

Third Party Logistics Services: An Empirical Study with Reference to Pune Industrial Area

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ABSTRACT

Outsourcing of several business operations and functions is very common now-a-days in several companies in India. Outsourcing of logistics function is gaining importance because of its benefits and advantage all over the world. Outsourcing of logistics function helps manufacturing companies to concentrate on their core competencies by reducing or eliminating non productive activities which adds unwanted cost to the product. Because of such growing importance of outsourcing of logistics function, it has transitional shift from conventional to strategic function. To minimize the non-productive functions like logistics, company can either manage its logistics at his own or have a tie up with the company providing logistics services or it will outsource the logistics function to logistics service providers. Among all above mentioned options, outsourcing of logistics services to logistics service providers is considered as preferred option by many of manufacturing companies now-a-days due to its multiple benefits.

The research is intended to cover Pune Industrial area which is having well equipped industrial zones like Pimpri Chinchwad, Bhosari, Talegaon Chakan, Ranjangaon, etc. & is one of the fastest developing industrial zones in Asia having presence of many big national & multinational companies. There are many isolated examples of individual organizations and their respective logistics capabilities. Hence, it was considered important to carry out a comprehensive survey on Third Party Logistics (3PL) practices in Pune industrial area.

The research was intended to know three main aspects of third party logistics providers, i.e. current usage extent of third party logistics services, outsourcing reasons and impact of usage of third party logistics services on business results. The study will help to understand the present scenario of third party logistics provider (3PLP) in Pune industrial region & future growth.

Keywords: Outsourcing of Logistics Function, Pune Industrial Area, Third Party Logistics Services, Transportation, Warehousing.

1. INTRODUCTION

Outsourcing of several business operations and functions is very common now-a-days in several companies in India. Outsourcing of logistics function is gaining importance because of its benefits and advantage all over the world. Outsourcing of logistics function helps manufacturing companies to concentrate on their core competencies by reducing or eliminating non productive activities which adds unwanted cost to the product. Because of such growing importance of outsourcing of logistics function, it has transitional shift from conventional to strategic function. To minimize the non-productive functions like logistics, company can either manage its logistics at his own or have a tie up with the company providing logistics services or it will outsource the logistics function to logistics service providers. Among all above mentioned options, outsourcing of logistics services to logistics

service providers is considered as preferred option by many of manufacturing companies now-a-days due to its several benefits.

Global logistic industry spends approximately US 4 Trillion, out of that US spends approximately US 990 Billion which is near about one fourth of expenditure of Global logistic industry & US logistics activities expenditure is 8 % of GDP. Japan's expenditure on logistic activities is 10.5 % its GDP where as China's expenditure on logistics activities is 13.5 % of GDP & total expenditure is approximately US 506 Billion. Indian Logistic industry spends 14 percent of its GDP on logistics activities so if we consider GDP of India is US 1.6 Trillion so India spends approximately US 220 Billion on logistics activities & as compare to United States of America's expenditure 8 percent of its total GDP on logistics activities & if India is able to decrease its spending on logistics function from 14 % to 8 % then India can save approximately

US 90 Billion resulting in to Indian products effectively withstands in international markets by providing better technology, better quality & better services with the help of saved money on logistic activities. The Indian logistics industry consists of transport companies for roadways transportation, railways, air cargo companies, sea ports and shipping companies, as well as third party logistics companies. The performance of logistics industry widely depends on the infrastructure i.e. roads, railways, ports and airports of the respective area.

In this research, Pune industrial area is covered. Different industrial sectors are covered so as to portray a better picture of logistics & third party logistics services. Pune has big industrial area all around the city. Pimpri Chinchwad Municipal Corporation was the richest in Asia a couple of years ago due to industrial development. The Bhosari MIDC area is one of the largest MIDC areas in the state. Also Chakan- Talegaon industrial area has grown up tremendously in recent time with big giants like General Motors, Mahindra & Mahindra, Wolkswagon, Bajaj Auto manufacturing setups. Many big companies like Tata Motors, SKF India Ltd, Therrmax Ltd, Bajaj auto ltd, KSB pumps, Cummins India Ltd, also have preferred Pune for their manufacturing plants.

The research was intended to know three main aspects of third party logistics providers, i.e. present extent of usage of third party logistics services, reasons for outsourcing and impact of usage of third party logistics services on business results. The study will help to understand the present scenario of third party logistics provider (3PLP) in Pune industrial region & future growth.

