

Cloud migration in schools: Transitioning from on-premises domains to Microsoft cloud platforms utilising Intune and SharePoint

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Project Context

- Hwb programme – raising digital standards in Wales [1] [2].
 - Investment of £180m to transform digital landscape of Welsh education.
 - Investment of £1.2m to procure M365 licenses for all learners and teachers.
 - Infrastructure upgrades and device procurement.
- Schools are required to work towards Hwb digital standards as part of Hwb programme:
 - Procurement of modern devices to replace aging estates.
 - Implementation of a standardised ICT approach across LA.
 - Adoption of M365, and deployment of a device management for all schools.



Aims & Objectives

- **Project Aim:** To develop and implement a cloud migration strategy for schools in Bridgend County Borough Council to transition from on-premises domains to Microsoft 365.
- **Objectives :**
 - Assess current infrastructure and plan migration strategy.
 - Migrate file storage to SharePoint.
 - Implementation of Intune device migration.
 - Evaluate migration outcomes and develop wider rollout framework.



Review of literature

- Key drivers for cloud adoption in education settings include cost savings, flexibility, and greater collaboration [3] [4] [5] [6].
- Ease of remote working with Office apps available anywhere [5] [8], particularly poignant after remote education during the pandemic.
- Minimal impact on end users of GPO migration to Intune [7], and feature differences between Windows Server and Endpoint Manager [7] [9].
- Project planning: incremental approach vs quick migration [6].



Methodologies

- Mixed methods approach:
 - Quantitative data relating to data on efficiency, measurable statistics, and costs.
 - Qualitative data focusing on impact on users, and feedback of their experiences.
- A deductive approach will be adopted for this project, based around the hypothesis that migration to Microsoft 365 will improve operation efficiency and improve the digital experience of users in schools.



Methodologies

- Data collection strategies:
 - Literature review
 - Action research
 - Case study
- Data evaluation:
 - Quantitative statistics will quantify improvements to operation efficiency.
 - Qualitative data will undergo thematic analysis.

