The following are selected terms you will encounter in the OSCRE Website, education and training.

Asset Lifecycle
Digital Competency
Digital Ecosystem
Data Governance
Data Integration and Aggregation
Data Literacy
Data Models
Data Strategy
Digital Maturity
Digital Transformation
Information Supply Chain (ISC)
Interoperability
Master Data Management
Use case

Asset Lifecycle
A life cycle that encompasses the full range of activities and processes from the inception of a project through operations, maintenance and ultimate disposition of the asset.

Digital Competency
Digital Competence is the set of knowledge, skills, attitudes, abilities, strategies, and awareness that are required when using ICT [Information and Communications Technology] and digital media to perform tasks; solve problems; communicate; manage information; collaborate; create and share content; and build knowledge effectively, efficiently, appropriately, critically, creatively, autonomously, flexibly, ethically, and reflectively. (Ferrari)

Digital Ecosystem
An information-enabled network of collaborative internal and external business partners who utilize technology to connect strategies business functions, competencies, and actions that cultivate innovation and lead to better business outcomes.

Data Governance
Data governance refers to the overall management of the availability, usability, integrity, and security of the data employed in an enterprise...a sound data governance program includes a governing body or council, a defined set of procedures, and a plan to execute those procedures...the execution and enforcement of authority over the management of data assets and the performance of data functions...the decision-making process that prioritizes investments, allocates resources, and measures results to ensure that data is managed and deployed to support business needs. (Data Governance Institute)

Data Integration and Aggregation
Data integration involves combining data from different sources and providing users with a unified view. Data Aggregation is a process in which information is gathered and expressed in a summary form.
Data Literacy

Data literacy is a skill set that includes the following and evolves over time as the industry moves towards a more digitally-focused approach to data collection and analysis. According to WhatIs, Data literacy skills include:

- Knowing what data is appropriate to use for a particular purpose.
- Interpreting data visualizations, such as graphs and charts.
- Thinking critically about information yielded by data analysis.
- Understanding data analytics tools and methods and when and where to use them.
- Recognizing when data is being misrepresented or used misleadingly.
- Communicating information about data to people lacking data literacy, an ability sometimes referred to as data storytelling.

Data Models – 3 types of Data Model

Conceptual Data Model
A conceptual data model identifies the highest-level relationships between the different entities. Features of conceptual data model include: Includes the important entities and the relationships among them. No attributes are specified. No primary keys are specified. (Source: 1Keydata.com)

Logical Data Model
A logical data model describes the data in as much detail as possible, without regard to how they will be physically implemented in the database. Features of a logical data model include all entities and relationships among them and all attributes for each entity. (Source: 1Keydata.com)

Physical Data Model
Physical data model represents how the model will be built in the database. A physical database model shows all table structures, including column name, column data type, column constraints, primary key, foreign key, and relationships between tables. (Source: 1Keydata.com)

Data Strategy

A single, enterprise plan for the use of organizational data as an essential asset for strategic and operational decision-making. A data strategy defines the approach the enterprise will take to manage and use its data and information to achieve its business and technology goals, and to realize a competitive advantage using this asset.

An Enterprise Data Strategy is the comprehensive vision and actionable foundation for an organization’s ability to harness data-related or data-dependent capabilities. It also represents the umbrella for all derived domain-specific strategies, such as Master Data Management, Business Intelligence, and Big Data. (Dataconomy) The Enterprise Data Strategy is:

- Actionable
- Relevant (e.g. contextual to the organization, not generic)
- Evolutionary (e.g. it is expected to change on a regular basis)
- Connected / Integrated – with everything that comes after it or from it
Digital Maturity

Digital maturity combines two separate but related things. One is digital intensity, the level of investment in technology-enabled initiatives meant to change how the company operates. The other is transformation management intensity, the level of investment in the leadership capabilities needed to create digital transformation within an organization. Transformation intensity consists of the vision to shape a new future, governance and engagement to steer the course and IT/business relationships to implement technology-based change. (Sloan Management Review)

Digital Transformation

Digital transformation is the integration of digital technology into all areas of a business, fundamentally changing how you operate and deliver value to customers. It’s also a cultural change that requires organizations to continually challenge the status quo, experiment, and get comfortable with failure.

Information Supply Chain (ISC)

The Information Supply Chain (ISC) has parallel activities to, and plays a critical role in, the smooth operation of, the Physical Supply Chain (PSC). It supports business operations, internal and external reporting, compliance and regulations and policy and decision making.

Data is generated by relevant stakeholders along the supply chain. It is acquired from multiple channels, undergoes transformation, and is formalized in data stores within the organization's data ecosystem. Any issues encountered in the ISC will impact the PSC and vice-versa, which will ultimately impact the organization's operation. The ISC also provides deep insights into business operations and enables process optimization. The ISC should be expanded to identify critical data entities, the business-critical data elements in each entity, and the trusted sources of data and key systems-of-record for each critical data element. (Source: https://www.linkedin.com/pulse/whats-information-supply-chain-why-you-should-care-jay-zaidi)

Interoperability

Interoperability describes the extent to which systems and devices can exchange data, and interpret that shared data. For two systems to be interoperable, they must be able to exchange data and subsequently present that data such that it can be understood by a user. Interoperability is the ability of different information technology systems and software applications to communicate, exchange data, and use the information that has been exchanged...the ability of information systems to work together within and across organizational boundaries.

• “Foundational” interoperability allows data exchange from one information technology system to be received by another and does not require the ability for the receiving information technology system to interpret the data.

• “Structural” interoperability is an intermediate level that defines the structure or format of data exchange (i.e., the message format standards) where there is uniform movement of health data from one system to another such that the clinical or operational purpose and meaning of the data is preserved and unaltered. Structural interoperability defines the syntax of the data exchange. It ensures that data exchanges between information technology systems can be interpreted at the data field level.
• “Semantic” interoperability provides interoperability at the highest level, which is the ability of two or more systems or elements to exchange information and to use the information that has been exchanged. Semantic interoperability takes advantage of both the structuring of the data exchange and the codification of the data including vocabulary so that the receiving information technology systems can interpret the data. This level of interoperability supports the electronic exchange of data among business partners.

**Master Data Management**

Master data management is a technology-enabled discipline in which business and IT work together to ensure the uniformity, accuracy, stewardship, semantic consistency and accountability of the enterprise’s official shared master data assets. Master data is the consistent and uniform set of identifiers and extended attributes that describes the core entities of the enterprise such as customers, suppliers, sites, hierarchies and chart of accounts. (Gartner IT Glossary)

**Use Case**

A use case is used in system analysis to identify, clarify, and organize system requirements, typically reflecting the business needs of key stakeholders. The use case contains interactions between systems and users. The use case should contain all system activities that have significance to those users. A use case can be thought of as a collection of possible scenarios related to a particular goal, and has the following characteristics:

- Organizes functional requirements.
- Models the goals of the system and user interactions.
- Records paths (called scenarios) from trigger events to goals.