2. LITERATURE REVIEW

Logistics role as a part of organizational strategy has been apparent since 1970's (Heskett 1977), As a part of research during 1980's, Bowersox & Daugherty (1987) presented a typology which postulated three dimensions of logistics strategy : specialization, information & market. The late Rober V. Delaney suggested that "Relationships are what will carry the logistics industry in to the future" (Delaney 2000). Lib & Butner (2007) point out that provider of logistics services are attempting to build more collaborative working relationship with their key customers. Outsourcing logistics services, third party logistics services and contract logistics are synonyms to each other which mean the same. Outsourcing of logistics

function involves the use of dedicated companies who provides logistics services and performs logistics activities for the manufacturing companies which were performed by the company itself. The third party logistics providers perform either whole logistics function or provide services for limited functions of logistics.

Outsourcing of logistics services has gain the momentum mainly because of globalization which enables companies to share the sources of resources and technology. Because of globalization of business, companies are able to manufacture products for foreign markets and source the quality material at cheaper rates from outside countries. As a result of inter-country transaction, the supply chain becomes more complex and wide which require better control and management so that the supply chain becomes more effective and efficient. As supply chain becomes more complex, it requires expertise of certain functions like custom clearing, import export procedures, tax policies and distribution channels of destination countries. Because of which manufacturing companies are concentrating on their core competencies and emphasizing on outsourcing such logistics functions.

The current scenario in the market is very competitive. For each and every product there are numerous players in the market which results in the huge competition amongst the companies working in the same field. Due to the increased competition in the market, the companies could not compete by having control on the selling price, the only thing which companies can control was manufacturing cost of the product which is an aggregate cost of manufacturing cost, procurement cost, inventory carrying cost, quality inspection cost & so on. Hence companies are more keen on controlling these cost so that overall cost of manufacturing product will be less which ultimately increases the profitability of the firm. For manufacturing cost reduction companies nowadays are practicing the modernize techniques of production like JIT, FMS, CAD/CAM etc. For reducing inventory cost techniques like MRP, EOQ, classification of inventories, Kanban, Zero inventory system etc. has been used. These all techniques have made supply chain more effective & efficient which results in reduced lead time & responsive supply chains. Use of technology has made order processing more advanced & faster than earlier. With the help of internet & enhanced communication systems the flow of information becomes very fast. According to the study of supply chain strategies in India it has been

observed that companies are considering the supply chain strategies for formulating their business strategies so that reduction of inventory cost will be the major part of overall cost reduction & overall strategies of business for the same.

Hence logistics is considered as the main weapon of the competitive market in the recent future. Effective logistics management need a balance of inventory level & lead time at the same time which should consider the service level for customer and economies of scale for the manufacturing company too.

Logistics outsourcing players enables the manufactures to convert their fixed expenses into variable one. Third party logistics providers enables the manufacturing companies to maintain the balance between inventory level, lead time & service level of manufacturing firms. According to the research on 3PLP it has been found that following factors define the extent of usage of logistics outsourcing:

- Total experience of third party logistics providers.
- Business policies for using the logistics outsourcing services
- Expenditure decided by the company for using third party logistics services.
- Outsourcing limited services of logistics (warehousing, vehicle consolidation, freight management, order processing, reverse logistics, selection of mode of transport, logistics MIS, rate negotiation, inventory management, order receiving, inbound logistics, outbound logistics, packaging, distribution, custom procedural assistance, import export procedural assistance, customer service/support).

Research about logistics outsourcing indicates that firms outsource logistics activities for several reasons, so as to concentrate on manufacturing process, Reduction of Logistics Expenditure, Enhancing operations flexibility, Better customer service, Elimination of non productive activities, Exposure to technology, Growth in terms of expansion, Effective use of Capital investment, Better Inventory turnover ratio, Benefits of outsourcing, Organizational restructuring, Development of supply chain, Improvement in profitability. Third party logistics providers are more efficient & effective in terms of managing inventories, inventory costs, lead time & balance between all of them as this firms operate dedicatedly for logistics services only which enables them to have

expertise of the logistics management. The decision of outsourcing logistics services is a major decision & critical with respect to the business & hence the outcome of using third party logistics services should be considered.

The use of logistics outsourcing services in the future totally depends on the success of the firms using third party logistics services. If we sum up all the researches about use of third party logistics services, we can conclude that in future more and more companies will be interested in outsourcing logistics services. Generally companies start outsourcing few of the activities so that they can observe the benefits of the 3PL services. Later on companies keep on increasing the outsourcing percentage which contributes to logistics performance system.

