# A STUDY OF SUPPLY CHAIN MANAGEMENT INFLUENCING COST FOR OBTAINING COMPETITIVE EDGE IN ALIGARH LOCK INDUSTRY, UP

Dr. Gaurav Saxena, GLA University, 17 Km Stone, NH-2, Delhi Road-Mathura Road, Mathura, 281406, India,

#### ABSTRACT

Integration of economies in world is demanding integrated system of supply chain flows. Supply chain flows depend on information, money, good and values flow. Effective implementation of these flows leads to reasonable reduction in cost. Indian government foresightedly introduced "Make in India", which stimulates Indian entrepreneurs to align their intent with global standard for maintaining competitiveness. Aligarh lock industry (ALI) has to put more efforts to achieve its competitive position. It found in the research that Aligarh lock industry is lacking behind in multiple areas. In the research, we found that ALI profoundly lacking behind with technology, production process facilities, research and development, high cost, unavailability of skilled labour. This is an exploratory and descriptive research and research sample is taken from all clusters in Aligarh. In this research we found that proper implementation of supply chain and novel thinking of entrepreneurs may sink up Aligarh lock industry in competitive world where global players are gazing India as a next business hub of opportunity. This paper investigated on prospects of supply chain management and tries to probe Aligarh entrepreneur's business acumen.

Keywords: Core Competency, Self Managed Business, Optimum Supply Chain Value, Supply Chain Uncertainty.

#### 1. INTRODUCTION

The standard corporate model of affiliation relied upon vertical blend, request, and limit based organization. There is a outrageous change in the norm and tody's high level business world when the solicitation went inconsistent both to the extent quality and sum, the local and worldwide business areas turned too assembled and likewise normal to predict. There is another factor, which is dynamic, change in the advancement achieved the use of single-purpose creation equipment which is old; the huge scope producing gadget is too costly and not versatile. Rise in progresses now allow for the difference in get-together essential characteristic of the enormous corporation into easy-to-program creation gadgets with product flexibility interesting to exhibit assortments, and process versatility powerless against changes in advancement. Most of the high-level affiliations have adapted the new environment and the essential shift is incorporated as the shift from the vertical bureaucracies to even corporations. There are seven huge current characteristics which components such corporations and they are as straightening out around process, not tasks; a level request; bunch the board; assessing execution through customer satisfaction, an increase in contacts with suppliers and customers; information, planning and retraining of laborers at all stages and rewards subject to bunch execution. Contemporary undertaking presence is process pushed and chain arranged; hence blend has become a core-question for companies. The issues and hardships with the standard vertical co-operation among affiliations are costly and time consuming, rather than co-operating; there is similarly no scope of cost diminishes or prohealthy redesigns at the expenses of

someone else in the supply chain. control of store network the board has advanced during the last three various years shape a complement on planning collaborations and diminishing worth to offer a superior thing that produces utility inside the hands of a conclusive purchaser. Aligarh lock adventure isn't persistently creating since it was expected due to customary procedures. Aligarh industry needs to observe principles by taking on a practical store organization.

Aligarh Lock industry is suffering to save genuine

in a globalizing financial system. Aligarh lock industry is at present inside the center of innovative change. This industry is moving from the advanced age to the data age. at some stage in the business, age associations won through how enjoyably they might clutch the benefits from economies of scale and degree. advancement was imported, yet as time goes on, accomplishment accumulated to associations that might embed that new development into significant assets that offered colossal mass gathering of the standard thing. data age challenge has begun several express troubles. Aligarh lock industry needs to give you the accompanying components. managing Uncertainty, getting purchaser, stock decision, region decision, esteem decision, creating Unit choice, store network Uncertainty decision, store network Flows decision, unmatched tech in SCM decision, Operational Practices in-store network the board.

Due to growing challenges from the world over, Companies are doing combating to stay above water. Reducing cost has turned into an objective and the store network the board has given an opening to do precisely that. Feasible stock chains won't only help

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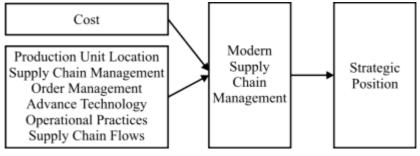
with making the high ground yet, what's more, support its major circumstance on the lookout. Aligarh industry has continually evolved over the latest several numerous years yet there are spaces of concern. With a general population of around 2,000,000 and around 12000(Tiny units are avoided) present day units, the Aligarh lock industry is exceptionally enormous in size. A critical piece of this industry are Pavan Zaidi, Link Locks, Harrison, Bajaj, Noval, etc Store network remains a troublesome plot for this industry. With the creating modernization of the for the most part current set-up of Aligarh, we may expect that Aligarh lock units will settle this issue in like manner positively.

