

A Study of the Customers Satisfaction Toward Global Supply Chain Management Efficiency and Effectiveness

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Abstract

Global supply-chain management has six main areas of concentration: logistics management, competitor orientation, customer orientation, supply-chain coordination, supply management, and operations management. These six areas of concentration can be divided into four main areas: marketing, logistics, supply management, and operations management. Successful management of a global supply chain also requires complying with various international regulations set by a variety of non-governmental organizations. Successful global supply-chain management occurs after implementing the appropriate framework of concentration, complying with international regulations set by governments and non-governmental organizations, and recognizing and appropriately handling the risks involved while maximizing profit and minimizing waste. In commerce, global supply-chain management is defined as the distribution of goods and services throughout a trans-national companies' global network to maximize profit and minimize waste. Essentially, global supply chain-management is the same as supply-chain management, but it focuses on companies and organizations that are trans-national.

Key words-l logistics management-supply-chain-global network-international regulations.

1. Introduction

Supply-chain management is a cross-functional approach that includes managing the movement of raw materials into an organization, certain aspects of the internal processing of materials into finished goods, and the movement of finished goods out of the organization and toward the end consumer. As organizations strive to focus on core competencies and become more flexible, they reduce ownership of raw materials sources and distribution channels. These functions are increasingly being outsourced to other firms that can perform the activities better or more cost effectively. The effect is to increase the number of organizations involved in satisfying customer demand, while reducing managerial control of daily logistics operations. Less control and more supply-chain partners lead to the creation of the concept of supply-chain management. The purpose of supply-chain management is to improve trust and collaboration among supply-chain partners thus improving inventory visibility and the velocity of inventory movement. we have to communicate with all the vendors, suppliers and after that we have to take some comparisons after that we have to place the order.

The world has increasingly become complex, uncertain and very competitive. In order to remain competitive and relevant in the market, most companies have developed strategies to cope with these

challenges. Supply chain being an integral part of the business highly contributes to the success of an organization especially, when modern technologies for instance integration are used. However, this cannot be achieved without managing good relationships with the suppliers. Supply chain deficiencies pose threats to most organizations especially those who do not perceive the need for supplier relationship management (SRM).

The need for achieving efficiency in supply chains has fueled the need for supplier relationship management. Companies that have perfected the art of supplier relationship management have well defined and efficient supply chains. Hughes and Jonathan (2022), defined supplier relationship management (SRM) as a discipline of strategically planning for, and managing, all interactions with third party organizations that supply goods and/or services to an organization in order to maximize the value of those interactions. In practice, SRM entails creating closer, more collaborative relationships with key suppliers in order to uncover and realize new value and reduce risk.

2. OBJECTIVES OF THE STUDY

1. To study the respondent's awareness of Global Supply chain process & the relationship between organization and suppliers
2. To determine the challenges faced in implementing Global Supply chain management.
3. To determine the impact of Supplier Relationship Management on Supply Chain.

3. METHODOLOGY

Research in common parlance refers to a search for knowledge. Eminent research scholars have defined the term research as a scientific and systematic search for pertinent information on a specific topic. In fact, research is an art of scientific investigation. It is a voyage of discovery. Thus, research is an original contribution to the existing stock of knowledge making for its advancement. It is pursuit of truth with the help of study, observation, comparison and experiment. Technically speaking, research comprises defining the problems; formulating the hypotheses; collection organizing and evaluating the data; making the conclusions; and testing the conclusions to determine whether they fit the formulated hypothesis. The primary purpose of research is to discover answer to question through the application of scientific procedures.

4. TARGET RESPONDENTS

SAMPLE

A sample is a finite part of a statistical population whose properties are studied to gain information about the whole. When dealing with the people, it can be defined as a set of respondents selected from a larger population for the purpose of a survey. A population is a group of individual's person, objects or items from which samples taken for measurement. Sample size of the paper is 100 respondents.

SAMPLING METHOD

The data collected from the respondents through the convenience sampling, which belongs to the "nonprobability sampling". As the name implies, the sample is selected because they are convenient to the researcher. A convenience sample is used when you simply stop anybody in the street who is prepared to stop, or when you wander round a business, a shop, a restaurant, a theatre, or whatever, asking people

you meet whether they will answer your questions.

5. DATA COLLECTION METHOD

The work does not end by framing the design. It is necessary to acquire the various details. The collected information is aimed at getting a truthful & clear result. The result can be further analyzed selection of best possible method collecting data very vital for this type of study.

Data is basically collected in two methods. They are classified in two types.

- PRIMARY DATA
- SECONDARY DATA

6. STATISTICAL TOOLS ADOPTED FOR THE STUDY

The statistical tools adopted in the research are below. This is used to frame a list of findings which is useful to give suggestion SIMPLE PERCENTAGE METHOD, ONE WAY ANOVA, CO -EFFICIENT OF CORRELATION, t-Test, WEIGHTED AVERAGE METHOD, PERCENTAGE METHOD

Review of literature

Partners (2011) described SRM as "The consolidation and classification of procurement data to provide an understanding of supplier relationships in order to develop procurement strategies that reduce costs, make procurement predictable and repeatable, enlighten supplier partnership decisions and provide leverage over suppliers in negotiations".

