid, Reduce, Transfer, Do Nothing)** |
| 4 | Exceeding the budget | Depending on the delays and success rate of the testing, the final cost may exceed the estimated budget. | 5 | 4 | 20 | Improving | Reduce - ensure delays are mitigated, manage and support all testing as much as possible, and ensure the details of the project scope as as comprehensive as possible to estimate the budget |
| 5 | Contracted resources skill level meets lower expectation | Since there are no internal developers available for the project, A&D was forced to hire contractors through Geneva. | 5 | 3 | 15 | No Change | Reduce - assign resources tasks that are within their skill set |

[Back](#_Risk)

# Exhibit 4 – Budget

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **WBS Code** | **Labor Hours** | **Labor Rates** | **Total Labor** | **Equipment** | **Estimate** |
| 1 |  |  |  |  |  |
| *1.1* |  |  |  |  |  |
| 1.1.1 | 1016 | $ 75.00 | $ 76,200.00 |  | $ 76,200.00 |
| *1.2* |  |  |  |  |  |
| 1.2.1 | 64 | $ 75.00 | $ 4,800.00 |  | $ 4,800.00 |
|  | 64 | $ 75.00 | $ 4,800.00 |  | $ 4,800.00 |
| 1.2.2 | 32 | $ 75.00 | $ 2,400.00 |  | $ 2,400.00 |
|  |  |  |  |  |  |
| 1.2.3 | 48 | $ 75.00 | $ 3,600.00 |  | $ 3,600.00 |
| 1.2.4 | 120 | $ 75.00 | $ 9,000.00 |  | $ 9,000.00 |
|  | 120 |  |  |  |  |
|  | 120 |  |  |  |  |
| 1.2.5 | 16 | $ 75.00 | $ 1,200.00 |  | $ 1,200.00 |
| *1.3* |  |  |  |  |  |
| 1.3.1 |  |  |  |  |  |
| 1.3.1.1 | 32 | $ 75.00 | $ 2,400.00 |  | $ 2,400.00 |
| 1.3.1.2 | 48 | $ 75.00 | $ 3,600.00 |  | $ 3,600.00 |
| 1.3.1.3 | 24 | $ 75.00 | $ 1,800.00 |  | $ 1,800.00 |
| 1.3.1.4 | 48 | $ 75.00 | $ 3,600.00 |  | $ 3,600.00 |
| 1.3.1.5 | 32 | $ 75.00 | $ 2,400.00 |  | $ 2,400.00 |
| 1.3.1.6 | 24 | $ 75.00 | $ 1,800.00 |  | $ 1,800.00 |
| 1.3.2 | 24 | $ 75.00 | $ 1,800.00 |  | $ 1,800.00 |
| 1.3.3 | 56 | $ 75.00 | $ 4,200.00 |  | $ 4,200.00 |
| 1.3.4 | 32 | $ 75.00 | $ 2,400.00 |  | $ 2,400.00 |
| *1.4* |  |  |  |  |  |
| 1.4.1 | 108 | $ 75.00 | $ 8,100.00 |  | $ 8,100.00 |
|  | 54 | $ 75.00 | $ 4,050.00 |  | $ 4,050.00 |
| 1.4.2 | 108 | $ 165.00 | $ 17,820.00 |  | $ 17,820.00 |
|  | 54 | $ 75.00 | $ 4,050.00 |  | $ 4,050.00 |
| 1.4.3 | 108 | $ 165.00 | $ 17,820.00 |  | $ 17,820.00 |
|  | 54 | $ 75.00 | $ 4,050.00 |  | $ 4,050.00 |
