

Project on
**“Benefits of IT Implementation in SCM for Real
Estate Sector”.**

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CERTIFICATE

This is to certify that Rahul Verma 2K22/EMBA/18 has submitted the project report titled “Benefits of IT Implementation in SCM for Real Estate Sector” in partial fulfillment of the requirements for the award of the degree of Master of Business Administration (MBA) from Delhi School of Management, Delhi Technological University, New Delhi during the academic year 2023-24.

Signature of Guide

Signature of Head (DSM)

Seal of Head

Place: New Delhi

Date: 31/05/24

DECLARATION

I, Rahul Verma, student of EMBA 2022-23 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi – 42, hereby declare that the dissertation report “Benefits of IT Implementation in SCM for Real Estate Sector” submitted in partial fulfillment of Degree of Master of Business Administration is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.

This report is not being submitted to any other University, for award of any other Degree, Diploma or Fellowship.

Place: New Delhi

Date: 31/05/2024

Rahul Verma

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ABSTRACT

Information Technology (IT) already developed much in India and but in some place, we are failed to use it efficiently. As IT already developed in India and Real Estate Sector is developing to meet the demand new homes for Indians. To make home/flat deliveries/possession more efficient and effective which can be achieved with blend of Information Technology (IT) Integration in Supply Chain Management (SCM) in Real Estate industry (REI). As a result, there are many IT systems available for use in Supply Chain. However, the Managers (REI) in SCM have not proper skills to finalize the appropriate information technology tool for their system. This issue can undermine the benefits of the concept of supply chain management (SCM) in partnership with IT. Therefore, the purpose of this study was to identify the key IT systems used in SCM specially for Real Estate industry (REI). We analyzed the impact of IT investment in SCM in the Real Estate sector using six different organizational approaches: incorporation, storage costs, carrying costs, carrying speeds, competitiveness, and corporate communications. The results show that, as well as Real Estate Developer flexibility, integration has the greatest impact on IT implementations, followed by competition, transportation costs, and speed. It seems that now a day SCM has become a very significant management tool to help improve the performance of business in that in the Real Estate industry (REI). Information and communication technology is extensively used in supply chains, but lacks logical verification of how IT form their value.

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Executive Summary

Real estate sector is one of the most dynamic and significant sector/markets in India, Covering Delhi and its neighboring cities such as Gurgaon, Noida, Ghaziabad, Faridabad and other parts of India like Pune, Bangalore etc, the region has experienced substantial growth due to rapid urbanization, economic development, and infrastructure advancements. Real Estate Developers need SCM solution with blend of IT which can cater their need like Managing their Assets, Forecasting & Planning, Documentation & File Management and Sourcing & procurement etc. Real Estate need to use different SCM solutions to manage and coordinate their equipment, land and building. Fixed assets like properties and other investments can be tracked by correct use of SCM with IT. By implementing correct IT Solution with SCM it will help Real Estate Developers to efficiently categorize properties like commercial, residential, industrial, agricultural, sales, rental properties, etc. The Real Estate Developer/Broker requires proper analysis of supply & demand for properties by which he can create their listing accordingly. The documents related to the properties/assets can be managed using the SCM Software. All property listings have documents for title or lease deeds, associated tenants, and ownership or investor data on the system. It will reduce the time of creating agreements and managing leases, especially for large properties. Information Technology and its use for Supply chain in any Real Estate Sector has provide a competitive benefit for many companies in the Real Estate Industry (REI). This study aim on the use and impact of IT system tools or Supply Chain Management Software (SCMS) like ERP, logistics, procurement and warehouse management (WCS) and hardware like GPS and RFID Tages. It also emphasizes the contribution of IT in supply chain for Real Estate industry. This helps restructure all scattered sales to get advanced service levels, lower logistic, procurement, SCM costs. The study also wants to enhance knowledge of the importance and challenges of IT systems in supply chain situations.

On a cost-based approach combined with cost-effectiveness, we expand intangible model that incorporate 3 Information Technology tools (backend incorporation, management skills, and supplier support) to enhance performance development. The model differs from previous studies by suggesting a competitive measure of performance in resource performance relationships. The technical service alone, however, has no answer in creating the value of IT.

In fact, management skills, which allow for adaptation of supply chain processes and company strategies to meet IT applications, are shown to play a very strong role in creating value for IT.

In addition, the incorporation of backend and management skills is found to be very significant in highly competitive environments in Real Estate industry. While resources such as assets have a declining value under competition, integration and management resources become even more powerful. All in all, this paper provides insight into key drivers of IT-enabled supply chains.

CHAPTER 1 INTRODUCTION

1.1 WHAT NEED FOR THIS STUDY

In the era of highly competitive market, Real Estate Developers, especially for small or mid segment developers in tier II & tier III cities need to provide the best services to their customers at a affordable price. The use of IT tools is prominent in the SCM to assets of Real Estate Developers to reduce their operating costs. Information technology has become an important factor in Streamlining the supply chain operations. Despite the IT applications and the many Advantages, they offer, regional developers are falling behind in Integrating IT tools to guide and manage their Inventory channels. Especially in tier II & tier III cities, supply chain management is interrelated to the beginning of global economic integration, opening the local real estate economy to the well stablish developers.

However, the advantage and use of Supply chain in Real Estate Sector is not recognized by the small developers which is leading to them legging. We can say that in the Real Estate sector use of IT is not consistently. This may surface questions. Do IT tools provide opportunities and advantages to small real estate developers?

Therefore, we need to think about the impact of IT on supply chain management and how IT is employed. In communication to support these developers in enhancing productivity, effectiveness and developing aggressive supply chains. It also gives understanding how ICT tools can help you operate your supply chain..

1.2 Statement of Problem:

It is used to address supply chain information needs by developers and customer requirements have boosted. Real Estate developers are reassessing how business is run due to new technological methods and increasing market competitiveness. Therefore, Developers are reassessing their supply chains to be more efficient and meet new

Obstacles from customer viewpoint. This is done to continue Performance by more customer focus and to safe guard against competition. Sinking costs is a huge benefit and developers are looking for different ways to satisfy the customer expectations with a faster and more cost effective, time bound deliveries.

Information Technology has a substantial impact on the SCM. It is an essential part of expense reduction and a main source of SCM and procurement. Many small developers who construct 1-2 projects in small regions or small cities are incurring high costs. The main reasons with these developers are the amount of time spent looking for records, inventory loss, inadequate data backups and no records storage SOP. This disrupts the supply chain operation of the organization.

As a result, developers can lookout the different ways to cut down Supply chain and logistic costs, increase delivery time, and merge other administrative services.

