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Kandlakoya (V), Medchal, Hyderabad – 501401



An Empirical Study on The Impact of Marketing Analytics on Brand Performance and Customer Satisfaction

- **M. Shiva**, Student of MBA, CMR institute of Technology, Hyderabad, Telangana, India.
Shivarocknaik4@gmail.com
- **Dr. B. Nayeema**, Associate Professor, CMR institute of technology, Hyderabad, Telangana, India.
bajjisnayeema@cmritonline.ac.in

ABSTRACT

As digital technologies and data-driven practices become standard in marketing, organizations are relying more heavily on analytics to guide decisions. This study examines whether that reliance pays off — specifically, how marketing analytics affects brand performance and customer satisfaction, and how the two outcomes relate to each other. It also looks at how data-driven marketing strategies shape customer perception and engagement.

The research used a descriptive, quantitative design. Primary data came from 112 respondents through a structured questionnaire, while secondary data was drawn from books, journals, research articles, and online sources to ground the study in existing literature. Data was analyzed using frequency, percentage, correlation, and regression analysis, run through Microsoft Excel and SPSS.

The findings show that marketing analytics has a significant positive impact on both brand performance and customer satisfaction. Personalized marketing and data-informed decisions consistently improve customer experiences, strengthen brand image, and build greater loyalty and engagement. The relationship holds across the data — analytics isn't just associated with better outcomes, it measurably contributes to them.

Taken together, these results suggest that organizations using marketing analytics effectively are better positioned for sustainable growth and a stronger competitive position in a market that keeps shifting.

Keywords: Marketing Analytics, Brand Performance, Customer Satisfaction, Data-Driven Marketing, Customer Engagement, Brand Loyalty.

INTRODUCTION

Businesses today collect more data than they know what to do with. Every customer click, purchase, review, and social media interaction leaves a trail. Marketing analytics is the practice of turning that trail into something you can actually act on.

At its core, it's about measuring what's working. Which campaigns drove sales? Which customers are about to leave? Where is the budget going that shouldn't be? Those questions used to get answered by gut feeling and experience. Now there's data — if you know how to use it.

Brand performance and customer satisfaction are where this gets interesting. A company can spend heavily on advertising and still lose market share if customers feel ignored. Analytics helps identify why that happens — not through dashboards full of numbers, but by surfacing patterns that aren't obvious until you look closely. Why do customers in one region churn faster? Why does a product get low ratings despite strong early sales?

Personalization is another area that's changed. It used to mean putting someone's name in an email subject line. Now it means knowing which segment responds to which message, or that a customer who buys one product typically needs another within two months. That kind of targeting isn't just more efficient — it actually changes how customers experience a brand.

OBJECTIVES OF STUDY

1. To Analyze the Role of Marketing Analytics in Improving Brand Performance.
2. To Examine the Impact of Marketing Analytics on Customer Satisfaction.
3. To Evaluate the Relationship between Marketing Analytics, Customer Satisfaction, And Brand Performance.
4. To Identify How Data-Driven Marketing Strategies Influence Customer Perception And Engagement.

HYPOTHESES

Null Hypotheses (H_0)

H_{01} : Marketing analytics has no significant impact on brand performance.

H_{02} : Marketing analytics has no significant impact on customer satisfaction.

Alternative Hypotheses (H_1)

H_{11} : Marketing analytics has a significant impact on brand performance.

H_{12} : Marketing analytics has a significant impact on customer satisfaction.

SCOPE OF THE STUDY

The scope covers the main ways analytics shows up in practice: how data gets collected and interpreted, how customer insights are applied, how campaigns get evaluated, and how findings actually influence decisions. On the brand side, the focus is on awareness, loyalty, image, and competitiveness. On the customer side, it's service quality, experience, and retention.

The findings are based on a specific set of respondents and organizations, gathered during a defined period. They won't translate uniformly across every industry, market, or company size — and the study doesn't try to suggest they will. Other factors shape brand performance and customer satisfaction too; this research focuses on the analytics piece without pretending it's the whole picture.

The aim is to give marketers, managers, and researchers something they can actually use — a grounded look at where analytics contributes to better brand and customer outcomes, and where the evidence is thinner than the enthusiasm around data-driven marketing tends to imply.

