Term	Definition
Artificial Neural Networks	Collections of small computing units (neurons) that process data and learn to make decisions over time.
Bayesian Analysis	A statistical technique that uses Bayes' theorem to update probabilities based on new evidence.
Business Insights	Accurate insights and reports generated by generative AI can be updated as data evolves, enhancing decision-making and uncovering hidden patterns.
Cluster Analysis	The process of grouping similar data points together based on certain features or attributes.
Coding Automation	Using generative AI to automatically generate and test software code for constructing analytical models, freeing data scientists to focus on higher-level tasks.
Data Mining	The process of automatically searching and analyzing data to discover patterns and insights that were previously unknown.
Decision Trees	A type of machine learning algorithm used for decision-making by creating a tree-like structure of decisions.
Deep Learning Models	Includes Generative Adversarial Networks (GANs) and Variational Autoencoders (VAEs) that create new data instances by learning patterns from large datasets.
Five V's of Big Data	Characteristics used to describe big data: Velocity, volume, variety, veracity, and value.
Generative AI	A subset of AI that focuses on creating new data, such as images, music, text, or code, rather than just analyzing existing data.
Market Basket Analysis	Analyzing which goods tend to be bought together is often used for marketing insights.
Naive Bayes	A simple probabilistic classification algorithm based on Bayes' theorem.
Natural Language Processing (NLP)	A field of AI that enables machines to understand, generate, and interact with human language, revolutionizing content creation and chatbots.
Precision vs. Recall	Metrics are used to evaluate the performance of classification models.
Predictive Analytics	Using machine learning techniques to predict future outcomes or events.
Synthetic Data	Artificially generated data with properties similar to real data, used by data scientists to augment their datasets and improve model training.