**YOUR LOGO**

**PROJECT NAME**

**AUTHOR**

**DATE**

**Version 0.0.0**

|  |  |  |  |
| --- | --- | --- | --- |
| REVISION HISTORY | | | |
| DATE | VERSION | DESCRIPTION | AUTHOR |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**1.  Introduction**

**1.1    Purpose**

**1.2    Background**

**1.3** Analysis **Scope**

**1.4    Process**

**1.5    Criteria for Evaluation**

**2.  Assumptions, Constraints, and Conditions**

**2.1    Assumptions**

**2.2    Constraints**

**2.3    Conditions**

**2.4    Recommended Solution**

**3.  Alternatives**

**3.1    Current System**

**3.2    Proposed System**

**3.3    Alternative System A**

**3.4    Alternative System B**

**4.  Cost Analysis**

**4.1    Development Costs**

**4.2    Operational Costs**

**4.3    Non-Recurring Costs**

**4.3.1        Capital Investment Costs**

**4.3.2        Additional NR Costs**

**4.4    Recurring Costs**

**4.5    Project Cost Analysis**

**5.  Benefit Analysis**

**5.1    Key Benefits**

**5.2    Tangible Benefits**

**5.3    Summary of Tangible Benefits**

**5.4    Intangible Benefits**

**5.5    Summary of Intangible Benefits**

**6.  Cost and Benefit Comparison**

**6.1    Results of Tangible Benefits Comparison**

**6.2    Results of Intangible Benefits Comparison**

**6.3    Return on Investment**

**6.4    Conclusion**

**7.  Sensitivity Analysis**

**7.1    Sources of Uncertainty**

**7.2    Results**

**8.  Analysis Results**

**9.  References**

1. **Introduction**

The document serves to inform readers of solutions provided to the organization, by analyzing the project from a cost-benefit perspective. It may also put forth alternatives, in addition to detailing the total cost across the project lifespan, with a comprehensive comparison of the alternatives.

* 1. **Purpose**

Identify the business need. Discuss the motivation behind the initiative to seek alternatives to the active system, i.e. marketplace threat, modernization, increasing competitive edge. Introduce the project, and how it will support the organization’s missions and strategic goals.

* 1. **Background**

Discuss previous initiatives that led to the current project.

* 1. **Analysis Scope**

Provide an outline of the scope and detail any omissions.

* 1. **Process**

Detail the process used to carry out the analysis. Explain how it will be used by the project team. Include procedures. Discuss how estimate costs were derived. Provide information to bolster their validity.

* 1. **Criteria for Evaluation**

Describe how alternative systems will be evaluated. Provide criteria, such as reduced costs, increased efficiency, objectives met, etc.

1. **Assumptions, Constraints, and Conditions**

Identify assumptions, constraints, and conditions of the current system to build a case for approval of the project proposed.

* 1. **Assumptions**

Identify current and future environmental factors upon which the analysis is based.

* 1. **Constraints**

Identify potentially limiting external factors.

* 1. **Conditions**

Identify internal environmental factors influencing system processes.

* 1. **Recommended Solutions**

Summarize all recommended system development solutions.

1. **Alternatives**

Identify all systems contained in the analysis. Add any further alternatives following item 3.4.

* 1. **Current System**

Identify current system in place, if any.

* 1. **Proposed System**

Characterize the proposed system by describing the operational and technical characteristics.

* 1. **Alternative System A**

Identify internal environmental factors influencing system processes.

* 1. **Alternative System B**

Summarize all recommended system development solutions.

1. **Cost Analysis**

Provide a breakdown of costs for the proposed system and alternatives. These should include design and development, installation, operational costs, maintenance, disposal, and consumables. Conduct analysis of costs for each year so they may be weighed against resulting benefits.