| 1.4.4 | 48 | $ 75.00 | $ 3,600.00 |  | $ 3,600.00 |
|  | 48 | $ 75.00 | $ 3,600.00 |  | $ 3,600.00 |
| 1.4.5 | 128 | $ 75.00 | $ 9,600.00 |  | $ 9,600.00 |
|  | 128 | $ 75.00 | $ 9,600.00 |  | $ 9,600.00 |
| 1.4.6 | 32 | $ 75.00 | $ 2,400.00 |  | $ 2,400.00 |
| **WBS Code** | **Labor Hours** | **Labor Rates** | **Total Labor** | **Equipment** | **Estimate** |
|  | 32 | $ 75.00 | $ 2,400.00 |  | $ 2,400.00 |
| 1.4.7 | 144 | $ 75.00 | $ 10,800.00 |  | $ 10,800.00 |
|  | 144 | $ 75.00 | $ 10,800.00 |  | $ 10,800.00 |
| 1.4.8 | 160 | $ 165.00 | $ 26,400.00 |  | $ 26,400.00 |
|  | 160 | $ 75.00 | $ 12,000.00 |  | $ 12,000.00 |
| *1.5* |  |  |  |  |  |
| 1.5.1 | 112 | $ 75.00 | $ 8,400.00 |  | $ 8,400.00 |
|  | 112 | $ 75.00 | $ 8,400.00 |  | $ 8,400.00 |
| 1.5.2 | 160 | $ 75.00 | $ 12,000.00 |  | $ 12,000.00 |
|  | 160 | $ 75.00 | $ 12,000.00 |  | $ 12,000.00 |
| 1.5.3 | 176 | $ 75.00 | $ 13,200.00 |  | $ 13,200.00 |
|  | 176 | $ 75.00 | $ 13,200.00 |  | $ 13,200.00 |
| *1.6* |  |  |  | $ 98,500.00 | $ 98,500.00 |
| 1.6.1 | 160 | $ 75.00 | $ 12,000.00 |  | $ 12,000.00 |
| 1.6.2 | 273.6 | $ 75.00 | $ 18,468.00 |  | $ 18,468.00 |
| 1.6.3 | 30.4 | $ 75.00 | $ 228.00 |  | $ 228.00 |
| 1.6.4 | 368 | $ 75.00 | $ 27,600.00 |  | $ 27,600.00 |
| 1.6.5 | 36.8 | $ 75.00 | $ 276.00 |  | $ 276.00 |
| *1.7* |  |  |  |  |  |
| 1.7.1 | 104 | $ 165.00 | $ 17,160.00 |  | $ 17,160.00 |
| 1.7.2 | 96 | $ 165.00 | $ 15,840.00 |  | $ 15,840.00 |
| 1.7.3 | 56 | $ 165.00 | $ 9,240.00 |  | $ 9,240.00 |
| 1.7.4 | 48 | $ 165.00 | $ 7,920.00 |  | $ 7,920.00 |
| 1.7.5 | 192 | $ 165.00 | $ 31,680.00 |  | $ 31,680.00 |
|  | 192 | $ 165.00 | $ 31,680.00 |  | $ 31,680.00 |
| 1.7.6 | 48 | $ 75.00 | $ 3,600.00 |  | $ 3,600.00 |
| 1.7.7 | 124 |  | $ - |  |  |
| 1.7.8 | 144 | $ 165.00 | $ 23,760.00 |  | $ 23,760.00 |
| 1.7.9 | 368 | $ 75.00 | $ 27,600.00 |  | $ 27,600.00 |
|  | 368 | $ 75.00 | $ 27,600.00 |  | $ 27,600.00 |
| *1.8* |  |  |  |  |  |
| 1.8.1 |  |  |  |  |  |
| 1.8.1.1 | 96 | $ 75.00 | $ 7,200.00 |  | $ 7,200.00 |
| 1.8.1.2 | 160 | $ 75.00 | $ 12,000.00 |  | $ 12,000.00 |
|  | 160 | $ 165.00 | $ 26,400.00 |  | $ 26,400.00 |
|  | 160 | $ 165.00 | $ 26,400.00 |  | $ 26,400.00 |
|  | 160 | $ 165.00 | $ 26,400.00 |  | $ 26,400.00 |
| 1.8.2 | 1280 | $ 75.00 | $ 96,000.00 |  | $ 96,000.00 |
