**IT 313 Qualitative and Quantitative Risk Assessment**

**IT-313 Risk Management & Mitigation**

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**Qualitative and Quantitative Risk Assessment**

**Project Overview:**

* **Scope: Expanding an existing computer network to comply with FISMA regulations for a U.S. government contract.**
* **Timeline: Six months for full implementation.**
* **Budget: $3 million.**
* **Revenue Potential: $30 million annually.**
* **Contractual Requirements: On-time delivery, strict quality standards, and potential penalties for delays.**

**Key Risks:**

* **Technical Challenges: Implementing a complex network expansion within a tight timeframe.**
* **Security Risks: Ensuring compliance with FISMA regulations and protecting sensitive government data.**
* **Budget Overruns: Exceeding the allocated budget due to unforeseen costs or delays.**
* **Schedule Delays: Failing to meet the project deadlines, resulting in financial penalties and potential contract termination.**
* **Quality Issues: Delivering a network that does not meet the specified quality standards.**

**Risk Assessment Matrix**

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk Category** | **Likelihood** | **Impact** | **Risk Rating** |
| **Technical Challenges** | **High** | **High** | **Critical** |
| **Security Risks** | **High** | **Critical** | **Catastrophic** |
| **Budget Overruns** | **Medium** | **High** | **High** |
| **Schedule Delays** | **High** | **High** | **Critical** |
| **Quality Issues** | **Medium** | **High** | **High** |

**Qualitative Risk Assessment**

**On Time:**

* **With Required Security: High risk due to the complexity of the project and the need to implement stringent security measures.**
* **Without Required Security: Catastrophic risk due to potential legal and financial consequences of non-compliance.**
* **One Month Early: Medium risk, as it would require additional resources and effort but could potentially improve the project's overall success.**
* **Two Months Late: Critical risk due to potential financial penalties and contract termination.**

**Quantitative Risk Assessment**

**On Time, With Required Security, Within Budget, but Not Meeting Service Commitment:**

* **Likelihood: High due to the complexity of the project and the potential for unforeseen challenges.**
* **Impact: Critical due to potential financial penalties, reputational damage, and contract termination.**
* **Risk Rating: Catastrophic**

**Risk Mitigation Strategies**

**Technical Challenges:**

* **Allocate sufficient resources and expertise.**
* **Conduct thorough testing and quality assurance.**
* **Develop contingency plans for unforeseen technical issues.**

**Security Risks:**

* **Engage security experts to ensure compliance with FISMA regulations.**
* **Implement robust security controls and monitoring measures.**
* **Conduct regular security audits and vulnerability assessments.**

**Budget Overruns:**

* **Develop a detailed project budget and track expenses closely.**
* **Identify potential cost-saving measures.**
* **Negotiate with vendors for favorable pricing.**

**Schedule Delays:**

* **Develop a detailed project schedule with clear milestones.**
* **Monitor progress closely and address issues proactively.**
* **Consider using Agile methodologies for more flexible project management.**

**Quality Issues:**

* **Establish rigorous quality standards and testing procedures.**
* **Conduct regular quality reviews and audits.**
* **Provide ongoing training and support to project team members.**

**By carefully assessing and mitigating these risks, our company can use this opportunity to nurture a strong, mutually beneficial relationship with the U.S. government and hope to work on future projects with them.**