

DA TYPES, TOOLS, APPLICATION



Data Analytics Types



- **Four main types of data analytics**
 1. Predictive data analytics
 2. Prescriptive data analytics
 3. Diagnostic data analytics
 4. Descriptive data analytics



Data Analytics Types

- **Predictive data analytics :**
- ❖ Predictive data analytics - makes predictions about future outcomes using historical data combined with statistical modeling, data mining techniques and machine learning.



Data Analytics Types

- **Prescriptive data analytics :**
- ❖ Prescriptive Analytics - examines data or content to answer the question “What should be done?” or “What can we do to make _____ happen?”,
- ❖ Techniques - graph analysis, simulation, complex event processing, neural networks.



Data Analytics Types

- **Descriptive data analytics**
- ❖ Descriptive analytics is the process of parsing historical data to better understand the changes that occur in a business.
- ❖ Using a range of historic data and benchmarking, decision-makers obtain a holistic view of performance and trends on which to base business strategy.



Data Analytics Types



- **Descriptive data analytics**
- ❖ Descriptive analytics is the process of using current and historical data to identify trends and relationships.
- ❖ simplest form of data analysis
- ❖ Answers the question “What happened?” - providing reports and analysis of past events



Data Analytics Types



- ❖ **Some of the widely used data analytics tools are :**
- R and Python
- Microsoft Excel
- Tableau
- RapidMiner
- KNIME
- Power BI
- Apache Spark
- QlikView
- Talend
- Splunk



Data Analytics Applications



- ❖ **Applications for Text, Web and Social Media:**
 - Text mining - extracts knowledge from texts
 - Social network analysis – information's extracted from social relations
 - Recommendation systems.



Applications of Data Science



- Internet Search
- Recommendation Systems
- Image/Speech/Character Recognition
- Gaming
- Price Comparison Websites – PriceGrabber, PriceRunner, Jungle, Shopzilla.