Practice Problem 1

Digital Dark Age

Science & Technology

How might we prioritize data to save and reduce the effects of information loss in the future?

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Background

The Digital Dark Age is an inability to access previously collected documented files, photos, and other information stored in outdated file formats, software, or hardware. Data becomes corrupt, scarce, or otherwise inaccessible as technology changes and physical media decays.

Context

Technology is constantly evolving with what once was considered revolutionary is now outdated, and progressively discarded. Information technology does not exist in a vacuum; digital media requires supplemental technologies to retrieve the information. Discs, drives, and other mediums can deteriorate. Even when preserved, the information can be lost without its specific reader. Proprietary file formats fall prey to the Digital Dark Age, as they are less widespread and preserving them increasingly difficult. Conservators and other data specialists strive to ensure digital information remains available. The Internet Archive is one of many organizations dedicated to preserving digital information for future generations. Updating files to modern formats has many obstacles, including expense, expertise, and equipment demands. Many archivists do not have the resources to update file formats for all items in their catalogues.

Questions to Explore

- How should archivists decide which data to prioritize saving?
- What methods can be used to modernize outdated file types?
- How might the loss of information affect the future of humanity?

Central Themes

1. Fragility of digital information
2. Logistics and ethics of data preservation
3. Societal impact of memory loss
4. Innovation in digital preservation

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