## 2. RESEARCH FRAMEWORK

In the past study found that Aligarh lock industry is lacking on effective supply chain; which hinders the performance resulted diminishing profit. Literature clearly pointed out few variables responsible of it. There are few factors such as cost, production unit, Supply uncertainty, order process, operational practices, supply chain flows.

The main assertions of this research are:

- A1: Supply chain management has significant relation with Aligarh lock industry.
- A2: Effective supply chain has significant effect on reduction of cost.
- A3: Reduction in costs has significant impact on strategic position in the market.



**Research Framework** 

#### 3. LITERATURE REVIEW

**G.Tomas M.Hult, David J.KetchenJr and Mathias Arrfet, in the explored named** "Key Supply Chain Management: Improving Performance through a culture of seriousness and information advancement" observed that One of the applicable improvements in these days' s economy is that opposition is transforming into less 'firm versus firm' and more 'production network versus production network.' surely, firms which incorporate Dell and Wal-Mart have, generally, reworked the approaches of technique and contest of their individual ventures through the use of supply chains now not just as a way for shipping material, but moreover as a serious weapon. Drawing on two or three hypotheses, our examination progresses the rising investigations flow on essential store network the board by means of dropping new gentle on why a couple of partnerships outflank others in expressions of process duration. for the explanation that inventory network exercises structure organizations' benefits, development, market extent, and diverse key measurements (Handfield and Nichols, 2002), staying the distance between what we understand and what we really should understand about the determinants of process duration all through different enterprises is essential. indeed, even as past request shows autonomous jobs for a culture of seriousness and mastery improvement, our results feature the criticality of simultaneously contemplating these two ideas and market choppiness in order to decrease process duration.

McAdam, R. and Brown, L.<sup>40</sup> in his research titled "Strategic alignment and the supply chain management" found that in their research steel stockholder zone: an exploratory case take a look at evaluation" supply Chain management". This research targets to behavior an exploratory study at the organizational implications of strategic

alignment in the steel stockholder supply chain through studying the responses of a case observe enterprise. more and more fragmented and risky markets bring about stress on businesses to strategically align all factors of their supply chain to make sure speedy and suitable responsiveness. there's a paucity of studies in this region in the steel stockholder supply chain. A strategic alignment version was decided on which included alignment from four key elements, particularly markets, method, culture and leadership style. The version is used as an analysis framework for a case study inside the steel stockholder supply chain. information series blanketed a survey of a stratified pattern of customers, company archive and organizational material and semi-structured interviews. the consequences for the supply chain and the enterprise's reaction are mentioned and evaluated.

Kaufmann, L. and Carter, C.R.<sup>41</sup> studied on research titled "the impact of price vs. non-price driven motives in the United

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**States and Germany**" concluded global sourcing can constitute a considerable quantity of an enterprise's expenses, specifically for production concerns. current research suggest that global supply control may be tremendously of greater significance to German organizations than it presently is to their U.S. counterparts, and imply that a cross-countrywide study may cause crucial insights as to why this distinction may exist. as an instance, cultural variations among the us and Germany may additionally cause specific management techniques (Hofstede 1984; Schwartz 1994). Practitioners can frequently study precious lessons by examining those variations and evaluating the activities of managers in their country with the ones of another.

**Chen, C. Y., Zhao, Z., and Bal I, M. O.** researched on subject matter "A version f or batch superior available-to-promise" manufacturing and Operations management" discovered that he to be had-to-promise characteristic is turning into increasingly more critical in supply chain management because it at once links production assets with client orders. on this research, a blended integer programming ATP version is supplied. This model can offer an order-promising and-achievement answer for a batch of orders that arrive inside a predefined batching interval. a variety of constraints, along with raw fabric availability, manufacturing potential, cloth compatibility, and client alternatives, are considered.

Hartley, J.L. <sup>[43]</sup> studied on studies titled "Collaborative value evaluation: experiences from the automobile industry" this research identifies first, five distinct MSC types were recognized as follows: collaborative communication, collaboration in new automobile development, collaborative problem solving, strategic shopping, and dealer development. second, contrary to preceding research, suppliers' consumer proliferation functionality is observed to have an effect on MSC positively. thirdly, on the other hand technology uncertainty is said to have a substantial moderating effect on the supplier abilities exercise over collaborative issues and concerns solving and strategic buying; it has no direct effect on any MSC type.

