MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act,1956

COURSE CONTENT

MARKETING ANALYTICS & (LAB)								
I Semester: MBA								
Course Code	**Category**	**Hours/Week**			**Credits**	**Maximum Marks**		
		L	**T**	**P**	**C**	**CIE**	**SEE**	**Total**
25MB028M6	**CORE**	4	0	-	4	40	60	100
Contact Classes:60	**Tutorial Classes:** Nil	**Practical Classes:** Nil				**Total Classes:** 60		
Prerequisite: Basic concepts of Marketing								

COURSE OVERVIEW:

This course provides a comprehensive introduction to marketing analytics and its role in data-driven marketing decision making. It covers the scope, applications, and integration of marketing analytics with business intelligence. The course develops hands-on competency in using MS Excel for organizing, summarizing, and analyzing marketing data through pivot tables, slicing, and demographic analysis. It explores advanced analytical techniques including segmentation analytics, cluster analysis, conjoint analysis, and perceptual mapping. The course further examines pricing analytics, demand estimation, price optimization, and bundling strategies using solver tools. Emphasis is also placed on promotion analytics, advertising effectiveness, and media allocation models. The course concludes with customer analytics, including customer journey mapping, persona development, and customer lifetime value estimation. Overall, the course equips students with quantitative and analytical skills required for evidence-based marketing decisions.

COURSE OBJECTIVES:

1. To provide a strong conceptual foundation in marketing analytics and its integration with business intelligence.
2. To develop students' ability to organize, summarize, and analyze marketing data using MS Excel tools.
3. To enable learners to apply segmentation, pricing, and promotion analytics for strategic marketing decisions.
4. To build competency in using analytical models such as cluster analysis, conjoint analysis, and media allocation models.
5. To equip students with skills to analyze customer behavior, develop personas, and estimate customer lifetime value.

COURSE OUTCOMES: After completion of the course, students should be able to

1. Summarize the scope & significance of marketing analytics, differentiating it from marketing research and explaining data organization methods.
2. Analyze marketing and demographic datasets with Excel for evaluation of customer behavior and product performance.

3. Calculate Customer Lifetime Value and conduct sensitivity analysis through Excel-based customer analytics
4. Optimize pricing scenarios and demand estimation for complementary products with Excel Solver.
5. Develop marketing strategies through segmentation and promotional analytics with assessment of promotional effectiveness using various models.

Unit – I: Introduction to Marketing Analytics: Definition, Need and Scope of Marketing Analytics, Marketing Analytics Vs Marketing Research, Levels in Marketing Analytics, Adoption and Application of Marketing Analytics, Marketing Analytics and Business Intelligence. MS Excel as a Tool for conduction of Marketing Analytics. Using MS Excel to Organize and Summarize Marketing Data: Creation of Pivot Tables and Organizing Data. Summarizing Revenue Data: Month-wise and Product- wise. Slicing & Dicing of Data: Pareto Principle, Report Filters and Slicers. Demographic Analysis: Analyzing Sales Data by Age, Gender, Income and Location, Construction of Crosstabs of Two Demographic Variables.

Unit – II: Segmentation & Positioning Analytics: Segmentation Analytics: Cluster Analysis and its Applications, Location-wise Clustering, Using Solver to find Optimal Clusters. Using Conjoint Analysis to Segment a Market, Using Decision Trees for Segmenting the Market. Perceptual Mapping, White Spaces, Umbrella Brands, Multidimensional Scaling.

Unit – III: Pricing Analytics: Pricing, Goals of Pricing, Price Elasticity, Estimating Linear and Power Demand Curves, Using Excel Solver to Optimize Price, Incorporating Complementary Products, Using Solver Table to Price Multiple Products and Finding Demand Curve for All Products. Price Bundling, Bundling Prices to Extract Consumer Surplus, Mixed Bundling, Using Evolutionary Solver to Find Optimal Bundle Prices. Price Skimming.

Unit – IV: Promotion Analytics: Promotion Analytics: Promotions and Types of Promotions, Discounting & Types of Discounting. Measuring the Effectiveness of Advertising: The Adstock Model. Media Selection Models: Linear Media Allocation Model, Quantity Discounts, Monte Carlo Media Allocation Simulation. Pay per Click Advertising.

UNIT – V: Customer Analytics: Customer Journey Mapping and the Process of Mapping (How to). Metrics for Tracking Customer Experience: Customer Feedback Metrics & Behavior Derived Customer Metrics. Customer Persona, Building a Customer Persona and its Benefits, Parts of Buyer

Persona. What Customer Wants: Using Conjoint Analysis for Levels in Consumer Decision Process in Product Choices and Product Attributes. Customer Lifetime Value (CLV). Calculating Customer Lifetime Value: Measuring Sensitivity Analysis with Two-Way Tables, Estimating the Chance if Customer is still Active.

TEXT BOOKS:

1. Wayne L. Winston — *Marketing Analytics: Data-Driven Techniques with Microsoft Excel*, Wiley, **2014**.
2. Stephan Sorger — *Marketing Analytics: Strategic Models and Metrics*, CreateSpace, **2013**.
3. Rajkumar Venkatesan, Paul Farris & Ronald Wilcox — *Cutting Edge Marketing Analytics*, Pearson, **2014**.
4. Seema Gupta — *Marketing Analytics*, McGraw Hill Education, **2018**.

REFERENCE BOOKS:

1. John D. C. Little & Sunil Gupta — *Marketing Science*, Pearson, **2016**.
2. Mike Grigsby — *Marketing Analytics: A Practical Guide to Real Marketing Science*, Kogan Page, **2018**.
3. Philip Kotler & Kevin Lane Keller — *Marketing Management*, Pearson, **2016**.
4. Paul W. Farris et al. — *Marketing Metrics: The Manager's Guide to Measuring Marketing Performance*, Pearson, **2015**.

ELECTRONIC RESOURCES:

1. Microsoft Learn — Excel for Data Analysis
   🔗 https://learn.microsoft.com/en-us/training/excel/
2. Google Analytics Academy
   🔗 https://analytics.google.com/analytics/academy/
3. HubSpot Academy — Marketing Analytics
   🔗 https://academy.hubspot.com/
4. Coursera — Marketing Analytics Resources
   🔗 https://www.coursera.org/courses?query=marketing%20analytics

MATERIALS ONLINE:

1. Course template
2. Tutorial question bank
3. Tech talk and Concept Video topics
4. Open-ended experiments
5. Definitions and terminology
6. Assignments
7. Model question paper – I
8. Model question paper – II
9. Lecture notes
10. PowerPoint presentation
11. Drshya Siksha Sangrah (DSS) Videos