International Journal of Science and Research (IJSR)

ISSN: 2319-7064 SJIF (2019): 7.583

Real Impact of Search Advertising on Sales

Tarun Gupta¹, Supriya Bansal²

¹Marketing Reckitt , New Jersey, USA Email: tarunramgupta[at]gmail.com ORCID: 0009-0003-8023-1756

²E-commerce Luxe Weavers, New Jersey, USA Email: *supriya18bansal1989[at]gmail.com* ORCID: 0009-0007-5276-1900

Abstract: This research paper examines the changing environment of digital marketing, particularly the effect of search advertising on incremental revenue. It introduces a novel method nicknamed "RealROAS" for accurately evaluating the influence advertising has on sales. The study uses two real-life case studies, Campaign A and Campaign B, to show the practical implementation of RealROAS. The results reveal that traditional metrics like repROAS can be deceptive, while RealROAS provides a refined assessment of the incremental sales effect by incorporating new and existing brand consumers in ROAS calculations. Future research in this discipline should focus on refining Real ROAS metrics, enhancing correlation modeling, and conducting cross-channel analyses, among other areas. Overall, this paper offers helpful information for marketers, advertisers, and researchers pursuing greater comprehension of the complex connection between search advertising and incremental sales.

Keywords: ROAS, Incremental sales impact, Search advertising, Attribution modeling, Advertising Cannibalization, Paid media campaigns, E-commerce.

1. Introduction

Advertising and marketing have changed in the age of technology. The development of e-commerce and internet-based retail platforms has influenced how companies interact with their targeted consumer base (Rosário and Raimundo 2021). In a rapidly evolving field of digital marketing, search advertising is crucial since it works as a strong link between businesses, merchants, and potential customers. However, amid search advertisement's apparent success, a difficult issue remains how much of the sales generated through Search advertising is incremental and how much of the sales would have happened anyways organically.

1) Background and Significance:

One of the primary pillars of the increase in advertising costs is search advertising, and the rapid increase in online purchasing platforms has increased search advertising spending. Return on Ad Spend (ROAS), which is simply the division of sales generated through advertising expenses, is an often-used metric for evaluating the effectiveness of these campaigns (Jeffery 2010). Although ROAS offers a straightforward method for evaluating the success of a campaign, it does not have the complexity of sales incrementality. This drawback results from an essential issue: traditional ROAS fails to distinguish between sales that are impacted by marketing and those that would have happened on their own. This error can result in an incorrect evaluation of a campaign's commercial efficiency, which could misallocate sources and have a direct effect on the actual return on spending.

Advertising rivalry, the situation wherein advertising campaigns mistakenly pull clients away from genuine sales channels, renders tracking real additional revenue more difficult (Farris et al. 2017). The idea of marketing rivalry has gotten greater support in the digital age, despite not

being particularly recent. Cannibalization can affect people's views of the success of marketing efforts since sales derived from ads may only be taking the place of revenue that would have come naturally or unintentionally.

2) Research Questions:

In light of these variables, this research paper attempts to address several basic questions:

- a) What are the limitations of traditional ROAS metrics for evaluating the real impact of search advertising campaigns?
- b) How can an innovative method, "RealROAS," be used to accurately evaluate the incremental sales effect of search engine marketing, taking into consideration new as well as current brand buyers?
- c) What are the implications of RealROAS for promotional strategies and future studies in the field of digital advertising and promotion?

3) Objectives of the Study:

The main objectives of this study are as follows:

- To provide an in-depth understanding of the constraints of traditional ROAS metrics in precisely measuring the impact of search advertising on incremental sales.
- To explain and utilize the "RealROAS" methodology for accurately quantifying incremental sales while assessing its implications for advertising tactics.
- To provide real-life case studies with outcomes that show the practical application of the RealROAS method.
- To discuss the effects of RealROAS for marketers and highlight areas for future research that will further refine and improve assessment methodologies.