The above discussion gives the foundation for studying outsourcing logistics services in pune industrial area with respect to the three main objectives of understanding the present extent of usage of logistics outsourcing services & various logistics functions in Pune industrial area, understanding the reasons for outsourcing the logistics services and studying the impact of usage of third party logistics services on business results.

3. OBJECTIVES

1. To understand the present extent of usage of logistics outsourcing services & various logistics functions in Pune industrial area.
2. To understand the reasons for outsourcing the logistics services.
3. To study the impact of usage of third party logistics services on business results.

4. HYPOTHESIS

1. In Pune industrial area very few functions of logistics are outsourced in which functions like warehousing, transportation, inventory management & reverse logistics are primary. Rests of the functions are not outsourced marginally.
2. Reasons for outsourcing the logistics services in pune industrial area are mainly to concentrate on core competencies of company, logistics cost reduction & to increase inventory turns.
3. Outsourcing logistics services to third party logistics providers helps companies to increase their

Table 1: Respondents Profile

Sr. No.	Sector	Number Of Companies	Percentage Of Companies
1	Automotive	12	24
2	Engineering	19	38
3	Chemicals/ Fertilizers	7	14
4	Metals	2	4
5	Transportation	4	8
6	Others	6	12
	TOTAL	50	100 %

Source: Primary data (Questionnaire)

productivity, to minimize cost of logistics & cost of inventory which results positively on customer satisfaction as well as employee morale.

5. RESEARCH METHODOLOGY

5.1 Sampling Method

In this study **convenience sampling** technique will be used so that companies from different sectors will be included in sample so as to get the insights of overall logistics industry.

5.2 Sample Size

Companies in Pune Industrial Area: 50

5.3 Data Collection

Primary Data- Questionnaire

To determine the usage of third party logistics practices in Pune, a mail survey was conducted. The survey questionnaire was designed based on the following aspects of third party logistics providers & mail to the respective manufacturing companies -

1. Extent of usage of services offered by third party logistics service providers for carrying out specific logistics activities;
2. Reasons for outsourcing;
3. The impact of using third party logistics services on logistics performance, customer satisfaction and employee morale;

