DETERMINANTS OF CONVERSION RATES IN HEALTH CARE ADVERTISING: AN EMPIRICAL STUDY OF META ADS FOR CLINICS

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ABOUT THE ORGANISATION

Digital Inclined is a results-driven digital marketing agency dedicated to supporting business growth through strategic and customer-focused solutions. Serving diverse sectors. the company aims to simplify digital marketing while delivering measurable impact. Recognized as a Google Premier Partner and Meta Business Partner, Digital Inclined brings certified expertise to every campaign. Their experienced team leverages the latest technologies to enhance brand visibility, drive engagement, and maximize ROI. With a strong emphasis on long-term value, the organization positions itself as a trusted growth partner for its clients.

Growth Consulting

Strategic guidance to scale your business by optimizing marketing, sales, and digital processes for sustainable growth.

Performance Marketing

Data-driven campaigns across platforms designed to deliver real, measurable results and boost ROI.

Google & Facebook Ads

Precision-targeted advertising strategies on Google and Meta to maximize reach and conversions.

MISSION

To empower businesses with innovative digital strategies that drive measurable growth, enhance customer engagement, and deliver long-term value through data-driven marketing solutions.

VISION

To be a leading digital growth partner recognized for transforming businesses through impactful digital marketing, cutting-edge technology, and a customer-first approach.

INTRODUCTION TO HEALTHCARE ADVERTISING

Strategic Communication

Advertising is strategic communication to influence consumer behavior, educating and informing. Healthcare advertising promotes services while maintaining ethical integrity.

Leveraging Meta Platforms

Healthcare institutions use platforms like Meta to connect with patients. The challenge is converting reach into measurable actions like appointment bookings.

Study Focus

This study investigates determinants of conversion rates in Meta ads for healthcare clinics, focusing on ad copy, visuals, CTA, budget, schedule, and A/B testing.

OBJECTIVE

- To evaluate the impact of creative elements (ad copy, visuals, and call-to-action)Conconversion rates.
- To assess how campaign structure, including budget and scheduling, influencesadperformance.
- To analyze the role of optimization strategies, particularly A/B testing, inenhancingconversion outcomes.
- To derive strategic recommendations for clinics to maximize returns fromMetaadinvestments.

RESEARCH QUESTION

1)Which creative elements most significantly influence conversion rates in Metaads?
2)What is the relationship between budget, schedule, and ad performance?
3)Does the use of A/B testing measurably improve conversion rates for healthcare campaigns?

LITERATURE REVIEW

Creative & Visual Elements That Influence Conversion

- Personalized ad copy increases conversion by 15% (Smith, 2020)
- Emotion-based content boosts recall and engagement (Keller, 2022)
- Human faces in ads increase CTR by 40% (Meta Report, 2021)
- Color contrast & symmetry improve engagement (Zhang et al., 2020)
- Clear CTAs like “Book Now” outperform generic ones (Hu & Kim, 2019)
- CTA button shapes affect user clicks (Lee et al., 2023)

This group of studies shows that personalized and visually strategic content—like strong CTAs and human imagery—drives higher interaction and recall.

LITERATURE REVIEW

Optimization Techniques for Better Outcomes

- A/B testing improves conversion by 20–30% (Ghosh et al., 2018)
- Multivariate testing offers deeper audience insights (Thomas & Eriksson, 2021)
- AI-integrated A/B testing significantly enhances ROI (Priya & D’Souza, 2020)

Testing tools—from basic A/B to advanced AI-based testing—help refine ad elements and improve overall campaign performance."

METHODOLOGY

This study follows a quantitative, descriptive, and analytical research design.
Quantitative: How budget impacts conversion or whether A/B testing improves performance—a numerical, data-driven method was necessary. Quantitative analysis provided the empirical grounding required to assess statistical significance.
Descriptive: Descriptive statistics offered valuable insights into the distribution and average behavior of the ad elements under study, laying the groundwork for deeper analysis.
Analytical: Regression analysis and other inferential tools were used to identify which factors have the most significant impact on conversion rates and how these relationships interact. This analytical layer allowed for evidence-based recommendations.