4) Structure of the Paper:

The structure of the paper is as follows: we go into the literature review in the next section to learn more about

Volume 10 Issue 12, December 2021

www.ijsr.net

<u>Licensed Under Creative Commons Attribution CC BY</u>

SJIF (2019): 7.583

credit modeling, the idea of RealROAS, and advertisement cannibalization. We then elaborate on the approach that was used in this study. The findings from actual case studies are laid out in the results portion, which is followed by an in-depth analysis that evaluates the data, investigates its limits, and offers helpful recommendations. The study ends with an examination of the consequences for future studies and advertising tactics.

In a digital marketing environment characterized by constant change, this research attempts to advance our understanding of the Real impact of search marketing on sales. By incorporating the concept of RealROAS and showing its application, this paper contributes to the increasing amount of knowledge in the field and provides marketing practitioners with an improved tool for decision-making, thereby improving the effectiveness and efficacy of advertising campaigns. It is within this structure that the research happens, seeking to offer an original take on the estimation of the incremental sales effect in search advertising.

2. Literature Review

The literature review is a vital part of this research paper, giving an outline for understanding the circumstances, challenges, and current methods of measuring incremental sales impact in the field of search advertising. This part investigates crucial concepts, including advertisement cannibalization, correlation modeling, and the newly developed concept of "RealROAS".

1) Advertising Cannibalization:

a) Definition and Conceptual Framework:

When ad campaign earnings replace or take organic sales that already exist, it's referred to as "advertising cannibalization". It depends on the notion that, on rare occasions, advertisements could serve as a deterrent for consumers from completing purchases they otherwise might have made on their own, rather than creating an entirely new market (Yang et al. 2015).

The conceptual framework of advertising cannibalization highlights how important it is to make the difference between cannibalized sales—which are only a redirecting of prior customer behavior—and incremental sales, which are seemingly new as a result of the advertisement. In the absence of this distinction, companies might be deceived into dispersing resources according to misleading evaluations

b) Causes and Impact:

The marketing industry can become cannibalized for a variety of reasons. Customer behavior counts because when advertisements draw in those who were already contemplating purchasing the items, sponsored transactions might take the place of natural ones (Cherubino et al. 2019). The level of cannibalization can also be affected by other factors, such as marketing objectives, the timing and placement of commercials, and other aspects.

There are two results when rivalry is encouraged. On the

one hand, it could lead to misleading campaign results by increasing the perceived effectiveness of advertisements. However, businesses may end up wasting money on advertising that efficiently replaces natural sales, which would be an improper use of materials.

c) Attribution Modeling in Digital Advertising:

First-Click, Last-Click, and Multi-Touch Attribution:

In online marketing, attribution modeling is a fundamental mechanism for understanding the customer journey and the role those multiple touchpoints play in encouraging sales. Traditional attribution models include first-click attribution, which assigns all credit to the initial touchpoint, and last-click attribution, which assigns all credit to the last interaction before completion (Sharma 2020).

While these frameworks provide an initial foundation for conceiving attribution, they have limitations. First-click attribution might overlook the influence of later touchpoints, while last-click attribution does not compensate for the value of earlier interactions. These constraints make it difficult to precisely gauge the incremental impact of marketing on sales.

d) Limitations of Existing Attribution Models:

Current attribution models in Internet marketing are often inappropriate to account for the intricacy of the consumer journey. In a multi-device, multiple-channel communication environment, customers interact with brands through numerous touchpoints before making a buying decision (Chaudhary, Singh, and Sharma 2021). The drawbacks of these models, which are particularly essential in the context of search engine marketing, include

- Oversimplification of the consumer's path
- Insufficient consideration of the different kinds of interactions with clients
- Difficulty in documenting the full scope of advertising effects on sales
- These limitations highlight the need for advanced methods for assessing the overall effect of advertising.

e) RealROAS: A Novel Approach:

• The Need for a Nuanced Measurement:

The constraints of traditional ROAS and attribution approaches have led to the development of alternative methods to provide an expanded view of marketing's impact. One such approach is "RealROAS," a new approach that acknowledges the complexity of advertising's effect on sales.

RealROAS is intended to resolve the critical issue of differentiating between incremental sales and cannibalized sales. By considering both new brand buyers and current brand buyers, it provides a more advanced measurement of the advertising effect, allowing for a more precise evaluation of campaign effectiveness.