Kwai-Sang et al., (2004) has stated that many factors, such as competitive market place for products and variety of customer's demands, need for fast delivery of product to the market and development of information technology resulted in movement of organisations towards Supply Chain and forced them to outsource their organisational activities to appropriate and certain suppliers for sustaining market's profit margin.

Melachlan & Larson, (2011) describes SRM as it classifies and engrosses the right stakeholders to yield ownership of the relationship, drive active communication and bring into line strategic objectives. Firms and their suppliers with different business practices and terminology come together into a working relationship through SRM.

Chan, Chan, Ip, & Lau, (2007) also had stated that the main goal of the purchasing department is to select the proper source to minimise cost and maximise quality, customer satisfaction and market share. However, supplier selection is a multidimensional problem, which is complex to solve because of its intangible and tangible factors.

Ho, Xu, & Dey (2010) rank the priority of the supplier selection criteria as follows: quality, delivery, price/cost, manufacturing capability, service, management, technology, research and development, finance, flexibility, reputation, relationship, risk and safety and environment. They point out that quality and delivery time have become more important than price and the traditional evaluation approach, which is a selection of a supplier based on only the lowest price, is not effective in today's competitive supply chain management. Beside the classical supplier evaluation criteria (price, quality and

delivery time), there are other critical criteria such as operational performance, service quality, educational status of the personnel, technology, financial capacity, process control capability, after-sales service, and sustainability that may help to select competent suppliers.

7. DATA ANALYSIS AND INTERPRETATION

Global Exporters list

Exporters	Value exported in 2025(USD thousand)	Trade balance in 2025 (USD thousand)	Annual growth in value between 2024-2025 (%)	Annual growth in value between 2024-2025 (%)	Share in world exports (%)
World	30160598	-891429	0	-17	100
Italy	4577493	799200	-2	-18	15.2
United States of America	3187917	2366711	1	-17	10.6
Brazil	2265342	2245898	6	-23	7.5
Hong Kong, China	2053762	-413052	-4	-15	6.8
Germany	1223602	275959	0	-19	4.1
India	1096323	421464	4	-20	3.6
Australia	985231	887655	-2	-15	3.3
Korea, Republic of	918470	-12475	2	-9	3
Argentina	823908	792206	0	-18	2.7

Satisfaction with supplier relationship

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	30	30.0	30.0	30.0
Agree	38	38.0	38.0	68.0

Neutral	28	28.0	28.0	96.0
Disagree	4	4.0	4.0	100.0
Total	100	100.0	100.0	

INFERENCE:

From the above table it indicates

- Strongly agree (30.00%), Agree (38.00%), Neutral (28.00%), Disagree (04.00%) Strongly Disagree (00.00%) from the 100 respondents.
- So It is found that the maximum no of the respondents Agree (38.00%) & minimum no of respondents Disagree (4.00%) with the statement.

Service in Quality

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	36	36.0	36.0	36.0
Agree	42	42.0	42.0	78.0
Neutral	18	18.0	18.0	96.0
Disagree	4	4.0	4.0	100.0
Total	100	100.0	100.0	

INFERENCE:

From the above table it indicates

- Strongly agree (36.00%), Agree (42.00%), Neutral (18.00%), Disagree (4.00%) Strongly Disagree(00.00%) from the 100 respondents.
- So It is found that the maximum no of the respondents Agree (42.00%) & minimum no of respondents Disagree (4.00%) with the statement.

Technology to handle materials

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	20	20.0	20.0	20.0
Agree	34	34.0	34.0	54.0
Neutral	24	24.0	24.0	78.0

Disagree	12	12.0	12.0	90.0
Strongly Disagree	10	10.0	10.0	100.0
Total	100	100.0	100.0	

INFERENCE:

From the above table it indicates

- Strongly agree (20.00%), Agree (34.00%), Neutral (24.00%), Disagree (12.00%) & Strongly Disagree (10.00%) from the 100 respondents.

So It is found that the maximum no of the respondents Agree (34.00%) & minimum no of respondents strongly Disagree (10.00%) with the statement.

t-Test

YEARS OF EXPERIENCE AND SEARCH FOR NEW SUPPLIERS

NULL HYPOTHESIS (H₀): There is no significant difference between the gender of the respondents and satisfaction with the suppliers.

ALTERNATIVE HYPOTHESIS (H₁): There is significant difference between the gender of the respondents and satisfaction with the suppliers.

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Satisfaction with supplier relationship	Male	76	2.00	.894	.103
	Female	24	2.25	.737	.150

Independent Samples Test

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

									Lower	Upper
Satisfaction with supplier relationship	Equal variances assumed	.228	.634	-1.241	98	.217	-.250	.201	-.650	.150
	Equal variances not assumed			-1.373	46.285	.176	-.250	.182	-.617	.117

Interpretation:

Since the P-value is greater than 0.05. Alternative hypothesis accepted at 95% confidence level. So there is significant difference between the gender of the respondents and satisfaction with the suppliers.