|  | 1280 | $ 75.00 | $ 96,000.00 |  | $ 96,000.00 |
| **WBS Code** | **Labor Hours** | **Labor Rates** | **Total Labor** | **Equipment** | **Estimate** |
|  | 1280 | $ 75.00 | $ 96,000.00 |  | $ 96,000.00 |
|  | 1280 | $ 165.00 | $ 211,200.00 |  | $ 211,200.00 |
|  | 1280 | $ 165.00 | $ 211,200.00 |  | $ 211,200.00 |
|  | 1280 | $ 165.00 | $ 211,200.00 |  | $ 211,200.00 |
|  | 1280 | $ 75.00 | $ 96,000.00 |  | $ 96,000.00 |
|  | 1280 | $ 75.00 | $ 96,000.00 |  | $ 96,000.00 |
| 1.8.3 | 640 |  | $ - |  |  |
|  | 640 | $ 75.00 | $ 48,000.00 |  | $ 48,000.00 |
|  | 640 | $ 75.00 | $ 48,000.00 |  | $ 48,000.00 |
|  | 640 | $ 165.00 | $ 105,600.00 |  | $ 105,600.00 |
|  | 640 | $ 165.00 | $ 105,600.00 |  | $ 105,600.00 |
|  | 640 | $ 165.00 | $ 105,600.00 |  | $ 105,600.00 |
|  | 640 | $ 75.00 | $ 48,000.00 |  | $ 48,000.00 |
|  | 640 | $ 75.00 | $ 48,000.00 |  | $ 48,000.00 |
| *1.9* |  |  |  |  |  |
| 1.9.1 | 640 | $ 75.00 | $ 48,000.00 |  | $ 48,000.00 |
|  | 640 | $ 75.00 | $ 48,000.00 |  | $ 48,000.00 |
|  | 640 | $ 75.00 | $ 48,000.00 |  | $ 48,000.00 |
|  | 640 | $ 165.00 | $ 105,600.00 |  | $ 105,600.00 |
|  | 640 | $ 165.00 | $ 105,600.00 |  | $ 105,600.00 |
|  | 640 | $ 165.00 | $ 105,600.00 |  | $ 105,600.00 |
|  | 640 | $ 75.00 | $ 48,000.00 |  | $ 48,000.00 |
|  | 640 | $ 75.00 | $ 48,000.00 |  | $ 48,000.00 |
| 1.9.2 | 64 | $ 75.00 | $ 4,800.00 |  | $ 4,800.00 |
|  | 64 | $ 75.00 | $ 4,800.00 |  | $ 4,800.00 |
|  | 64 | $ 75.00 | $ 4,800.00 |  | $ 4,800.00 |
|  | 64 | $ 165.00 | $ 10,560.00 |  | $ 10,560.00 |
|  | 64 | $ 165.00 | $ 10,560.00 |  | $ 10,560.00 |
|  | 64 | $ 165.00 | $ 10,560.00 |  | $ 10,560.00 |
|  | 64 | $ 75.00 | $ 4,800.00 |  | $ 4,800.00 |
|  | 64 | $ 75.00 | $ 4,800.00 |  | $ 4,800.00 |
| 1.9.3 | 720 | $ 75.00 | $ 54,000.00 |  | $ 54,000.00 |
|  | 720 | $ 75.00 | $ 54,000.00 |  | $ 54,000.00 |
|  | 720 | $ 75.00 | $ 54,000.00 |  | $ 54,000.00 |
|  | 720 | $ 165.00 | $ 118,800.00 |  | $ 118,800.00 |
|  | 720 | $ 165.00 | $ 118,800.00 |  | $ 118,800.00 |
|  | 720 | $ 165.00 | $ 118,800.00 |  | $ 118,800.00 |
|  | 720 | $ 75.00 | $ 54,000.00 |  | $ 54,000.00 |
| **WBS Code** | **Labor Hours** | **Labor Rates** | **Total Labor** | **Equipment** | **Estimate** |
|  | 720 | $ 75.00 | $ 54,000.00 |  | $ 54,000.00 |

[Back](#_Budget_1)