* 1. **Development Costs**

Break down the costs per all proposed systems per phase, with personnel, equipment, training, software licensing, and tools to be included in the development phase. Provide information in an outline by completing the below chart or provide a link or attachment to a spreadsheet.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ALTERNATIVE 1 DEVELOPMENT COSTS | | | | | | |
| ID NO. | PHASE | YR 1 | YR 2 | YR 3 | YR 4 | AMOUNT |
| 1.1 | PLANNING |  |  |  |  |  |
| 1.2 | REQUIREMENTS |  |  |  |  |  |
| 1.3 | DEVELOPMENT |  |  |  |  |  |
| 1.4 | TESTING |  |  |  |  |  |
| 1.5 | IMPLEMENTATION |  |  |  |  |  |
| **TOTAL** | | | | | |  |
| ALTERNATIVE 2 DEVELOPMENT COSTS | | | | | | |
| ID NO. | PHASE | YR 1 | YR 2 | YR 3 | YR 4 | AMOUNT |
| 1.1 | PLANNING |  |  |  |  |  |
| 1.2 | REQUIREMENTS |  |  |  |  |  |
| 1.3 | DEVELOPMENT |  |  |  |  |  |
| 1.4 | TESTING |  |  |  |  |  |
| 1.5 | IMPLEMENTATION |  |  |  |  |  |
| **TOTAL** | | | | | |  |
| ALTERNATIVE 3 DEVELOPMENT COSTS | | | | | | |
| ID NO. | PHASE | YR 1 | YR 2 | YR 3 | YR 4 | AMOUNT |
| 1.1 | PLANNING |  |  |  |  |  |
| 1.2 | REQUIREMENTS |  |  |  |  |  |
| 1.3 | DEVELOPMENT |  |  |  |  |  |
| 1.4 | TESTING |  |  |  |  |  |
| 1.5 | IMPLEMENTATION |  |  |  |  |  |
| **TOTAL** | | | | | |  |

* 1. **Operational Costs**

Break down the operational costs per all proposed systems. Provide information in an outline by completing the below chart or provide a link or attachment to a spreadsheet.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ALTERNATIVE 1 OPERATIONAL COSTS | | | | |
| CATEGORY | DESCRIPTION | BEGIN DATE | END DATE | COST |
|  | PERSONNEL |  |  |  |
|  | CONTRACTORS |  |  |  |
|  | COMMERCIAL SOFTWARE |  |  |  |
|  | INFRASTRUCTURE |  |  |  |
|  | FACILITIES |  |  |  |
|  | SUPPLIES |  |  |  |
| **TOTAL** | | | |  |
| ALTERNATIVE 2 OPERATIONAL COSTS | | | | |
| CATEGORY | DESCRIPTION | BEGIN DATE | END DATE | COST |
|  | PERSONNEL |  |  |  |
|  | CONTRACTORS |  |  |  |
|  | COMMERCIAL SOFTWARE |  |  |  |
|  | INFRASTRUCTURE |  |  |  |
|  | FACILITIES |  |  |  |
|  | SUPPLIES |  |  |  |
| **TOTAL** | | | |  |
| ALTERNATIVE 3 OPERATIONAL COSTS | | | | |
| CATEGORY | DESCRIPTION | BEGIN DATE | END DATE | COST |
|  | PERSONNEL |  |  |  |
|  | CONTRACTORS |  |  |  |
|  | COMMERCIAL SOFTWARE |  |  |  |
|  | INFRASTRUCTURE |  |  |  |
|  | FACILITIES |  |  |  |
|  | SUPPLIES |  |  |  |
| **TOTAL** | | | |  |

* 1. **Non-Recurring Costs**

Provide a breakdown of non-recurring costs for the proposed system and alternatives. These should include design and development, installation, operational costs, maintenance, disposal, and consumables. Conduct analysis of costs for each year so they may be weighed against resulting benefits.

* + 1. **Capital Investment Costs**

|  |  |  |  |
| --- | --- | --- | --- |
| CAPITAL INVESTMENT COSTS ( acquisition / development / installation ) | | | |
| DESCRIPTION | ALT 1 | ALT 2 | ALT 3 |
| VEHICLES |  |  |  |
| SUPPLIES |  |  |  |
| SOFTWARE / LICENSING |  |  |  |
| SITE |  |  |  |
| SECURITY / PRIVACY EQUIPMENT |  |  |  |
| FACILITIES |  |  |  |
| DATABASE |  |  |  |
| COMMUNICATIONS EQUIPMENT |  |  |  |
| AIR-CONDITIONING EQUIPMENT |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **TOTAL** |  |  |  |

* + 1. **Additional NR Costs**

|  |  |  |  |
| --- | --- | --- | --- |
| ADDITIONAL NON-RECURRING COSTS | | | |
| DESCRIPTION | ALT 1 | ALT 2 | ALT 3 |
| PROCUREMENT |  |  |  |
| RESEARCH |  |  |  |
| DATABASE PREP |  |  |  |
| SOFTWARE CONVERSION |  |  |  |
| DATA CONVERSION |  |  |  |
| TRAINING |  |  |  |
| TRAVEL |  |  |  |
| INVOLUNTARY RETIREMENT |  |  |  |
| PERSONNEL SEVERANCE |  |  |  |
| PERSONNEL RELOCATION |  |  |  |
| POTENTIAL DISRUPTION TO CURRENT OPS |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **TOTAL** |  |  |  |

