“Inadequate Data Backup Redundancy and Disaster Recovery Preparedness”

Milestone Deliverable 1 – Project Initiating

IT PROJECT MANAGEMENT & SCHEDULING

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1. Project Sponsor

The sponsor of the project is the Chief Information Officer of Leo AS Tech Solution Inc.

2. Business Case

2.1.Company Overview

- Leo AS Tech Solution Inc. is a prominent IT company that began with a few client product services, including customer software development, cybersecurity solutions, network infrastructure, and IT project management.
- It has subsequently expanded to become the region's top provider of IT solutions services. The company operates in over 79 countries and employs around 5390 people, including software developers, network engineers, cybersecurity specialists, and project managers. The company's headquarters is in Bangalore, India, a significant technology hub and its operations serve clients worldwide.
- The firm has grown steadily, with yearly revenues topping around $100 million.

2.2.Business reasons for initiating the system.

- This project addresses the problem of inadequate data backup redundancy and disaster recovery preparedness by migrating physical servers to the cloud. Inadequate data backup redundancy can lead to financial losses, reputational damage, and regulatory compliance issues.
- Businesses may be unable to operate if they do not have access to their data. Downtime can be costly and disruptive to business operations.
- Additionally, this project also aims to improve replicating physical server backups to the cloud, which will provide disaster recovery protection in the event of a natural disaster or other disruption.
- Inadequate data backup redundancy is a situation in which an organization does not have enough copies of its data stored in different locations to protect it from loss or corruption. This can happen for several reasons, such as:
  1. Not having a backup policy in place
  2. Not backing up data frequently enough
  3. Not testing backups to ensure that they are working properly.
  4. Not storing backups in a safe and secure location

  Overall, the project will improve the organization's data backup redundancy and disaster recovery preparedness, while also reducing costs and improving employee morale.

3. Preliminary Scope statement

3.1.Proposed system

The proposed system for the problem of inadequate data backup redundancy and disaster recovery preparedness is a cloud storage system. This system would allow the organization to store their data in a secure and reliable off-site location. The cloud storage system would also replicate data across multiple locations, which would further protect data from loss or corruption in the event of a disaster.

The proposed system would have several benefits, including:

1. Improved data protection: The cloud storage system would provide a more secure and reliable way to store data than on-premises storage solutions. Additionally, the replication of data across multiple locations would further protect data from loss or corruption.
2. Reduced costs: The cloud storage system would reduce the costs associated with managing and maintaining on-premises storage solutions.
3. Increased scalability: The cloud storage system is scalable to meet the needs of organizations of all sizes.
4. Improved disaster recovery: The cloud storage system would make it easier and faster to recover data in the event of a disaster.

Overall, the proposed cloud storage system would provide a more secure, reliable, and cost-effective way for organizations to protect their data and ensure disaster recovery preparedness.

3.2.Business capabilities provide by system.

Leo AS Tech Solution Inc. could use the cloud storage system to store all its important data, such as customer records, financial data, and intellectual property. The company could configure the cloud storage system to replicate data across multiple locations, such as data centres in different regions. This would ensure that the company's data is always available, even if there is a disaster in one region.

In the event of a disaster, the company could quickly and easily recover its data from the cloud storage system. This would allow the company to resume operations quickly and minimize downtime.

The cloud storage system would also provide the company with several other benefits, such as reduced costs and increased scalability.

The following are the essential business capabilities the proposed system must provide to the organization:

1. A proper backup for storing all their data which can be both on-premises and off-premises.
2. A backup solution that replicates data across multiple devices or locations.
3. A backup solution that encrypts data to protect it from unauthorized access.