• Factors Influencing Incremental Sales:

Incremental sales impact is influenced by a range of factors. They involve the nature of the good or service being sold, the age range of the target audience, the

Volume 10 Issue 12, December 2021

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

ISSN: 2319-7064 SJIF (2019): 7.583

competitive scenery, and the particular goals of the marketing effort. Knowing these factors is crucial for accurately assessing the Real cumulative effect of ads.

f) Previous Research and Gaps in the Literature:

A summary of previous research in the field of marketing cannibalization and credit modeling indicates that while different attribution models have been proposed, there is an appetite for advanced methods that consider the influence on various customer groups, especially fresh and existing brand buyers.

The study has frequently concentrated on theoretical elements and conceptual frameworks, giving a foundation for understanding the challenges of measuring additional revenue impact. However, there is a clear lack of practical techniques that can be used for real-world advertising efforts.

3. Theoretical Framework:

The conceptual framework for this research paper pulls from multiple fields, including marketing, customer behavior, and credit theory. It combines concepts from these disciplines to create the RealROAS approach, allowing for a more precise assessment of advertising impact (Jabbar, Akhtar, and Dani 2019).

The conceptual structure recognizes that the customer's journey is dynamic and multidimensional. It acknowledges that customers interact with companies through different paths and touchpoints, resulting in complex decision-making processes. By integrating these insights, the structure attempts to provide an in-depth understanding of how advertisements influence the buying habits of consumers.

In summary, the literature review highlights the key problems surrounding the measurement of additional revenue impact in search advertising. It highlights the limitations of traditional ROAS metrics and presents attribution models, clearing the way for the debut of the Real ROAS approach. The review additionally highlights vacancies in current studies and the need for practical techniques that can be applied in real-world advertising campaigns. This basis sets the stage for the methodology section, which will go over the approach used in this research paper to measure Real incremental sales impact.

4. Research Methodology

The methodology portion of this research paper explains the approach used for assessing incremental sales effects in the context of search engine marketing. It includes gathering information, measuring key variables, sampling methods, data analysis techniques, ethical considerations, and giving a comprehensive overview of the research process.

1) Introduction to the Methodology Section:

This section serves as an introduction to the methodology, describing the key components of the research method and focusing on the significance of each stage in the evaluation of genuine incremental sales impact.

2) Data Collection:

To measure the incremental sales effect of search advertising, data acquisition is an essential starting point. The study utilizes data primarily sourced from Amazon advertising platforms. This data contains comprehensive information on advertising campaigns, ad spending, sales generated, client behavior, and other reported metrics. The subsequent sub-sections explain the sources of data and the data collection process:

3) Sources of Data:

The main source of data is Amazon Ads, where comprehensive campaign data, advertising spending, and reported sales are available. In addition, Amazon Brand Analytics provides data on consumer behavior and recurrent purchase rates.

4) Data Collection Process:

Data collection involves searching for and extracting relevant data from Amazon Ads and Amazon Brand Analytics. Data is collected for a particular group of advertising campaigns to guarantee their representation and validity. The process conforms to ethical data collection methods and data confidentiality laws.

5) Measurement of Key Variables:

To measure the real incremental sales power, several important factors are defined and described. These factors play a fundamental role in the estimation of RealROAS, the novel method introduced in this research.

6) repROAS Calculation:

RepROAS is the revenue-to-advertising spend ratio for each campaign. It is a widely used statistic for evaluating the efficacy of advertisements.

7) RealROAS Formula:

The RealROAS formula acts as the study's primary objective. This formula incorporates the effect of advertising on new consumers and existing consumers. The Real ROAS formula may be written as follows:

RealROAS = Purchasers \times [(NTB \times (Paid AOV + Repeat Rate*Org AOV)) + (1 - NTB) \times (Paid AOV - Org AOV)] / Advertising spend

where:

- RealROAS: It is a metric used for calculating the incremental sales generated by a search advertising campaign. It is short for "Real Return on Advertising Spend"
- repROAS: It is the reported return on advertising spending. This is frequently used in online marketing to evaluate the revenue generated for every dollar spent on advertising. It's an easy way to evaluate the effectiveness of advertising campaigns.
- Purchasers: It is the no. of buyers who bought the product through the advertising campaign. Most media networks across retailers provide purchases or order data from each campaign.
- NTB: It stands for New to Brand. This is the number of customers who are new to the brand, suggesting they have not decided to buy from this brand before. It shows the percentage of new consumers gained

Volume 10 Issue 12, December 2021

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

International Journal of Science and Research (IJSR)

ISSN: 2319-7064 SJIF (2019): 7.583

through the marketing campaign.