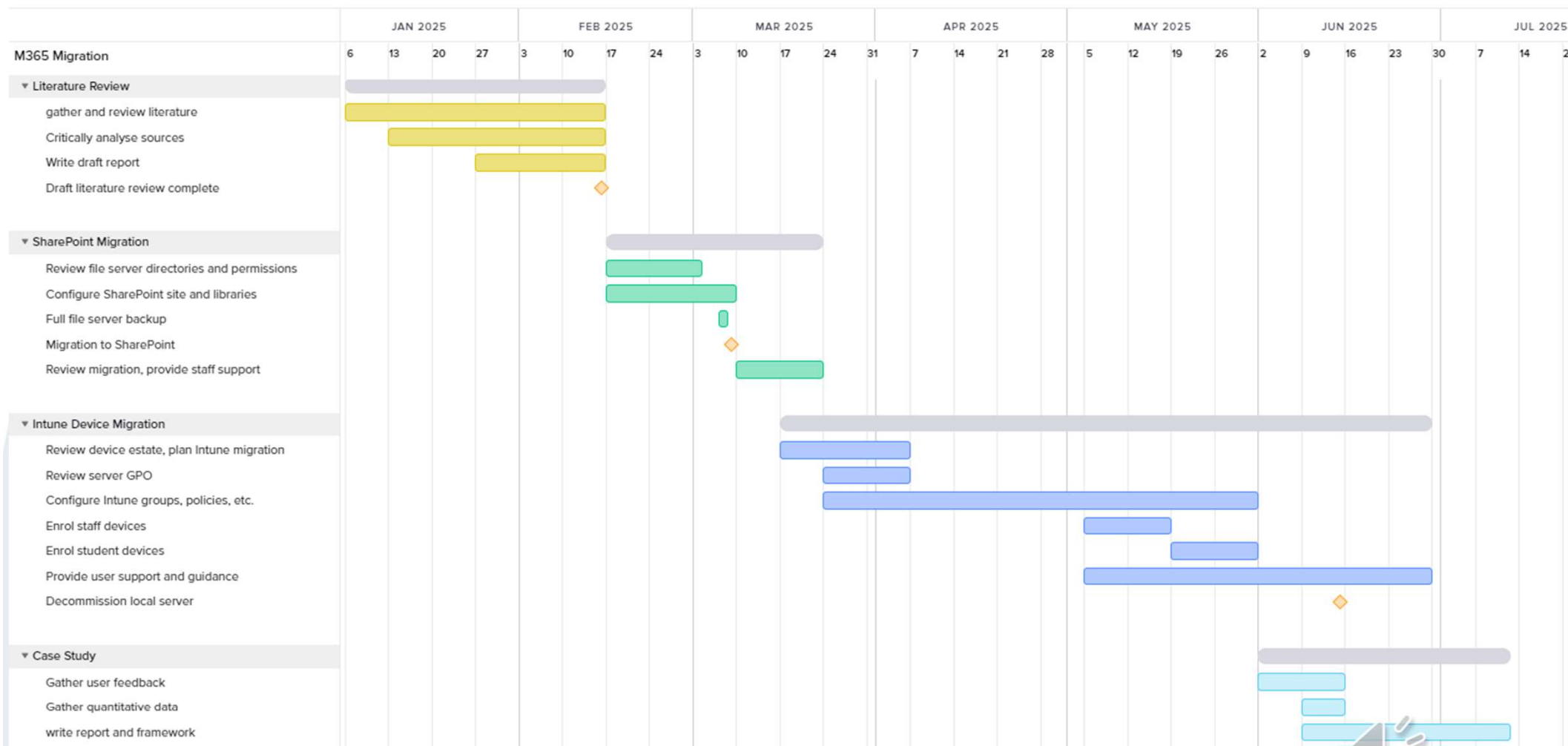


Project planning

- Hardware:
 - Windows device to access cloud platforms and software
 - End users have Windows machines
 - Existing windows server
- Software:
 - Windows Media Creation Tool
 - Windows Imaging and Configuration Designer
 - SharePoint migration tool
 - Veeam backup
 - Cloud portals access via web browser



Project planning



Impact & limitations

- Intended impacts:
 - Successfully migrate a pilot school to cloud platforms
 - Increase efficiency, improve digital landscape, and provide learners with exposure to relevant digital tools.
 - Develop a framework to migrate other schools in the LA.
- Potential risks and limitations:
 - Potential of data loss in file server migration, backup measure must be in place to mitigate risk.
 - User resistance to change, sufficient training and support to be provided to mitigate.
 - Existing infrastructure in the pilot school may differ from others.



References

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- [6] “Is now the right time for you to migrate to the cloud? | RM,” Rm.com, 2021. <https://www.rm.com/blog/2021/october/is-now-the-right-time-for-you-to-migrate-to-the-cloud> (accessed Aug. 30, 2024).



References cont.

[7] M. E. Hudson and B. Zoghi, "Moving Towards A Modern Desktop by Migrating Group Policy to Intune Policy," Journal of Business Studies Quarterly, vol. 12, (1), pp. 16-30, 2022. Available: <https://www.proquest.com/scholarly-journals/moving-towards-modern-desktop-migrating-group/docview/2718688297/se-2>.

[8] S. Spencer, "Three ways Microsoft 365 Education can change remote learning for the better," Care Computers & Services Limited, Feb. 22, 2021. <https://carecomputers.co.uk/three-ways-microsoft-365-education-can-change-remote-learning-for-the-better> (accessed Aug. 30, 2024).

[9] P. Eisenmann, "Can the Microsoft Azure Security Suite be a practical solution for SMBs when analysing and protecting existing IT infrastructure?," Bachelor's thesis, Landshut University of Applied Sciences, 2022. Available: <https://doi.org/10.57688/324>



Link to video presentation

Short link:

<https://tinyurl.com/mrx29y6a>

Full link:

https://uowtsd-my.sharepoint.com/:v:/g/personal/2216851_student_uwtsd_ac_uk/ERONBZVDbyhPpTNq_ErXsLgB1xlOTM3Au4ljDVpEhTfryw?nav=eyJyZWZlcnJhbEluZm8iOmsicmVmZXJyYWxBcHAIoiJPbmVEcmI2ZUZvckJ1c2luZXNzliwicmVmZXJyYWxBcHBQbGF0Zm9ybSI6IldlYiIsInJlZmVycmFsTW9kZSI6InZpZXciLCJyZWZlcnJhbFZpZXciOiJNeUZpbGVzTGlua0NvcHkifX0&e=Yz4Eqk