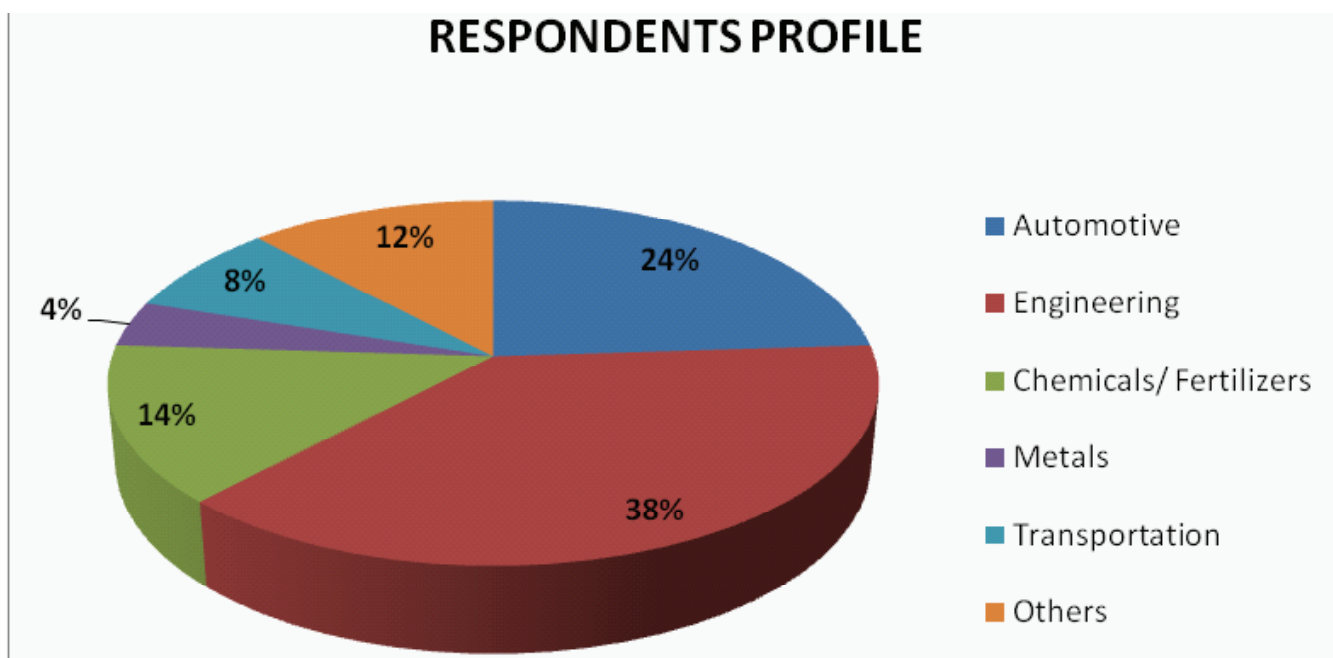
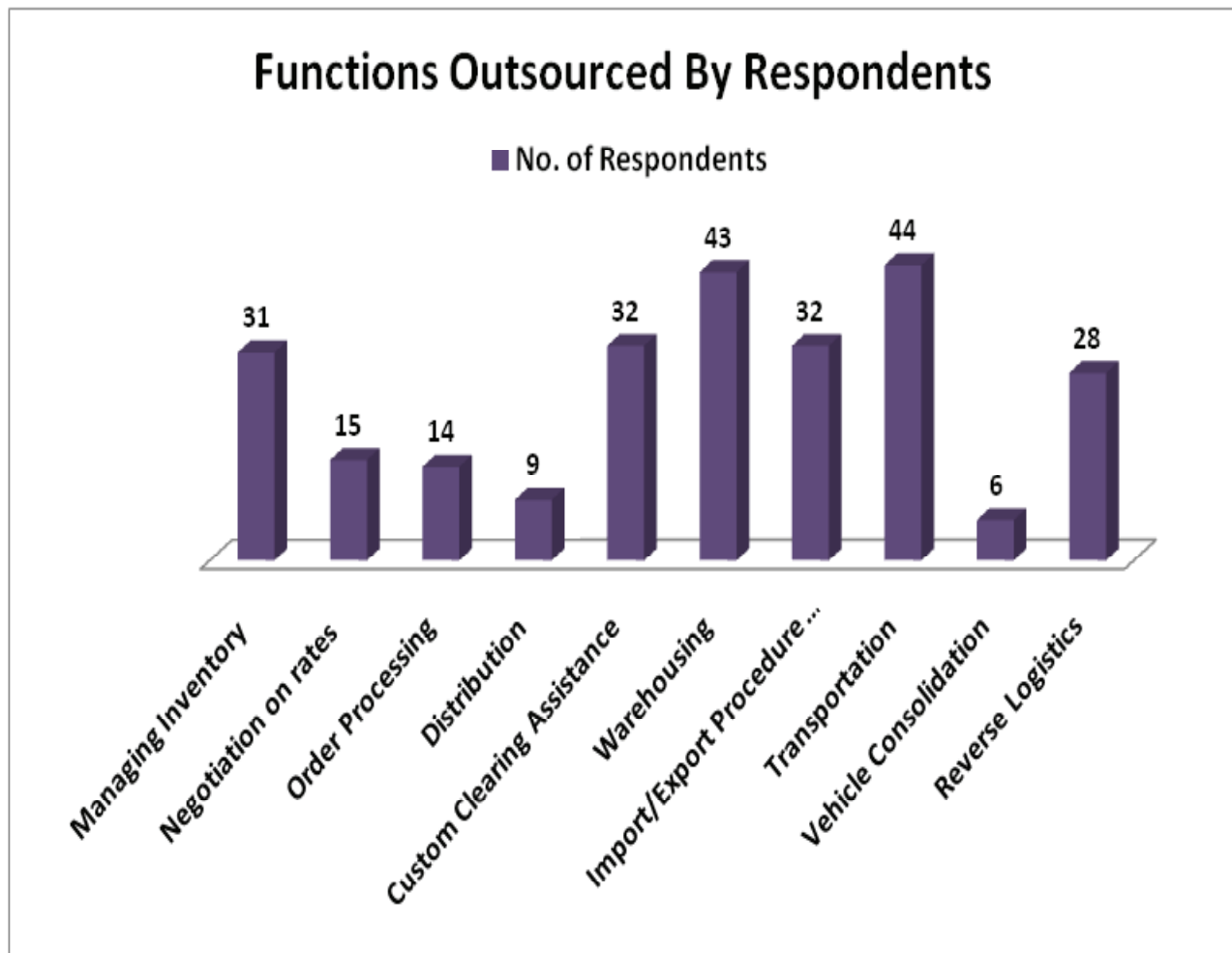
Chart No 1: Respondents Profile

Table 2: Logistics functions outsourced by respondents.

