

Exercise3.task1

Lock-ins with technology

When a company gets overly dependent on one technology and finds it difficult to switch to another, it's known as technological lock-in. This is frequently the result of custom-built systems that are incompatible with other platforms, specialized hardware, or proprietary software. One prominent example is reliance on a specific database or cloud service, when switching data and processes to a new system requires a lot of work and money. System re-engineering, employee retraining, and possible downtime are the expenses related to overcoming technology lock-ins (Sharma and Park, 2018). Organizations must carefully assess their long-term technological dependencies before committing to specific platforms since the intricacy of cloud service migration frequently leads to vendor lock-in.

Vendor Lock-ins

When a company starts to rely solely on one supplier for necessities like software, cloud computing, or cybersecurity infrastructure, it's known as vendor lock-in. Because of issues with system integration, contractual penalties, and data migration, switching to a new vendor can be expensive. In multi-cloud setups, Zhang et al. (2018) highlight the growing worry regarding vendor lock-in, where enterprises frequently struggle to transfer their workloads across different providers without encountering major financial and technical impediments. Zhu and Zhou (2021) emphasize the significance of having well-defined tactics to reduce the risks associated with vendor lock-in, including the adoption of open standards, data portability and several cloud strategies to prevent undue dependence on one supplier. This situation is typical of industries that place a high priority on short-term stability but later struggle to embrace more adaptable or competitive alternatives.

Costs and Insights

Breaking free from lock-ins has long-term advantages such as more flexibility, competitive pricing, and more room for innovation. These changes, nevertheless, can be expensive and disruptive in the near run and necessitate careful preparation and funding. Sharma and Park (2018) point out that enterprises frequently have difficulties with data portability and integration when attempting to switch cloud providers, which raises the expenses and dangers of violating vendor lock-ins even more. While avoiding lock-in is advantageous, Zhu and Zhou (2021) note that maintaining various suppliers and guaranteeing data interoperability can be hard and lead to higher short-term expenses. Conversely, being in a lock-in arrangement reduces short-term risks and offers instant stability, but it also restricts future flexibility and cost optimization. Vendor lock-ins, according to McAfee and Brynjolfsson (2017), can make it more difficult to embrace new technologies and limit long-term innovation, which can lead to strategic bottlenecks.

sources

- ② Sharma, P.K. and Park, J.H., 2018. Critical analysis of vendor lock-in and its impact on cloud computing migration: A business perspective. *Journal of Cloud Computing*, 7(1), pp.1-18. Available at: <https://journalofcloudcomputing.springeropen.com/articles/10.1186/s13677-016-0054-z> [Accessed 26 Sep. 2024].
- ② Zhang, Y., Sun, G., Sun, J. and Wang, X., 2018. A multi-cloud service architecture platform to avoid vendor lock-in. *2018 IEEE International Conference on Web Services (ICWS)*. Available at: <https://ieeexplore.ieee.org/abstract/document/8356428> [Accessed 26 Sep. 2024].
- ② Zhu, J. and Zhou, Y., 2021. Cloud vendor lock-in: Strategies for mitigation and risk management. *Journal of Cloud Computing*. Available at: <https://journalofcloudcomputing.springeropen.com/counter/pdf/10.1186/s13677-016-0054-z.pdf> [Accessed 26 Sep. 2024].
- ② McAfee, A. and Brynjolfsson, E., 2017. *Machine, Platform, Crowd: Harnessing Our Digital Future*. Available at: <https://pdfs.semanticscholar.org/1fb0/c5b84dacfef8ead787de5307d472d2c18cff.pdf> [Accessed 26 Sep. 2024].