LIMITATIONS OF THE STUDY

Every study has boundaries, and this one is no different. The data comes from a specific group of respondents, collected within a defined period — so the findings reflect a particular context, not a general rule. Readers in different industries or markets may find the results don't translate directly to their situation.

The research focuses on marketing analytics and its connection to brand performance and customer satisfaction. Other variables that shape both — economic conditions, internal leadership, competitive pressure — fall outside the scope by design, not by accident.

Survey-based research also carries inherent subjectivity. Responses depend on how participants interpreted the questions and what they chose to share. That's a limitation common to this kind of research, and it's worth keeping in mind when drawing conclusions from the data.

Taken together, these boundaries don't undermine the findings — they just define what the study is and isn't claiming. It's a focused examination of one relationship, in one setting, during one period. That's enough to be useful, as long as it's read that way.

REVIEW OF LITERATURE

Kotler and Keller (2006): in their foundational work on marketing management, observed a shift already underway — organizations moving away from product-centric marketing toward approaches built around customer data. Their core argument was straightforward: businesses that actually analyze customer preferences position their brands more effectively and build stronger relationships than those relying on intuition alone. What stands out in their work is the direct line they draw between analytical capability and outcomes that matter — customer satisfaction and brand loyalty, they argued, depend heavily on how well an organization understands customer behavior and reads market trends in the first place.

Usha (2020): traced how marketing analytics has changed shape over time — moving from basic reporting toward something built on big data, AI, and machine learning. The shift matters because it changes what analytics can actually do: instead of just describing what happened, these tools now help marketers decide what to do next.

Mittal et al. (2023): looked at the connection between customer satisfaction and business performance, and found it runs deeper than most companies assume. Satisfied customers don't just come back — they talk, and that word-of-mouth turns into measurable profitability over time. The study's broader point was that this isn't accidental: organizations that build their strategy around the customer, backed by real analytical practice, consistently end up with stronger brands and steadier growth.

RESEARCH METHODOLOGY

Research Design:

The study uses a descriptive, quantitative design — suited to measuring perceptions across a group of respondents and drawing statistical comparisons, rather than following individuals over time or exploring experiences in depth.

Quantitative methods fit the research because the study is built around testable hypotheses. Structured responses make statistical analysis possible, which allows for conclusions that go beyond general impressions. Whether marketing analytics has a measurable impact on brand performance and customer satisfaction is a question that needs numbers to answer, not just opinions.

Population:

The study draws on two groups: customers who interact with brands shaped by marketing analytics, and marketing professionals who work with analytics data as part of their daily roles. One group experiences the outcomes; the other produces them. Both perspectives are needed to get a complete picture.

Sampling Design:

The limitation is real and worth stating plainly: convenience sampling doesn't guarantee a perfectly representative sample. People who were easy to reach and willing to respond may differ in meaningful ways from those who weren't. The findings should be interpreted with that in mind.

Sample Size:

Number of respondents: **111**

DATA COLLECTION

Primary Data

Primary data was collected through a structured questionnaire administered to customers and individuals who interact with brands across digital and traditional marketing channels. Questions focus on respondents' awareness of personalized marketing, their perceptions of brand performance, satisfaction levels, engagement, and views on data-driven marketing practices

Secondary Data

Secondary data came from academic journals, research articles, books, conference papers, industry reports, and online databases across marketing analytics, brand performance, customer satisfaction, digital marketing, and customer relationship management.

DATA ANALYSIS TECHNIQUES

The data collected from respondents was analyzed using both descriptive and inferential statistical techniques

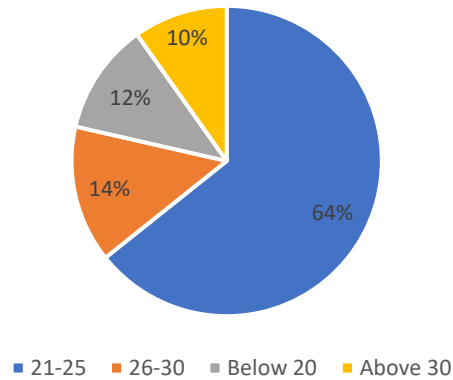
Statistical Tools

Data was processed and analyzed using **Microsoft Excel** and **SPSS**. Excel handled initial data organization and basic computations; SPSS was used for the statistical analysis — descriptive summaries, hypothesis testing, and examining relationships between variables.