<i>Sr No.</i>	<i>3plp Functions</i>	<i>No. Of Respondents Outsourcing Function</i>	<i>%</i>
1	Managing Inventory	31	62
2	Negotiation on rates	15	30
3	Order Processing	14	28
4	Distribution	09	18
5	Custom Clearing Assistance	32	64
6	Warehousing	43	86
7	Import/Export Procedure Assistance	32	64
8	Transportation	44	88
9	Vehicle Consolidation	6	12
10	Reverse Logistics	28	56

Chart 2: Logistics functions outsourced by respondents

4. The benefits of using third party logistics services on specific business objectives;
5. The overall satisfaction with third party logistics service providers; and
6. The future plans of current users of third party logistics services.

5.4 Secondary Data

Secondary data will be acquired from different sources such as

- a. Newspapers

- b. Magazines
- c. Journals
- d. Electronic Media

6. DATA ANALYSIS

6.1 Respondents Profile

The respondents represented the broad variety of industry including various sectors like Automobile, Engineering, Metals etc. Majority of the respondents were from automotive & engineering sector only as Pune industrial area is well equipped with automobile companies & engineering vendors for automobile companies.

6.2 Functions Outsourced by Companies (Respondents):

The following table shows the details of functions which are outsourced by the respondents

In the questionnaire respondents were asked about whether they outsource the following function or not. After comparing all the responses from respondents we found that warehousing, transportation are the two main functions which are outsourced by almost companies followed by which are inventory management, import export procedural assistance & custom clearing assistance those who deal in international trade.

6.3 Reasons for Outsourcing Logistics Services

Following table shows the responses of respondents for reasons of outsourcing on a scale of 1 to 3 i.e. least important (1), Important (2) & Very important (3).

By using weighted average method we can find out the weighted importance of each reason of outsourcing logistics services.

6.4. Sample Calculation

Function: Concentrate on manufacturing process

Responses of respondents:

Least Important (1)	Important (2)	Very Important (3)
0	14	36

Weighted average of responses:

Least Important (1)	Important (2)	Very Important (3)	Total weighted average
$0 \times 1 = 0$	$14 \times 2 = 28$	$36 \times 3 = 108$	136

Maximum weighted average points will be: $50 \times 3 = 150$

Percentage of importance = $136 \times 150 / 100 = 90.67\%$

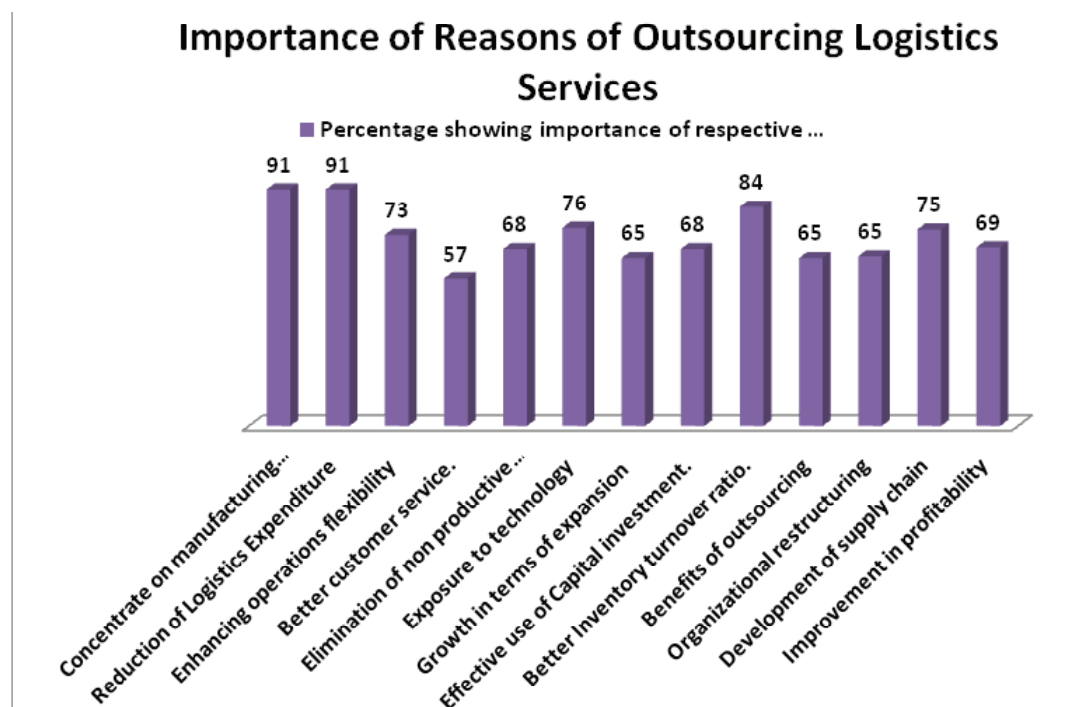
The above information shows that the primary reasons for the companies to outsource the logistics services are to concentrate on manufacturing process, reduction in logistics expenditure, better inventory turnover ratio followed by which rest of reasons are there.