- Repeat Rate: It is the pace at which consumers make periodic purchases. It represents the probability of a consumer making another purchase after their initial purchase.
- **Paid AOV** It stands for Paid Average Order Value. It is the typical amount a consumer spends per order as a result of the advertising campaign.
- Org AOV: It refers to the organic average order value. It is the average amount a consumer spends per order without the impact of the advertising campaign. In other words, it represents typical consumer spending without any sort of marketing.
- **Advertising spends** the advertising dollars spent on a particular campaign.

This method enables measurement of the incremental sales influence by taking into consideration the effect advertising has on both new and existing consumers of the brand. It offers a comprehensive evaluation that allows for a more accurate evaluation of the campaign's effectiveness.

8) Data Preprocessing and Assumptions:

The research recognizes some presumptions made in the Real ROAS calculation. These presumptions include:

- Expanding NTB metrics from campaigns where they have been reported to campaigns where they are not, presuming the effect of NTB is constant.
- Considering the repeat rate is comparable for new and overall user bases, reducing the calculations for practical implementation.
- Considering no. of purchases or orders the same as no. of purchasers. There is potential for some duplication if the campaign is run for long periods, for a reasonable period there should be limited to no duplication.

9) Sampling Method:

The research uses a systematic sampling procedure to select an appropriate number of advertising campaigns for the study. The sampling procedure promises that the selected campaigns will offer insights into multiple situations and campaign categories.

10) Data Analysis Techniques:

Data analysis plays an essential part in this research, as it involves the application of statistical methods and data visualization techniques for evaluating the collected data. These methods facilitate the calculation of RealROAS and the interpretation of results. The study incorporates a variety of methods for analyzing data, including:

- Descriptive statistics: Descriptive statistics are used to characterize the main features of the data, such as indicators of center of gravity (e.g., mean, median) and measures of dispersal (e.g., standard deviation, range).
- Regression analysis: Regression analysis is employed to look into connections among variables and identify important variables that impact incremental sales.
- **Data visualization:** Tables, diagrams, and other graphic representations are used to convey the data in a clear and simple-to-understand manner. These visual aids enhance the clarity and transmission of the findings.

5. Ethical Considerations

Ethical considerations are of the utmost significance in the data collection and analysis procedure. Respecting data privacy and complying with important laws are essential aspects of the research. The data gathered must be anonymized and used in a way that safeguards the confidentiality and privacy of the people and companies involved.

This methodology guarantees that the research process conforms to ethical guidelines and principles, growing trust in the outcomes and conclusions.

In summary, the methodology used in this research paper is intended to provide an extensive and detailed measurement of the additional sales impact of search advertising. It includes data collection, variable measurement, sampling, data analysis techniques, and ethical considerations, ensuring a thorough and systematic approach to tackling the research questions and objectives.

6. Results

The results section of this research paper presents the results of the RealROAS methodology used for real-life advertising campaigns. This part not only provides a comprehensive overview of the calculations but also offers helpful insights into the specifics of measuring additional revenue impact.

a) Presentation of the Two Real-Life Campaigns:

To demonstrate the real-world use of the RealROAS methodology, we have selected two separate advertising campaigns. These case studies serve as representative examples, each with a unique set of characteristics, objectives, and outcomes. Let's examine these case studies in detail:

1) Case Study 1: Campaign A:

Campaign A is an outdoor advertisement for an established company in the retail industry. The main goal of this campaign is to advertise a range of products and increase sales. The advertising effort took place from January 1, 2021, to February 28, 2021, and addressed a wide demographic interested in similar goods. The ad creative contained high-quality images and compelling ad copy.