1.3 OBJECTIVES OF THE STUDY

The objective of this study is to determine the significance of IT on SCM and logistics management in the Real Estate Industry. To achieve the objectives of this study, the following research objectives

- Importance and role of IT in Real Estate Industry.
- To find what factors of supply chain affected by implementation of IT in Real Estate Industry.
- To find the main Participation and advantage of IT in SCM for Real Estate Industry.
- To Suggest techniques in implementing IT tools to improve SCM for small developers.

1.4 SCOPE OF THE STUDY

Information interchange benefits as an important means of sustainability for a real estate developer and facilitates SCM incorporation. In today era, with the onset of IT system tools & information distribution has become an crucial opportunity. Furthermore, information sharing in the procurement/SCM has been very important in establishing partnerships and long-term sustainability, leading to the robust real estate sector. Today,

developers lack information sharing, so linking actions within the organization is inefficient. The motive of this study is to Evaluate and verify the relevance of data sharing in SCM for order to enhance the productivity of the developer in the Real Estate Sector.

Another aim of this study is to give a broad synopsis of IT system in the SCM and logistics operations. The greatest accomplishment in SCM has been the capability to minimize the supply chain and logistic costs. This approach comes with customer satisfaction, efficacy and supportability.

SCM in real estate involves managing the flow of materials, information, and finances as they move from suppliers to manufacturers to wholesalers to retailers and, finally, to consumers. Effective SCM ensures that materials and services are available at the right place and time, which is critical for timely project completion and cost management.

CHAPTER 2 REVIEW OF LITERATURE

This section of the study includes documentary materials and offers an overview of Information Technology tools and applications in Supply Chain Management (SCM) and logistics. It explains SCM operations and outlines the benefits of Information Technology in SCM. Additionally, the study presents lessons learned from IT research in SCM. The aim of this literature review is to help understand the impact of IT on supply chain and logistics.

Supply Chain Management

Supply chain management involves overseeing the journey of goods from raw materials to finished products and managing the entire process from order placement to delivery to the customer. Effective management of the supply chain enables organizations to reduce the final product cost. This can only be achieved through efficient monitoring and control of the supply chain system, including inventory management, warehouse monitoring, transportation, and logistics control. Supply chain management encompasses various domains such as transportation, procurement, information technology, and logistics. It is a crucial component for all organizations, regardless of size. Flexible management of SCM operations enhances customer value and achieves sustainable competitive advantages. Supply chain activities include product development, inventory planning, procurement, production, and the information systems required to coordinate these activities. SCM focuses on managing information-driven operations, from data acquisition through production and product development to distribution, with the goal of increasing customer value.

Information Technology Functions

Information Technology (IT) in an organization enhances business efficiency by analyzing fundamental business sales, gathering and providing essential information for administrative decisions, reporting trends and changes in key business activities, and maintaining communication channels. This level of performance is also anticipated in the supply chain. IT connectors have the capability to integrate all supply chain processes into a rapid, cohesive, and adaptable system, enabling the production of large quantities of customized products at a low cost.

Use of IT in SCM and Logistics:

Information Technology (IT) is essential in Supply Chain Management (SCM). IT systems collect data from diverse locations and organize it into a structured format to enhance the performance of

SCM and logistics. Small Real Estate Developers can leverage IT to manage supply chain processes, reduce logistics costs, and improve overall efficiency. Effective information systems are crucial for organizations to achieve supply chain efficiency and effectiveness. Administrators should use IT tools and methods to assess the structure, environment, and SCM processes, enabling them to evaluate costs and performance accurately.

Store Management Systems:

Warehouse management systems carry out activities such as planning instructions and operation on daily basis of the warehouse. This plan includes activities like material receipt, allotment of storage areas, refilling of material of expropriated areas, production list selection, order selection, and delivery of goods. These systems also track inventory in stock.

(ERP) Enterprise Resource Planning Systems

Enterprise Resource Planning (ERP) systems are a key IT application used by organizations. ERP represents a modern business model that relies on a computer-assisted information management system. By utilizing advanced information technology, ERP systems perform the functions of a supply chain network. They successfully integrate functions such as asset planning, cash flow management, and information flow to achieve comprehensive distribution and resource sharing objectives. (Betty Wang (University of Nebraska - Lincoln, 2001)

Radio Frequency Identification (RFID)

RFID is an IT technology utilized in manufacturing, transportation, supply chain management, and asset management. It is used for the automatic detection of objects. RFID systems employ radio frequency tags to transmit embedded data, with each tag containing a unique serial number for product identification. The data transmitted by RFID can be read automatically.

Point of Sale Tracking System

Point-of-sale systems are another important function used in logistics and SCM. These systems are Information Technology tools that connect a scanning system with a vendor management system. Typically, goods are marked with a barcode and scanned by an optical reader.

Benefits of IT to Supply chain management.

Effective Information Management

Successful information management can help guarantee that a company meets the planning needs of its customers. Organization need to prioritize planning items such as timely delivery, stock

expiration rates, order status, shipping tracking and acceleration, order convenience, complete ordering, customer retrieval creation, and retrieval opportunities and product changes.

Helps in Decisions Support Systems

Organization requirements efficient information from their clients, information from their suppliers. Areas of Information technology that include decision support systems / information technology and delivery management functions did not provide the information required by management to make strategic decisions.

Digital Order Processing System

The order processing system is the main data processing system in which all the orders from the customers and order to the suppliers processed. Customer order provides a communication message to stop the transportation process going on. Cost and efficiency of all communications can result in loss of customers or excess shipping, cost of goods and storage facilities and possible production inefficiencies resulting from frequent changes in the production line. Processing information and information systems form the basis of transport systems and management information companies.

Challenges for implementation of IT in supply chain and logistics.

Lack of knowledge about IT benefits:

The biggest challenge for adopting IT supply chain IT tools in the Real Estate industry is the lack of information about the benefits of IT in the supply chain. This adoption requires fundraising and this will increase the organization's costs because a particular organization will not be ready to apply the new technology to their organization.