Table 3: Responses of respondents for reasons of outsourcing logistics services.

Sr. No.	Reason For Outsourcing Logistics	Least Important (1)	Important (2)	Very Important (3)
1	Concentrate on manufacturing process	0	14	36
2	Reduction of Logistics Expenditure	2	10	38
3	Enhancing operations flexibility	8	24	18
4	Better customer service.	21	23	6
5	Elimination of non productive activities.	4	34	10
6	Exposure to technology	8	20	22
7	Growth in terms of expansion	10	33	07
8	Effective use of Capital investment.	12	24	14
9	Better Inventory turnover ratio.	6	12	32
10	Benefits of outsourcing	14	25	11
11	Organizational restructuring	9	34	7
12	Development of supply chain	5	27	18
13	Improvement in profitability	3	41	6

Table 4: Weighted average points of reasons for outsourcing.

<i>Sr. No.</i>	<i>Reason For Outsourcing Logistics</i>	<i>Least Important (1)</i>	<i>Important (2)</i>	<i>Very Important (3)</i>	<i>Total Weighted Average Points</i>	<i>Percentage of weighted average (out of Max points = 150)</i>
1	Concentrate on manufacturing process	0	14	36	136	91 %
2	Reduction of Logistics Expenditure	2	10	38	136	91 %
3	Enhancing operations flexibility	8	24	18	110	73 %
4	Better customer service.	21	23	6	85	57 %
5	Elimination of non productive activities.	4	34	10	102	68 %
6	Exposure to technology	8	20	22	114	76 %
7	Growth in terms of expansion	10	33	7	97	65 %
8	Effective use of Capital investment.	12	24	14	102	68 %
9	Better Inventory turnover ratio.	6	12	32	126	84 %
10	Benefits of outsourcing	14	25	11	97	65 %
11	Organizational restructuring	9	34	7	98	65 %
12	Development of supply chain	5	27	18	113	75 %
13	Improvement in profitability	3	41	6	103	69 %

Chart 3: Importance of Reasons of Outsourcing Logistics Services

6.5 Impact of Third Party Logistics Services

Following table shows the responses taken from respondents about impact of third party logistics services on three main parameters as performance of logistics function, Customer satisfaction & satisfaction of employees.

Using weighted average method we will find out the weighted average points for each parameter and then find out the percentage of weighted average points which will represent the overall effect of logistics outsourcing services on above mentioned parameters.

Sample Calculations for 1) Performance of Logistics Function:

$$\begin{aligned} \text{Weighted average points} &= (18 \times 5) + (13 \times 4) + (16 \times 3) \\ &+ (3 \times 2) + (0 \times 1) \\ &= 90 + 52 + 48 + 6 + 0 \\ &= 196 \end{aligned}$$

$$\begin{aligned} \text{Maximum weighted average points} &= 50 \times 5 \\ &= 250 \end{aligned}$$

$$\begin{aligned} \text{Percentage of weighted average points} &= 196 \times 100 / 250 \\ &= 78.4 \% \end{aligned}$$

6.6 Chart no iv: Impact of Third Party Logistics Services

The above data shows that there is positive impact of third party logistics services on companies. Companies responded that using third party logistics services enhances satisfaction of employees, performance of logistics function & customer satisfaction too.

7. HYPOTHESIS TESTING

For testing hypothesis we will use chi square test. The chi-square test is a "goodness of fit" test: it answers the question of how well do experimental data fit expectations.