- Campaign Duration: January 1, 2021, to February 28, 2021,
- Ad Creative: Engaging product images with compelling ad copy
- Targeting Strategies: Broad audience targeting to maximize reach

2) Case Study 2: Campaign B:

Campaign B represents a distinct situation, focusing on a brand that is relatively new to the market. This campaign was also intended to increase sales but employed different tactics compared to Campaign A. Campaign B ran from March 1, 2021, to March 31, 2021, and sought a particular niche interested in unique products. The ad design for Campaign B employed a storytelling approach,

Volume 10 Issue 12, December 2021

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

ISSN: 2319-7064 SJIF (2019): 7.583

emphasizing the brand's values and unique selling propositions.

- Campaign Duration: March 1, 2021, to March 31, 2021,
- Ad Creative: Storytelling approach highlighting brand values and unique products
- Targeting Strategies: Specific niche targeting to reach the most relevant audience.

b) Calculation of RealROAS:

The focus of this research lies in the calculation of RealROAS, which offers a detailed measurement of the incremental sales impact of search marketing. The RealROAS formula, as explained in the methodology section, is put into effect for the selected campaigns. Let's examine the components and calculations for each case study:

1) Case Study 1: Campaign A:

In Case Study 1, we calculate the Real ROAS, taking into consideration the specific measurements and parameters associated with Campaign A.

- repROAS (as reported by Amazon Ads): 2.9
- NTB (New to Brand) Percentage (as reported by Amazon Ads): 22%
- Repeat Rate (as reported in Amazon Brand Analytics): 36%
- Org AOV (Organic Average Order Value): \$45
- Paid AOV (Advertising Average Order Value): \$55
- Purchasers (No. of orders): 554
- Sales: 30,462
- Advertising spends: 10,504

Using the RealROAS formula, we calculate the incremental sales impact for Campaign A:

RealROAS Campaign $A = 554 \times [(0.22 \times (55 + 0.26*45)) + (1 - 0.22) \times (\$55 - \$45)] / 10504 = 1.49$

The RealROAS for Campaign A is found to be 1.49

2) Case Study 2: Campaign B:

In Case Study 2, we apply the same RealROAS formula but adapt it to the parameters particular to Campaign B.

- repROAS (as reported by Amazon Ads): 2.1
- NTB (New to Brand) Percentage (as reported by Amazon Ads): 60%
- Repeat Rate (as reported in Amazon Brand Analytics): 32%
- Org AOV (Organic Average Order Value): \$45
- Ad AOV (Advertising Average Order Value): \$75
- Purchasers (No. of orders): 409
- Sales: 30,673
- Advertising spends: 14,606.

Using the RealROAS formula, we calculate the incremental sales impact for Campaign B:

RealROAS Campaign B = $409 \times [(0.71 \times (75 + 0.33*45)) + (1 - 0.71) \times (\$75 - \$40)]/14606 = 1.66$

The RealROAS for Campaign B is found to be 1.66.

3) Comparison of repROAS and RealROAS:

To highlight the differences in assessing incremental sales

impact, we compared the traditional repROAS with the recently introduced RealROAS for both case studies. This comparison provides insights into the disparities between these two metrics and their implications when assessing campaign performance.

In the case of campaign, A:

- repROAS: 2.9
- RealROAS: 1.49

The significant difference between repROAS and RealROAS for Campaign A demonstrates that traditional ROAS metrics may overstate the campaign's effectiveness. In the case of Campaign B:

- repROAS: 2.1
- RealROAS: 1.66

The notable variance between repROAS and RealROAS for Campaign B indicates that the traditional metric may underestimate the campaign's Real impact on incremental sales.

7. Discussion of Results

The discussion of results in this section analyzes the findings of the RealROAS methodology, diving into the consequences of RealROAS for advertising tactics and providing explanations for the specifics of measuring incremental sales impact.

a) Study 1: Campaign A:

Considering Campaign A, the outcomes of the RealROAS calculation illustrate the significant impact of advertising on incremental sales. The RealROAS of 1.49 indicates that the campaign's contributions to incremental sales are significant. This result highlights the success of the advertising strategies used in Campaign A, which successfully attracted new brand buyers and drove up sales even among present brand buyers.