Information overload:

Overloaded information is a major challenge during the implementation of IT in any organization because they need to collect and process large amounts of customer data, and then convert it into useful information for a customer-focused industry. (Elango, 2018)

Risk in adopting correct IT tools :

In a situation where managers want to apply information technology to their organization, finalizing appropriate and accurate IT tools that can be helpful in planning their future growth will

be a strategic decision. From this we can analyze which tool we can choose, what the big cost and operating costs will be and much more. (Zahra Lotfi M. M., 2013)

Internal Resistance to Changing:

Any company that has made a policy of using information technology tools in supply chain management strategy recognizes that one of the major challenges it faces is the important transformation of the internal culture needed to make the supply chain reform a success. (Gaba)

Change in Existing norms and policies:

Due to the implementation of the information tool in the organization need to change the thinking process of employees and managers. Changes in the role and commitment of staff in implementing IT solutions that have transformed organizational structure and processes and policies. (Elango, 2018)

Financial Cost:

High cost of online services, equipment purchase costs, maintenance costs and security costs. A good amount of investment and training costs are required for the adoption and implementation of new IT technologies that pose challenges to companies using the IT tool. (Reekum, March 2008)

Data integration & Data Quality:

One of the main benefits of IT is to provide a single accurate source of enterprise data. Data transfer is an important step in IT solutions. This includes transferring data from many older systems to IT tools. However, you need to get all the data first. This can be harder than expected. Information is scattered throughout the organization and can be buried in accounting systems, departmental applications, spreadsheets, and even paper.

Ensuring data quality can be a major project in itself, which involves data validation, duplication and adding non-existent values before transferring data to an IT tool. (Temjanovski, January 2014)

Continuous improvement:

Using an information technology tool is not an effort that is made once the upgraded IT system is alive. The resolution must go on with emerge to support organization and technology requirement. The team needs to continue to manage the System after successful installation, troubleshooting and support new needs as they arise.(Temjanovski, January 2014)

Management decision:

For business owners and leaders assigned the task of driving a digital strategy, their risk perception has a greater impact on success than anything else. Deciding to install digital tools or infrastructure may be difficult because of the anonymity it shows, but escaping the process can be a very risky approach. By understanding the psychological barriers to digital decision-making, industry stakeholders can and should promote the adoption of technology in small and medium enterprises by doing so, strengthening the backbone of the global economy. (Dineva, 2022)

CHAPTER 3 RESEARCH METHODOLOGY

3.1 METHODOLOGY ADOPTED

Research is concluded by leveraging each from primary and secondary sources. Following are the methods of data collected:

3.2 Primary sources

Data was collected using a structured questionnaire.

Information was collected by interacting with the employees and having an exploration with the departmental managers of the different organizations in the Real Estate sector.

3.3 Secondary sources:

All published data available on the subject matter was consulted, i.e. the newspapers, journals, company websites, company records, company brochures etc.

3.4 Survey method

The survey uses the Likert scale technique, which is commonly used for employee's questioner.

I use 5 levels Likert scale for IT impact on supply chain management in Real Estate Industry. Distributed questioner having 17 questions among the employees and requested for the response.

The format used in five-level Likert use for this survey is:

- i : Highly satisfy
- ii : Satisfy
- iii : Neutral
- iv : Dissatisfy
- v : Highly Dissatisfy

3.5 Participant size

Distributed questioner among all the employees working in different departments of Real Estate organization.

3.6 Data collection

A structured survey approach was conducted for this survey with the help of employees working in real estate sector. The survey which I conducted is included all the departments like procurement, storage and warehouse, logistic and transportation Accounts and Finance. From both the service and manufacturing industry. A simple questionnaire was used for conducting this survey and circulated among them for their valuable feedback. I Divided all the questions into two parts:

A: General Information (Contains 6 Questions)

B: Specific questions related to impact of IT in supply chain (Contains 17 Questions)

Total questions were distributed among the targeted employees out of this 44 participants responded. The respond from all of them was much excellent, accordingly, the questions were circulated to the target group to respond in different organization in Real Estate sector.

Participants were fully informed that participating in the study was voluntary, respecting their confidentiality and anonymity, that the study results would not damage their integrity, and in the end, the study would be conducted independently and impartially for learning purposes.

Research paper studies for Preparing questioner.

International Journal of Engineering Research and Technology. ISSN 0974-3154 Volume 7, Number 1 (2014), pp. 41-48 “Impact of Information Technology on Supply Chain of Indian Industries” by Vikas Kumar

The impact of IT in SCM within an organization by Kikaro Nyagawani.

A Survey Based Analysis of IT Adoption and 3PLs’ Performance. Supply Chain Management: An International Journal. Vol. 17, Issue 2, February by Pietro

Evangelista(University of Naples Federico), Riccardo Mogre (University of Hull),
Alessandro Perego (Polytechnic Institute of Milan)

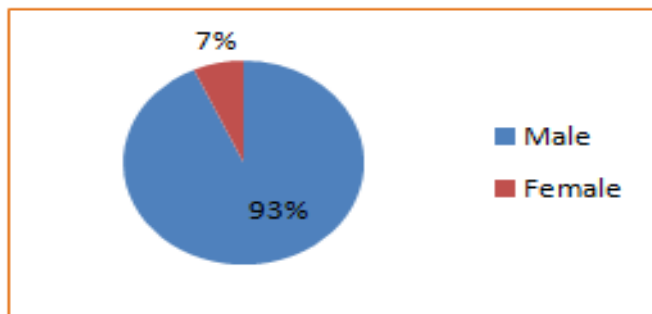
CHAPTER 4 DATA ANALYSIS

Part: General Questions

Gender

TABLE 1

Particulars	No. of Participant	Percentage
Male	55	93%
Female	4	7%

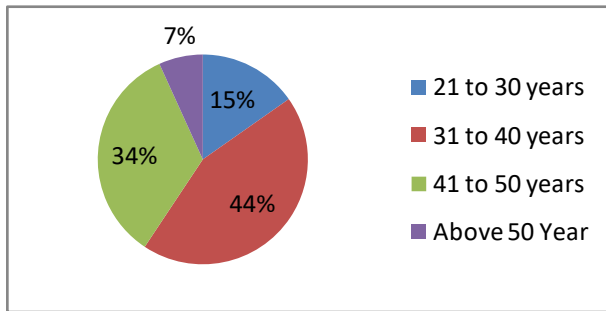


ANALYSIS: From the above diagram shows in the respondent the larger part of male participants i.e. 93%.

Age group of Employees

TABLE 2

Particulars	No. of Participant	Percentage
21 to 30 years	9	15%
31 to 40 years	26	44%
41 to 50 years	20	34%
Above 50 Year	4	7%

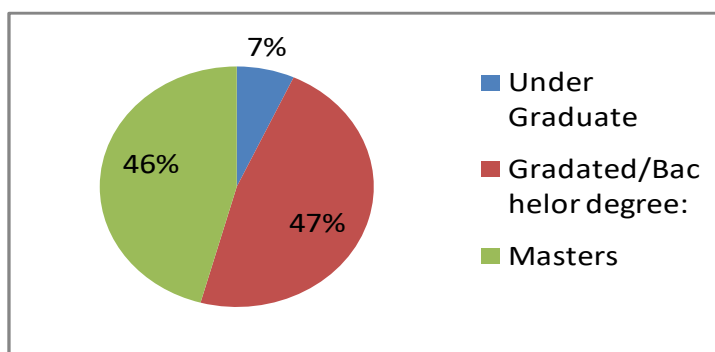


ANALYSIS: As per the above pie chart it shows the maximum number of participant are of age between 31-40 years i.e. 44%.