The chi-square (I) test is used to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories. Do the numbers of individuals or objects that fall in each category differ significantly from the number you would expect? Is this difference between the expected and observed due to sampling error, or is it a real difference?

$$X^2 = \frac{(O - E)^2}{E} \quad \text{where } O \text{ is the Observed Frequency in each category}$$

E is the Expected Frequency in the corresponding category
is sum of
 df is the "degree of freedom" (n-1)
 X^2 is Chi Square

Table 5: Impact of third party logistics services

Sr. No.	Factors	Very Positive (5)	Positive (4)	Average (3)	Negative (2)	Very Negative (1)
1	Performance of Logistics Function	18	13	16	3	0
2	Customer satisfaction	9	27	10	4	0
3	Satisfaction of Employees	17	22	11	0	0

Table 6: Weighted average points for impact of logistics services.

Sr. No.	Factors	Very Positive (5)	Positive (4)	Average (3)	Negative (2)	Very Negative (1)	Total Weighted Average Points	% of weighted average
1	Performance of Logistics Function	18	13	16	3	0	196	78.4
2	Customer satisfaction	9	27	10	4	0	191	76.4
3	Satisfaction of Employees	17	22	11	0	0	206	82.4

Steps in using chi square test:

1. Write the observed frequencies in column O.
2. Figure the expected frequencies and write them in column E.
3. Use the formula to find the chi-square value.
4. Find the degree of freedom (df)= (N-1)
5. Find the table value (consult the Chi Square Table).
6. If your chi-square value is equal to or greater than the table value, reject the null hypothesis: differences in your data are not due to chance alone.

7.1 Functions Outsourced by Companies (Respondents)

The following table shows the observed responses from the various respondents & expected responses.

Chi square table value at 95% level of confidence is **16.919**. The calculated chi square value (**10.52**) is smaller than that of chi square table value. Hence the first hypothesis about functions outsourced stands true that in pune industrial area primarily warehousing, transportation & inventory management are outsourced maximum.

Table 7: Observed (Actual) responses collected through questionnaire & Expected responses.

<i>Sr No.</i>	<i>3plp Functions</i>	<i>No. of Respondents Outsourcing Function (Observed Data)</i>	<i>No. of Respondents Outsourcing Function (Expected Data)</i>
1	Managing Inventory	31	25
2	Negotiation on rates	15	20
3	Order Processing	14	20
4	Distribution	09	15
5	Custom Clearing Assistance	32	35
6	Warehousing	43	45
7	Import/Export Procedure Assistance	32	35
8	Transportation	44	45
9	Vehicle Consolidation	6	10
10	Reverse Logistics	28	35

Table 8: Chi square test for functions outsourced by respondents.

<i>Sr No.</i>	<i>3plp Functions</i>	<i>O_{ij}</i>	<i>E_{ij}</i>	<i>O_{ij} - E_{ij}</i>	<i>(O_{ij} - E_{ij})²/E_{ij}</i>
1	Managing Inventory	31	25	6	1.44
2	Negotiation on rates	15	20	-5	1.25
3	Order Processing	14	20	-6	1.80
4	Distribution	09	15	-6	2.40
5	Custom Clearing Assistance	32	35	-3	0.26
6	Warehousing	43	45	-2	0.09
7	Import/Export Procedure Assistance	32	35	-3	0.26
8	Transportation	44	45	-1	0.02
9	Vehicle Consolidation	6	10	-4	1.60
10	Reverse Logistics	28	35	-7	1.40
				$\chi^2 =$	10.52

Chi square value $\chi^2 = 10.52$

Degree of freedom df (N-1) = 10 - 1 = 9

Significance Level = 0.05

Table Value = 16.919

Chi square value (10.52) is less than table value (16.919)

7.2 Chi Square Test for Reasons of Outsourcing Services:

The following table shows observed & calculated weighted average points for various reasons of outsourcing.

Chi square table value at 95% level of confidence is **21.026**. The calculated chi square value (**17.50**) is smaller than that of chi square table value. Hence the second hypothesis about reasons of outsourcing stands true

that in pune industrial area & the companies primarily outsources the logistics services to concentrate on manufacturing process, to reduce logistics expenses & to increase inventory turnover ratio.

7.3 Chi Square Test for Impact of Logistics Outsourcing Services

The following table shows the responses of companies obtained from questionnaire database & expected one.

Table 9: Observed weighted average points & expected points for reasons of outsourcing logistics services.