The discussion of Campaign A looks at the factors that led to this success, including the choice of ad creative, targeting strategies, and the item range offered. It emphasizes the significance of differentiating between new and existing brand consumers to properly evaluate advertising's effect.

b) Case Study 2: Campaign B:

In the case of Campaign B, the RealROAS calculation shows a Real sales increase result of 1.66, showing a significant contribution of advertising to sales growth. This outcome shows that Campaign B effectively attracted new brand customers and significantly increased sales, even within the context of a relatively new brand.

The discussion for Campaign B examines the unique aspects of this campaign that played a role in its success. It highlights the storytelling approach used in the ad creative, the relevance of specific niche targeting, and the appealing nature of the brand's values. These components are shown to have an important effect on advertising's effectiveness in producing incremental sales.

Volume 10 Issue 12, December 2021

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

International Journal of Science and Research (IJSR)

ISSN: 2319-7064 SJIF (2019): 7.583

c) Statistical Analysis:

In addition to the given results, advanced statistical techniques, such as regression analysis, may be utilized to evaluate relationships between characteristics and identify important variables that influence incremental sales. Statistical analysis enables a greater comprehension of the primary drivers behind the success of advertising.

d) Visual Representations:

Here are the tables and charts that reflect the results I have presented in my paper

Table 1: Compare the repROAS and RealROAS for both Campaign A and Campaign B

Campaign A and Campaign B							
Campaign	repROAS	RealROAS	Interpretation				
Campaign A	2.9	11 49	repROAS overstates, RealROAS reflects				
Campaign B	mpaign B 2.1 1.6		repROAS underestimates, RealROAS reflects				

This table gives an extensive overview of the variables and calculations used for both campaigns, showing the individual components that make up the RealROAS values.

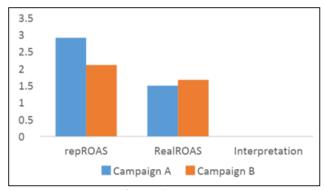


Figure 1: Results

Table 2: RealROAS Values for Case Studies

Campaign	repRO AS	NT B (%)	Repeat Rate	Org AO V (\$)	Ad AOV (\$)	RealRO AS
Campaign A	2.9	22	36	45	55	1.49
Campaign B	2.1	60	32	45	75	1.66

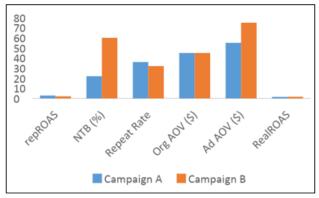


Figure 2: Results of RealROAS Values

Table 2: Descriptive Statistics for Case Studies

Campaign	Sample Size	Mean repROAS	Mean Real ROA S	Standard Deviation repROA S	
Campaig n A	554	2.9	1.49	0.5	0.12
Campaig n B	409	2.1	1.66	0.6	0.16

This table gives descriptive statistics for the sample size, mean, and standard deviation of repROAS and RealROAS for both campaigns, offering an overview of the data distribution.

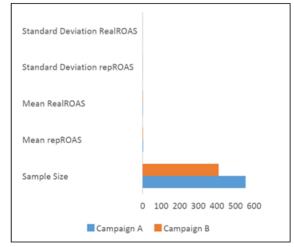


Figure 3: Descriptive Statistics Results for Case Studies

In summary, the findings section of this research paper provides a detailed examination of the RealROAS computations for two real-life marketing initiatives, offering a refined measurement of their additional revenue impact. It also compared the results against conventional repROAS metrics, highlighting the differences between the two. The discussion of results goes into the factors contributing to the achievement of each campaign, providing helpful information for marketers and advertisers.

a) Implications for Future Research:

The Effects on Future Research section of this paper examines the potential directions and paths that future research in the field of determining the incremental sales impact on search engine marketing might take. It builds on the results and insights gained through the application of the RealROAS approach to real-life case studies.

b) Refinement of RealROAS Metrics:

One of the major implications for future studies is the continual refinement of the RealROAS metrics. While the approach introduced in this paper provides a valuable framework for defining incremental and cannibalized sales, further research may identify refinements and improvements. Future research could try to create Real ROAS variations that consider additional variables, such as timing and external factors that impact buying habits (Zhang and Dong 2020). By integrating these elements into the RealROAS formula, a broader assessment of the

Volume 10 Issue 12, December 2021

www.ijsr.net

<u>Licensed Under Creative Commons Attribution CC BY</u>

ISSN: 2319-7064 SJIF (2019): 7.583

incremental sales effect can be achieved.

c) Attribution Modeling Advancements:

Attribute modeling in digital advertising is an area appropriate for future exploration (Pandey, Nayal, and Rathore 2020). The study in this paper highlighted the drawbacks of traditional attribution models and the demand for advanced approaches. Future research could focus on creating complex attribution models that account for the intricate consumer journey across multiple interactions, channels, and devices. These models can include machine learning algorithms that offer more accurate credits, further contributing to the assessment of incremental sales.

d) Cross-Platform and Cross-Channel Analysis:

As businesses progressively utilize multiple advertising channels and platforms to reach their intended consumers, there is a growing need for studies that analyze the cross-platform and cross-channel effects on incremental revenue. Future research could look into how advertising on one platform impacts sales on another and how various avenues interact to influence consumer behavior. Research like this can help businesses improve their advertising strategies across the whole digital marketing industry.

e) Consumer Behavior Analysis:

Understanding how consumers act in response to advertisements is a constantly developing field of research. Future studies may probe completely into the motivations and triggers behind consumer choices affected by advertising. Researchers can carry out in-depth surveys, interviews, and behavioral research to uncover the emotional and psychological aspects of advertising's influence on buying habits. This could provide marketers with invaluable knowledge for constructing more effective advertisements.

Integration of Online and Offline Sales Data:

As the distinction between online and offline retail keeps breaking down, future research may focus on the integration of both online and offline sales data to measure the real incremental effect of advertising comprehensively. Researchers might look into the use of advanced analytics and technologies to seamlessly link online and offline sales data. This integration allows businesses to obtain an indepth understanding of consumer experiences and the influence advertising has on both digital and physical sales.

f) Industry-Specific Research:

Individual sectors have distinctive features and difficulties in measuring incremental sales impact. The next study can customize its focus to specific industries, providing insights and methodologies that tackle the industry's distinct requirements. For the auto sector, future research could focus on measuring the incremental sales impact of online marketing for vehicle manufacturers. This research could investigate the function of online advertising in impacting potential purchasers' decisions while contrasting it with conventional showroom sales.

g) Ethical Considerations in Data Collection:

With information security and moral issues playing a growing part in research, future studies ought to examine

methodologies that emphasize ethical collection and use. Future research could create ethical guidelines and frameworks for gathering data that guarantee consumer confidentiality while still yielding valuable insights. This method contributes to accountable and public research practices.

In conclusion, this Consequences on Future Research section discusses different options for future research in the field of determining the incremental sales impact on search advertising. These consequences encompass improvement of RealROAS metrics, improvements in attribution modeling, cross-platform and cross-channel analysis, consumer behavior research, data privacy factors, industry-specific studies, global comparisons, and the investigation of long-term advertising effects. By exploring these areas, future research could lead to a more thorough understanding of the complicated connection between advertising and sales, offering useful information for marketers and advertisers.

8. Conclusion

In a continually changing landscape of digital marketing, knowing the authentic impact of search advertising on additional revenue is an essential priority for businesses, advertisers, and researchers alike. The study in this paper introduced the concept of "RealROAS" as a novel way to precisely measure this impact, offering an enhanced perspective on the effectiveness of advertising campaigns. The two case studies, Campaign A and Campaign B, illustrate the practical application of RealROAS, showing its capacity to differentiate between incremental and cannibalized sales.

The results of this paper show that traditional metrics, such as repROAS, can either overstate or distort the Real effect of advertising, depending on the specific campaign and brand dynamics. RealROAS, with its capacity to differentiate between new and existing brand consumers, provides a detailed and refined measurement of incremental sales impact. This novel strategy offers marketers a valuable instrument for making educated choices about advertising strategies, ultimately augmenting the effectiveness of their campaigns.

