

Who did it better, Kimball or Inmon?

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Part Time: Srilanka: Data Warehousing

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In Collaboration With

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IIT No : **2019108** RGU Id : **1912323**

CMM701

30th October 2019

A **Data Warehouse** is, meant to collect data from various heterogeneous sources which will be supported to make decisions in order to take business analysis and various reports from large chunk of data turns into a useful piece of information. It represents all the information to understand the organization's business (What is Data Warehousing?, n.d.). Ralph Kimball, introduced the Dimensional Model Data warehouse, known as the Bottom-Up design, On the other hand, another renowned author of data warehousing, Bill Inmon who introduce the design methodology of Top-Down design. This topic will analyze those two methodologies in contrast.

Both methods take the data warehouse as “a single integrated repository of atomic data” (Imhoff et al., 2003). Both use ETL for data warehousing. According to Inmon (Inmon, n.d.), He define his design as the enterprise Data warehouse while Kimball defines his, as the dimensional data warehouse, but both architectures focus on enterprise perspective in order to support the organizational decision of information analysis (Kimball and Ross, 2013). Similarities rely on both methods, but with different approach to build and creation of DataWarehouse. Let's look at the architecture of both methods and how those methods support different business needs.

Enterprise Data warehouse design as **Top-down** approach implemented using in a normalized data model, which is in 3NF. Data stored by the lowest level of details in the data warehouse (Inmon, n.d.). The Inmon methodology follows the pattern of creating data marts ONLY after the whole Datawarehouse has been implemented. Basically data marts for specific business processes derived from the DataWarehouse, which will be the center of the information source and enables the business intelligence capabilities. The Inmon's Datawarehouse defined with terms like “Subject-oriented, Time-variant, non-volatile and integrated” (Imhoff et al., 2003; Inmon, n.d.). In the meantime Kimball's Dimensional modeling known as **Bottom-Up** approach, the data marts are created for specific business processes to enable analysis and to create reports from the use of it. Data marts are designed to contain dimensions and facts. Facts have the atomic data or/either summary of data. In this case, a single data mart represents a specific business element. Dimensions are designed as star or snowflake schema to organize the data (Kimball and Ross, 2013).

The question is who did it better? Well... it depends. As we see, the implementation of a data warehouse depending on the organizational business objective. Considering the cost and time involved. Inmon's method is suitable for stable businesses that can afford the cost and time to evolve into the business objective. Business conditions change but not the design. Moreover, it's for enterprise-wide businesses. While Kimball's approach is for frequent change of organization and can start quickly with a low cost. Smaller organizations preferable this method (George, n.d.). Now it's time for you to choose which methodology of designing a Data Warehouse will help your organizational needs and help to grow your business logic.

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