



Marketing Data Analysis Using Artificial Intelligence



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Introduction to Marketing Data Analysis Using Artificial Intelligence

The modern marketing landscape relies heavily on intelligent data interpretation, making advanced analytical skills essential for strategic success. This Marketing Data Analysis Using Artificial Intelligence course equips participants to process, analyze, and interpret vast volumes of marketing data. It provides an understanding of how AI marketing strategies and machine learning models transform raw data into actionable intelligence. Participants will explore both foundational and advanced concepts, enabling learners to apply AI-driven marketing insights to real-world scenarios.

Participants will learn how to use marketing data analysis tools to improve campaign performance and forecast customer behavior. The Marketing Data Analysis Using Artificial Intelligence program introduces practical methods for leveraging AI in digital marketing analytics to enhance decision-making accuracy. It also highlights global best practices to build a solid framework for marketing analytics with AI. Learners will apply data-driven approaches to sustain marketing growth and achieve a competitive advantage.

Targeted Groups

This Marketing Data Analysis Using Artificial Intelligence training targets professionals seeking specialized knowledge and skills:

- Marketing managers are seeking advanced analytical approaches.
- Digital campaign specialists optimizing performance.
- Data analysts working in marketing environments.
- Business intelligence professionals.
- Customer insight and behavior analysts.
- Market research and forecasting specialists.
- Digital transformation and performance improvement teams.
- Entrepreneurs aiming for data-driven market growth.
- Fresh graduates in marketing or data science.
- Professionals exploring AI in marketing analytics.

Course Objectives

Participants will achieve the following objectives by completing the Marketing Data Analysis Using Artificial Intelligence course:

- Understand essential and advanced AI concepts in marketing analytics.
- Learn how to use AI marketing strategies for stronger results.
- Apply data analysis for marketers using multiple data sources.
- Develop skills in preparing, cleaning, and structuring marketing datasets.
- Build competence in analyzing customer behavior using machine learning.
- Use predictive modeling to forecast market trends and customer actions.
- Interpret marketing data insights to support strategic decisions.
- Use AI-powered marketing analytics tools to improve digital campaigns.
- Apply AI-driven marketing insights to optimize performance.
- Learn to analyze marketing data using machine learning techniques.
- Create data visualizations for precise digital marketing analysis.
- Build interactive dashboards using AI-supported tools.
- Strengthen capabilities in handling large-scale marketing databases.
- Apply segmentation and clustering for customer analysis.
- Use predictive analytics to enhance marketing performance.
- Support digital marketing decisions through AI-powered methods.

Targeted Competencies

Participants will gain the following competencies during the Marketing Data Analysis Using Artificial Intelligence program:

- Solid understanding of AI marketing data analysis.
- Ability to apply artificial intelligence in marketing decisions.
- Skills in using marketing analytics tools and AI.
- Competence in interpreting data for strategic actions.
- Capability to build forecasting models for campaigns.
- Proficiency in customer segmentation with AI techniques.
- Mastery of AI-driven analysis for customer behavior.
- Ability to integrate insights into digital marketing analytics.
- Skill in creating interactive marketing dashboards.
- Strength in applying predictive insights to improve performance.

Studying Scenarios

In this Marketing Data Analysis Using Artificial Intelligence training, participants will develop their skills through the analysis of the following scenarios:

- Studying digital campaign performance using AI-driven marketing insights.
- Analyzing customer segmentation using clustering and classification.
- Evaluating sentiment and feedback to improve brand positioning.
- Identifying trends using marketing analytics with AI tools.
- Predicting consumer behavior in real-world digital markets.
- Assessing multi-channel campaign performance using AI.
- Analyzing website and platform interactions to optimize user journeys.
- Applying predictive analytics to improve future campaigns.

Course Content

Unit 1: Fundamentals of Marketing Data Analysis Using AI

- Understand the role of AI-driven marketing analytics in strategic decision-making.
- Explore internal and external marketing data sources.
- Compare qualitative and quantitative marketing data.
- Identify key marketing data analysis tools used globally.
- Learn how to prepare and structure datasets for AI analysis.
- Use Excel, Python, and R for foundational data preparation.
- Track essential marketing performance indicators.
- Explore how AI in marketing analytics improves business results.
- Understand the impact of data on marketing decisions.
- Learn how to integrate data analysis into marketing planning.

Unit 2: Artificial Intelligence in Marketing Analytics

- Understand AI concepts and their marketing applications.
- Explore the branches of machine learning used in marketing data analysis.
- Apply classification and clustering to customer segmentation.
- Build predictive models to forecast customer behavior.
- Use sentiment analysis to evaluate digital campaigns.
- Explore AI marketing strategies for customer engagement.
- Apply natural language processing for analyzing customer feedback.
- Automate analytics processes using AI marketing data analysis tools.
- Study AI in digital marketing analytics to improve campaigns.
- Analyze real cases using artificial intelligence in marketing.

Unit 3: Digital Marketing Campaign Analysis

- Collect campaign data from digital advertising platforms.
- Analyze key metrics such as CTR, CPC, and ROAS.
- Track customer journeys across digital channels.
- Use marketing analytics tools and AI to monitor performance.
- Apply statistical models to measure the impact of advertising.
- Evaluate multi-channel marketing performance with AI.
- Conduct ROI analysis using predictive techniques.
- Prepare detailed reports for marketing decision-makers.
- Use AI-driven marketing insights to optimize campaigns.
- Study how to use AI for marketing data analysis in real projects.

Unit 4: Advanced Customer Behavior Analysis Using AI

- Collect customer interaction data across platforms.
- Analyze omnichannel behavior using advanced AI tools.
- Apply segmentation techniques based on purchase patterns.
- Use churn prediction models to retain customers.
- Apply clustering models to identify customer groups.
- Understand the motivations behind search behavior using AI.
- Build data-based customer personas.
- Track changes in customer behavior through longitudinal studies.
- Apply personalized marketing using AI-powered insights.
- Integrate machine learning to provide deeper behavioral interpretation.

Unit 5: Advanced Tools and Techniques for AI Marketing Analytics

- Use Power BI and Tableau for advanced visualization.
- Connect marketing datasets to analytical dashboards.
- Apply Scikit-Learn and TensorFlow for predictive modeling.
- Use Big Data tools to manage large marketing databases.
- Build modern dashboards using business intelligence tools.
- Identify future market trends using AI-based techniques.
- Model customer behavior using statistical AI methods.
- Perform text analysis on customer reviews.
- Automate weekly and monthly reporting using innovative AI systems.
- Apply AI-powered marketing analytics tools in real case studies.

Final Insights & Key Takeaways

This course enables participants to implement AI-powered marketing analytics in real business environments confidently. It equips them with advanced tools for analyzing customer data and optimizing marketing strategies. The content bridges theory with practical application to support data-driven decision-making. Graduates will leave ready to apply artificial intelligence for marketing data analysis in competitive markets.