Sr. No.	Reason For Outsourcing Logistics	Calculated Percentage of weighted average points obtained from respondents responses (Oij)	Expected Percentage of weighted average points (Eij)
1	Concentrate on manufacturing process	91 %	95 %
2	Reduction of Logistics Expenditure	91 %	95 %
3	Enhancing operations flexibility	73 %	70 %
4	Better customer service.	57 %	80 %
5	Elimination of non productive activities.	68 %	80 %
6	Exposure to technology	76 %	75 %
7	Growth in terms of expansion	65 %	75 %
8	Effective use of Capital investment.	68 %	60 %
9	Better Inventory turnover ratio.	84 %	95 %
10	Benefits of outsourcing	65 %	80 %
11	Organizational restructuring	65 %	75 %
12	Development of supply chain	75 %	80 %
13	Improvement in profitability	69 %	75 %

Table 10: Chi square test calculations for reasons of outsourcing logistics services.

Sr No.	Reason for Outsourcing Logistics	O _{ij}	E _{ij}	O _{ij} - E _{ij}	(O _{ij} - E _{ij}) ² /E _{ij}
1	Concentrate on manufacturing process	91	95	-4	0.17
2	Reduction of Logistics Expenditure	91	95	-4	0.17
3	Enhancing operations flexibility	73	70	3	0.13
4	Better customer service.	57	80	-23	6.61
5	Elimination of non productive activities.	68	80	-12	1.80
6	Exposure to technology	76	75	1	0.01
7	Growth in terms of expansion	65	75	-10	1.33
8	Effective use of Capital investment.	68	60	8	1.07
9	Better Inventory turnover ratio.	84	95	-11	1.27
10	Benefits of outsourcing	65	80	-15	2.81
11	Organizational restructuring	65	75	-10	1.33
12	Development of supply chain	75	80	-5	0.31
13	Improvement in profitability	69	75	-6	0.48
				$\chi^2 =$	17.50

Chi square value $\chi^2 = 17.50$

Degree of freedom df (N-1) = 13 - 1 = 12

Significance Level = 0.05

Table Value = 21.026

Chi square value (17.50) is less than table value (21.026)

Table 11: Observed responses & expected responses for impact of logistics outsourcing.

<i>Sr. No.</i>	<i>Factors</i>	<i>Calculated % of Weighted Average Points (Observed Data)</i>	<i>Expected Percentage of Weighted average points</i>
1	Performance of Logistics Function	78.4	95
2	Customer satisfaction	76.4	85
3	Satisfaction of Employees	82.4	95

Table 12: Chi square test of impact of logistics outsourcing services.

<i>Sr No.</i>	<i>Reason For Outsourcing Logistics</i>	<i>O_{ij}</i>	<i>E_{ij}</i>	<i>O_{ij} - E_{ij}</i>	<i>(O_{ij} - E_{ij})²/E_{ij}</i>
1	Performance of Logistics Function	78.4	95	-16.6	2.90
2	Customer satisfaction	76.4	85	-8.6	0.87
3	Satisfaction of Employees	82.4	95	-12.6	1.67
				$\chi^2 =$	5.44

Chi square value $\chi^2 = 5.44$

Degree of freedom $df (N-1) = 3 - 1 = 2$

Significance Level = **0.05**

Table Value = **5.991**

Chi square value (**5.44**) is less than table value (**5.991**)

Chi square table value at 95% level of confidence is **5.991**. The calculated chi square value (**5.44**) is smaller than that of chi square table value. Hence the third hypothesis about impact of outsourcing stands true. In pune industrial area & the companies responded very positively about outsourcing logistics services & its benefits.

8. CONCLUSION

On the basis of study conducted we can conclude that companies in Pune industrial area are not completely aware of all the functions of third party logistics providers and they are unaware of the benefits of those services offered by the third party logistics providers. During the study we came to conclusion that most of the companies outsource only transportation & warehousing functions majorly followed by which rest of the functions are outsourced.

Also, while conducting the study we came across the respondents responses about the reasons for outsourcing the logistics services & it is found that the main reasons for the companies to outsource the logistics services is to concentrate on core competencies & reduction in cost. Companies are least bother about rest of the reasons and benefits.

After conducting the study we found that companies' perception about the use of third party logistics services is very positive. According to the statistics, companies found very positive impact on employee morale. Logistics system performance is enhanced & customer satisfaction as well.

By summing all observations we can conclude that there is significant role which third party logistics providers are playing in pune industrial area. Still companies in pune industrial area have not yet explore all the shades & benefits of outsourcing logistics services. The concern issue is to spread more awareness about the various functions of logistics outsourcing & also the benefits of using these functions.

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