Part A

What are some of the main vendor lock-in issues the authors identify?

Opara-Martins et al (2014) state that "the Main lock-in issues that affect the consumers are;"

1. High costs to switch vendors
2. Expensive migration of data
3. Proprietary interfaces to resources
4. Time consuming migration of applications
5. Incompatibility with software developed by other vendors
6. Exclusive conditions in license of software usage

How would you mitigate them?

Ensure that the company infrastructure aligns with the company services, goals and traditions while also choosing a strong vendor that is compatible with the business systems, design and architecture.

What are some of the security concerns with the modern cloud?

Some of the security concerns with the modern cloud include data breaches, unauthorized access to systems and data, and the potential for data loss or corruption. Additionally, there may be concerns around compliance with regulatory standards, as well as the need to protect sensitive information and protect against potential cyber threats.

Hybrid controls require the consumer and the CSP to configure the access controls correctly (Morrow et al. 2021), this can lead to misconfigurations and create security risks.

How can these be mitigated?

To mitigate the security concerns associated with the modern cloud, organizations may need to implement a range of measures, including:

1. Encrypting sensitive data to protect against unauthorized access
2. Implementing robust access controls to prevent unauthorized access to systems and data
3. Regularly backing up systems and data to protect against data loss or corruption
4. Implementing security monitoring and management processes to detect and respond to potential threats
5. Ensuring compliance with relevant regulatory standards and industry best practices
6. Regularly training employees on security best practices to reduce the risk of human error.

References

Morrow, T., LaPiana, V., Faatz, D., Hueca, A. and Richmond, N., 2021. *Cloud Security Best Practices Derived from Mission Thread Analysis*. CARNEGIE-MELLON UNIV PITTSBURGH PA.

Opara-Martins, J., Sahandi, R. and Tian, F., 2014, November. Critical review of vendor lock-in and its impact on adoption of cloud computing. In *International Conference on Information Society (i-Society 2014)* (pp. 92-97). IEEE.