4. A solution that will help the organization when there is a natural disaster and the system would fail.

4. Stakeholder Analysis

4.1.Issues relevant to roles and responsibilities

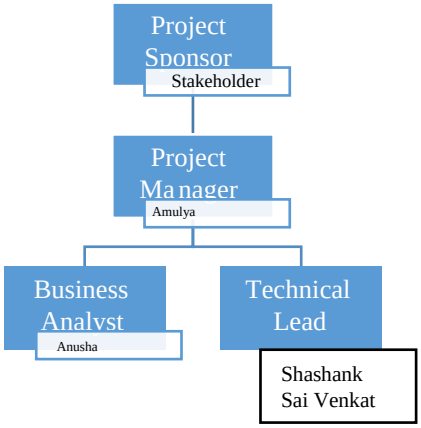

Figure 1

Role Name	Name	Attitude towards the new system	General Responsibilities
Project Manager	Amulya	1. The project manager should be responsible for leading the project team and ensuring that the project is completed on time and within budget. 2. The project manager should be confident and assertive, but also humble and willing to listen to others. They should be able to motivate and inspire the project team, and they should be able to manage risks and setbacks effectively.	• Creating and reviewing the project charter • Create and maintain a project plan, subsequently manage, oversee, and track the project's deliverables. • Manage project risks. • Prepare and review the rollout plan; and oversee the project's overall success

Business Analyst	Anusha	1.The business analyst should be responsible for understanding the business needs of the organization and translating those needs into technical requirements. 2. The business analyst should be analytical and detail-oriented, but also creative and innovative. They should be able to understand the business needs of the organization and translate those needs into technical requirements. They should also be able to communicate effectively with both business and technical stakeholders.	• Completing a study of the data needed, report needs, certification distribution, tracking, and storage, as well as business, faculty, and technical staff input. • Create use cases, requirements, and a new business process flow. • Finish the functional design documentation, including the screen mock-ups, report layouts, data definitions and mappings, notifications, etc.
Technical lead	Shashank, Sai Venkat	1.The technical lead should be responsible for designing and implementing the cloud storage system. 2. The technical lead should be knowledgeable and experienced, but also humble and willing to learn from others. They should be able to design and implement a robust and scalable cloud storage system. They should also be able to troubleshoot problems and resolve issues quickly and efficiently.	• Create information security requirements. • Responsible for the technical implementation of the report and e-Certification application. • Contribute to, review, and provide feedback on the Functional Design papers.

Name	Title / Role	Attitude towards the new system	Organization / Department
Sponsor	Project Sponsor / • Provide direction, wisdom, overall guidance, and solutions for the project's elevated difficulties. • Project management and strategy • Make recommendations regarding the requirements and the new business process. • Approve the business requirements and the new business process.	1. The stakeholder should be responsible for representing the interests of the organization and providing feedback on the project's progress. 2. The stakeholder should be engaged and supportive, but also realistic and pragmatic. They should be able to provide clear and concise feedback on the project's progress, and they should be able to make decisions quickly and efficiently.	IT Infrastructure

5. Project Charter

Project Title: Inadequate Data Backup Redundancy and Disaster Recovery Preparedness

Project Start Date: 08-25-2023 **Projected Finish Date:** 08-30-2024

Budget Information: $12,09,552

Project Manager: Amulya

Project Objectives:

By moving physical servers to the cloud, the initiative aims to address inadequate backup redundancy and disaster recovery preparedness. Inadequate data backup redundancy can result in monetary losses, harm to one's reputation, and problems with regulatory compliance. The initiative also seeks to enhance the replication of physical server backups to the cloud, which will offer disaster recovery protection in the case of a natural catastrophe or other disturbance.

Main Project Success Criteria:

1. Meeting the business needs of the organization: The cloud storage system must meet the specific needs of the organization, such as the need to store a certain amount of data, the need to access data from specific locations, and the need to comply with specific regulations.

2. Being completed on time and within budget: The project must be completed on time and within the approved budget.
3. Meeting the technical requirements: The cloud storage system must meet all of the technical requirements that have been specified by the business analyst.
4. Being secure and reliable: The cloud storage system must be secure and reliable enough to protect the organization's data from unauthorized access, loss, or corruption.
5. Meeting the disaster recovery requirements: The cloud storage system must meet the organization's disaster recovery requirements. This means that the system must be able to recover data quickly and easily in the event of a disaster.

