**Module 7: Essay Paper**

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IFT 320: Managing The Cloud

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1. **What cloud infrastructure provider would you recommend to the CTO?**

I would recommend AEE's CTO to adopt a hybrid cloud solution (Route 2) with AWS as the cloud infrastructure provider. This recommendation is based on several factors, including AEE's need for compatibility with its existing proprietary equipment and software, cost-efficiency, and the flexibility offered by AWS. AWS provides a wide range of services, including VPN connectivity, allowing a seamless integration between cloud and on-premises infrastructure, which is essential for AEE to maintain compatibility with their existing technology while benefiting from cloud advantages.

**2. The selection criteria for making this recommendation include:**

* *Compatibility*: A hybrid cloud solution with AWS allows AEE to migrate services that

are compatible with cloud environments while maintaining essential local services. This ensures the proprietary testing equipment and software requiring physical connections continue to function without issues related to latency or connection reliability. AWS supports various types of hybrid integrations, including services like AWS Storage Gateway and Direct Connect, making it easier for organizations to connect cloud services with existing infrastructure.

* *Cost-Efficiency:* The hybrid approach offers cost-efficiency by allowing AEE to leverage

its existing infrastructure where possible while migrating other services to the cloud. This minimizes the need for upfront investments, compared to the full hardware replacement approach, and turns infrastructure spending into operational expenditure, making budgeting more predictable. AWS offers a pay-as-you-go pricing model that would allow AEE to scale resources based on their specific needs, which is financially beneficial for a company with a limited IT budget.

* *Flexibility and Future-Proofing:* AWS's hybrid cloud capabilities offer the flexibility

AEE needs to gradually adopt cloud technologies without completely abandoning their current investments. This reduces migration risk and allows AEE to train its IT staff and adapt over time. AWS's training resources and certification programs would help bridge the knowledge gap for AEE's technical team, ensuring they are equipped to manage the new infrastructure. Additionally, having both cloud and on-premises components provides AEE with greater agility to scale and adjust their infrastructure as their requirements evolve, making the organization more resilient and adaptable to future changes in technology.

In conclusion, AWS provides a robust hybrid cloud platform that meets AEE's current needs while allowing them to gradually transition more workloads to the cloud over time, offering a balance of risk mitigation, cost management, and technological advancement.