Master Data

Idea In Short

Master Data is the set of identifiers that provide context about business data, such as location, customer, product, asset, etc. It is the set of core data that is absolutely required to run business operations. Otherwise, there would be no uniform way to compare data among enterprise systems. The quality of Master Data is essential to the success of an organization. Inaccurate or outdated Master Data can lead to poor decision-making, wasted resources, and missed opportunities.

Master Data is the core data of an organization, which includes customers, products, employees, suppliers, and more. It is the foundation upon which an organization's business processes are built. Hence, Master Data is the backbone of any organization, as it contains the essential information needed to run the company. Without accurate and up-to-date Master Data, an organization would be unable to make sound decisions, track progress, or even communicate effectively.

Importance

In recent years, the importance of Master Data has been further emphasized by the rise of big data and data analytics. As organizations increasingly rely on data to drive their business decisions, the need for high-quality Master Data has become more critical than ever.

Business data

However, not all Master Data are created equal. Furthermore, what is designated as Master Data can vary across industries, businesses within the same industry or even, among business units within the same enterprise. In other words, Master Data can be discrete or not have much in common.

In general, the data captured by businesses falls into one of these three categories:

- **transactional Data:** Transactional data is data that is generated by various applications while running business processes
- **Analytical Data:** Analytical data is generated through data processing i.e. calculations or analyses run on transactional data
- **Master Data:** Master Data represents the actual, critical business objects upon which the transactions are performed or data analyses run

Example

The three data types are exemplified in a standard business transaction:

> Buyer X placed an order for 10 units of the Product Y on DD-MM-YYYY for a total of $5000.

Within this transaction, the Buyer and the Product Y are designated as Master Data. These entities lie at the heart of the transaction, without which, the transaction cannot happen.

The secondary data generated from this interaction fall under transactional data. Details, such as the amount, date, number of units [quantity] purchased, purchase amount (transaction volume) are transactional data.

Furthermore, additional information, such as the average order size of this particular customer, average order value, etc. can extracted through statistical analysis on an accumulated dataset. Such information comprise the analytical data.

As this example demonstrates, Master Data is the data about the business entities; it provides the context for business transactions.

Furthermore, nNote that all three data types are linked. Organizations require all three data types working together to support even the most basic of business activities.

Hence, Master Data forms one of the key data assets of an enterprise.

Types of Master Data

There are several types of Master Data, including customer data, product data, and financial data. Each type of data has its own unique importance and purpose. Some Master Data types are:

- **Customer data:** is used to track and manage customer relationships. It includes information such as customer names, addresses, contact information, purchase history, etc.
- **Product data:** is used to track and manage the inventory of an organization. It includes information such as product names, descriptions, prices, stock levels, etc.
- **Financial data** is used to track and manage the financial performance of an organization. It includes information such as revenue, expenses, profit margins, etc.

By investing in quality Master Data, organizations can ensure that their data is reliable and can be used to make sound business decisions.

Categories and Components of Master Data

The most common categories of Master Data, along with their components, are:

- Parties: Both individuals and organizations, plus the whole spectrum of roles nested therein: scouts, buyers, vendors, customers, suppliers, and employees
- Products: commodities traded among the parties
- Financial structures: assets, accounts, documents, etc.
- Locational concepts: sales territories, branches, office locations

Both, business processes and their supporting IT systems require Master Data. Therefore, it is imperative to standardize Master Data formats, synchronize values and properly manage Master Data for successfully integrating multiple systems that support a business process.

Characteristics of Master Data

Typically, Master Data is non-transactional in nature. The exception to this rule is where information about Master Data components, such as parties or products, is listed only on such transactional documents as invoices and receipts and is not recorded separately (although it should be).

Master Data is often grouped into Master record datasets, which may encompass Reference Data associated with it. However, it is important to separate Master Data from Reference Data. Associated Reference Data is rather like a tag-along piece of data, for example, the zip code of an office branch address in a customer Master record dataset.

Master Data is typically stored in a centralized database, which allows for easy access and updates. However, in some cases, Master Data may be stored in multiple databases or spreadsheets.

Summary

To ensure the quality of Master Data, organizations should put in place processes and controls for collecting, storing, and managing the data. They should also establish clear guidelines for who can access and update the data. Organizations should also consider investing in Master Data management [MDM] software, which can help to automate the process of collecting, storing, and managing Master Data. MDM software can also help to improve the quality of Master Data by providing features such as data cleansing and data enrichment. Despite its importance, Master Data is often overlooked by organizations. This is often due to the fact that it can be seen as a tedious and time-consuming task to manage. However, with the right processes and tools in place, managing Master Data can be relatively straightforward and can have a major impact on the success of an organization.