



A Study on Supply Chain Process and Its Relationship with Customers

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ABSTRACT

Customer relationship management is an essential part of supply chain management because it creates value for the supply chain. By improving customer satisfaction, retention, and loyalty, increases profit margins. CRM also helps companies improve their sales and revenue by making the supply chain more efficient. Customer relationship management is the process of managing customer interactions with a business. It allows businesses to improve customer satisfaction, retention, and loyalty. It also includes the analysis of data to identify customer needs, providing information to customers about various products, and making sure customers are happy with their experience. This article provides an overview of how customer relationship management can benefit supply chain management. The vertical integration concept is popular with large manufactures producing less technical, commodity type products; however, more organizations prefer to have an independent supply chain. Contrary, the internal supply chain consists of the movement of goods within organization starting from receiving of raw materials till production of goods and dispatch. This internal supply chain generates lots of efficiencies through check and balances at every point. The research is done through a questionnaire to obtain the required data from the respondents. The data collected through questionnaire were transferred to the table from which various table are prepared for future analyze. The present study is descriptive research design it includes survey of different kinds its major purpose is description of the state of affairs exists all present.

Keywords: supply chain management, customer relationship management, and information sharing and information technology.

I. INTRODUCTION

Customer relationship management technology is revolutionizing how businesses interact with their customers and manage their supply chains.

These systems allow organizations to track and manage customer interactions and data from a centralized location. This information can improve customer service, streamline supply chain management, and optimize marketing campaigns. In the supply chain, it may be necessary to implement CRM systems at multiple points in the supply chain. When that happens, the systems will rely on each other to share information. Customer service representatives use the CRM system to manage incoming customer requests, questions, and complaints.

CUSTOMER RELATIONSHIP MANAGEMENT

A CRM system can help businesses identify the best ways to improve customer satisfaction, retention, and loyalty. It also helps businesses analyze data to identify trends that may affect sales or revenue. Customer relationship management is an essential part of supply chain management because it makes the supply chain more profitable.

CRM systems allow sales and marketing teams to target their efforts toward people who are most likely to buy their products and services. It also helps sales and marketing teams make their efforts more efficient. A CRM system can help companies understand what customers want and need so they can improve their products and services. Lastly, a CRM system tracks customer interactions. It also helps companies analyze data to identify trends that may affect sales or revenue.

SUPPLY CHAIN MANAGEMENT

There are several ways and perspective through which supply chain and supply chain management can be looked at. Each new way explores different aspect of supply chain and its importance in business success. Supply chain usually perceived as a linear model in which flow starts with raw material, converting into components, to semi-completed products, to the final product and to delivery and consumption.



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SUPPLY CHAIN MANAGEMENT PRACTICES

Supply chain practices are actions made by an organization to create an effective supply chain management system. For a long time, academics have used a variety of approaches to describe supply chain management practices (SCMP). Materials flow, information flow, and postponement strategy are examples of supply chain management techniques, as are supply chain integration, information exchange, supply chain characteristics, customer service management, closeness to other supply chains, and just-in-time production.

a) Information sharing:

Access to confidential information is what is meant by "information sharing," which enables business partners to track the status of orders as they move through various supply chain procedures. Sharing information entails finding and disseminating timely relevant information for planning and controlling supply chain operations.

The parties' relationships and social ties are strengthened as a result of the integrated process's ability to share information between them. Additionally, one of the key elements of supply chain collaboration is information exchange. When an organization gives its supply chain partners access to vital information and planning, which enables the partners to perform better and ensure the product is well-designed and of higher quality, which increases customer satisfaction, the partners sense a better relationship with the organization.

b) Information Technology:

By utilizing information technology in supply chain management, businesses can improve their performance in the highly competitive global market. Information technology is important to corporate sustainability. Information technology has an impact on how organizations collaborate with one another and enables them to monitor market demands, demand variations, and resource allocation accordingly.

Information technology interacts both internally within the organization and externally with consumers and suppliers, rather than functioning in a vacuum. Mariotti also found that utilizing

information technology between a company and its supply chain partners enhances communication, lowers risk, and creates efficiency in the exchange of data and information. In other words, a company that uses information technology effectively will guarantee a higher degree of client pleasure.

c) Postponement:

One or more supply chain activities, such as manufacturing, sourcing, and delivery, are being postponed until a later stage in the chain. The goal is for businesses to create a flexible and accommodating supply chain that can accommodate changing client demands through factors including product creation, product differentiation, and demand functions.