Kanet, J.J. and Cannon, A.R.<sup>[44]</sup>in his research titled "Implementing supply chain management lessons learned at Becton Dickinson" " observed that quantity of key findings emerged: the sector is a relatively "new" one; numerous disciplines declare possession of the sector; consensus is missing on the definition of the time period; contextual attention is totally on the manufacturing industry; predominantly "process" conceptual framing prevails; research techniques employed are generally analytical conceptual, empirical surveys or case research; the positivist research paradigmatic stance is popular; and theories associated with transaction expenses economics and competitive edge dominate.

**Romano, P. and Vinelli, A.**<sup>[45]</sup> in his study titled "quality control in a supply chain attitude: strategic and operative alternatives in a textile-apparel community" determined that supply chain management (SCM) is conceived by way of academics and practitioners as both an extension of logistics or an all-encompassing method to commercial enterprise integration. From the researcher's factor of view, SCM involves no longer handiest logistic sports however additionally other techniques including quality management. This paper seeks to recognize how pleasant can be controlled the use of a supply chain attitude and what the operative and strategic outcomes are for both the person organizations and the complete supply network. It reports a case observation performed on Marzotto, a crucial Italian fabric and apparel enterprise, and its supply chain relationships. The study compares the first-class practices inside the two different kinds of supply community of which Marzotto is the focal company. One is managed the usage of a traditional client-dealer approach and the alternative a broader and extra coordinated perspective. within the latter case, it was determined that the whole supply network ought to improve its potential to satisfy the expectations of the ultimate consumer in terms of high-quality through the joint definition and co-management of best practices/processes.

Antony Paulraj, Injazz J. Chen<sup>[46]</sup> researched on topic "strategic supply management is driven by several critical factors" discovered that empirical evidence to the reality that strategic supply management is driven by using several vital elements which includes environmental uncertainty, consumer oriented, competitive priorities, top control assist, information era and supply network structure. however, uncertainty it was not determined to be a huge deterrent in the successful management of supply activities. instead, it turned into a stepping-stone for preparedness a number of the supply chain companions. In widespread, the outcome of this study offers extra insights for practitioners and researchers in understanding the strategic management of the supply function.

**Martin Lockstrom, Joachim Schadel, Roger Moser, Norma J. Harrison**<sup>[47]</sup> in his study titled "supplier integration framework in a Chinese language context primarily based on current theories and empirical insights from the Chinese language automobile industry" that seeks to expand a provider integration framework in a Chinese language context based totally on existing theories and empirical insights from the Chinese language automotive industry. The goal is to increase a framework and perceive various of factors which can probably facilitate supplier integration and ultimately enhance supply chain performance. The framework contains a causal chain with four key constructs, beginning with supply chain leadership as an antecedent to alliance readiness, which in flip is proposed to yield a better degree of supplier integration.

Hiroshi Ohta, RieIkena, M. Abdur Rahim<sup>[48]</sup> studied on research titled "supply chain information sharing supply chain facts

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sharing" concluded that lessen a firm's working expenses. cost-saving benefits from sharing both upstream or downstream information amongst supply chain contributors has been well diagnosed and properly studied in the literature in current years. records sharing on inventory regulations is also vital to each buyers and suppliers. in this study, we utilize a supply chain system together with a dealer, purchaser 1 and consumer 2, and analyze the impact of the reordering factor system for the dealer and buyers after they cooperatively decide their top-of-the-line order quantities. This paper gives stock fashions for a three-echelon supply chain such that the predicted cost characteristic is minimized. The studies considers both; the case wherein stock records is being shared most of the three supply chain partners (supplier, buyer 1 and buyer 2) and the case wherein inventory facts is best found from the downstream accomplice. via a numerical example, we compare the performance of each structure and offer a set of observations regarding the software of inventory records sharing amongst companions from an financial viewpoint.

**Dmitry Lvanor (2008)**<sup>[49]</sup> researched on subject matter entitled "the framework of supply Chain (re)-design (SCD), extraordinary structures (useful, organizational, informational, and many others.) are (re)-shaped" discovered that framework of supply Chain (re)-design (SCD), distinct structures (practical, organizational, informational, etc.) are (re)-shaped. those structures are interrelated and trade in their dynamics. How is it viable to keep away from structural incoherency and consistency and to gain comprehensiveness by way of (re)- designing supply chains? This paper introduces a new method to simultaneous multi-structural SCD with structure dynamics considerations. For the conceptual and mathematical models, we advocate to use multi-structural macro-states and dynamical opportunity multi-graphs. The studies technique is theoretically based on the blended utility of operations studies, agent-primarily based modeling and control theory. The consequences show the multi-structural and inter-disciplinary remedy allows complete and practical SCD trouble formulation and answer.