1.Age Group:

Category	Frequency	Percentage
21-25	72	64.29%
26-30	16	14.29%
Below 20	13	11.61%
Above 30	11	9.82%

1.Age Group

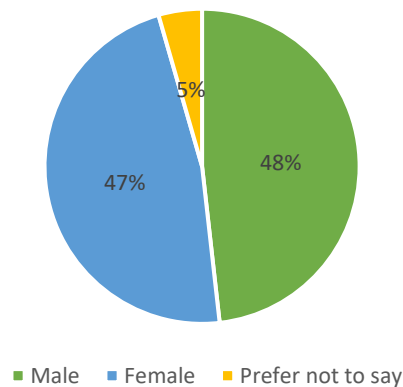


Interpretation: The majority response was "21-25" representing 64.29% of respondents.

2. Gender:

Category	Frequency	Percentage
Male	54	48.21%
Female	53	47.32%
Prefer not to say	5	4.46%

2. Gender

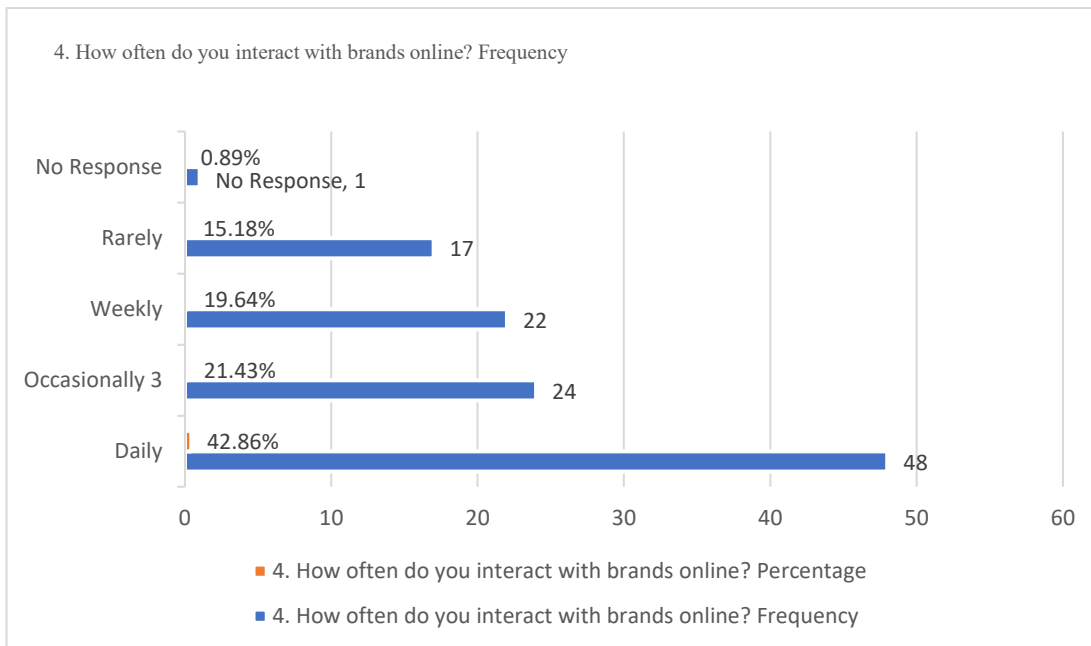


Interpretation: The majority response was "Male" representing 48.21% of respondents.

4. How often do you interact with brands online?

Category	Frequency	Percentage
Daily	48	42.86%
Occasionally 3	24	21.43%
Weekly	22	19.64%
Rarely	17	15.18%

No Response	1	0.89%
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Interpretation: The majority response was "Daily" representing 42.86% of respondents.

STATISTICAL TOOL ANALYSIS

Correlation Analysis:

Correlation analysis examined the strength of relationships between marketing analytics and the two dependent variables.

Variables	Correlation Coefficient (r)
Marketing Analytics and Brand Performance	0.502
Marketing Analytics and Customer Satisfaction	0.542

Interpretation:

Both correlations are positive and statistically significant. Marketing analytics shows a moderate relationship with brand performance ($r = 0.502$) and a slightly stronger one with customer satisfaction ($r = 0.542$). Neither relationship is weak, but neither is strong enough to suggest that analytics alone drives outcomes — other variables clearly play a role. The pattern does suggest that organizations investing in data-driven marketing are more likely to see improvements in both areas than those that don't.