As a result, postponement enables businesses to effectively adapt to customer demand and market variations. Overall, deferral may be useful in certain situations, including those involving products with high levels of specialization and variety, low rates of delivery, and significant market uncertainty. As a result, businesses can cut their supply chain expenses. According to Wallin, delay enables an organization to respond to changing client demands and fulfill changing customer needs, perhaps leading to an improvement in customer satisfaction.

d) Customer Satisfaction:

Customer satisfaction is described as the ability to make customers happy by paying attention to them and fulfilling their needs. Meeting the needs of the client is a crucial component of any business since doing so results in their satisfaction, which in turn fosters loyalty and a long-term strategic partnership with the manufacturer.

When a company operates primarily on the needs of the client rather than the needs of the organization, customer satisfaction is guaranteed. Furthermore, Andreessen noted that an organization's capacity to meet customers' expectations has a significant impact on customer satisfaction. Therefore, it tends to boost consumer satisfaction and loyalty when services or products meet their perceived expectations.

NEED OF THE STUDY

✓ This study focuses about the supply chain process and its relationship with the customers in the company to optimize the movement of goods and services and to develop the relationship between the organization and the customers which helps the business to identify the best ways to improve customer satisfaction, retention, and loyalty.



✓ It also examines to track customer interactions, so it is easy for business to understand what customers want and need.

✓ This study also focuses on the customer satisfaction towards the organization and this information can improve the processes and ensure that orders are fulfilled quickly and accurately.

SIGNIFICANCE OF THE STUDY

✓ This research shows that the relationship between the supply chain process and customers is one of the greatest attribute to any company; this study has been done to help the business to better understand the challenges faced in supply chain process and customer relationship management sections.

✓ This Research will allow sales and marketing teams to target their efforts toward people who are most likely to buy their products and services and also helps companies to improve their sales and revenue by making the supply chain more efficient.

✓ It helps business reach people who are right for their products and services and also allow businesses to target their marketing efforts and make them more efficient.

STATEMENT OF PROBLEM

✓ The research in general refers to any problem that has been arisen and is difficult to solve in which the researcher experiences the context of finding a solution for the problem that has been arisen.

✓ In this sense, customer satisfaction towards the organization's products and services plays an important role in any logistics business in this regard.

✓ The research is carried out so that we can study about the challenges faced in supply chain process and relationship with customers sections of wrkpod. The priorities must be defined in accordance with certain aspects.

II. REVIEW OF LITERATURE

Jung Sik Jeong and Paul Hong (2007) despite a substantial amount of research on the value of customer orientation in the management and marketing literature, the effects of customer orientation and interactive system infrastructure across business networks remain little understood. In order to link client orientation, interactive system infrastructure, value chain practises, and network performance outcomes, this article will provide a paradigm.

N Azad and F Ahmadi (2015) explains customer relationship management (CRM) systems track and measure marketing campaigns over different networks. There are literally many studies associated with the implementation of CRM in different industries. This paper presents an empirical investigation to determine effective factors influencing on the success of CRM implementation.

Radwan el Shoghari and Kassem Abdallah (2016) identify the supply chain management and its impact on customer service, as well as indicating the role of supply chain management in improving sales and identifying the views of managers working in the corporate about supply chain management.

Muhammad Alshurideh and Nizar M Alsharari (2019) aims to explain the relationship between supply chain integration (SCI) and customer relationship management (CRM) in the Emirates airline (EA) logistics. The paper adopts qualitative research methodology and presents an interpretive case study approach.

Benjamin T Hazen and Daniel Pellathy (2021) proves circular economy (CE) initiatives are taking hold across both developed and developing nations. Central to these initiatives is the reconfiguration of core supply chain management (SCM) processes that underlie current production and consumption patterns.

RESEARCH METHODOLOGY

Research methodology is a systematically solve the research problems. It includes the overall research design, the sampling procedure, data collection method and analysis procedure.

RESEARCH DESIGN

The research is done through a questionnaire (Google form – online mode) to obtain the required data from the respondents. The data collected through questionnaire were transferred to the table from which various table are prepared for future analyze. The present study is descriptive research design it includes survey of different kinds its major purpose is description of the state of affairs exists all present.