We emphasize the ability of the proposed technique and optimization-supported simulation. The proposed technique enhances managerial insight into supply chains at the strategic and tactical ranges and serves to assist decision-makers in SCD.

**Rebecca Angeles** (**2008**)<sup>[50]</sup> identity (RFID) inside their supply chain management" Researcher uses Au and Kauffman's interpretation of the Rational expectancies speculation (REH) and the accompanying adaptive studying ideas to reply the key studies question: 'Do the REH and the adaptive getting to know theories explain the early adoption behaviours and movements of companies affected by mandates to install Radio Frequency identification (RFID) within their supply chains? the use of content analysis of secondary facts, proof is offered and solutions the research question inside the affirmative. In terms of the four situations of the evaluative framework, the following were confirmed: (1) network externalities signify RFID adoption within the pharmaceutical industry supply chain; (2) the diverse hobbies of the a couple of participants within the pharmaceutical enterprise at once laid low with RFID adoption mandates needed to be reconciled; (three) companies inside the pharmaceutical industry conduct pilot tasks to address the uncertainties surrounding RFID generation and (4) supply chain members within the pharmaceutical enterprise optimize using limited statistics to be had to them that allows you to respond to mandate for RFID deployment by way of the united states meals and Drug administration in connection with the drug electronic pedigree monitoring initiative. All 5 propositions have been also undoubtedly confirmed.

**Chris Ellegaard**<sup>[53]</sup> studied on research titled "**Supply risk management in a small company perspective**" concluded eleventh studied SCOs practice largely the equal supply threat control practices, which may be characterized as protecting. The approach covers danger elimination practices together with information safety and local sourcing because the essential practices, mixed with relational practices such as fairness, loyalty, and seeking out responsive, reliable, and like-minded providers. research limitations/implications– The study focuses completely on small manufacturing businesses. research of different kinds of companies, consisting of exchange or hello-tech businesses might screen other

practices.

Arni Halldorsson, Herbert Kotzab, Juliana H. Mikkola, Tage Skjøtt-Larsen<sup>54</sup>researched on topic entitled " Complementary theories to supply chain management" found out that SCM as a discipline using one-of-a-kind theories from non-logistics areas to explain inter- organizational phenomena. It also attempts to establish a body of reference that permits us to mitigate the distance among the contemporary SCM studies and exercise and the theoretical factors of how to shape and manage supply chains. The star ting-point of our issues centered on two the strive of explaining two studies questions:

- the way to shape a supply chain?
- a way to manipulate a particular structure?

those questions are essential, as many selection makers in enterprise practice in addition to in academia cope with these problems greater often than to think of recent feasible. we've offered an issue that builds on organization theories if you want to solution our questions, and this can be seen as an try to decrease the gap among current SCM studies and exercise and present theoretical descriptive and prescriptive reasons. we've consequently developed a trendy framework wherein we combine the managerial SCM arena with four one-of-a-kind business enterprise theories which will provide an explanation for our two studies questions, and we use our framework for searching at two exceptional trouble regions inside SCM: 1 0.33-celebration logistics; and two new product development. we find that we can't rely on one concept to explain

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Inter-firm governance structure and control selections in a supply chain, however have to apply complementary theories. furthermore, we will show that constructing a unified theory y of SCM might be difficult, as many problems can arise whose answer might depend upon different theoretical backgrounds. In that experience we've shown how our theoretical preference has shown one-of-a-kind effects depending at the remark perspective. We recommend that similarly empirical and theoretical studies is needed in order to find out the contingencies for selecting a particular combination of theories that adequate explains management decisions associated with c configuring and dealing with supply chains.

**Terje I. Vaaland, Morten Heide**<sup>55</sup>.in his research titled **"Can the SME survive the supply chain challenges?**" determined that supply Chain simply suggest that SMEs supply much less interest to planning and manipulate strategies than LEs. SMEs are much less happy with the strategies applied; less worried with techniques assisting SCM on product high-quality, explanation of operations and capital price clarification; much less focused on device integration with other actors in the supply chain; and much less centered on EDI and e-based solutions. research barriers/implications– The observe focuses commonly on managerial additives and excluded logistics structures and commercial enterprise methods which can be extra or much less inter-related. practical implications– Horizontal cooperation or vertical integration can lessen the information technology gap through sharing making plans and manipulate structures. The suppliers of guide systems need to don't forget turning in complete "flip-key" solutions for supply chain capabilities, specially focused toward SMEs. Originality/price– The energy of this examine is that it's been able to discover systematic differences among LEs and SMEs across sectors with respect to how SCM demanding situations are met.