Regression Analysis

Regression analysis was used to quantify how much of the variation in each outcome variable is explained by marketing analytics.

Dependent Variable	R ² Value	p-value
Brand Performance	0.252	0.000
Customer Satisfaction	0.294	0.000

Interpretation:

Marketing analytics significantly predicts both brand performance and customer satisfaction. The R² values — 25.2% for brand performance and 29.4% for customer satisfaction — indicate that analytics is a meaningful predictor of both outcomes, though not the only one. Customer satisfaction appears slightly more responsive to analytics-driven practices than brand performance, which may reflect the more direct and immediate nature of personalized customer interactions compared to longer-term brand-building processes.

ANOVA Results:

ANOVA was conducted as part of the regression models to test their overall statistical significance.

Model	p-value
Marketing Analytics → Brand Performance	0.000
Marketing Analytics → Customer Satisfaction	0.000

Interpretation:

Both models are statistically significant at the 0.05 level. The ANOVA results confirm that the regression models are a valid fit for the data — the relationships identified are not products of chance. Marketing analytics meaningfully influences both brand performance and customer satisfaction when tested across the full sample.

Chi-Square Test:

A Chi-Square test was conducted to examine whether demographic variables are associated with respondents' awareness and perceptions of marketing analytics.

Variables Compared	p-value	Association
Age Group and Awareness of Marketing Analytics	< 0.05	Significant
Gender and Awareness of Marketing Analytics	> 0.05	Not Significant

Interpretation:

Age shows a significant association with awareness of marketing analytics — younger respondents, particularly those in the 21–25 bracket, demonstrated higher familiarity with personalized marketing and data-driven practices. This is consistent with the demographic profile of the sample, where digital-native younger consumers are both more exposed to and more conscious of analytics-based interactions.

FINDINGS

✓ Gender distribution is nearly equal — balanced enough to reflect consumer perspectives across both male and female respondents without meaningful skew.

- ✓ Most respondents know that companies use data to understand their behavior — awareness of analytics is widespread, not something that needs to be assumed.
- ✓ Personalized ads and recommendations get noticed and drive purchase decisions — respondents confirmed both, which means analytics-driven targeting is landing as intended.

SUGGESTIONS

- ✓ Invest in better analytics tools — not just more of them. The focus should be on tools that actually surface actionable insights about customer behavior and purchasing patterns, not ones that generate reports nobody reads.
- ✓ Make personalization the default, not a feature. The data shows personalized communication drives engagement and satisfaction — campaigns built on customer data consistently outperform generic ones.
- ✓ Listen to customers continuously, not just at the end of a campaign. Feedback and behavioral data should feed into ongoing adjustments, not just post-mortems.

CONCLUSION

Marketing analytics influences brand performance in ways that go beyond awareness metrics. When organizations use customer data to inform their strategies, they build stronger brand images, earn greater loyalty, and position themselves more competitively. The effect isn't automatic — it depends on how well the data is interpreted and acted on — but the relationship is consistent and statistically significant.

The impact on customer satisfaction is equally clear. Personalized recommendations, tailored communication, and data-informed interactions make customers feel understood rather than targeted. That distinction matters. Customers who feel understood are more likely to trust a brand, return to it, and recommend it. The study's loyalty and word-of-mouth findings reflect exactly that pattern.

The correlation and regression results tie these threads together. Marketing analytics doesn't just affect brand outcomes and customer outcomes separately — it drives both through the same underlying mechanism: knowing your customer well enough to give them something relevant, at the right time, in the right way.

REFERENCES

1. Kotler, P., & Keller, K. L. (2006). *Marketing management* (12th ed.). Pearson Prentice Hall.
2. Mittal, V., Anderson, E. W., Sayrak, A., & Tadikamalla, P. (2023). Dual emphasis and the long-term financial impact of customer satisfaction. *Marketing Science*, 24(4), 544–555.
3. Usha, K. (2020). A systematic review of marketing analytics: Trends and future directions. *Journal of Marketing Analytics*, 8(2), 45–62.