“Inadequate Data Backup Redundancy and Disaster Recovery Preparedness”

MD 4 &5

IT PROJECT MANAGEMENT & SCHEDULING

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1. Make-or-buy analysis:

Selection Criteria	Weight	Proposal 1 (In-House Development)	Proposal 2 (Cloud-based Solution)	Proposal 3 (Hybrid Approach)
Technical Feasibility	30%	70	90	80
Cost-Effectiveness	30%	60	95	75
Time to Market	20%	40	90	70
Scalability	20%	70	90	85
Total Score	100%	78	91	81

Analysis:

Technical Feasibility:

- In-House Development: Developing the IT system in-house would require the organization to hire and train additional IT personnel, which could be costly and time-consuming. Additionally, the organization would need to invest in hardware and software and maintain the system on an ongoing basis.
- Cloud-based Solution: A cloud-based solution would eliminate the need for the organization to invest in hardware or software, and the cloud provider would be responsible for maintaining the system. This would free up the organization's IT personnel to focus on other strategic initiatives.
- Hybrid Approach: A hybrid approach would involve developing some of the IT system in-house and deploying other components in the cloud. This approach would give the organization more control over its data and applications, but it would also be more complex to manage.

Cost-Effectiveness:

- In-House Development: The upfront costs of developing the IT system in-house would be high, but the ongoing costs would be relatively low.
- Cloud-based Solution: The upfront costs of a cloud-based solution would be lower than in-house development, but the ongoing costs would be higher, as the organization would need to pay a subscription fee to the cloud provider.
- Hybrid Approach: A hybrid approach would have the lowest upfront costs, but the ongoing costs would be higher than in-house development, as the organization would need to pay for cloud services and maintain its own IT infrastructure.

Time to Market:

- In-House Development: Developing the IT system in-house would take the longest amount of time, as the organization would need to design, develop, and test the system.

- Cloud-based Solution: A cloud-based solution could be deployed in a matter of weeks or months, as the cloud provider would already have the infrastructure and software in place.
- Hybrid Approach: A hybrid approach would take longer than a cloud-based solution, but shorter than in-house development.

Scalability:

- In-House Development: The IT system developed in-house would be scalable, but it would require additional hardware and software to scale up.
- Cloud-based Solution: A cloud-based solution would be highly scalable, as the cloud provider would automatically provision additional resources as needed.
- Hybrid Approach: A hybrid approach would be less scalable than a cloud-based solution, but more scalable than an in-house solution.

Based on the selection criteria table, Proposal 2 (Cloud-based Solution) has the highest total score, indicating that it is the most suitable procurement plan for the IT system for this project. Proposal 2 received high ratings in technical feasibility, cost-effectiveness, time to market, and scalability. This suggests that a cloud-based solution will provide the organization with the flexibility, scalability, and cost-savings needed to meet its current and future IT needs.

Contract Type:

For this project, we need to select a contract type for the development and deployment of the cloud-based system. Here's a comparison of four common contract types:

1. Fixed-Price Contract:

- Description: The contractor delivers the agreed-upon scope of work for a fixed price, regardless of the actual cost.
- Advantages:
    1. Predictable costs for the organization.
    2. Reduced risk of cost overruns.
    3. Clear expectations for both parties.
- Disadvantages:
    1. Limited flexibility for changes to the scope of work.
    2. May incentivize the contractor to cut corners to meet the budget.
- Justification for use: This contract type is suitable for projects with a well-defined scope of work and a fixed budget. It is also beneficial when minimizing cost risks is paramount.

2. Time and Materials Contract:

- Description: The contractor is paid for the time spent and materials used to complete the project, at an agreed-upon hourly rate or unit price.
- Advantages:
    1. Provides flexibility for changes to the scope of work.
    2. Promotes collaboration and transparency between the parties.
- Disadvantages:
    1. Unpredictable costs for the organization.
    2. Increased risk of cost overruns.
    3. Requires ongoing monitoring and management.
- Justification for use: This contract type is suitable for projects with a less defined scope of work or those requiring frequent changes. It is beneficial when flexibility and collaboration are valued over cost predictability.

