BC/DR Strategy & Implementation:

These units addressed the design and evaluation of BC/DR strategies, comparing frameworks like ISO 22301:2019 and ENISA guidance, and analysing multi-cloud structures (ISO/IEC, 2018; ENISA, 2022; Gartner, 2023).

Key Concepts:

- RTO, RPO and BIA
- ISO 22301:2019
- Single Cloud, Multi-Cloud, Hybrid
- Technologies: Synchronous Replication, Containerisation (Kubernetes, Docker)
- Vendor Lock-in Mitigation: Opara-Martins et al. (2016)
- Architectures: Multi-cloud, Active-Active (Wanclouds, 2025)

Design Requirements:

Requirement	Justification
24/7/365 service	Uninterrupted business
RTO/RPO < 1 min	Prevents downtime/data loss
GDPR compliance	Regulatory fit
Portability	Supports mobility
Resilience & failover	Achieved via multi-cloud

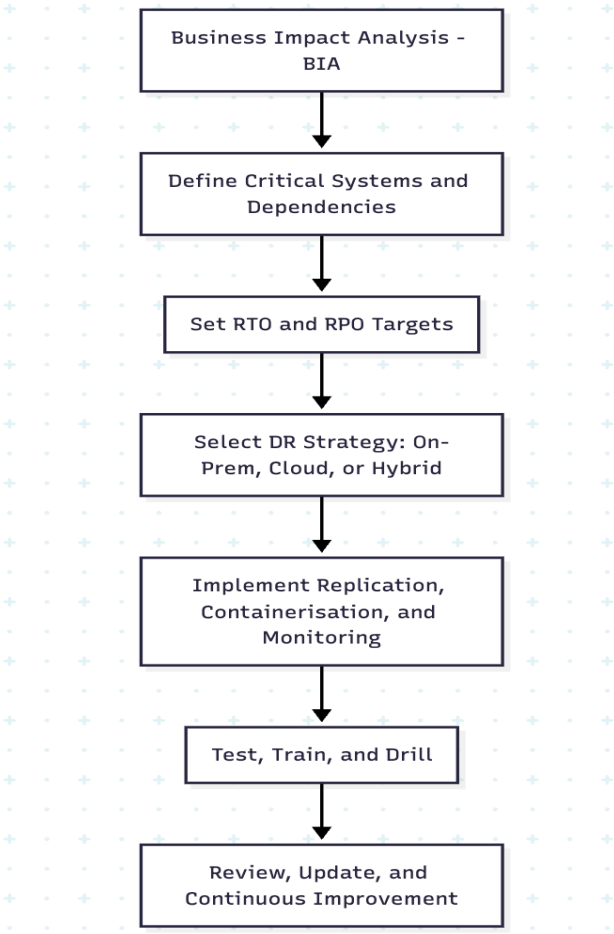
Recommended Architecture:

- Multi-cloud active-active (AWS/Azure)
- Synchronous replication for zero data loss (Alshammari & Alwan, 2017)
- Containerisation for portability (Opara-Martins et al., 2016)
- Automated testing & monitoring (Wanclouds, 2025)

DR Strategy Comparison:

DR Strategy	RTO/RPO	Cost	Lock-in	Suitability
Single-Cloud Active-Passive	5–15 min	Medium	High	Too risky
On-Prem DR	10–30 min	High	Low	Too slow
Multi-Cloud Active-Passive	1–3 min	High	Medium	Acceptable
Multi-Cloud Active-Active	<1 min	High	Low	Best option

DR Planning Lifecycle diagram:



Learning Outcome:

I learnt that there is no universal BC/DR that is in line with the organisation's risk and operational priorities. Through comparing single-cloud, hybrid, and multi-cloud models, I realised that hybrid and active-active architectures deliver stronger resilience. I also recognised that true disaster recovery success depends on compliance, data consistency, regular testing, documentation, and cross-functional drills.

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