The Impact of Advertising Expense on the Sales Volume of the AutomotiveIndustry: A Study of the Automobile Sector of Pakistan

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ABSTRACT

This article aims to explore the relationship between advertising expenses and sales volume in the automotive sector. The study sets out to test the hypothesis that there is a positive relationship between these two variables. To gather data and test the hypothesis, we used a multi-method approach that combined both primary and secondary data sources. The primary data was collected through a questionnaire that was filled by the marketing employees of five automobile companies of Pakistan and an interview with marketing head of a leading automotive company of Pakistan. The results of the questionnaire and interview showed that advertising expenses play a vital role in boosting sales volume. Additionally, secondary data analysis of the financial reports of several automotive companies over the past decade revealed a clear correlation between advertising expenses and sales volume. The results highlight the importance of advertising for companies in the sector as a means to increase sales and achieve business success. The findings of this research can be used by companies in the sector to make informed decisions about their marketing strategies, and by researchers to inform future studies in this field.

Keywords: Advertising, Sales Volume, Brand Awareness, Automobile sector, Consumer Behaviour

Introduction

Advertising is a crucial aspect of marketing and plays a significant role in the success of businesses, particularly in highly competitive industries such as the automobile sector. The automobile industry in Pakistan has experienced significant growth in recent years, with numerous local and international companies entering the market. In this competitive environment, companies are looking for ways to differentiate themselves and reach their target audience effectively, and advertising has become a critical tool for achieving these goals. Studies have shown that advertising can have a significant impact on sales volume, particularly in the automobile industry. Literature references such as the works of (Keller & Kotler, 2003) and (Rangaswamy & Lilien, 2000) suggest that advertising has the ability to build brand awareness, generate interest, and drive purchase decisions among potential customers. Additionally, (Aaker, 1991) and (Papatla & Nakamoto, 2000) have found that advertising expenditure is positively correlated with sales volume, suggesting that increased advertising investment leads to increased sales. However, the relationship between advertising expense and sales volume is complex, and various factors such as advertising effectiveness, market competition, and consumer behaviour play a role in determining the impact of advertising on sales. In light of this, this article aims to explore the relationship between advertising expense and sales volume in the automobile sector in Pakistan, drawing on existing literature references to better understand the impact of advertising on sales in this industry.

History of the Automobile Sector

In South Asia, the first automobile made its debut on the roads in 1897, but it wasn't until after the 1930s that cars began to be imported in small quantities, primarily used by the wealthy or high-ranking government officials. However, this changed during the Second World War when the

Mahindra brothers started assembling Jeep vehicles and later expanded into making LCVs and tractors. In Pakistan, the history of cars can be divided into several periods, starting from 1947 when truck assembly started, followed by the introduction of the private sector in 1972, tractor and motorcycle production, private sector automobile assembly, and finally, exports.

Phase 1: 1947 to 1972

In the period of 1947 to 1972 in Pakistan, several automobile plants were established with the help of American companies and Pakistani entrepreneurs. These plants were limited to assembly operations and lacked organized component manufacturing facilities, technological expertise, and proper ancillary support. The lack of effort to improve technology and develop skills, as well as unprofessional management, hindered the localization process. The General Motors plant was sold to Ghandhara Industries Limited, which was later granted permission to engage in the progressive manufacture of Bedford trucks and buses.

Phase 2: The Post Nationalisation Period from 1972

In 1972, the automobile sector in Pakistan was nationalized along with various other industries. The nationalized units were renamed and managed under the Board of Industrial Management, which formulated national policies and oversaw their functions. Separate corporations were created to handle major industrial sectors, including automobiles. However, policy formulation lacked commitment as the corporations were focused on demonstrating the public sector's ability to run profitable industries.

Phase 3: Manufacturing of Tractors and the entry of the Private Sector

In the 1980s, Pakistan integrated public and private sectors in the automobile industry, establishing new public and private sector undertakings, such as Pak-Suzuki and Ghandhara-Nissan, to manufacture vehicles. Additional plants were set up under PACO for automotive production.

Phase 4: Establishment of the private sector automobile assembly plants and the vendor industry

In the mid-1980s, there was a need for another car manufacturer in Pakistan, but it wasn't granted until 1989 when the House of Habib and Toyota Motor Corporation were allowed to establish a plant to manufacture popular Toyota vehicles. During this time, the vendor industry established its first assembly plant, and the industry initially focused on tractors, buses, and auto parts. In the 1980s, Suzuki began production in Pakistan, leading to other assemblers establishing licensed vendors and boosting the local industry's entry into auto parts manufacturing.

Phase 5: 2000 to 2011

In the early 2000s, the automobile industry in Pakistan grew significantly, but it still needs to establish a presence in the international market. The industry faced a major setback in 2008-09 due to the economic recession, causing a drop in sales by 47%. However, the industry recovered in 2009-10 with increased production. Despite not reaching the highest level achieved in 2006-07, the overall growth of the industry in Pakistan is impressive, with potential for further growth.

Research Methodology

The purpose of this study is to examine the relationship between advertising expenditure and sales in the automobile sector in Pakistan. The research design employed in this study is empirical and exploratory and will use both secondary data and primary data obtained through questionnaires. The secondary data will consist of the advertising expenditure and sales data of five automobile manufacturing/assembling companies listed on the Pakistan Stock Exchange for the period 2012 to 2021. This data will be collected from the Pakistan Stock Exchange. Additionally, a questionnaire will be designed and administered to 100 employees in the marketing department of automobile companies to gather their perspectives on the impact of advertising on sales volume.

The data collected will be analyzed using statistical methods to identify patterns and relationships between advertising expenditure and sales. The findings of this study will provide valuable insights into the impact of advertising expenditure on sales in the automobile sector in Pakistan.

Statement of Problem

In order to succeed in the business world, it is important to create awareness and make your products and services known to consumers. This helps to build a relationship with customers and increase sales. However, the automobile industry faces challenges in achieving this goal. The main challenge is that car manufacturers are not using effective and regular advertising to promote their products. To overcome this challenge, car manufacturers should evaluate the cost-benefit analysis of various advertising methods across different media channels. This will help them to make informed decisions on the best advertising techniques to use. As stated by (David & James, 1982), creating product awareness is a way to educate both existing and potential customers about a product or service.

Review of Literature

Previous research on the relationship between advertising expense and sales in the automobile industry has yielded interesting results. One study by (Kamal, 2015) found that there is a positive relationship between advertising expense and sales in the automobile industry. The study used data from several major automobile manufacturers and found that an increase in advertising expenditure leads to an increase in sales. This relationship holds true across different segments of the market and for different types of vehicles. Another study by (Rossiter & Percy, 2008) found that advertising can be used to differentiate a manufacturer's products from those of their competitors. They found that advertising can be used to target specific segments of the market, such as luxury car buyers or first-time car buyers, which can increase sales. (Longe, 2001) in his

research demonstrated the impact of advertising on the sales and profit of a business organization taking Starcomms Plc as a case. Longe (2001) defined advertising as any personal paid form of non-personal communication which is directed to the consumers or target audiences through various media in order to present and promote a product, services and idea. Good advertising requires competent personnel including a number of specialists to enable it thrive in the ever dynamic and competitive business environment. It is therefore imperative that key personnel in departments that are directly involved to be carefully selected and positioned to ensure continuous success. In recognizing the role advertising can play a growing number of companies and establishments have to embark on a nationwide advertising campaign. Advertising campaigns obviously informed by depressed consumer demand, thrive by persuading the consumer on the need for consumptions. At the completion of this thesis, the impact of advertising at Starcomms was clearly defined and it should have become a continuous practice for Starcomms.

Statement of Hypothesis

This study is mainly concerned with the impact of advertising on sales of cars in Pakistan. The hypothesis developed for this study is:

H1: There is a positive relationship between Advertising and Sales volume of Automobile Sector.

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                                    H1
┌──────────────────────┐                  ┌──────────────────────┐
│                      │ ───────────────▶ │   Sales Volume of    │
│    Advertisement     │                  │   Automobile Sector  │
└──────────────────────┘                  └──────────────────────┘
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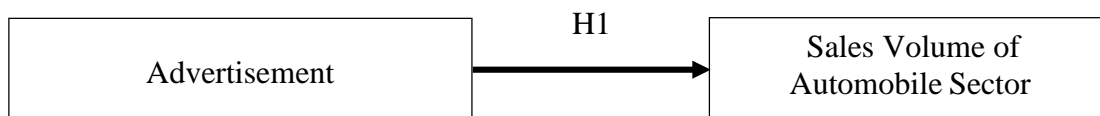
Figure 1 Research Model

The hypothesis is developed after the extensive study of previous literature and automobile industry's financials as it is the base of this research study where further continuation of the study will be according to this hypothesis. Here Advertising is the independent variable and Sales volume is the Dependent variable.

Sources of data

The research will utilize both primary and secondary sources to collect data. The primary sources include an online questionnaire and an interview with the Marketing Head. The questionnaire, which consists of 13 questions, will be distributed to employees working in the automotive sector of Pakistan to gather information on the relationship between advertising expenses and sales volume. The questions are rated on a Five-point Likert scale, ranging from "Strongly Disagree" to "Strongly Agree". The interview with the Marketing Head will provide a deeper understanding of the relationship between advertising expenses and sales through direct and unstructured questions. As for the secondary sources, the research will gather secondary data from financial reports of five different companies in the automotive sector from 2012 to 2021. The companies are Ghandhara Nissan, Pak Suzuki, Honda Cars, Deewan Motors, and Indus Motors. This data will be analyzed to complement the primary sources and provide additional support to the research findings.

Findings and analysis

## Secondary Data

We have focused on extracting the data from the industry's major automobile players by collecting the published data from the income statements of the companies. We have gathered the data for the past ten years of the Advertising expense and the sales volume of the companies and tried to explore the relationship between the two variables. We have represented the data into graphical form for a better visual understanding of the relationship between the variables.

Honda Atlas Cars Limited

The data provided shows the relationship between net sales and advertising cost of Honda Cars Limited from 2012 to 2021.

In 2012, Honda Cars Limited had a net sales of 16,599,608,000 and advertising cost of 16,617,000. This shows that the company had low net sales compared to later years, but also had a low advertising cost. From 2013 to 2015, the net sales of Honda Cars Limited increased, with a peak in 2015 at
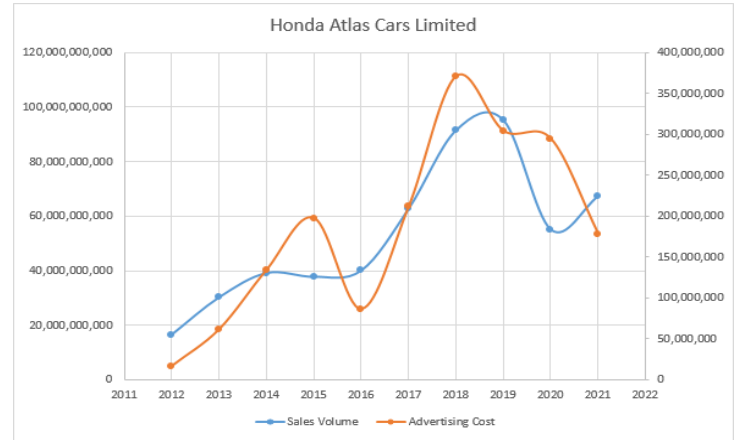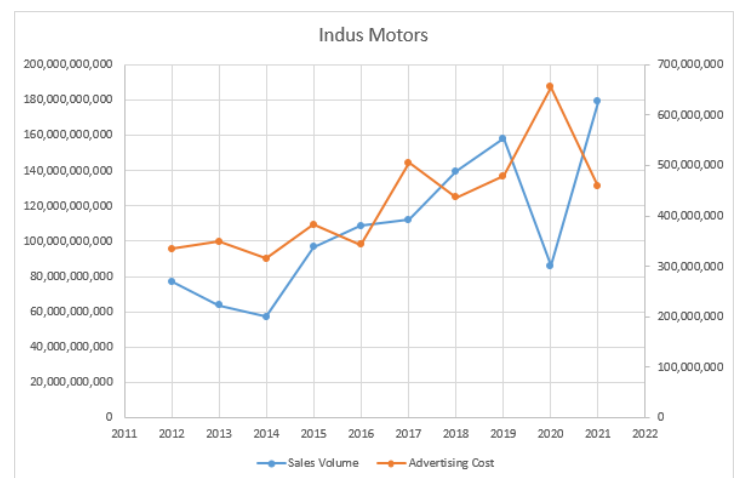

Figure 2 Advertising over sales of Honda

37,764,159,000. During this period, the advertising cost also increased, with the highest advertising cost in 2015 at 197,757,000. In 2020, the net sales decreased slightly due to the COVID-19 pandemic, and the advertising cost also decreased. In 2021, the net sales increased again and the advertising cost also increased, but not as much as the net sales. Overall, It suggests that there is a positive relationship between net sales and advertising cost, as years with higher advertising costs generally had higher net sales.

Indus Motors

The data provided shows the relationship between net sales and marketing cost of Indus Motors from 2012 to 2021. In general, as the net sales increased, the marketing cost also increased, with some fluctuations. For example, in 2019, the net sales reached 157,996,212,000 and the marketing cost was 478,948,000, the highest amo

Figure 3 Advertising over sales of Indus

decreased compared to 2019, but the marketing cost increased even further to 655,101,000. There were also some years where the net sales increased but the marketing cost decreased, such as in

2018. It is worth noting that the relationship between net sales and marketing cost can be influenced by various factors, and this data alone does not provide a comprehensive analysis.

Pak Suzuki Motors

The provided data showcases the connection between net sales and advertising costs of Pak Suzuki Limited over the years 2012-2021. In the initial year, the company's net sales and advertising costs were low. In 2013-2015, the net sales increased with a peak in 2015, along with an increase in advertising costs, although
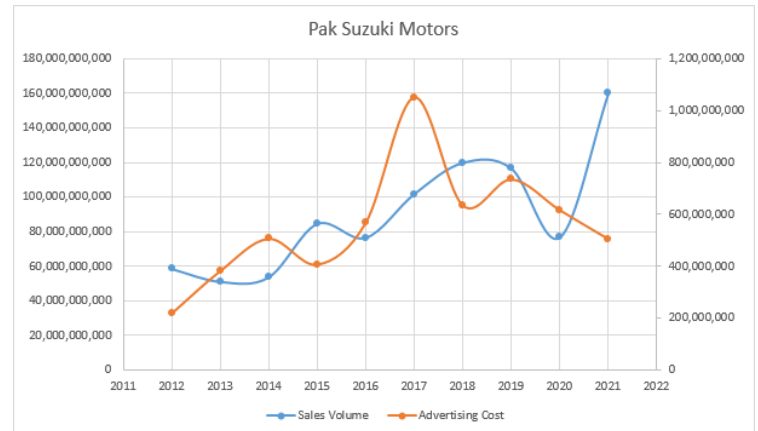
Figure 4 Advertising over sales of Pak Suzuki

not as much as net sales. From 2016-2019, net sales and advertising costs both increased, but the latter did not rise as much. In 2020, due to the pandemic, net sales decreased substantially while advertising costs increased slightly. In 2021, net sales increased again along with a rise in advertising costs, albeit not as much. The data suggests a positive connection between advertising costs and net sales for Pak Suzuki Limited, although other factors such as economic conditions and competition may also have an impact. Further comprehensive analysis is necessary to establish a definitive correlation between these variables.

Insights from Marketing Employees

With the help of a questionnaire, which comprises of questions related to advertising and its impact on the performance of the automobile sector, we have drawn the information regarding the variables we have opted for; which are Advertising and Sales volume, and also shown the relationship of these variables. And it is also expected that this questionnaire will help in testing of our hypothesis. We asked the marketing employees of Automobile Sector to fill this

questionnaire. The respondents rated the factors using a Five-point Likert scale from -2 to +2 (i.e.,

-2= Strongly disagree -1 = Disagree, 0=Neutral, 1=Agree, 2=Strongly agree).

The questions and the responses by the marketing employees are discussed below:

i. Celebrity endorsement increases influence on the customers.

The data given shows the response of employees to the statement "Celebrity endorsement increases influence on the customers." The mean of the data is 1.37, which

Option	(x)	Frequency	fx
Strongly Agree	2	51	102
Agree	1	39	39
Neutral	0	7	0
Disagree	-1	2	-2
Strongly Disagree	-2	1	-2
Mean	1.37	Σ fx	137

Table 1 Celebrity Endorsement

suggests that most employees either agree or strongly agree with the statement. Therefore, it can

be concluded that there is a positive relationship between celebrity endorsement and sales increase,

as a majority of employees believe that celebrity endorsement has an impact on customer's

purchasing decisions.

ii. Intensive advertisement can influence the customer to make the buying decision.

The data suggests that intensive advertisement can positively impact sales, as a majority of respondents either strongly agree or agree that it influences their buying

Option	(x)	Frequency	fx
Strongly Agree	2	39	78
Agree	1	35	35
Neutral	0	16	0
Disagree	-1	6	-6
Strongly Disagree	-2	4	-8
Mean	0.99	Σ fx	99

Table 2 Advertisement Intensity

decision (74 out of 99). The mean value of the responses is close to 1, indicating a positive

correlation between advertisement and sales volume.

iii. Print ads influence the customer to make buying decision.

The data suggests that print ads can have a positive impact on sales, as a majority of respondents either strongly agree

Option	(x)	Frequency	fx
Strongly Agree	2	30	60
Agree	1	28	28
Neutral	0	30	0
Disagree	-1	10	-10
Strongly Disagree	-2	2	-4
Mean	0.74	Σ fx	74

Table 3 Print Ads

or agree that they influence their buying decision (58 out of 88). The mean value of the responses is 0.74, indicating a positive correlation between print ads and sales volume.

Insights from The Senior Marketing Manager of Indus Motors:

To gain further in depth knowledge about the impact of advertising on the sales volume, the marketing head of Indus Motors Company Limited, Mr Talha Chishti was interviewed. He shared valuable insights into the relationship between sales volume and advertising. The discussion delved into the role of advertising in driving sales growth and the impact of various advertising mediums on customer behavior. The following are the highlights of the conversation with Mr Chishti:

Upon asking, how do they select the best medium for advertisement? He answered "my approach to evaluate the best advertisement medium for our company would be to conduct a comprehensive analysis of various advertising options available and their effectiveness in reaching our target audience. This analysis would include factors such as the target audience demographics, their media consumption habits, the cost-effectiveness of each medium, and the company's advertising goals and budget. Additionally, I would also consider the strengths and weaknesses of each medium, such as the level of engagement it provides, its ability to drive brand awareness and recall, and the ROI it delivers. Based on this analysis, I would recommend the best medium that aligns with our goals and budget while delivering the highest return on investment.

On asking about how the effectiveness of advertising mediums is measured, he elaborated that they would employ a multi-faceted approach that includes both qualitative and quantitative measures. Quantitatively, they would track key metrics such as reach, engagement, conversions, and sales to determine the ROI of each advertising campaign. This would give a clear picture of which mediums are delivering the best results in terms of driving traffic, generating leads, and

increasing sales. Qualitatively, they would conduct market research, surveys, and focus groups to understand the impact of advertising on brand awareness, perception, and recall. This would give a better understanding of the emotional connection customers have with the brand and how advertising is shaping that connection.

Furthermore, they would also monitor the performance of advertising efforts over time, making adjustments as needed to optimize their strategy. By leveraging both quantitative and qualitative measures, they can ensure that the advertising investments are delivering maximum impact and driving the overall performance of the company.

Conclusion

After conducting a thorough assessment of both primary and secondary data, it can be concluded that there is a significant positive relationship between advertising expense and sales volume in the automotive sector. The responses received from the employees working in the sector indicated a strong agreement on the positive impact of advertising expenses on sales volume, while the interview with the Marketing Head reinforced this view by providing a deeper understanding of the marketing strategies used by the companies in the sector. Furthermore, the analysis of the secondary data, specifically the financial reports of five companies in the automotive sector over the past 10 years, showed a strong correlation between advertising expenses and sales volume. The results indicated that an increase in advertising expenses was followed by a corresponding increase in sales volume, providing further evidence of the predictive relationship between the two variables.

In conclusion, the findings of this research provide strong evidence for the significant positive relationship between advertising expense and sales volume in the automotive sector proving the hypothesis. The results highlight the importance of advertising for companies in the sector as a

means to increase sales and achieve business success. The findings of this research can be used by companies in the sector to make informed decisions about their marketing strategies, and by researchers to inform future studies in this field.

Recommendation

1. Companies in the automotive sector should invest in advertising to increase sales volume.

2. Companies should monitor their advertising expenses and sales volume over time to ensure that the relationship between the two remains significant.

3. Future research should consider collecting data from a larger sample size and from different geographic locations to further validate the findings of this study.

Limitations

1. The study was limited to the automotive sector in Pakistan and may not be generalizable to other countries or industries.

2. The sample size was limited to five companies, so the results may not be representative of the entire sector.

3. The study was limited to a 10-year time frame and may not reflect the relationship over a longer period.

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Education.

APPENDIX – A
Questionnaire for employees – Marketing Department

How do you rate the impact of the following characteristics of advertisement on the performance of the automobile industry?

S#	Characteristics	Strongly agree	Agree	Neutral	Agree	Strongly disagree
1.	Advertising sometimes misleads the customers.					
2.	Celebrity endorsement increases influence on the customers.					
3.	Advertisement increases recall ability of the customers.					
4.	TVCs at regular intervals help in decision making of the customers.					
5.	TVCs grabs the customers attention instantly.					
6.	Advertisement influences brand loyalty of the customers.					
7.	Advertising of vehicles impact new customers more.					
8.	Advertising increases the awareness about the vehicle.					
9.	TVCs are the best medium for advertisement.					
10.	Out of home advertisement is more engaging than Print ads.					
11.	Print ads influence the customer to make buying decision.					
12.	Informative advertisement is more engaging than entertaining advertisement.					
13.	Intensive advertisement can influence the customer to make the buying decision.					

APPENDIX – B
Interview Questions and Answers

Q1: By leveraging the right kinds of advertising media, marketers can engage with different audiences in distinct ways. For example, social media encourages customers to begin a dialogue, while television distributes messages through one-way communication. So, how do you evaluate which medium is the best in terms of advertisement for your company?

Q2: Advertising as we know can be overwhelming at times. Some ideas or executions might look good to the marketers but might not reflect in numbers as it should. How do you gauge the effectiveness of different advertising mediums and their impact on the company's overall performance?

Q3: I firmly believe that a good marketing plan can do wonders for boosting an organizations' brand loyalty. How do you plan on keeping your customers loyal towards your brand when there are different new entrants in the market that claim to be providing better value for money in the same price segment of cars?

Q.4 How does the company measure the impact of advertising on brand awareness and consideration, and how does it relate to sales volume?