The primary goal is to quantify the relationship between independent variables (creative, structural, and optimization elements of Meta Ads) and the dependent variable (conversion rate). A simulated dataset was used for empirical testing through regression analysis.

Data Source & Sampling -

- Simulated dataset of 150 Meta ad campaigns
- Based on industry practices and literature benchmarks
- Represents diverse clinic types: dental, cosmetic, dermatology, general health
- Purposive sampling to ensure varied performance outcome

Variables in the Study

- Dependent Variable: Conversion Rate (%) – users who took the desired action

- Independent Variables: Ad Copy Quality (1–5)
  Visual Appeal (1–5)
  CTA Strength (1–5)

- Daily Budget (INR)

- Campaign Schedule (days)

- A/B Testing Used (0 = No, 1 = Yes)

- Data Collection Tool - Existing Ads campaign of different clinics The simulated data was saved in Excel format for further analysis in IBM SPSS.

- Data Analysis Techniques Descriptive statistics were calculated for all variables to understand distribution and central tendencies. Multiple linear regression analysis was then employed to determine the influence of independent variables on the conversion rate. IBM SPSS software was used to conduct the analysis and interpret the regression coefficients, p-values, R-squared, and t-statistics.

RESULT

Model Summary[b]

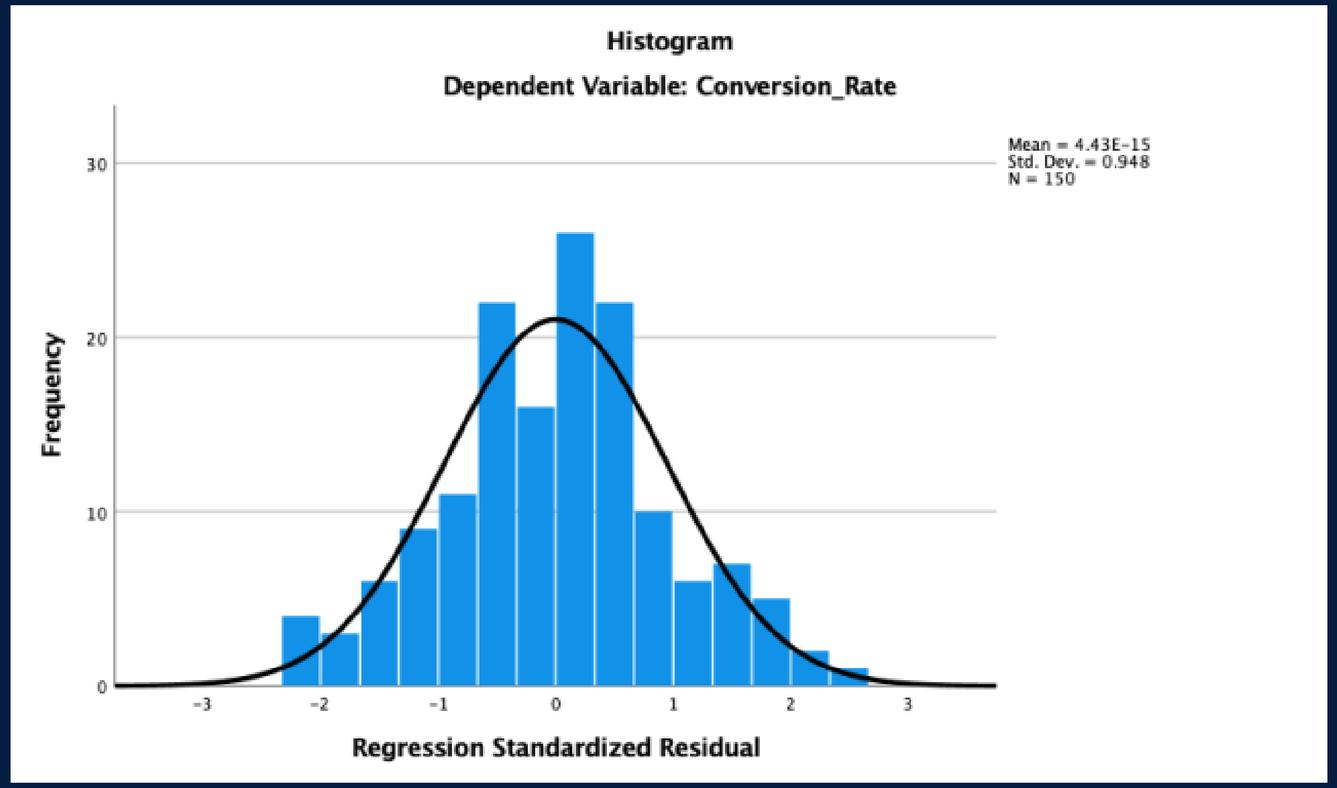
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.879[a]	.772	.746	5.71120	.772	30.239	15	134	<.001	2.177