3. Cost-Plus Contract:

- Description: The contractor is reimbursed for the actual cost of completing the project, plus a fee for their profit.
- Advantages:
    1. Shares the cost risk between the organization and the contractor.
    2. Provides maximum flexibility for changes to the scope of work.
- Disadvantages:
    1. High potential for cost overruns if not managed carefully.
    2. Limited incentive for the contractor to control costs.
    3. Requires detailed cost tracking and reporting.
- Justification for use: This contract type is suitable for complex projects with a high degree of uncertainty or those requiring significant collaboration. It is beneficial when risk sharing, and flexibility are more important than cost predictability.

4. Cost-Sharing Contract:

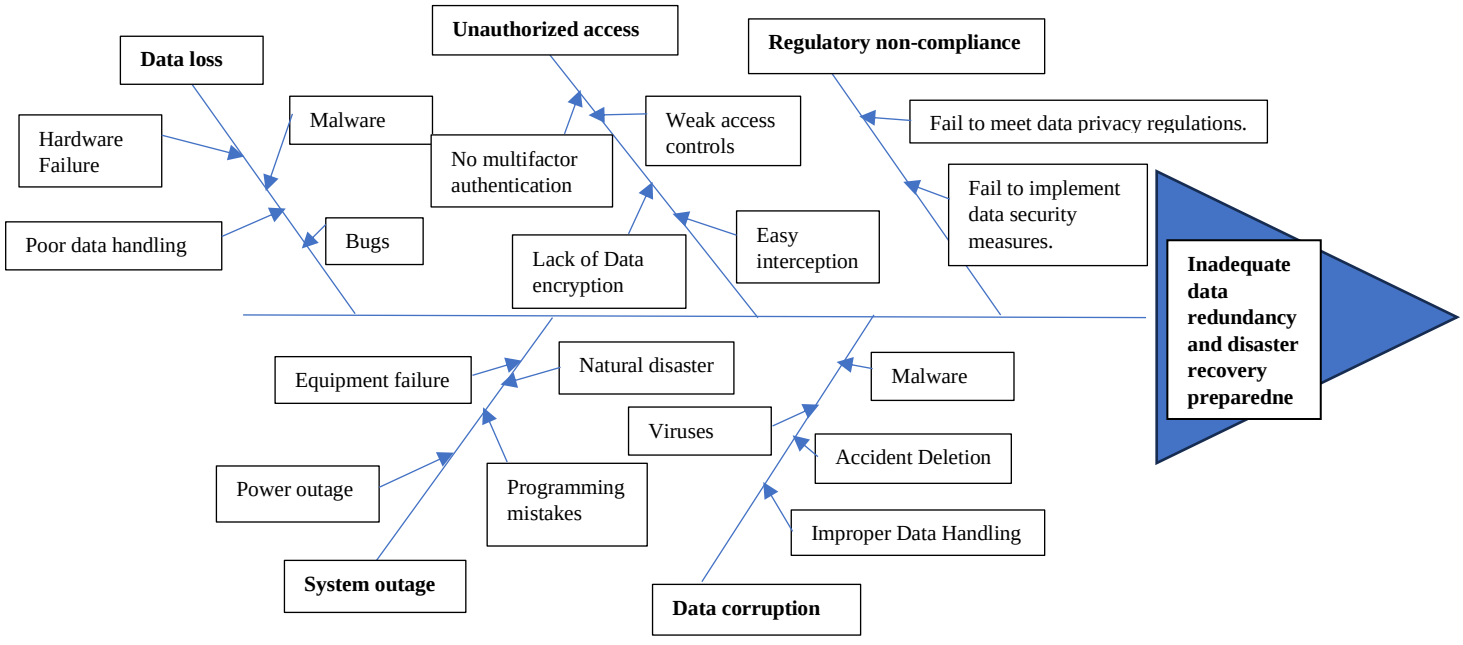
- Description: The organization and the contractor share the cost of the project, based on a predetermined agreement.
- Advantages:
    1. Encourages collaboration and shared responsibility for success.
    2. Aligns the financial interests of both parties.
- Disadvantages:
    1. Complex to negotiate and manage.
    2. Requires clear understanding of risk allocation.
- Justification for use: This contract type is suitable for projects with mutual benefits and shared risks. It is beneficial when collaboration and alignment of interests are crucial to project success.