Education:

TABLE 3

Particulars	No. of Participant	Percentage
Under Graduate	4	7%
Gradated/Bachelor degree	28	47%
Masters	27	46%

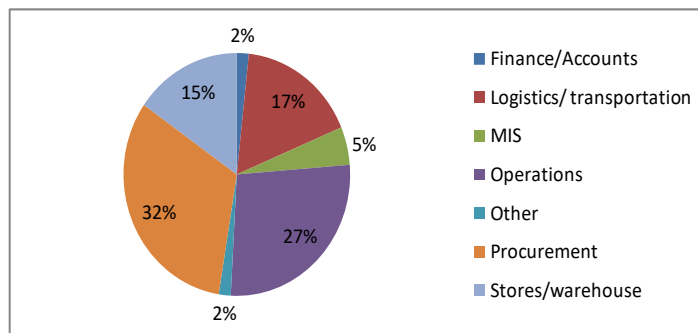


ANALYSIS: As per the above pie chart it shows the maximum number of participant graduated i.e. 47%.

Department

TABLE 4

Particulars	No. of Participant	Percentage
Finance/Accounts	1	2%
Logistics/ transportation	10	17%
MIS	3	5%
Operations	16	27%
Other	1	2%
Procurement	19	32%
Stores/warehouse	9	15%

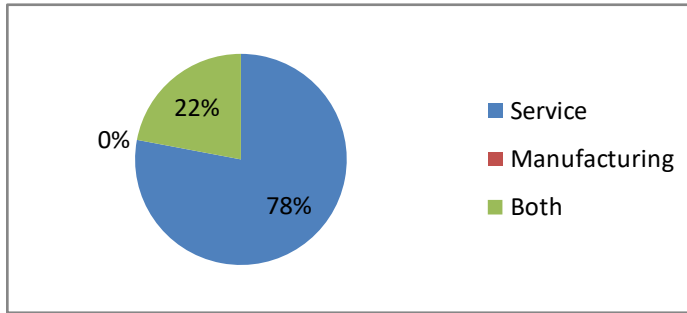


ANALYSIS: As per the above pie chart it shows the maximum number of participant are from Procurement and operations i.e. 32% each.

Industry

TABLE 5

Particulars	No. of Participant	Percentage
Service	46	78%
Manufacturing	0	0%
Both	13	22%



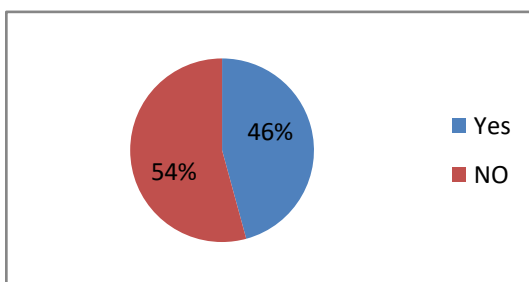
ANALYSIS: As per the above pie chart it shows the 78% of participants are from services industry.

Part: Specific Questions

Are your organization use any IT tool for SCM

TABLE-7

Particulars	No. of Participant	Percentage
Yes	27	46%
NO	32	54%



ANALYSIS: 46% are confirm that their organization is using IT tools for managing their supply chain and logistics.

For below all the responses is divided in two parts:

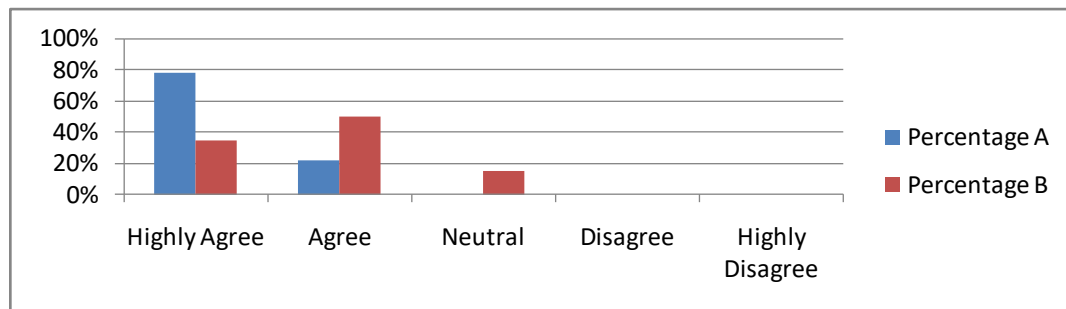
A:Working in the organization where IT tool using to manage SCM

B:Working in the organization where IT tool not using in SCM

Business gets profit from the applying IT tools in the SCM and logistics management.

TABLE -8

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	21	78%	11	34%
Agree	6	22%	16	50%
Neutral	0	0%	5	16%
Disagree	0	0%	0	0%
Highly Disagree	0	0%	0	0%

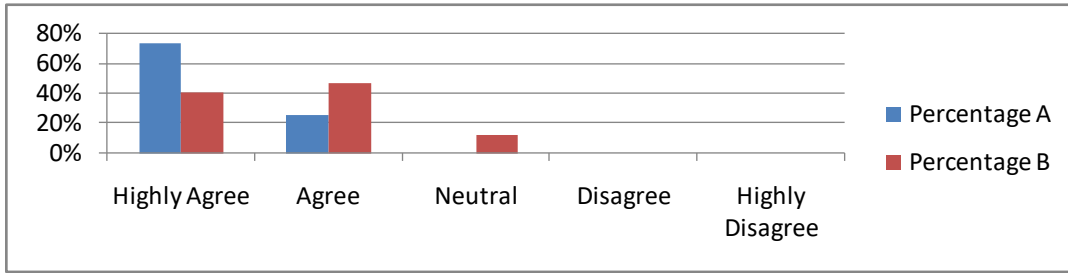


ANALYSIS: As per the above graph participant from Category A is maximum responses are highly agreeing on that IT in supply chain will get benefit.

IT system support to organization for fast and quick preparation of order processing to meet the customer expectation as per timeline.

