**PROJECT INTRODUCTION:**

The main focus of this project:

* To design a data warehouse model for the business model described in this project.
* Identify available open source database to use for the project.
* Create a ETL plan to extract, load and transform this data from the database into data warehouse schema.
* Finally load this sample data into the data warehouse schema and create some visualization dashboard to represent analytics.

**BUSINESS BACKGROUND:**

The main business model I am targeting via this project is the manufacturing. Primarily in this manufacturing business the multiple entities of the business are tied in and interlinked i.e. starting from employee records to purchase orders and online transactions are very important for the success of the business.

Hence this project aims at designing a data warehouse model with the available database of all online transactions. Down the lane this will be used for various analytics activities to significantly improve any business related issues as well as understand market trend worldwide and how the business and transactions fluctuate as a function different entities.

**DATABASE DESCRIPTION:**

In this project I plan to use the online open source AdventureWorks Database available from Microsoft.

Database: <https://github.com/Microsoft/sql-server-samples/releases/tag/adventureworks>

Regarding the Database - all the data generated and stored is in regards to Adventureworks bicycle manufacturing company. Database consists of many tables (<https://technet.microsoft.com/en-us/library/ms124438(v=sql.100).aspx>) relating to Customer vendor and employee details, Product specifics, transactions and ordering specifics, billings details etc.

**ANALYTICAL THEME:**

The main analytical theme of this project is as follows:

* For the defined business model and the specific problem I am addressing - I would like to define the specifics needed in terms of data from the available databases.
* This specific information set will be used to design a data warehouse schema by defining dimensions and fact table.
* Later in Mysql I would like to extract, load and transform the data from the online data sources and make a sample data warehouse schema.
* This sample schema will be used to develop some visual analytics and hence will be presented in the final presentation and report.