## The Business Intelligence Concept

(Connolly and Begg, 2015) defines Business Intelligence as *“an umbrella term that refers to the processes for collecting and analyzing data, the technologies used in these processes, and the information obtained from these processes with the purpose of facilitating corporate decision making”.*  The term Business Intelligence is a relatively new one as it appeared around mid - 90s. However, systems that provide Business Intelligence exist since early 1980s – they used to be called Enterprise Information systems (EIS) (Sharda et al., 2015). EIS were the first systems that had the capability of providing advanced data analytics such as forecasting, prediction and ad-hoc reporting. EIS replaced the Management Reporting Systems (MRS) that showed up in the 1960s and had very limited capabilities. As the EIS continued evolving, they were enhanced with additional features such as artificial intelligence and data mining. These systems are now called Business Intelligence systems (BIS) and are a very important element of a modern business in terms of supporting decision making.

## Business Intelligence Systems

(Sharda et al., 2015) defines a Business Intelligence System as system that has four components. A Data Warehouse, Business Analytics, a User Interface and Business Performance Management (BPM). The data warehouse is the central repository of data that have been collected from different internal or external sources. Business Analytics refer to tools that are used for querying, mining or analyzing data from the data warehouse such as OLAP tools or Data Mining tools. The User Interface refers to the dashboards or reports that can be produced by modern reporting tools. Finally the business performance management (BPM) is tightly connected with Business Intelligence as the latter can help BPM to identify strategy requirements, drive performance and monitor achievement. (Fidler, 2016). This project will focus on the data warehouse component, and more specifically of the methods that are used to extract data from data sources and the load the data into the data warehouse, after performing any necessary transformations.

## The Data Warehouse concept