8. ANALYSIS USING KARL PEARSON'S CORRELATION

Correlation analysis is the statistical tool used to measure the degree to which two variables are linearly related to each other. Correlation measures the degree of association between two variables.

1. Null hypothesis (H0):

There is positive relationship between price quoted by SS Enterprises and discounts/concessions offered by suppliers

Alternate hypothesis (H1):

There is negative relationship between price quoted by SS Enterprises and discounts/concessions offered by suppliers

Correlations

	Price adapted by vendors	Discounts/offers/concessions
Price adapted by vendors	Pearson Correlation 1	.140
	Sig. (2-tailed)	.164
	N	100
	Pearson Correlation	1
		.140

Discounts/offers/concessions	Sig. (2-tailed)	.164	
	N	100	100

$$r = \frac{N\sum XY - \sum X\sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\sqrt{N\sum Y^2 - (\sum Y)^2}}$$

r = .140

INFERENCE:

Since r is positive, there is positive relationship between price quoted by SS Enterprises and discounts/concessions offered by suppliers.

2. Null hypothesis (Ho):

There is positive relationship between prompt payment by SS Enterprises and timely delivery by suppliers

Alternate hypothesis (H1):

There is negative relationship between prompt payment by SS Enterprises and timely delivery by suppliers

	Prompt Payment to suppliers	Delivery on time by suppliers
Prompt Payment to suppliers	1	.090
	Sig. (2-tailed)	.371
	N	100
Delivery on time by suppliers	.090	1
	Sig. (2-tailed)	.371

N	100	100
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$$r = \frac{N\sum XY - \sum X\sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

r = .090

INFERENCE:

Since r is positive, there is positive relationship between prompt payment by SS Enterprises and timely delivery by suppliers

ONE-WAY ANOVA CLASSIFICATION

Null hypothesis (Ho):

There is no a significance difference between material handling and Just-In-Time concept.

Alternate hypothesis (H1):

There is a significance difference between material handling and Just-In-Time concept.

ANOVA

Technology to handle materials

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	30.209	3	10.070	8.182	.000
Within Groups	118.151	96	1.231		
Total	148.360	99			

Multiple Comparisons

Dependent Variable: Technology to handle materials

(I) Just-In-Time	(J) Just-In-Time	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Strongly Agree	Agree	-.012	.282	1.000	-.75	.73
	Neutral	.231	.308	.876	-.57	1.04

	Disagree	-1.738*	.413	.000	-2.82	-.66
Agree	Strongly Agree	.012	.282	1.000	-.73	.75
	Neutral	.243	.282	.825	-.50	.98
	Disagree	-1.726*	.394	.000	-2.76	-.70
Neutral	Strongly Agree	-.231	.308	.876	-1.04	.57
	Agree	-.243	.282	.825	-.98	.50
	Disagree	-1.969*	.413	.000	-3.05	-.89
Disagree	Strongly Agree	1.738*	.413	.000	.66	2.82
	Agree	1.726*	.394	.000	.70	2.76
	Neutral	1.969*	.413	.000	.89	3.05

*. The mean difference is significant at the 0.05 level.

$$F = F_{cal} > F_{tab} \quad F = 8.182 > 5.32$$

Hence, the Alternate hypothesis [H1] is accepted.

INFERENCE:

The calculated value of F is greater than the tabulated value. Hence, we reject the null hypothesis and conclude that there is a significance difference between material handling and Just-In-Time concept.

9. CONCLUSION

To conclude it is the insertion into global markets that has been the primary stimulus causing change and development of the industry and it is the nature of the international market combined with a specific set of policies to cater to it that can to a large extent explain the structure and performance of the industry as a whole as well as the clusters that have been specifically studied. Effectiveness of Supply Chain Process and Its Relationship with Suppliers reveals the positive result towards the organization. The factors which add the positive things are price, quality, service and ordering process so on. Second, the structure that developed to cater to the international market through successive value addition resulted in a complete transformation of the production chain in the leather industry.

REFERENCES

1. Partners, V. What Is SRM And Why Does It Matter? 2011. [online] Available at: <http://www.mypurchasingcenter.com/purchasing/industry-articles/what-is-srm-and-why-does-it-matter/>
2. Cox, J. C. (2004). How to identify trust and reciprocity. *Games and economic behavior*, 46(2), 260-281.
3. Kwai-Sang et al., 2004. “A study on supply chain management practices: The Hong Kong manufacturing perspective“ *International Journal of Physical Distribution & Logistics Management* Vol.34, No.6, pp.505 - 524
4. McLachlin, R. & Larson, P. (2011) Building humanitarian supply chain relationships: lessons from leading practitioners, *Journal Of Humanitarian Logistics And Supply Chain Management*.
5. Ho, W., Xu, X., & Dey, P.K. (2010). Multi-criteria decision making approaches for supplier evaluation and selection: A literature review. *European Journal of Operational Research*, 202(1), 16-24.