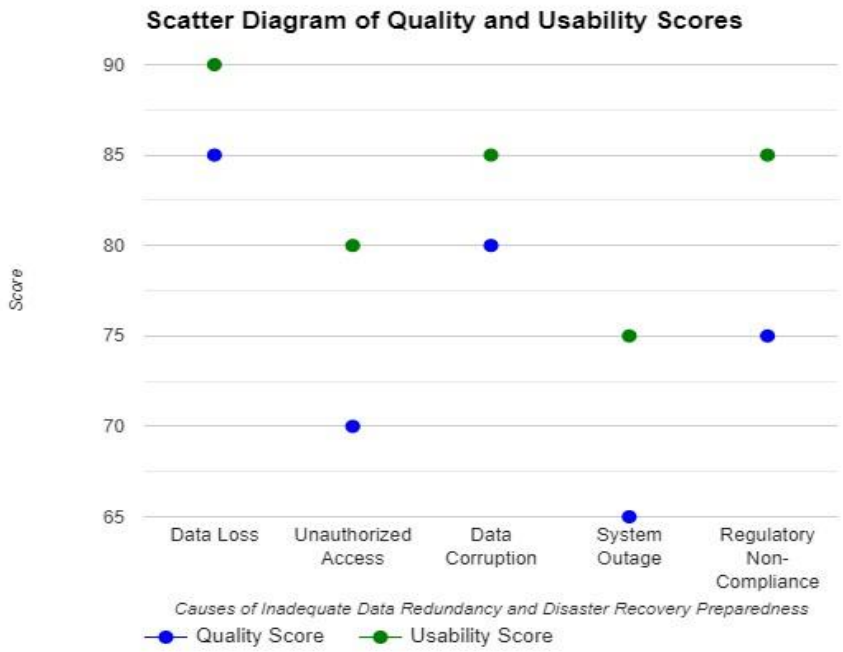
Given the significant value and complexity of the IT system, a fixed-price contract is the most appropriate contract type for this project. A fixed-price contract clearly defines the scope of work, deliverables, and price, which will help to minimize risks and ensure that the project is completed successfully. The contract type for the IT system will depend on the specific components that are purchased from vendors. However, a fixed-price contract is a good option for many of the components, such as hardware, data storage, and network security services.

Justification for Fixed-Price Contract:

1. Scope Definition: A fixed-price contract clearly outlines the scope of work, preventing misunderstandings and potential disputes during the project execution phase.
2. Cost Certainty: The fixed price provides predictability and cost certainty for the project sponsor, eliminating surprises and enabling better financial planning.
3. Risk Allocation: The fixed-price contract transfers the majority of the financial risk to the vendor, incentivizing them to manage costs effectively and deliver the project within the agreed-upon budget.
4. Performance Evaluation: The fixed-price contract serves as a benchmark for evaluating the vendor's performance against clearly defined deliverables and deadlines.
5. Reduced Administrative Burden: A fixed-price contract simplifies contract administration and reduces the need for ongoing negotiations and change orders.

2. Fishbone/Ishikawa diagram:





3. Stakeholder Management Strategy:

Stakeholder	Level of Interest	Level of Influence	Current Engagement	Potential Management Strategies
Project sponsor	High	High	Leading	Meet regularly with the project sponsor to keep them informed of project progress and risks.
Project manager	High	High	Leading	Delegate tasks to the project manager as appropriate.
IT team	High	High	Supportive	Involve the IT team in all aspects of the project, including requirements gathering, design, and implementation.
End users	High	Medium	Neutral	Develop a comprehensive training plan for end users.
Clients	Medium	Medium	Supportive	Keep clients informed of project progress and any potential disruptions to service.
Suppliers	Low	Medium	Neutral	Build strong relationships with suppliers to ensure that they are responsive to our needs.
Regulatory agencies	Low	Low	Neutral	Stay up to date on all applicable regulations and ensure that the project is compliant.