* 1. **Recurring Costs**

Summarize all recommended system development solutions.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ADDITIONAL NON-RECURRING COSTS | | | | |
| DESCRIPTION | RATE OF RECURRANCE | ALT 1 | ALT 2 | ALT 3 |
| DATA COMMUNICATIONS LEASE / MAINT. |  |  |  |  |
| EQUIPMENT LEASE / MAINT. |  |  |  |  |
| OVERHEADS |  |  |  |  |
| PERSONNEL SALARIES AND FRINGE BEN. |  |  |  |  |
| SECURITY |  |  |  |  |
| SOFTWARE LEASE / MAINT. |  |  |  |  |
| SUPPLIES |  |  |  |  |
| UTILITIES |  |  |  |  |
| TRAVEL |  |  |  |  |
| TRAINING |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| **TOTAL** | |  |  |  |

* 1. **Project Cost Analysis**

Provide a brief explanation of calculation process per year that includes any discount factors to future years for an appropriate Net Present Value. Inflation may cause values to decrease over time. Apply necessary adjustments.

|  |  |  |  |
| --- | --- | --- | --- |
| PROJECT COST ANALYSIS | | | |
| YR 1 | ALT 1 | ALT 2 | ALT 3 |
| NON-RECURRING COSTS |  |  |  |
| RECURRING COSTS |  |  |  |
| YR 2 | ALT 1 | ALT 2 | ALT 3 |
| NON-RECURRING COSTS |  |  |  |
| RECURRING COSTS |  |  |  |
| YR 3 | ALT 1 | ALT 2 | ALT 3 |
| NON-RECURRING COSTS |  |  |  |
| RECURRING COSTS |  |  |  |
| YR 4 | ALT 1 | ALT 2 | ALT 3 |
| NON-RECURRING COSTS |  |  |  |
| RECURRING COSTS |  |  |  |
| **TOTAL** |  |  |  |

1. **Benefit Analysis**

Describe derived benefits from proposed systems. Explain short-term and long- term benefits for each component of the proposal. Express dollar values where applicable to enable cost comparison.

* 1. **Key Benefits**

Provide a description of the two key benefit terms employed in the analysis: tangible and intangible.

|  |  |  |
| --- | --- | --- |
| KEY BENEFITS | | |
| BENEFIT TYPE | VALUE | DESCRIPTION |
| TANGIBLE | $ | Ex.: increased revenue, streamlined production, time savings, monetary savings |
| SUPPLIES | *(if applicable)* | Ex.: improved performance, enhanced decision-making, improved services, increased data, and intel reliability |

* 1. **Tangible Benefits**

Provide description of tangible benefits, identify data sources, and include supporting info for each. Use the table below for each benefit.

|  |  |  |  |
| --- | --- | --- | --- |
| BENEFIT TITLE | | | |
| CURRENT VALUE | ALT 1 | ALT 2 | ALT 3 |
| $ | $ | $ | $ |
| **SAVINGS** | **$** | **$** | **$** |

* 1. **Summary of Tangible Benefits**

Provide a summary of quantifiable benefit values for each proposed system alternative. Use the second table template to summarize the benefits described in the first. Do this to illustrate a cost comparison and technology solution, with the table above for each alternative.

|  |  |  |  |
| --- | --- | --- | --- |
| SUMMARY OF TANGIBLE BENEFITS | | | |
| DESCRIPTION | ALT 1 | ALT 2 | ALT 3 |
|  | $ | $ | $ |
|  | $ | $ | $ |
|  | $ | $ | $ |
| **TOTAL BENEFIT** | **$** | **$** | **$** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SUMMARY OF TANGIBLE BENEFITS | | | | |  |
| TANGIBLE BENEFIT 1 | FY XXXX | FY XXXX | FY XXXX | FY XXXX | TOTAL |
| ALT 1 | $ | $ | $ | $ | $ |
| ALT N | $ | $ | $ | $ | $ |
| TANGIBLE BENEFIT N | FY XXXX | FY XXXX | FY XXXX | FY XXXX | TOTAL |
| ALT 1 | $ | $ | $ | $ | $ |
| ALT N | $ | $ | $ | $ | $ |
| TOTAL BENEFITS | FY XXXX | FY XXXX | FY XXXX | FY XXXX | TOTAL |
| ALT 1 | $ | $ | $ | $ | $ |
| ALT N | $ | $ | $ | $ | $ |