TABLE 9

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	20	74%	13	41%
Agree	7	26%	15	47%
Neutral	0	0%	4	13%
Disagree	0	0%	0	0%
Highly Disagree	0	0%	0	0%

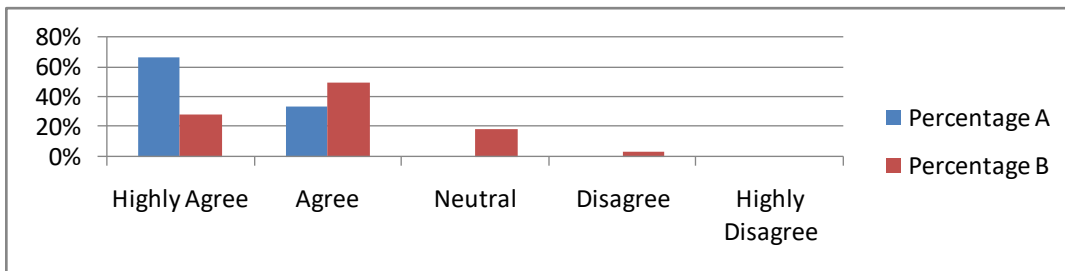


ANALYSIS: 74% participants highly agreed that IT system make order processing in faster way for Cat.-A and 41% for Cat.-B.

System assists efficiency and effectiveness in tasks

TABLE 10

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	18	67%	9	28%
Agree	9	33%	16	50%
Neutral	0	0%	6	19%
Disagree	0	0%	1	3%
Highly Disagree	0	0%	0	0%

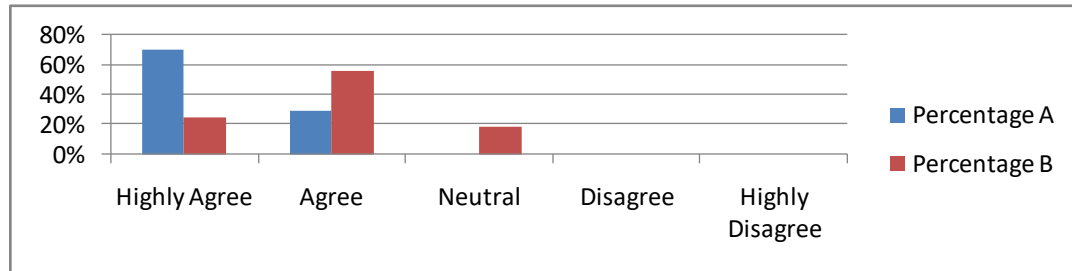


ANALYSIS: It is clear from this analysis that 67% accept IT will increase system efficiency and effectiveness on highly agree fro Cat.-A and 28% for Cat-B.

Information Technology in supply chain has been reduce the Serving time and cost

TABLE 11

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	19	70%	8	25%
Agree	8	30%	18	56%
Neutral	0	0%	6	19%
Disagree	0	0%	0	0%
Highly Disagree	0	0%	0	0%

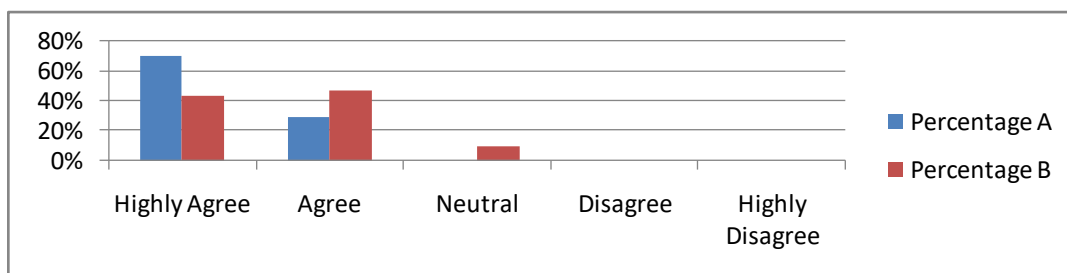


ANALYSIS: 70% participant accept that IT in supply chain reduce the long term time and cost for Cat-A and 25% for Cat-B as highly agree.

Information systems improve the efficiency of operation

TABLE 12

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	19	70%	14	44%
Agree	8	30%	15	47%
Neutral	0	0%	3	9%
Disagree	0	0%	0	0%
Highly Disagree	0	0%	0	0%

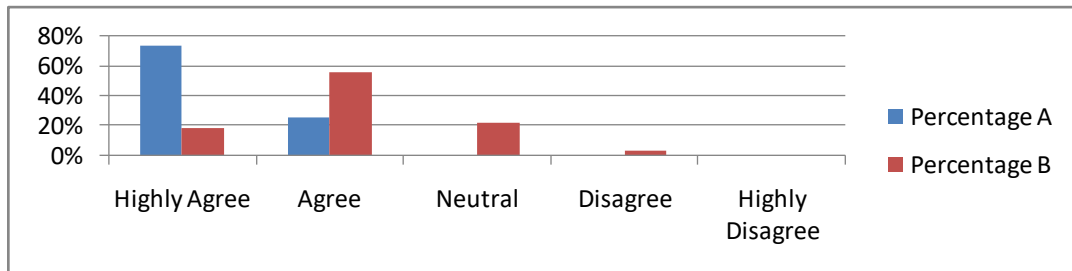


ANALYSIS: 70% participant accept that IT will improve efficiency in SCM in Cat-A and 44% for Cat-B.

Assist efficient and effective management of stock control

TABLE 13

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	20	74%	6	19%
Agree	7	26%	18	56%
Neutral	0	0%	7	22%
Disagree	0	0%	1	3%
Highly Disagree	0	0%	0	0%

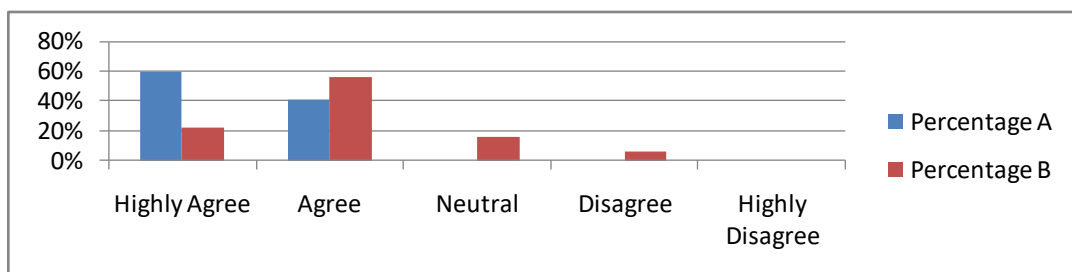


ANALYSIS: 74% participant accept that it help on stock control for Cat-A and 19% for Cat-B.

