CONCLUSION AND FUTURE WORK

Data analysis is a process where main algorithms are run the data to gain meaningful insight and help analysis trends, patterns and take better decisions for the actual business. It is important to understand that data has use only when transformed to information through analysis. Data analysis uses a wide range of techniques, software, tools, and methods (various tools that are available on the market where the data can be presented in a graphical format). Visualization is very important form of attaching smart identification to data and Such as SQL Server reporting services power view and power query yields some very important insights to the data.

The successful queries are used to extract the data in to accessible and attractive method with the help of a reporting tool. Normally these reports will be different forms either tabular or spread sheet-formatted. The reporting solutions might present in graphical drill down methods or bare form while some other tools might provide additional design to the data. Which will help to business analysis team

Recently Online Analytical Processing (OLAP) has the feature of organizing data into multidimensional hierarchies is known cubes. Data mining algorithms assist in uncovering relationships or patterns based on some fixed algorithms. OLAP tools allow to slice and dice the data to extract the specific data items. Its known as 3D view of the actual data. Actual cube that contains sales information is categorized by product, region, salesperson, retail outlet, and time period, in different units and dollars. Using an OLAP tool, a user needs to only click on a dimension to see a breakdown of particular metric sales (region wise). An analysis of units by product, salesperson (region wise); or to examine a particular salesperson's performance over a period of time.

Data mining process are used to determine the patterns from a dataset with the suitable algorithms. The identification of patterns goes through several phases, such as data preparation, data modeling, data complexity considerations, visual interpretations of the data trends, and
model updating process. It is worthwhile to note that data mining is often interpreted as a system that assists in business decisions. The popular operations that intertwine with data mining includes:

- Identify the relationship among the data
- Detect patterns from a set of data
- Auto detect patterns once the algorithm started using
- Use of the information and data for visual representation of the findings

Drilling down (appending a row header) is the most fundamental way data is analyzed by business users. The new row header is a dimension attribute appended to the GROUP BY expression in an SQL query. The attribute are independent to mentioned below

- Dimension attached to the fact table in the query,
- The definition of predetermined hierarchies
- Drill-down paths.

A suggestion for using Visual Tools has been given with examples from commercial packages such as Solution Architect and Smart Draw. Visualization integrates the business man job of explaining (easy) and understanding by the computer engineer (also very easy). The Project manager or CEO or CFO can explain visually the requirements further as complete automation is nearly impossible as country to country business practices vary. Today’s DWH systems provide many different services to different kinds of users. In order to have a big picture of the current situation and to visualize future scenarios, people involved in designing and managing today’s DWH systems need an overview of all these different ways the DWH is being used. In this paper, we have introduced the UML Profile for Modeling DWH Usage for modeling the different kinds of DWH usage on a conceptual level. It distinguishes four perspectives of usage (access control, temporal intensity, temporal flexibility and importance) as well as active or passive usage, and allows to model details of the users such as their skill level, number of instances, functional grouping or organizational affiliation. We base usage on UML information flows, which are intended for a general representation of information exchanges. It will continue extending same subject Area with UML.
The root cause analysis of the 12 major components that contribute to the chaos revealed that the flawed software engineering practices followed during the software development are root cause of the chaos in software development. Software engineering flaws assume many forms, including absence of a standard software development methodology, inefficient/flawed execution of solution steps, accidental omission of solution steps due to hasty schedule, failure to follow to raise sufficient human and other resources. Each of these flaws can induce disorder in software development process. Failure to identify and remove the root causes of the chaos inducing factors at the point of their origin itself can bring disorder in the system development. As chaos increases, various system development activities get derailed. The system development process then enters a normally hidden zone of chaos and the system development fails. The chaos zone is characterized by the presence of high entropy. People, Process, Product, and technology related problems caused by chaos emerge in the chaos zone. Once the development process enters the chaos zone, extensive and expensive repair works are needed to put the development process back into order. Often the fate of such projects is unclear.