a. Predictors: (Constant), A_B_Testing=1.0, CTA_Strength=4.0, Visual_Appeal=3.0, Campaign_Schedule, Ad_Copy_Quality=5.0, Daily_Budget, Visual_Appeal=2.0, Ad_Copy_Quality=2.0, CTA_Strength=5.0, Visual_Appeal=5.0, CTA_Strength=3.0, Ad_Copy_Quality=3.0, Visual_Appeal=4.0, CTA_Strength=2.0, Ad_Copy_Quality=4.0

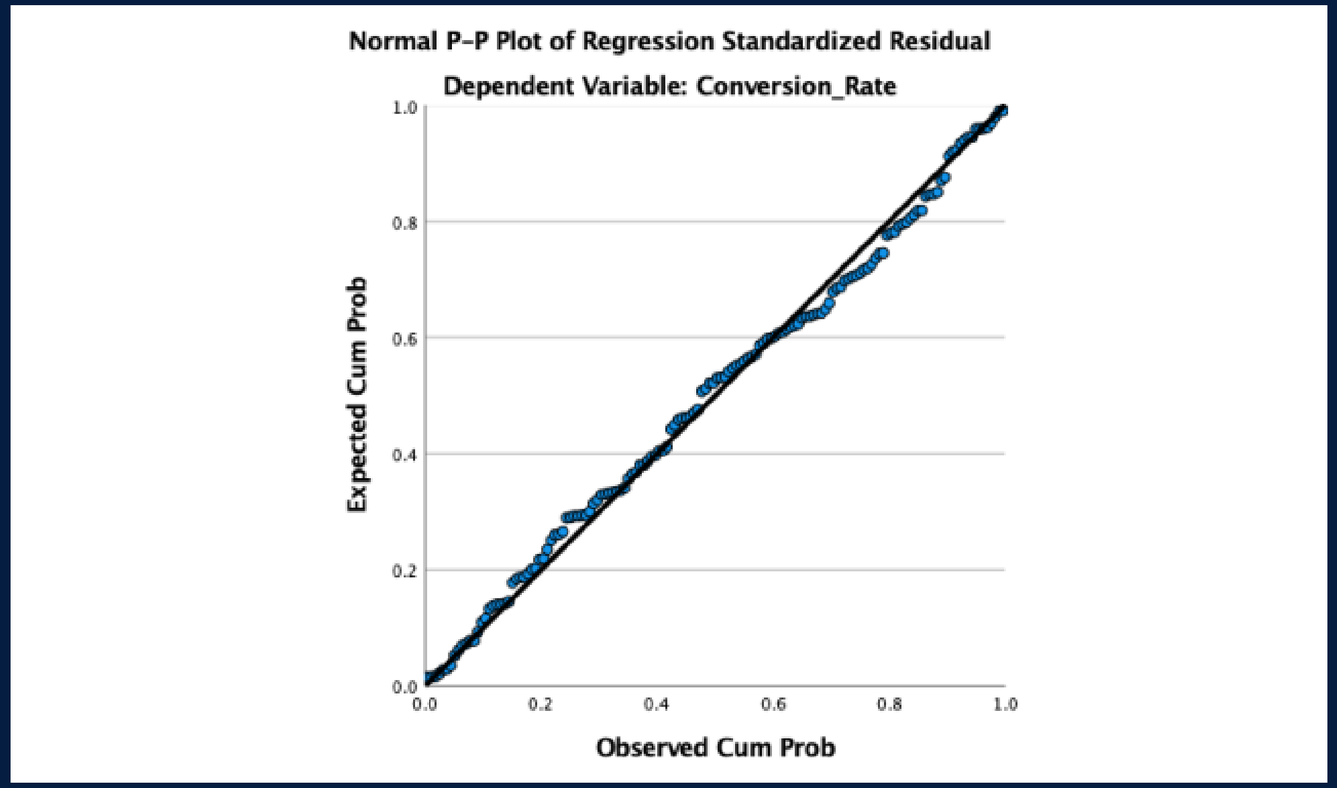
b. Dependent Variable: Conversion_Rate

- R Square = .772 This is the most important statistic for overall model fit. It means that 77.2%of the variability in your Conversion Rate is explained by the combination of all our predictor variables.
- Adjusted R Square = .746, An Adjusted R Square of 74.6% is strong. It confirms that our model is not just fitting random noise; it has substantial explanatory power.

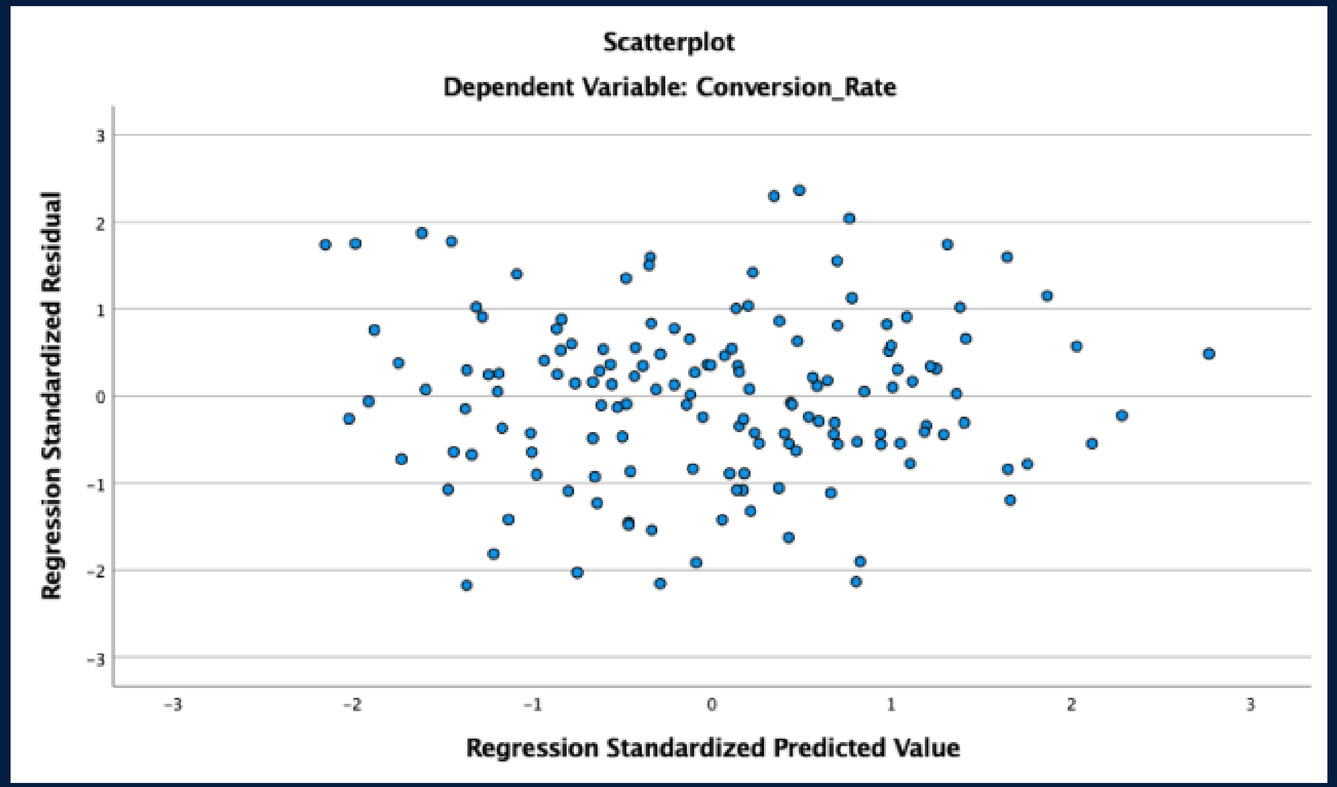
- Sig. F Change = <.001 (F-Test) 8 This is the p-value for the F-statistic. It tests the null hypothesis that your model has nopredictive capability (i.e., that the R Square is zero). Since the p-value (Sig.) is less than.001(which is much smaller than the standard threshold of .05), you can confidently reject the null hypothesis. Our regression model as a whole is statistically significant. This means the combination of our predictors reliably predicts the conversion rate better than chance.
- Durbin-Watson = 2.177 This statistic tests the assumption of independent errors. A value between 1.5 and 2.5 is generally considered acceptable. This suggests that the assumption of independence has been met. Our model, which includes ad copy quality, visual appeal, CTA strength, budget, schedule, and A/B testing, is a statistically significant predictor of the conversion rate for your Meta ad campaigns.
- The significance value is <.001, which means the probability is less than 0.1%. Since this p-value is far below the standard threshold of 0.05, we can confidently reject the null hypothesis (the null hypothesis being that your model has no predictive power)