The presence of IT tools in the organization has prejudiced the synchronization between the company and their partners.

TABLE 14

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	16	59%	7	22%
Agree	11	41%	18	56%
Neutral	0	0%	5	16%
Disagree	0	0%	2	6%
Highly Disagree	0	0%	0	0%

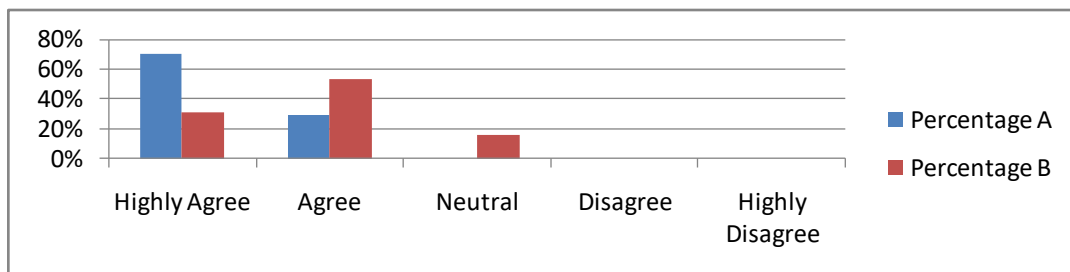


ANALYSIS: 59% accept with highly agree that coordination between supplier and organization improved for Cat-A and 22% for Cat-B.

Training should be provide to the employees for using of IT tools.

TABLE 15

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	19	70%	10	31%
Agree	8	30%	17	53%
Neutral	0	0%	5	16%
Disagree	0	0%	0	0%
Highly Disagree	0	0%	0	0%

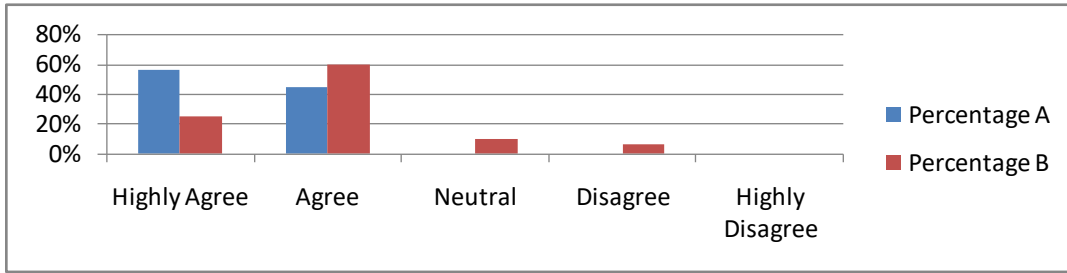


ANALYSIS: 70% participant accept as highly agree on need for training of employee on IT tool in Cat-A and 31% Cat-B.

IT system supports the synchronization proficiently across suppliers and product lines.

TABLE 16

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	15	56%	8	25%
Agree	12	44%	19	59%
Neutral	0	0%	3	9%
Disagree	0	0%	2	6%
Highly Disagree	0	0%	0	0%

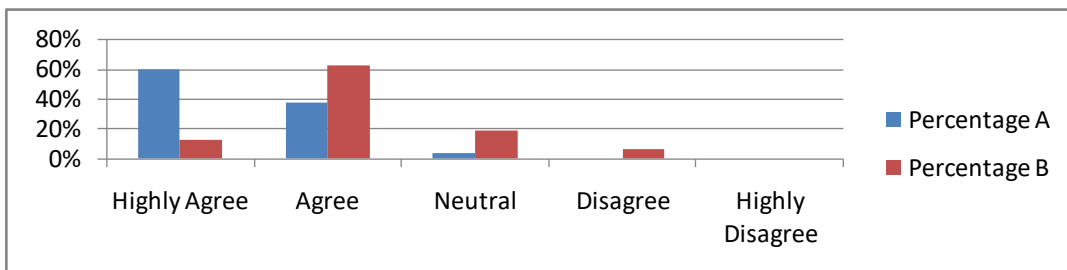


ANALYSIS: 56% participant is gone as highly agree with efficiency across supplier and product line for Cat-A and 25% for Cat-B.

IT system will support the organization to launch new product in industry/market.

TABLE 16

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	16	59%	4	13%
Agree	10	37%	20	63%
Neutral	1	4%	6	19%
Disagree	0	0%	2	6%
Highly Disagree	0	0%	0	0%

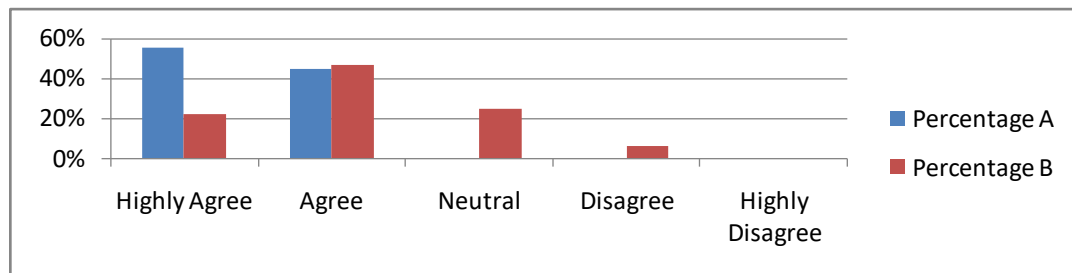


ANALYSIS: 59% participant accept that IT will support the organization to launch new product in industry for Cat-A and 13% for Cat-B.

IT system support in organization's to provide sufficient information to top management accordingly they will take decision to improve the organization performance.

TABLE 17

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	15	56%	7	22%
Agree	12	44%	15	47%
Neutral	0	0%	8	25%
Disagree	0	0%	2	6%
Highly Disagree	0	0%	0	0%

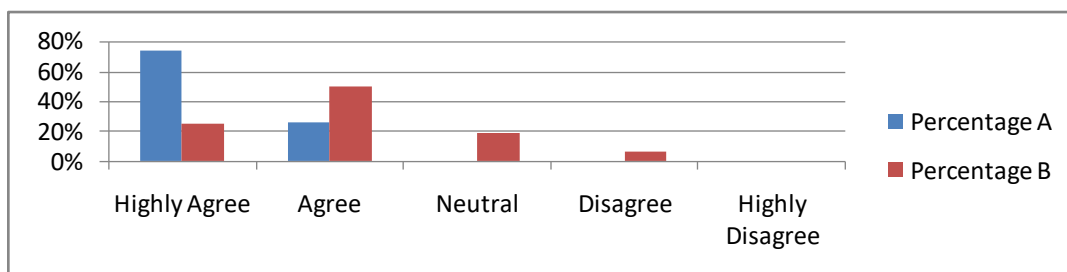


ANALYSIS: 56% participant accept that IT will provide sufficient information for careful decision for Cat-A and 22% for Cat-B.

