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The role of standards or standards bodies in determining specifications that are vital for identifying integrity and reliability for long-term data storage in cloud services.

- **NIST (National Standards and Technology)**
  - Taxonomy and reference model for cloud computing architecture.
- **SNIA (Storage Network Industry Association)**
  - Nonprofit vendor neutral trade association dedicated to developing standards, technologies and providing educational services on management of information.
- **CDMI (Cloud Data Management Interface)**
  - Created by the SNIA to define interfaces that applications use to create, retrieve, update, and delete data elements from the Cloud
Inter-operability and portability

Cloud services will continue to influence the interoperability and portability in storage architectures.

• General increase in the adoption of Cloud from end users to enterprises.
• BYOD (Bring Your Own Device) and extensive use of mobile devices requiring elastic data storage.
• Application design and approach to data management are moving towards the Cloud delivery model.
Users and developers of long-term storage applications should do the following to promote integrity and reliability in cloud services:

• Select providers/vendors who support industry wide accepted standards such as CDMI.

• Build applications with loosely coupled or simple interfaces for access to data in the Cloud such as REST (Representational State Transfer).

• Implement and regularly enforce risk assessments, audits, and monitoring regarding data storage/access.

• Create enforceable SLAs with providers/vendors.
References and Sources

- **NIST Cloud Computing Reference Architecture**

- **SNIA**
  http://snia.org

- **CDMI**
  http://www.snia.org/tech_activities/standards/curr_standards/cdmi