Conclusion: The histogram confirms that the residuals are approximately normally distributed, supporting the assumption of normality in the regression model for Conversion_Rate.



- This is a Normal Probability–Probability (P–P) plot used to assess whether the residuals from a regression model are normally distributed.
- The points lie very close to the diagonal line, which indicates: The residuals are approximately normally distributed.
- The regression model for predicting Conversion Rate appears to meet the assumption of normality, supporting the validity of inferential statistics like confidence intervals and p-values



- This plot helps check the assumption of homoscedasticity (constant variance of residuals) and detect any non-linearity or outliers.

Conclusion: The plot implies that the regression model's assumptions are reasonably met, and the model is likely a good fit for the data in terms of residual behavior.

CONCLUSION

1. This study explored the key determinants influencing conversion rates in Meta advertisements for healthcare clinics. Through a structured regression analysis of simulated campaign data, it was established that creative elements (ad copy, visual appeal, CTA strength), campaign structure (daily budget and campaign schedule), and optimization strategy (A/Btesting) all significantly impact ad performance.
2. The model demonstrated strong explanatory power, with an R^2 of 0.772 and an adjusted R^2 of 0.746. Among the variables studied, CTA strength and ad copy quality emerged as the most influential creative factors, while daily budget was the strongest structural driver.
3. A/B testing, though a binary variable, had a notable effect on improving conversion outcomes.

The findings validate the importance of integrating evidence-based design and execution in digital healthcare advertising.

RECOMMENDATION

- **Prioritize High-Quality Copywriting -**Craft emotionally engaging and personalized ad copy, as compelling messaging directly boosts conversion rates.
- **Improve Visual Aesthetics** - Use high-resolution, color-balanced images with human elements to capture and retain viewer attention effectively.
- **Refine Call-to-Action (CTA) Messaging** - Incorporate clear, action-driven CTAs like “Book Now” or “Schedule a Free Consultation” to enhance user response.
- **Optimize Budget Allocation** -Strategically manage ad spend by tracking ROI and avoiding overspending beyond the point of diminishing returns.
- **Align Campaign Timing with User Behavior** - Plan campaign durations based on peak user activity, especially on weekdays and during high-engagement hours.
- **Implement Routine A/B Testing** - Regularly test different versions of copy, visuals, and CTAs to identify high-performing elements and improve results.

THANK YOU