Deployment Plan and Proposal.

This document serves as a comprehensive guide to our deployment plan and proposal for migrating our application to the cloud, specifically leveraging the capabilities of Amazon Web Services (AWS). The primary objective is to present a detailed overview to the management team regarding the rationale behind selecting AWS, the expertise required, the scope of deployment, associated timelines, charges, and various other critical aspects.

1. Choice of AWS

The selection of AWS is grounded in its unmatched global infrastructure, proven reliability, and unparalleled scalability. AWS, as a leading cloud service provider, aligns seamlessly with the unique requirements of our application.

Advantages of Deploying in AWS

1. Scalability and Flexibility:

   AWS's dynamic scalability allows us to adjust resources according to real-time demands, ensuring optimal performance and cost-effectiveness.

2. Vast Array of Services:

   With a comprehensive suite of services, AWS simplifies deployment complexities, offering solutions for computing, storage, databases, machine learning, and more.

3. Pay-as-You-Go Pricing:

   AWS's pay-as-you-go model enables precise cost control, as we only pay for the resources consumed, making it a financially prudent choice.

4. Robust Security Features:

   AWS boasts advanced security measures, including encryption, identity management, and compliance certifications, ensuring the highest levels of data protection.

Disadvantages and Mitigation Strategies

1. Potential Cost Concerns:

   To mitigate potential cost overruns, a robust resource management strategy will be implemented, including regular cost monitoring and optimization.

2. Dependency on Third-Party Provider:

   Contingency plans will be established to address any unforeseen issues, ensuring minimal impact on business operations.

2. Scope of Work

The deployment plan encompasses a multifaceted approach, starting with foundational tasks such as infrastructure setup, server configuration, and initial application deployment. Ongoing services, including monitoring and support, will ensure the continued optimal performance of the application.

1. Setup AWS Account – Development Team and others.

2. Windows Server Deployment Frontend – Ramakrishna

3. Windows Server Deployment Backend – Ramakrishna

4. MySQL Server Deployment – Ramakrishna

5. Git and Node Express installation – Ramakrishna (Development Team Support Required)

6. Git Code Update – Development Team (Support Available from Ramakrishna)

7. MySQL Server DB Back and Restore to Cloud Server – Ramakrishna (Development Team Support Required)

8. Update code MySQL Cloud Server - Development Team

9. Configure Node Express and run Frontend and backend Server. (Development Team)

10. Verify the All services working – Development Team

11. Server Handover to Testing Team

12. After approval from the Testing Team, Handover server to the Production Team.

3. Timeline

The deployment timeline is organised into distinct phases, each with its specific objectives and milestones. This structured approach ensures a systematic and efficient deployment process, minimising disruptions.

Initially application is deployed directly in production environment

Later it is testing and development environments will be created.

4. Hiring an Expert vs. Using Internal Resources

Deploying an application involves nuanced expertise in infrastructure setup and security configurations, areas where Mr. Rama Krishna's specialized knowledge ensures a smooth and efficient deployment process. This approach minimizes risks and maximizes the potential for success.

Expert's Qualifications

Mr. Rama Krishna, a seasoned deployment expert, brings a wealth of experience to the project. His track record includes successful deployments for similar applications, highlighting his ability to navigate complex deployment scenarios with ease.

Career Record:

1. Lanco Global Systems, Hyderabad   : 7th July'06 to 13th July'07
   Role   : System Administrator
2. Vitrify Technologies Ltd.,   : Feb' 2009 to March' 2014
   Role   : IT Manager

3. GSS InfoTech Ltd.,   : September' 2014 to October' 2015
   Role   : Sr Virtualization Specialist – Corporate IT

4. Erpsolutions Inc (US)   : Consultant November' 2015 to Till Date

   Present Working: Sr Operation Engineer

5. Security Measures

AWS's robust security features, coupled with Mr. Rama Krishna's additional security measures, form a comprehensive defense against potential threats. Data integrity and confidentiality are paramount, and the combined efforts aim to deliver an exceptionally secure application environment.

6. Unforeseen events and Future Considerations

Contingencies: In the event of non-payment, a grace period will be provided before any service suspension, allowing for timely resolution. Clear communication channels will be established to address outstanding payments promptly, ensuring uninterrupted services.

Future Considerations: A detailed migration plan will be developed to facilitate a smooth transition if the decision to move to our own servers is made in the future. This includes data migration, application reconfiguration, and DNS updates to ensure minimal disruptions to end-users.

Conclusion and Recommendation

This document provides an exhaustive overview of the deployment plan and proposal. We recommend the management's approval to proceed with the deployment, leveraging the robust features of AWS and the expertise of Mr. Rama Krishna to establish a secure, scalable, and efficient application environment.