

Glossary and Acronyms

ERP - Enterprise Resource Planning. Enterprise Resource Planning (ERP) is a term usually used in conjunction with ERP software or an ERP system which is intended to manage all the information and functions of a business or company or organization such as an institution from shared data stores. An ERP system typically has modular hardware and software units and "services" that communicate on a local area network. The modular design allows a business to add or reconfigure modules (perhaps from different vendors) while preserving data integrity in one shared database that may be centralized or distributed.

Data Warehouse - A data warehouse is a repository of an organization's electronically stored data. Data warehouses are designed to facilitate reporting and analysis fed by or collected from operational data stores. This definition of the data warehouse focuses on data storage. However, the means to retrieve and analyze data, to extract, transform and load data, and to manage the data dictionary are also considered essential components of a data warehousing system. Many references to data warehousing use this broader context. Thus, an expanded definition for data warehousing includes business intelligence tools, tools to extract, transform, and load data into the repository, and tools to manage and retrieve metadata.

Data Mart - A data mart is a subset of an organizational data store, usually oriented to a specific purpose or major data subject, that may be distributed to support business needs. Data marts are analytical data stores designed to focus on specific business functions for a specific community within an organization. Data marts are often derived from subsets of data in a data warehouse or ERP or data stores managed by various applications, though in the bottom-up data warehouse design methodology the data warehouse is created from the union of organizational data marts.

Longitudinal System - The advent and arrival of the U.S. Department of Education's Education Data Exchange Network (EDEN) System has challenged the way state education agencies conduct business. Despite voluntary participation as a proof of concept site for EDEN precursors (e.g., the Integrated Performance Benchmarking System), many SEAs (State Education Agencies), are finding that this consolidated reporting requires that data be integrated from many different stand-alone collection repositories or data stores operated by schools and institutions. A Longitudinal Data system integrates data by means of a single data warehouse so that the longitudinal data meta data will meet all submission expectations and requirements detailed in the Education Data Exchange Network (EDEN) Workbook.

Meta Data - Metadata (meta data, or sometimes metainformation) is "data about data", of any sort in any media. Metadata is text, voice, or image that describes what the audience wants or needs to see or experience. The audience could be a person, group, or software program. Metadata is important because it aids in clarifying and finding the actual data. An item of metadata may describe an individual datum, or content item, or a collection of data including multiple content items and hierarchical levels, such as a database schema and relationships between datum. In data processing, metadata provides information about, or documentation of, other data managed within an application or environment. This commonly defines the structure or schema of the primary data. For example, metadata would document data about data elements or attributes, (name, size, data type, etc) and data about records or data structures (length, fields, columns, etc) and data about data (where it is located, how it is associated, ownership, etc.). Metadata may include descriptive information about the context, quality and condition, or characteristics of the data. It may be recorded with high or low granularity. An example of metadata occurs within data stores and message data used for web services. Associated with every file on the storage medium is metadata that records the date the file was created, the date it was last modified and the date the file (or indeed the metadata itself) was last accessed.

Schema The word schema comes from the Greek word "σχῆμα" (skhēma), which means shape, or more generally, plan. The plural is "σχῆματα" (skhēmata). In English, both schemas and schemata are used as plural forms, although the latter is the standard form for written English. Schema in computer science may refer to: Model or Diagram Schematic, a diagram that represents the elements of a system using abstract, graphic symbols or data element lists.

- Ontology (computer science), a data model that represents the relationships of a set of concepts within a domain
- XML schema, a way to define the structure, content and, to some extent, the semantics of XML documents
- Z specification language, part of a formal specification
- Database schema (disambiguation)
- Schema (genetic algorithms) or Schema (genetic programming), a set of programs or bit strings that have some genotypic similarity; usually specified by a template
- Axiom schema, a rule describing a set of statements in formal logic