Module 2: Reading and Videos Part I

Overview: Exploratory Data Analysis Using Cognitive Analytics

Data analysis through exploration is an essential process. Through this step marketers become detectives exploring and identifying data patterns. Exploratory data analysis provides a summary of the main characteristics within the data. Many times, explorational analysis results in a graphical visualization of data patterns this format helps them analysis understand the existing data and patterns and shield light on potential issues. Using relation versus a data table enables us to quickly see the change prices for a particular good or service.

Exploratory data analysis allows analysis to probe underlying relationships and data and investigate patterns. Exploring exploratory data analysis can help detect anomalies or outliers in the data, which variables that are most important, changes that occur within each variable, and patterns or relationships between variables that warrant further exploration.

Is there any technology that could augment and amplify traditional exploration? Is it possible for technology to generate recommendations and answer questions from natural language? The answer is yes. Cognitive analysis and knowledge discovery applications can examine standing questions in natural language generate recommendations and pose new questions about the data.

Cognitive Analytics and Knowledge Discovery

Machine learning, deep learning, natural language, processing computer vision, or a combination of these applications facilitate the completion of advanced cognitive analytics tasks. At least one type of cognitive analytics technology has become famous. Does the name Watson sound familiar? IBM built a powerful computer the computer could understand and products those natural language the technology combined high speed data processing and machine learning to create a recommendation system called Watson.

IBM Watson was successful in a game show, but our company is actually using cognitive analytics. In addition to IBM numerous companies have further delete cognitive technology using AI many small and large companies across industries can now realize the value of using cognitive analytics and knowledge discovery tools.

Uses for Cognitive Analytics:

Companies are using cognitive analytics in numerous ways such as:

- Customer facing solutions that interact with the customer.
- Support internal business operations and enhance decision making companies
- Exploratory data analysis

An advance of cognitive analytics it can be applied to explore structured and unstructured types of data. Exploratory data analysis graph combining internal and external data can provide many marketing insights and can lead to a competitive advantage.