VENDOR LOCK-IN & CLOUD SECURITY

DISCUSSION SUMMARY

BASED ON OPARA-MARTINS ET AL. (2014) & MORROW ET AL. (2021)

VENDOR LOCK-IN: ISSUES

- Proprietary APIs and data formats
- Data and VM format incompatibility
- Dependence on managed services
- Migration cost and complexity
- Lack of standardization
- Limited awareness of lock-in risks

MITIGATING VENDOR LOCK-IN

- Use open standards & formats
- Design cloud-agnostic architectures
- Modular / loosely-coupled systems
- Avoid deep reliance on proprietary services
- Multi-cloud or hybrid strategies
- Strong exit clauses in contracts
- Governance & awareness programs

MODERN CLOUD SECURITY CONCERNS

- Reduced visibility & control
- API/management interface compromise
- Multi-tenancy & isolation risks
- Misconfigurations & data exposure
- Insider threats
- Data loss & incomplete deletion
- Shared responsibility confusion
- Supply chain vulnerabilities

MITIGATING CLOUD SECURITY RISKS

- Strong IAM & MFA
- Encrypt data at rest and in transit
- Logging, monitoring, SIEM tools
- Backup, redundancy, disaster recovery
- Network segmentation, zero trust
- Secure APIs & patch management
- Governance, training & awareness
- Contractual SLAs & due diligence