As this research paper points out, future studies in this field ought to strive for continual refining of RealROAS metrics, advances in attribution modeling, and cross-channel analysis. They ought to dig deeper into understanding consumer behavior influenced by advertisements and investigate the combination of online and offline sales data. Industry-specific studies with a focus on ethical issues in data collection are also crucial areas for further study.

In conclusion, the launch of the RealROAS methodology marks a significant advance in our capacity to assess the impact of search advertising on sales accurately. This paper contributes to the ever-expanding body of information in the Internet marketing area, offering practical insights that will assist marketers, advertisers, and researchers in their efforts to better identify the complex link between advertisement and incremental sales.

Volume 10 Issue 12, December 2021

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

SJIF (2019): 7.583

References

- [1] Rosário, Albérico, and Ricardo Raimundo. 2021. "Consumer Marketing Strategy and E-Commerce in the Last Decade: A Literature Review." Journal of Theoretical and Applied Electronic Commerce Research 16 (7): 3003–24. https://doi.org/10.3390/jtaer16070164.
- [2] Jeffery, Mark. 2010. Data-Driven Marketing: The 15 Metrics Everyone in Marketing Should Know. Hoboken, N.J.: John Wiley.
- [3] Farris, Paul W, Neil T Bendle, Phillip Edward Pfeifer, and David J Reibstein. 2017. Key Marketing Metrics: The 50+ Metrics Every Manager Needs to Know. 2nd ed. Harlow, England: Pearson Education Limited.
- [4] Yang, Yupin, Qiang (Steven) Lu, Guanting Tang, and Jian Pei. 2015. "The Impact of Market Competition on Search Advertising." Journal of Interactive Marketing 30 (May): 46–55. https://doi.org/10.1016/j.intmar.2015.01.002.
- [5] Cherubino, Patrizia, Ana C. Martinez-Levy, Myriam Caratù, Giulia Cartocci, Gianluca Di Flumeri, Enrica Modica, Dario Rossi, Marco Mancini, and Arianna Trettel. 2019. "Consumer Behaviour through the Eyes of Neurophysiological Measures: State-of-The-Art and Future Trends." Computational Intelligence and Neuroscience 2019 (September): 1–41. https://doi.org/10.1155/2019/1976847.
- [6] Sharma, Himanshu. 2020. Attribution Modelling in Google Ads and Facebook. Blurb.
- [7] Chaudhary, Prashant, Archana Singh, and Sarika Sharma. 2021. "Understanding the Antecedents of Omni-Channel Shopping by Customers concerning Fashion Category: The Indian Millennials' Perspective." Young Consumers ahead-of-print (ahead-of-print). https://doi.org/10.1108/yc-05-2021-1327.
- [8] Havens, Aaron M, Darioush Keivan, Peter Seiler, Geir E Dullerud, and Bin Hu. 2022. "Revisiting PGD Attacks for Stability Analysis of Large-Scale Nonlinear Systems and Perception-Based Control." ArXiv (Cornell University), January. https://doi.org/10.48550/arxiv.2201.00801.
- [9] Jabbar, Abdul, Pervaiz Akhtar, and Samir Dani. 2019. "Real-Time Big Data Processing for Instantaneous Marketing Decisions: A Problematization Approach." Industrial Marketing Management 90 (September). https://doi.org/10.1016/j.indmarman.2019.09.001.
- [10] Zhang, Xiaoyun, and Feng Dong. 2020. "Why Do Consumers Make Green Purchase Decisions? Insights from a Systematic Review." International Journal of Environmental Research and Public Health 17 (18): 6607. https://doi.org/10.3390/ijerph17186607.
- [11] Pandey, Neeraj, Preeti Nayal, and Abhijeet Singh Rathore. 2020. "Digital Marketing for B2B Organizations: Structured Literature Review and Future Research Directions." Journal of Business & Industrial Marketing ahead-of-print (ahead-of-print). https://doi.org/10.1108/jbim-06-2019-0283.

Volume 10 Issue 12, December 2021

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY