

STUDY ON THE GDP IN PHARMACEUTICAL AND AUTOMOBILE INDUSTRIES TO THE CUSTOMERS

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ABSTRACT

Introduction: *The automotive industry in India is a major contributor to the country's GDP. The strategic importance of the automotive sector resides in the fact that, as in any other country, its development is dependent on a robust transportation network.*

Aim of the study: *the main aim of the study is Study on The GDP In Pharmaceutical And Automobile Industries To The Customers*

Material and method: *In the current investigation, approaches of research that were either exploratory or conclusive were used. In this particular instance, the definitive research technique is descriptive in character, and the research design is a single cross sectional.*

Conclusion: *This section was designed to investigate the opinions of customers on the Good Distribution Practices of the Automobile Industry and the Pharmaceutical Industry.*

INTRODUCTION

OVERVIEW

Determinants of Indian Automobile Industry Growth

The automotive industry in India is a major contributor to the country's GDP. The strategic importance of the automotive sector resides in the fact that, as in any other country, its development is dependent on a robust transportation network. Indian policymakers have taken note of the importance of the automobile industry to the country's economy and have been taking steps to support it through new regulations. The car industry in India is regarded to be a key driver of manufacturing in terms of gross domestic product, exports, and employment due to the interlinkages that exist between it and other industrial sectors. As a result of the fact that its performance is seen as a reflection of economic confidence, it is sometimes referred to as the "barometer" of the economy. As a result, analysts have identified it as a promising new area for growth in the Indian economy. In spite of this, the automotive sector in India has been experiencing a downturn as of late, and 2019 is shaping up to be the worst year yet, with sales taking a sharp nosedive and inventory levels rising.

LITERATURE REVIEW

Meena, Abhilasha & Dhir (2020) The objective of this research is to identify and rank a variety of variables that are boosting development in the Indian automobile sector. It goes on to create a hierarchical model in order to investigate the ways in which the elements interact with one another, as well as their degree of reliance and the force they exert. In this research, the growth-accelerating elements are first identified, and then the framework of modified total interpretive structural modelling (m-TISM), which is an enhanced form of TISM, is used. MICMAC analysis is then used to investigate the reciprocal interrelationships between the elements that have been found.

Singh, Drjagdeep (2020) The Indian automotive industry, which includes both vehicles and component parts, generates about 7.5% of the country's overall GDP and is one of the industries that directly or indirectly creates the most jobs. India is falling behind in terms of commercial vehicle manufacturing when compared to other countries across the world; as a result, the country needs a greater amount of attention, investment, and teamwork in order to catch up to the global market share. However, the automotive industry has advanced to the fourth place worldwide in terms of total output, and this progress has been maintained despite the presence of a number of obstacles. The management of the supply chain, often known as SCM, is one of the primary factors contributing to an organization's total value generation. In light of this, businesses are placing more emphasis on developing supply chains that are both more efficient and more competitive.

Singh, Rohit & Modgil, Sachin (2020) It was discovered that among the lean criteria that were taken into consideration, the practices of quality management, information management, and customer management had a greater impact on the key performance measurements than the others. Even though DEMATEL and fuzzy-VIKOR were applied to a circumstance that led to the assignment of priorities of elements that were deemed to effect an automobile company, the suggested technique may be utilised in a variety of other industrial contexts. The current research may be of use to decision-makers in formulating an effective approach for identifying important behaviours that have an impact on lean supply chains.

Nag, Biswajit & De, Debdeep (2020) The authors analyse how India's position as the fourth biggest auto market is maintained by well-established local enterprises and original equipment manufacturers as well as a robust market in terms of both domestic demand and exports. India is presently the fourth largest car market in the world. In light of these circumstances, the purpose of this research is to investigate how the incorporation of new technologies into businesses is helping the Indian car industry to expand and maintain its position as a global contender. In order to achieve this goal, the authors discuss the factors that are leading to a shifting competitive landscape in the industry and conduct an analysis of the strategies and policies that the Indian government is implementing in order to make it easier for domestic players to navigate the new landscape.

Kumar, S Praveen (2020) The car sector is one of the most promising ones, and in this day and age, there is a rise in consumers' purchasing power across the board, including in both established and emerging nations. Because satisfaction is a subjective state, it is difficult to measure its level.

It varies from person to person as well as from one brand to another and is dependent on a number of different elements. It is impossible to overstate the relevance of the project in terms of customer-oriented and market-oriented strategic management. It is now a crucial component that every firm has to take into consideration in order to increase the level of pleasure felt by its consumers. The great expansion that the Indian car industry has enjoyed is the consequence of two variables that are tied to one another.

METHODOLOGY

In the current investigation, approaches of research that were either exploratory or conclusive were used. In this particular instance, the definitive research technique is descriptive in character, and the research design is a single cross sectional. In the course of this investigation, primary data was gathered via the use of the questionnaire technique. The study was carried out with the assistance of a questionnaire, which measured the attitudes and acceptance of Pharmaceutical/Automobile by the staff, as well as the retailers and customers. The research design that was selected places a primary emphasis, both on the elaboration and the generation of new ideas pertaining to the topics that are being investigated.

In both exploratory and conclusive research methods, the data are obtained primarily through the use of interview and questionnaire techniques. Direct observation techniques, as well as Management, Dealers, and Customers opinion for the various factors of Pharmaceutical/Automobile were also utilised. The following prerequisites are met by the data that was utilised in this investigation:

1. A log of various periodicals and magazines covering news and developments in the pharmaceutical and automotive industries, as well as technology advances in those industries.
2. In order to verify the log data, a sampling of respondents was chosen, and the pertinent information and data was obtained from them.
3. The responses were gathered using a standardised questionnaire that was prepared specifically for consumers, dealers/retailers, and staff respondents to answer independently.

RESULTS

ANALYSIS FOR CUSTOMERS

The customer's point of view on the "Good Distribution practises" of the automobile and pharmaceutical industries was the primary focus of the questionnaire that was developed. first Question has given some parameters to know about their level of satisfaction on Communication, Availability of product, Price Quotation, Quality & Eco-friendly Products, Technical assistance, Order, Documentation, Delivery (time, reliability, accuracy and fulfilment), Packaging,

Replacement policy, Priority Based Services of Pharmaceutical/Automobile company. second Question has given some parameters to know about their level of satisfaction on Quality & Eco-friendly Products, Technical assistance, Order, Documentation, Delivery (time, reliability, accuracy and fulfilment). The second question is a request for a rating on the criteria of "Brand," "Logistics," "Warehousing," "Transportation," and "Information management" that are being used by the Automobile and Pharmaceutical Industries. The last question, which was an open-ended one, asked consumers for their insightful recommendations.

Reliability for Data Collected For The Customers

Cronbach's alpha (α) was used as the methodology for testing the reliability coefficient. Cronbach's alpha is a frequently used approach for measuring the reliability of a collection of two or more constructs. The alpha coefficient values may vary anywhere from 0 to 1, with higher values suggesting a better level of dependability among the indicators.

Table 4.1: Case Processing Summary for the Customers

Case Processing Summary			
		N	%
Cases	Valid	200	100.0
	Excluded ^a	0	.0
	Total	200	100.0
a. List wise deletion based on all variables in the procedure.			

The data shown in the table 4.1 may be construed to suggest that there were a total of 200 cases that were followed under scrutiny and judged to be legitimate. The total number of cases was two hundred. In which there was not a single instance that was overlooked or disregarded. All of the replies that were gathered from respondents and were guided by the questionnaire were filled out in a methodical manner, and individual attention was given to each of the respondents, as needed, in order to acquire appropriate and verified comments to the concerns.

Table 4.2: Reliability Statistics for the responses of Customers

Reliability Statistics	
Cronbach's Alpha	N of Items
.792	16

Cronbach value for the replies of the 200 people who participated in the research was discovered, as can be seen in the table that was just shown (Table 4.2) above. 792, which is a good indication

of the quality of the data and demonstrates that the data that was obtained is around 79% reliable. The Cronbach's α coefficient is a significant psychometric instrument or tool that is used to assess the consistency of the data. According to the reliability coefficient, the scale that is used to measure trust and commitment is a reliable instrument. As a result, a wide range of statistical methods may be used and evaluated.

Analysis Of Part B Of The Questionnaire For The Customers

This section of the questionnaire asks customers about the degree to which they are satisfied with aspects of the business such as the following: communication, availability of product, price quotation, quality and environmentally friendly products, technical assistance, order documentation, delivery (time, reliability, accuracy, and fulfilment), packaging, replacement policy, and priority based services. The findings were analysed using a Likert scale with five discrete points. In order to determine whether or not there is a connection between these metrics and overall happiness, the following hypotheses were developed and tested. The One Sample T test will be used for the analysis.

H010:- There is no significant use of effectiveness of Good Distribution practices (parameters) in Automobile and Pharmaceutical Industries in Mumbai.

H111:- There is significant use of effectiveness of Good Distribution practices (parameters) in Automobile and Pharmaceutical Industries in Mumbai.

Table 4.3: One-Sample Statistics for Customers

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
A1 (Communication)	200	3.93	.459	.032
A2 (Availability of Product)	200	4.56	.917	.065
A3 (Price Quotation)	200	3.16	.666	.047
A4 (Quality & Eco-friendly Products)	200	4.15	.499	.035
A5 (Technical Assistance)	200	4.55	.923	.065
A6 (Order)	200	4.62	.706	.050
A7 (Documentation)	200	4.57	.811	.057
A8 Delivery (Time, Reliability, Accuracy and Fulfillment)	200	3.96	.641	.045

A9 (Packaging)	200	3.98	.645	.046
A10 (Replacement policy)	200	4.03	.500	.035
A11 (Priority Based Services)	200	2.98	.485	.034

The entire number of responses, which came to 200, was shown in table 4.3. The mean, the standard deviation, and the mean of the standard error have all been included in the table. The table that can be seen above illustrates that the average point value of the contact with GDP (3.93 ± 0.666), Availability of the Product with GDP, (4.56 ± 0.917), Price Quotation (3.16 ± 0.431), Quality and Eco-friendly products ($4.15 \pm .499$), Technical Assistance (4.55 ± 0.923), Order (4.62 ± 0.706), Documentation (4.57 ± 0.811), Delivery Time, reliability, accuracy and fulfillment ($3.96 \pm .641$), Packaging ($3.98 \pm .645$), Replacement policy ($4.03 \pm .500$), and Priority based Services ($2.98 \pm .485$).

Table 4.4 One-Sample Statistics for Customers

One-Sample Test						
	Test Value = 0					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
A1 (Communication)	121.005	199	.000	3.925	3.86	3.99
A2 (Availability of Product)	70.337	199	.000	4.560	4.43	4.69
A3 (Price Quotation)	67.022	199	.000	3.155	3.06	3.25
A4 (Quality & Eco-friendly Products)	117.676	199	.000	4.150	4.08	4.22
A5 (Technical Assistance)	69.626	199	.000	4.545	4.42	4.67
A6 (Order)	92.577	199	.000	4.620	4.52	4.72
A7 (Documentation)	79.651	199	.000	4.570	4.46	4.68
A8 Delivery (Time, Reliability, Accuracy and Fulfillment)	87.414	199	.000	3.960	3.87	4.05
A9 (Packaging)	87.110	199	.000	3.975	3.89	4.06
A10 (Replacement policy)	113.906	199	.000	4.030	3.96	4.10
A11 (Priority Based Services)	86.688	199	.000	2.975	2.91	3.04

Table 4.4 demonstrates that the population mean differences for A1 to A11 are as follows: 3.925, 4.56, 3.155, 4.15, 4.545, 4.62, 4.57, 3.96, 3.975, 4.03, and 2.975 ("Mean Difference" column), and the 95% confidence intervals (95% CI) of the difference are as follows: 3.99 to 3.86, 4.69 to 4.43, 3.25 to 3.06, 4.22 to 4.08, 4.67 to 4.42, ("Upper" to "Lower" columns). It will be adequate to publish the values to three decimal places if the measurements that were employed are taken into consideration.

Analysis of Part C Of the Questionnaire for The Customers

H012:- There is no significant use of Brand Pull as an important dimension of GDP in the Pharmaceutical and Automobile Industries according to the customers.

H112:- There is significant use of Brand Pull as an important dimension of GDP in Pharmaceutical and Automobile Industries according to the customers.

Table 4.5: Group Statistics of Brand Pull with Pharmaceutical & Automobile Industries for Customers

Group Statistics					
	Type of Pharmaceutical/Automobile	N	Mean	Std. Deviation	Std. Error Mean
B1 (Brand)	Pharmaceutical Industries	51	3.25	.560	.078
	Automobile Industries	48	3.29	.582	.084

The mean for Pharmaceutical can be found in table 4.5 of the Group Statistics. It is 3.25. The average score for Automobile comes in at 3.29. The standard deviation for the Pharmaceutical industry is 0.560, while the standard deviation for the Automobile industry is 0.582. There are a total of 51 and 48 people participating in the Pharmaceutical and Automobile categories, respectively.

Table 4.6: Independent Samples Test of Brand Pull with Pharmaceutical & Automobile Industries for Customers

Independent Samples Test								
Levene's Test for Equality of Variances			t-test for Equality of Means					
F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	

								e	Lower	Upper
B1 (Brand)	Equal variances assumed	.285	.595	-.320	97	.749	-.037	.115	-.265	.191
	Equal variances not assumed			-.320	96.051	.750	-.037	.115	-.265	.191

In table 4.6, the significance level with two tails is 0.75. This number is more than the threshold value of 0.05. Because of this, we are able to come to the conclusion that the Pharmaceutical and Automobile Industries do not make considerable use of brand pull as a key component of their GDP. We are able to draw the conclusion that customers of automobile industries were more concerned about Brand Pull in comparison to customers of pharmaceutical industries due to the fact that Table 4.5, Group Statistics box revealed that the Mean for the Automobile Industries (3.29) was greater than the Mean for the Pharmaceutical Industries (3.25).

The evaluation of Logistics will be based on the following hypothesis, which has been formulated:

H021:- There is no significant use of Logistics as an important dimension of GDP Pharmaceutical and Automobile Industries.

H122:- There is significant use of Logistics as an important dimension of GDP Pharmaceutical and Automobile Industries.

Table 4.7: Group Statistics of Logistics with Pharmaceutical & Automobile Industries for Customers

Group Statistics					
	Type of Pharmaceutical/Auto mobile	N	Mean	Std. Deviation	Std. Error Mean
B2 (Logistics)	Pharmaceutical Industries	51	3.98	.510	.071
	Automobile Industries	48	4.06	.480	.069

The mean for the pharmaceutical industry may be found in table 4.7 of the Group Statistic. The average score for Automobile comes in at 4.06 The standard deviation for the Pharmaceutical industry is 0.510, while the Automobile industry has a standard deviation of 0.480. There are a total of 51 and 48 people participating in the Pharmaceutical and Automobile categories, respectively.

Table 4.8: Independent Samples Test of Logistics with Pharmaceutical & Automobile Industries for Customers

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
B2 (Logistics)	Equal variances assumed	.003	.959	-.824	97	.412	-.082	.100	-.280	.116
	Equal variances not assumed			-.826	97.000	.411	-.082	.099	-.279	.115

In table 4.8, the significance level with two tails is 0.41. This number is more than the threshold value of 0.05. As a result of this, we are able to draw the conclusion that the Pharmaceutical and Automobile Industries do not make considerable use of Logistics as an essential component of their GDP. We are able to draw the conclusion that customers of automobile industries were more concerned about logistics in comparison to customers of pharmaceutical industries due to the fact that Table 4.7, Group Statistics box revealed that the Mean for the Automobile Industries (4.06) was higher than the Mean for the Pharmaceutical Industries (3.98).

CONCLUSION

This section was designed to investigate the opinions of customers on the Good Distribution Practices of the Automobile Industry and the Pharmaceutical Industry. This section of the thesis aims to investigate the carry out operation of GDP and identify areas for improvements in GDP in the Pharmaceutical/Automobile Industry, with particular reference to customers' perceptions of the Automobile Industries and the Pharmaceutical Industries in Mumbai. In order to accomplish this goal, the data collection was carried out by means of an organised and methodical questionnaire. A questionnaire was given to the respondents in order to get a grasp of the level of GDP knowledge held by the consumers of the automobile and pharmaceutical industries in the Pune and Mumbai Districts of the Mumbai State of India. In this section, some questions were asked to determine the level of customer satisfaction with the Pharmaceutical/Automobile company's Communication, Availability of product, Price Quotation, Quality & Eco-friendly Products, Technical assistance, Order, Documentation, Delivery (time, reliability, accuracy, and fulfilment), Packaging, Replacement policy, and Priority Based Services. In addition to this, it questioned about the aspects of the automobile and pharmaceutical industries that they use, such

as brand, logistics, warehousing, transportation, and information management. At the very end, the customers inquired about the helpful recommendations.

REFERENCES

1. Meena, Abhilasha & Dhir, Sanjay & Sushil, Professor. (2020). An analysis of growth-accelerating factors for the Indian automotive industry using modified TISM. *International Journal of Productivity and Performance Management*. ahead-of-print. 10.1108/IJPPM-01-2019-0047.
2. Singh, Drjagdeep. (2020). Impact Assessment of CRM Practices on Supply Chain Management Performance in Indian Automobile Industry. *International Journal for Research in Applied Science and Engineering Technology*. 8. 10.22214/ijraset.2020.32099.
3. Singh, Rohit & Modgil, Sachin. (2020). Assessment of Lean Supply Chain Practices in Indian Automotive Industry. *Global Business Review*. 24. 097215091989023. 10.1177/0972150919890234.
4. Nag, Biswajit & De, Debdeep. (2020). *The Indian Automobile Industry: Technology Enablers Preparing for the Future*. 10.1007/978-3-030-18881-8_12.
5. Kumar, S Praveen. (2020). *Customer Satisfaction Toward Select Automobile Industries In Madurai City, Tamil Nadu*. 11. 1506-1511.
6. Charan, Parikshit. (2012). Supply chain performance issues in an automobile company: A SAP-LAP analysis. *Measuring Business Excellence*. 16. 10.1108/13683041211204680.
7. Bennett, David & Klug, Florian. (2012). Logistics supplier integration in the automotive industry. *International Journal of Operations & Production Management*. 32. 10.1108/01443571211274558.
8. Balon, Virendra & Sharma, A. & Barua, Mukesh. (2012). *Green Supply Chain Management in Auto Industry: A Literature Review*.
9. Golinska, Paulina & Fertsch, Marek & Pawlewski, Pawel. (2011). Production flow control in the automotive industry - Quick scan approach. *International Journal of Production Research*. 49. 4335 – 4351. 10.1080/00207543.2010.536180.
10. Ambe, Intaher & Badenhorst-Weiss, Johanna. (2011). An automotive supply chain model for a demand-driven environment. *Journal of Transport and Supply Chain Management*. 5. 10.4102/jtscm.v5i1.18.