SOURCES OF DATA

Both primary and secondary data is used for the study.

Primary data

The firsthand information, which is being collected through online mode – Google form by the researcher, is called primary data. In this study, the



primary data was collected through structured questionnaire.

Secondary data

Secondary were collected from the books, leading journals, newspapers and magazines, textbooks, related to study and from the internet sources have been referred for this purpose.

Sample size and population

The intended population of this research study is based on the employee working with wrkpod. Total population of employee in wrkpod is 180. In the study, samples of 120 respondents are selected from the wrkpod using convenient sampling method.

Period of the study

The field survey has been carried out during the period from February 2023 to March 2023 to collect primary data.

SAMPLING METHOD

ANALYSIS AND INTERPRETATION

1. PERCENTAGE ANALYSIS

DEMOGRAPHIC PROFILE		NO. OF RESPONDENTS	PERCENTAGE
gender	Female	46	38.4
	male	74	61.6
age	30 and below	19	15.8
	31 to 40	43	35.8
	41 to 50	39	32.5
	51 to 55	13	10.9
	55 and above	6	5
Educational level	HSC and below	10	8.3
	Diploma or equivalent	44	36.6
	Bachelor's degree	46	38.4
	Master's degree and above	20	16.7
Work experience	Below 3	15	12.5
	3 to 5	41	34.2
	6 to 8	35	29.2
	9 and above	29	24.1
Accurate information sharing	Strongly agree	16	13.3
	Agree	45	37.5
	Neutral	40	33.4
	Disagree	16	13.3
	Strongly disagree	3	2.5
Face to face communication with supply chain partners	Strongly agree	23	19.2
	Agree	31	25.8
	Neutral	38	31.7

It refers to the technique or procedure to the researcher would adopt in selecting some sampling unit from which inference about the population are drawn. The sampling method adopted for this study is well-structured Questionnaire.

DATA ANALYSIS

The data collected from the primary source were arranged sequentially and tabulated in the systematic order in the master table.

Tools Used For Analysis

Data collected through questionnaire. For analysis and interpretation of the data simple statistical tools like Percentage Analysis, Weighted Average Ranking Method and Chi-Square Analysis was used.

- > Percentage Analysis
- > Chi-square Analysis



	Disagree	13	10.8
	Strongly disagree	15	12.5
IT system allows inter organization coordination	Strongly agree	7	5.8
	Agree	49	40.8
	Neutral	48	40
	Disagree	10	8.4
	Strongly disagree	6	5
Customization can be carried out later	Strongly agree	19	15.8
	Agree	31	25.8
	Neutral	34	28.4
	Disagree	24	20
	Strongly disagree	12	10
Positive feedback of customers about our products	Excellent	18	15
	Very good	40	33.3
	Good	31	25.8
	Average	16	13.4
	poor	15	12.5
Organization interacts with the customer	Excellent	16	13.3
	Very good	36	30
	Good	35	29.2
	Average	15	12.5
	poor	18	15

INTERPRETATION

The respondents in this survey, 61.6% are male, 35.8% are between 31 to 40 age, 38.4% are bachelor's degree, 34.2% had 3 to 5 years of work experience, 37.5% agree that the information sharing is accurate, 31.7% neutrally agree that there is face to face communication with supply chain partners, 40.8% agree that the IT system allows inter organization coordination, 28.4% neutrally agree that the customization can be carried out later, 30% respond very good that the organization interacts with the customer.

CHI SQUARE TEST

Age of the Respondents and Face To Face Communication with Supply Chain Partners

Null hypothesis (Ho):

There is no significant relationship between age of the respondents and face to face communication with supply chain partners.

Alternative Hypothesis (H1):

There is a significant relationship between age of the respondents and face to face communication with supply chain partners.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.817 ^a	16	.398
Likelihood Ratio	15.059	16	.520
N of Valid Cases	120		

a. 17 cells (68.0%) have expected count less than 5. The minimum expected count is .65



INTERPRETATION

As per the above table, it is inferred that the P value is 0.398; it is significant to 5% (0.05) significant level. The minimum expected count is 0.65. Thus null hypothesis is accepted and it is found that there is no significant relationship between age of the respondents and face to face communication with supply chain partners.

