

A scenic mountain landscape with a lake and snow-capped peaks. The foreground is a grassy hillside with purple flowers. The middle ground shows a dense forest of evergreen trees. In the background, there are large mountains with patches of snow under a clear blue sky.

*Deep
Thoughts*

by
JACK HANDEY

Data Tiering Strategies

Daniel Chester

Director of Services

Arkay Solutions, Inc.

What is Data Tiering?



Data Tiering of Yesteryear



1. Production
2. Testing and Development
3. Backup

Data Tiering Today



1. Production

2. Backups

3. Archive

4. Compliance

5. Flash

6. Disk

7. Tape



8. Disaster Recovery

9. Snapshots

10. Replication

11. Test & Development

12. Quality Assurance

13. Data Mining

14. Data Warehouse



Data Classification



1. Performance Tiering
2. Function Tiering
3. Requirement Tiering

Performance Tiering



Tier 0 – Memory or Flash

Tier 1 – 15K SAS Drives

Tier 2 – 10K SAS Drives

Tier 3 – 7.2K NL-SAS/SATA Drives

Tier 4 – Tape or Cloud

Performance Tiering



Tier 0 – Memory or Flash

Tier 1 – 15K SAS Drives

Tier 2 – 10K SAS Drives

Tier 3 – 7.2K NL-SAS/SATA Drives

Tier 4 – Tape or Cloud

Function Tiering



Tier 1 – Production

Tier 2 – QA, Test, Dev, Reporting

Tier 3 – Disaster Recovery (DR)

Tier 4 – Archive/Backup

Requirement Tiering



Tier 1 – Production

Tier 2 – Compliance

Tier 3 – Archive

Tier 4 – Backup and DR

Moving Forward



Data Classification

Data Governance

Data Stewardship

Data Stewardship



- Data Steward – Person responsible for making decisions about a subset of data.
- Periodic review to validate decisions.

Data Governance

Alphabet soup

- Define Policies
- Define Retention
- Define SLAs (Service Level Agreements)
- Define RTO (Return to Operations)
- Define RPO (Recovery Point Objective)
- Define Compliance Requirements
- Classify Data