Approach:

The following is a high-level approach for the proposed cloud storage system:

1. Planning: The first step is to carefully plan the system. This includes identifying the business needs, developing a technical specification, and creating a project plan.
2. Design: The next step is to design the system. This includes choosing a cloud storage provider, designing the system architecture, and developing a data migration plan.
3. Implementation: Once the system has been designed, it can be implemented. This includes migrating the data to the cloud storage system and configuring the system to meet the organization's needs.
4. Testing: Once the system has been implemented, it is important to test it thoroughly. This includes testing the system's functionality, security, and performance.
5. Deployment: Once the system has been tested and approved, it can be deployed to production. This includes making the system available to users and training users on how to use the system.
6. Support and maintenance: Once the system is deployed, it is important to provide ongoing support and maintenance. This includes monitoring the system's performance, resolving any issues that arise, and making updates to the system as needed.

Roles and Responsibilities

Role	**Name**	**Organization/ Position**	**Contact Information**
Project Manager	**Amulya**	Leo AS Tech Solution Inc.	216-418-5945
Business Analyst	**Anusha**	Leo AS Tech Solution Inc.	216-200-2460
Technical Lead	**Shashank; Sai Venkat**	Leo AS Tech Solution Inc.	216-418-6900 216-527-8923

Stakeholder	**Project Sponsor**	Leo AS Tech Solution Inc.	216-892-9000

5.1.Tangible and Intangible benefits

The proposed cloud storage system can provide several tangible and intangible benefits to organizations.

Tangible benefits:

1. Reduced costs: Cloud storage can help organizations to reduce the costs associated with managing and maintaining on-premises storage solutions.
2. Improved scalability: Cloud storage is scalable, so organizations can easily add or remove storage capacity as needed.
3. Increased accessibility: Cloud storage can be accessed from anywhere in the world with an internet connection. This can be beneficial for organizations with remote employees.
4. Improved disaster recovery: Cloud storage can help organizations to improve their disaster recovery capabilities. In the event of a disaster, organizations can quickly and easily recover their data from the cloud.

Intangible benefits:

1. Improved security: Cloud storage providers typically offer robust security features, which can help organizations to protect their data from unauthorized access, loss, or corruption.
2. Increased compliance: Cloud storage providers can help organizations to comply with various regulations, such as HIPAA and GDPR.
3. Improved employee satisfaction: Cloud storage can help to improve employee satisfaction by making it easier for employees to access the data they need, regardless of their location.
4. Increased competitive advantage: Cloud storage can help organizations to gain a competitive advantage by allowing them to focus on their core competencies and by providing them with a scalable and secure way to store their data.

5.2.Key schedule milestones

#	Project Phase	Milestones, Planning Deliverables	Target Completion Date
	Initiation	Project Charter Project Request	11/16/2023
	Planning	Project Plan Communication Strategy/Plan	`12/4/2023
	Requirements	Business Requirements/Service	12/30/2023

		or Product Requirement	
	Analysis and Design	Functional Designs May also include Service, Product and Technical Designs Test Plan	4/19/2024
	Development	Tech Designs & Development Network, Server, 3rd Party Service Integration	7/24/2024
	Testing	Test Plans / Test Cases	09/10/2024
	Deployment	Readiness Planning Documentation	9/23/2024
	Project Close	Project Financials and Close Docs Lessons Learned	10/5/2024

Table 1

5.3. Budget Estimate

The cost of hardware and software licensing, as well as budget details for the consultant and staff, are included in the project plan. Based on the typical salaries for the corresponding positions, an estimated budget for full-time and contract staff has been created. The general costs for switching to cloud storage are the fees for consultants, hardware, and software licenses. The total estimate is around $14,28,289.

Role	Employee Type	Assigned To	Allocation %	Start Date	End Date	Planned Working Days	Annual Salary	Rate/hr	Budget
UIT									
Project Manager	Full Time	Amulya	50%	01-11-23	05-10-24	348	$1,08,322	$52.08	$1,01,489
Business Analyst	Full Time	Anusha	100%	01-11-23	05-10-24	348	$97,168	$46.72	$1,82,078
Technical Lead	Contractor	Shashank	100%	01-11-23	05-10-24	348	$95,625	$47.81	$1,33,110
Developer	Contractor	Sai Venkat	100%	01-11-23	05-10-24	348	$94,670	$47.34	$1,31,781
UIT Subtotal				01-11-23	05-10-24				**$5,48,458**
Business Office				01-11-23	05-10-24				
Program Manager	Full Time	Michael	20%	01-11-23	05-10-24	348	$1,50,000	$72.12	$56,215
Business Analyst	Full Time	James	100%	01-11-23	05-10-24	348	$99,168	$47.68	$1,85,826
Cloud infrastructure specialist	Contractor	Mike	100%	01-11-23	05-10-24	348	$98,987	$49.49	$1,37,790
Business Office Subtotal									**$3,79,831**
One-Time Costs									
Consultant									$25,000
Hardware									$1,50,000
Software License									$3,50,000
One-Time Costs Subtotal									$5,00,000
TOTAL									**$14,28,289**

6. Kick off Meetings:

Date:

Time:

Location:

Agenda	Assigned To	Time
Introduction and Project Purpose	Project Manager	
Project Objectives	Project Manager	
Roles and Responsibility	Project Manager	
Project Schedule	Project Manager	

Date and time of next meeting:

7. Feasibility Analysis:

The feasibility analysis of the proposed cloud storage system should consider the following factors:

Technical feasibility: Does the organization have the technical expertise to implement and manage a cloud storage system?
The proposed cloud storage system is technically feasible. There are several cloud storage providers that offer robust and scalable solutions. The organization will need to assess its technical expertise and choose a cloud storage provider that meets its needs.

Economic feasibility: Is the cost of implementing and managing a cloud storage system within the organization's budget?
The proposed cloud storage system can be economically feasible for organizations of all sizes. There are a variety of cloud storage pricing options available, so organizations can choose a plan that fits their budget. Additionally, cloud storage can help organizations to reduce the costs associated with managing and maintaining on-premises storage solutions.

Operational feasibility: Does the organization have the operational resources to manage a cloud storage system?
The proposed cloud storage system is operationally feasible. Cloud storage systems are typically easy to manage and require little maintenance. However, the organization will need to have some operational resources in place to manage the cloud storage system, such as staff to monitor the system and troubleshoot any issues that arise.

Schedule feasibility: Can the cloud storage system be implemented within the organization's desired timeframe?
The proposed cloud storage system can be implemented within a reasonable timeframe. The

timeframe for implementation will vary depending on the size and complexity of the organization's data environment. However, most cloud storage providers can implement a cloud storage system within a few weeks or months.

Additional considerations for the feasibility analysis:

1. Security: The organization should choose a cloud storage provider that offers robust security features. The organization should also implement appropriate security measures, such as data encryption and access control.
2. Compliance: If the organization is subject to any compliance requirements, it is important to ensure that the cloud storage system meets those requirements. This may involve choosing a cloud storage provider that is certified to meet certain compliance standards.
3. Change management: It is important to have a change management plan in place to manage the transition to the cloud storage system. This plan should include steps for communicating with users about the changes, training users on how to use the system, and providing support to users during the transition.

By carefully considering all the relevant factors, the organization can make an informed decision about the feasibility of the proposed cloud storage system.

I expect the cloud storage system project to be beneficial to Leo AS Tech Solution Inc. in both terms of NPV and ROI.

NPV is a measure of the profitability of a project over time. It considers the time value of money, which means that it discounts future cash flows to their present value. The cloud storage system project is expected to generate significant cost savings for Leo AS Tech Solution Inc. These savings will come from reduced costs associated with managing and maintaining on-premises storage solutions. Additionally, the cloud storage system project is expected to improve Leo AS Tech Solution Inc.'s disaster recovery capabilities. This will reduce the risk of financial losses and reputational damage in the event of a disaster. As a result of these benefits, the cloud storage system project is expected to have a positive NPV.

ROI is a measure of the return on investment for a project. It is calculated by dividing the net profit from the project by the total investment cost. The cloud storage system project is expected to generate a high ROI for Leo AS Tech Solution Inc. This is because the cost of the project is relatively low, and the benefits are significant. In addition to the cost savings and disaster recovery benefits mentioned above, the cloud storage system project is also expected to improve Leo AS Tech Solution Inc.'s scalability and agility. This will allow the company to grow and adapt to changing market conditions more easily. As a result of these benefits, the cloud storage system project is expected to have a high ROI.