Educational Level of the Respondents and IT System in Company Allows the Organization to Achieve Inter Organization Coordination

Null hypothesis (Ho):

There is no significant relationship between the educational level of the respondents and IT system in company allows the organization to achieve inter organization coordination.

Alternative Hypothesis (H1):

There is a significant relationship between the educational level of the respondents and IT system in company allows the organization to achieve inter organization coordination.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.989 ^a	12	.786
Likelihood Ratio	7.786	12	.802
N of Valid Cases	120		
a. 14 cells (70.0%) have expected count less than 5. The minimum expected count is .50.			

INTERPRETATION

As per the above table, it is inferred that the P value is 0.786; it is significant to 5% (0.05) significant level. The minimum expected count is 0.50. Thus null hypothesis is accepted and it is found that there is no significant relationship between the educational level of the respondents and IT system in company allows the organization to achieve inter organization coordination.

Gender of the Respondents and Goods Are Stored At Appropriate Distribution Points Close To the Customers in the Supply Chain

Null hypothesis (Ho):

There is no significant relationship between the gender of the respondents and goods are stored at appropriate distribution points close to the customers in the supply chain.

Alternative Hypothesis (H1):

There is a significant relationship between the gender of the respondents and goods are stored at appropriate distribution points close to the customers in the supply chain.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.634 ^a	4	.621
Likelihood Ratio	2.665	4	.615
N of Valid Cases	120		
a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.60.			

INTERPRETATION

As per the above table, it is inferred that the P value is 0.621; it is significant to 5% (0.05) significant level. The minimum expected count is 4.60. Thus null

hypothesis is accepted and it is found that there is no significant relationship between the gender of the respondents and goods are stored at appropriate



distribution points close to the customers in the supply chain.

III. FINDINGS

The respondents in this survey, 61.6% are male, 35.8% are between 31 to 40 age, 38.4% are bachelor's degree, 34.2% had 3 to 5 years of work experience, 37.5% agree that the information sharing is accurate, 31.7% neutrally agree that there is face to face communication with supply chain partners, 40.8% agree that the IT system allows inter organization coordination, 28.4% neutrally agree that the customization can be carried out later, 30% respond very good that the organization interacts with the customer.

It is inferred that the P value is 0.398; it is significant to 5% (0.05) significant level. The minimum expected count is 0.65. Thus null hypothesis is accepted and it is found that there is no significant relationship between age of the respondents and face to face communication with supply chain partners

It is inferred that the P value is 0.786; it is significant to 5% (0.05) significant level. The minimum expected count is 0.50. Thus null hypothesis is accepted and it is found that there is no significant relationship between the educational level of the respondents and IT system in company allows the organization to achieve inter organization coordination.

It is inferred that the P value is 0.621; it is significant to 5% (0.05) significant level. The minimum expected count is 4.60. Thus null hypothesis is accepted and it is found that there is no significant relationship between the gender of the respondents and goods are stored at appropriate distribution points close to the customers in the supply chain.

IV. SUGGESTIONS

The organization has to improve the information exchange between them and the supply chain partner with timely, accuracy, adequately and in a complete manner. So that the relationships between the supply chain partner and the organization develop and also it helps the organization to satisfy the customer. The organization wants more frequent face to face communication with the supply chain partners to build a relationship with the customers.

The information technology system in the company has to increase direct computer to computer linkages with main suppliers and also reduce the response time across supply chain and its partners.

Information Technology system needs more effectiveness to integrate the whole supply chain system including supply chain partners.

That organization has to increase the final product assembly activities before the customer orders have actually been received. The organization needs more interactions with the customers to set the reliability, responsiveness and standards.

V. CONCLUSION

In every organization, Customer relationship management is an essential part of supply chain management because it creates value for the supply chain. By improving customer satisfaction, retention, and loyalty, increases profit margins. CRM also helps companies improve their sales and revenue by making the supply chain more efficient. The project titled "a study on supply chain process and its relationship with customers" helps in studying the factors which influences the supply chain process and their relationship with the customer.

Research studied on the relationship between supply chain management practices and the customer satisfaction. Information sharing, information technology and postponement are the dimensions of supply chain management practices that were used to investigate whether there is customer satisfaction. Hence from the above research, it has proven that when an organization shares relevant and important information among supply chain partners, it can results in the satisfaction of the customer.

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