* 1. **Intangible Benefits**

Some intangible benefits may be possible to quantify as data becomes available throughout the analysis process.

|  |  |  |
| --- | --- | --- |
| ALT 1 INTANGIBLE BENEFITS | | |
| BENEFIT TITLE | VALUE | DESCRIPTION |
| BENEFIT 1 | *(if applicable)* |  |
| BENEFIT N | *(if applicable)* |  |

|  |  |  |
| --- | --- | --- |
| ALT 2 INTANGIBLE BENEFITS | | |
| BENEFIT TITLE | VALUE | DESCRIPTION |
| BENEFIT 1 | *(if applicable)* |  |
| BENEFIT N | *(if applicable)* |  |

|  |  |  |
| --- | --- | --- |
| ALT 3 INTANGIBLE BENEFITS | | |
| BENEFIT TITLE | VALUE | DESCRIPTION |
| BENEFIT 1 | *(if applicable)* |  |
| BENEFIT N | *(if applicable)* |  |

* 1. **Summary of Intangible Benefits**

|  |  |  |  |
| --- | --- | --- | --- |
| SUMMARY OF INTANGIBLE BENEFITS | | | |
| DESCRIPTION | ALT 1 | ALT 2 | ALT 3 |
|  | $ | $ | $ |
|  | $ | $ | $ |
|  | $ | $ | $ |
| **TOTAL BENEFIT** | **$** | **$** | **$** |

1. **Cost and Benefit Comparison**

Once discounted values of costs and benefits have been determined, a comparison should be provided for each alternative. Some methods used are ROI, NPV, and BCR. Compare costs of maintaining existing system with costs of implementing and maintaining proposed systems. Then compare future costs over the same period of time.

* 1. **Results of Tangible Benefit Comparison**

|  |  |  |  |
| --- | --- | --- | --- |
| RESULTS OF TANGIBLE BENEFIT COMPARISON | | | |
| BENEFIT AND COST COMPARISON | ALT 1 | ALT 2 | ALT 3 |
| TOTAL TANGIBLE BENEFITS | $ | $ | $ |
| TOTAL COSTS | $ | $ | $ |
| **SAVINGS** | **$** | **$** | **$** |

* 1. **Results of Intangible Benefits Comparison**

|  |  |  |  |
| --- | --- | --- | --- |
| RESULTS OF INTANGIBLE BENEFIT COMPARISON | | | |
| DESCRIPTION | ALT 1 | ALT 2 | ALT 3 |
| INTANGIBLE BENEFIT |  |  |  |

* 1. **Return on Investment**

Describe the quantitative and non-quantitative measures employed, and how they will justify a return relative to the required investment level.

|  |  |
| --- | --- |
| RETURN ON INVESTMENT | |
| COST ITEMS | COST |
| SOFTWARE | $ |
| TRAINING | $ |
| SUPPORT (OVER X YEARS) | $ |
| **TOTAL COST** | **$** |
| EXPENSES | COST |
| EXP 1 | $ |
| EXP 2 | $ |
| EXP 3 | $ |
| **TOTAL EXPENSES** | **$** |
| COST SAVINGS | COST |
| DATA LOADING – Save 30% of 5 days/year @ $200/hour for 2 years | $ |
| ANALYSIS – Save 40% of 4 days/year @ $100/hour for 3 years | $ |
| CUSTOMER RELATIONS – 35% reduction in salaried employees | $ |
| REPORTING – Save 60% of 2 days/year @ $300/hour for 6 years | $ |
| **TOTAL SAVINGS** | **$** |

* 1. **Conclusion**

Note any required reevaluations to the analysis that may arise due to changes in assumptions, conditions, or restraints.

1. **Sensitivity Analysis**

Describe any factors or assumptions potentially impacted by inputs/costs and outcomes/benefits. Detail and rank key sources.

* 1. **Sources of Uncertainty**

|  |  |  |  |
| --- | --- | --- | --- |
| SOURCES OF UNCERTAINTY | | | |
| KEY SOURCE | EXTENT OF IMPACT | NATURE OF IMPACT | IMPLICATIONS |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

* 1. **Results**

Describe what the project will achieve, and how each alternative meets the needs of the organization.

1. **Analysis Results**

Provide an argument for each alternative approach based upon the conducted analysis. Summarize major benefits in comparison to costs.

1. **References**

Provide documentation/links to source materials, including studies, research, etc.

[Create a Cost Benefit Analysis Outline in Smartsheet](https://goo.gl/oRK4FY)