IT system will support to organization to select supplier on the basis of their quality.

TABLE 18

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	20	74%	8	25%
Agree	7	26%	16	50%
Neutral	0	0%	6	19%
Disagree	0	0%	2	6%
Highly Disagree	0	0%	0	0%

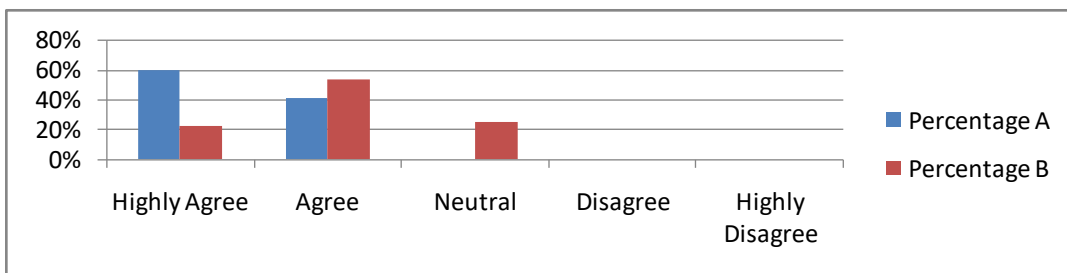


ANALYSIS: 74% participant accept that IT will help to select quality supplier for Cat-A and 25% for Cat-B.

Information systems help to measure and evaluate customer satisfaction

TABLE 19

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	16	59%	7	22%
Agree	11	41%	17	53%
Neutral	0	0%	8	25%
Disagree	0	0%	0	0%
Highly Disagree	0	0%	0	0%

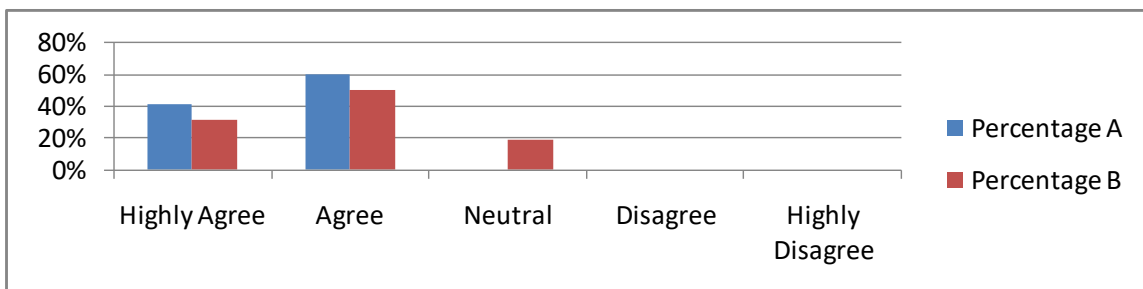


ANALYSIS: 59% participant says that IT system help to understand customer satisfaction for Cat-A and 22% for Cat-B.

Information systems manage material requirement of our facility

TABLE 20

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	11	41%	10	31%
Agree	16	59%	16	50%
Neutral	0	0%	6	19%
Disagree	0	0%	0	0%
Highly Disagree	0	0%	0	0%

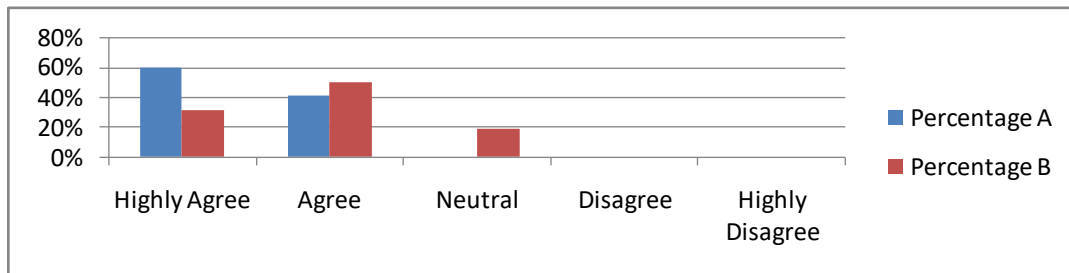


ANALYSIS: 41% participant accept that IT will help to finalize the material requirement as per demand in market fro Cat-A nad 31% for Cat-B.

IT systems support to organization in terms of quick information sharing with in organization.

TABLE 21

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	16	59%	10	31%
Agree	11	41%	16	50%
Neutral	0	0%	6	19%
Disagree	0	0%	0	0%
Highly Disagree	0	0%	0	0%

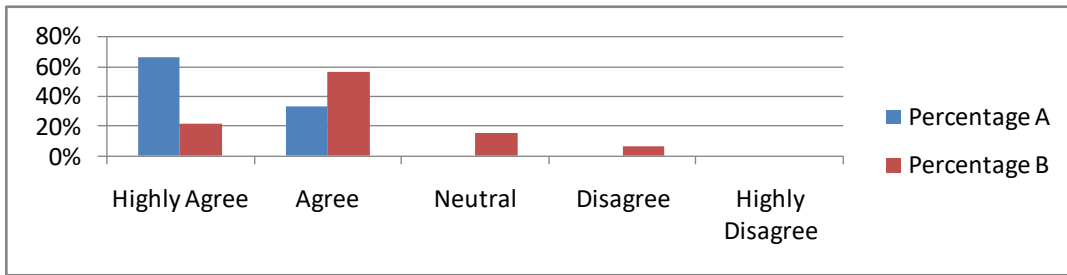


ANALYSIS: 59% participant accept that IT will help to share the information within department for Cat-A and 31% for Cat-B.

IT System support to monitoring and controlling of market change environment in Supply chain and logistic.

TABLE 22

Scale	No. of Participant A	Percentage A	No. of Participa B	Percentage B
Highly Agree	18	67%	7	22%
Agree	9	33%	18	56%
Neutral	0	0%	5	16%
Disagree	0	0%	2	6%
Highly Disagree	0	0%	0	0%



ANALYSIS: 67% participant says that IT will help to monitor change in market scenario for Cat-A and 22% for Cat-B.

4.1 Findings

- ✓ Maximum participant known about that IT implementation is beneficial for any organization to optimize the time and cost but the participant from category A are highly agreed is 43% more than the category B organizations because they are using the IT in SCM and well understand the importance of IT in Supply chain.
- ✓ It will accelerate the order processing, information flow in the organization and also it will help to control the stock and logistics.
- ✓ It help to maintain better communication between partners and customers.
- ✓ The vital impact of IT implementation in SCM is helping to take critical decisions on the basis of data available in IT system.
- ✓ Also the organization should always on up-gradation mode as per technology advancement and training for the same should be provided to engaged employees.
- ✓ It also help organization to understand the market environment and help to introduce the new product/service in market as per market scenario.
- ✓ IT system also help organization to finalize the capable partners/suppliers on the basis of past information.
- ✓ This will support in material planning to avoiding over or under stocking of finish good or raw material.
- ✓ It seems that the category B participants are having natural and disagree on some points like, it increase efficiency and effectiveness, effectiveness of stock control, it will help to introduce the new product in market and understand the market scenario. Because they are not working on IT tool in SCM
- ✓ Important information is the increase in communication across all different supply chain department. Information flows from the sales and planning team to the procurement team and transportation team using IT tools such as ERP, WMS etc.

4.2 Conclusion

The integration of Information Technology in Supply Chain Management is not just beneficial but essential for the real estate sector in India. It enhances efficiency, reduces costs, improves transparency, and ensures timely project completion, all of which are crucial for sustaining growth and competitiveness in this rapidly evolving market. As India continues to urbanize and develop its infrastructure, the role of IT in SCM will only become more critical, making it imperative for real estate firms to embrace these technologies.

Most Real Estate Developer do not consider the supply chain to be an important function in the organization and procurement is seen as a financial activity. Real Estate Developer s should consider using the supply chain and use Information Technology to improve their performance as this will save companies significantly. Companies should also use IT to plan their purchasing activities and engage their stakeholders.

The results also showed how important Information Technology is in an organization that uses SCM and logistics. Most of the supply chain in Real Estate Sector is not transparent as managers are known for conflicts of interest. This results in negative profits, poor customer service due to delays in project information for customers and long lead time. With an IT user, all of this can be prevented and companies can enjoy long-term benefits such as improved sales revenue and reduced launch costs.

4.3 Limitations

- Off-the-shelf IT solutions may not fully meet the unique requirements of a real estate firm's SCM processes. Customizing these solutions can be costly and time-consuming.
- The real estate sector is subject to various regulations and compliance requirements that can vary by region. IT systems must be designed to comply with these regulations, which can add to the complexity.

- Implementing advanced IT systems and technologies in SCM requires significant upfront costs. This includes expenses for hardware, software, infrastructure, and training. Small and medium-sized enterprises (SMEs) in the real estate sector may find these costs prohibitive.
- As real estate projects scale up, the IT systems must be able to handle increased data volumes and process complexities. Ensuring scalability without compromising performance can be difficult.

Recommendations:

Study recommends that Small service providers especially in the real estate sector should use IT in their supply chain operations to improve efficiency. Sales and customer service levels have improved over time with the adoption of IT in the supply chain.

Organizations should integrate supply chain function and the other functions involved in their operations in order to improve overall efficiency and be more competitive than competitors through better prices and products.

Organizations should integrate supply chain function and the other functions involved in their operations in order to improve overall efficiency and be more competitive than competitors through better prices and products.

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ANNEXURE

Questioner on IT Implementation in SCM for Real Estate Sector

➤ General Questions

- 1) Name:
- 2) Gender:
 - Male
 - Female
- 3) Age:
 - 21 to 30 years
 - 31 to 40 years
 - 41 to 50 years
 - Above 50 Year
- 4) Education:
 - Under Graduate
 - Gradated/Bachelor degree:
 - Masters Degree:
- 5) Department:
 - Procurement
 - Stores/warehouse
 - Logistics/ transportation
 - Finance/Accounts
 - MIS
 - Operations
- 6) Industry
 - Service
 - Manufacturing
 - Both

- 7) Organization Type
- Real Estate Developer
 - Real Estate Agent/Broker

- 8) Are your organization use any IT tool for SCM
- Yes
 - No

➤ **Specific Questions:**

- 1) Organization gets benefits from the application of information technology on supply chain management.
- Highly Agree
 - Agree
 - Neutral
 - Disagree
 - Highly Disagree
- 2) Use of Information Technology in supply chain activities help in the preparation of order processing to be faster and quick so as to meet deadlines as per required schedules.
- Highly Agree
 - Agree
 - Neutral
 - Disagree
 - Highly Disagree
- 3) The system assists efficiency and effectiveness in tasks
- Highly Agree
 - Agree
 - Neutral
 - Disagree
 - Highly Disagree
- 4) Information Technology in supply chain has been reduce the Serving time and cost
- Highly Agree
 - Agree
 - Neutral

- Disagree
 - Highly Disagree
- 5) Information systems improve the efficiency of operation
- Highly Agree
 - Agree
 - Neutral
 - Disagree
 - Highly Disagree
- 6) Assist efficient and effective management of stock control.
- Highly Agree
 - Agree
 - Neutral
 - Disagree
 - Highly Disagree
- 7) The availability of application of IT in the organization has influenced the coordination between the organization and suppliers.
- Highly Agree
 - Agree
 - Neutral
 - Disagree
 - Highly Disagree
- 8) The availability of application of IT in the organization has influenced the coordination between the organization and suppliers.
- Highly Agree
 - Agree
 - Neutral
 - Disagree
 - Highly Disagree
- 9) The employees should be given the training in using computer software in order to develop and increase knowledge on Information Technology in SCM in the organization..
- Highly Agree
 - Agree

- Neutral
- Disagree
- Highly Disagree

10) Information systems help to introduce new product and service in our market.

- Highly Agree
- Agree
- Neutral
- Disagree
- Highly Disagree

11) Information systems help to provide sufficient information to support careful decision making

- Highly Agree
- Agree
- Neutral
- Disagree
- Highly Disagree

12) Information systems help to select supplier based on their quality

- Highly Agree
- Agree
- Neutral
- Disagree
- Highly Disagree

9) 13. Information systems help to measure and evaluate customer satisfaction

- Highly Agree
- Agree
- Neutral
- Disagree
- Highly Disagree

5 Information systems manage material requirement of our facility

- Highly Agree
- Agree
- Neutral

- Disagree
- Highly Disagree

6 Information systems help to quickly share information within our firm

- Highly Agree
- Agree
- Neutral
- Disagree
- Highly Disagree

7 Information systems help to monitor change in our market condition

- Highly Agree
- Agree
- Neutral
- Disagree
- Highly Disagree