**B.S. Sahay, Jatinder N.D. Gupta, Ramneesh Mohan**<sup>[56]</sup>, in his research titled "**Managing supply chains for competitiveness: the Indian scenario**" famous that maximum of the Indian groups has aligned their supply chain objectives with their commercial enterprise objectives. they're now on route of aligning their strategies and management awareness. improved degree of competitiveness could require Indian businesses to control the three-dimensional alignment of reaching the schedule set by way of the commercial enterprise method.

**B.S. Sahay, Vasant Cavale, Ramneesh Mohan**<sup>[57]</sup>, researched on topic entitled "Indian supply chain architecture" found that blend industry deals restrict inventories in the total store network organization, what's it that afflicts Indian industry? Is it the way Indian inventory chains are arranged their direction to strategies to smooth out business exercises; their combination of data period to accelerate deals; their strategy to store network technique to upgrade primary concern outcomes that have restricted them from accomplishing overall norms? the item, in light of an as of late closed cross country study named "production network the board rehearses in Indian industry: 2000", hurls clear records around the contemporary engineering of supply chains in India. the thing presumes that despite the fact that a couple of Indian organizations are moving quick nearer to improve production network efficiencies, limits of them are all things considered away from understanding its impact.

**Rhonda R. Lummus, Robert J. Vokurka<sup>[58]</sup>**, in his research titled "**Defining supply chain management: a historical perspective and practical guidelines**" found that supply chain control has steadily multiplied since the 1980s whilst corporations saw the advantages of collaborative relationships inside and beyond their personal organization. firms are finding that they could now not compete efficaciously in isolation in their providers or other entities within the supply chain. This paper defines the idea of supply chain management and discusses its ancient evolution. The term does no longer update supplier partnerships, nor is it a description of the logistics characteristic. The competitive importance of linking a firm's supply chain approach to its general business strategy and a few practical pointers are offered for successful supply chain management. groups who're successful might be those which might be dealing with throughout all nodes of the supply chain from their provider's provider to their customer's patron. A clean expertise of supply chain standards and a willingness to openly percentage records among supply chain partners is a essential first step to making the supply chain a competitive force for a business.

# 4. RESEARCH METHODOLOGY

**Sample procedural:** In the research Aligarh lock industry is divided in four clusters. Clusters are Gopal puri, exhibition ground, Tala Nagri, Gular roa. Data is collected at all the level to identifying prospects of supply chain management in Aligarh lock industry. There are three levels in the organization. First is corporate level which shows the intent of the organization. Second level is business which is responsible for execute the intent and last level is operational, were at produce product.

# 5. ANALYSIS AND FINDINGS

Factors analysis and correlation are used as tools to analyze data

Factor Analysis								
	Production Unit Location	Supply Chain Uncertainty	Order Management	Advance Technology	Inventory	Practices	Supply Chain Flows	Feasibility of SCM
MEAN	3.32	3.27	3.23	3.32	3.29	3.28	3.30	3.41
MEDIAN	3.35	3.32	3.27	3.36	3.40	3.32	3.33	3.44
SD	0.32	0.34	0.38	0.34	0.60	0.41	0.70	0.47
Stand Error	0.10	0.11	0.12	0.10	0.18	0.12	0.21	0.14
CORREL	0.85	0.86	0.69	0.73	0.56	0.65	0.67	0.54

To identify the possibilities of gaining cost effectiveness with the introduction of modern supply chain management in lock industry is the one of the core issues of this research paper. It is found that there is significant relation between introducing modern supply chain management and possibilities of cost reduction. It is shown in the table that Factor value of correlation is 0.54 of feasibility of supply chain management. It is clearly shown in the research that if we implement modem supply chain management, strategic position can be managed in the market.

There is ample possibility of improving performance of Aligarh lock industry through implementation of supply chain management in accordance to facts found in the research. 52 percent of respondent strongly believe that supply chain management will lead to improve performance of Aligarh lock industry.

Survey reveals that only 43 percent of respondents were ready to redesigned jobs according to the requirement of Modern Supply Chain Management. Survey includes 25 percent respondent adherent to disagree.

Research reveals that only 15 percent of respondents were convinced that they have established benchmark for their organization, which in accordance to them is adopting best practices in lock industry such as Pavana Zaidi security, Link Locks, Bajaj Lock.

It was found that cost reduction has positive correlation with introduction of supply chain management and value of correlation is 0.69 approximate.

Underneath cost following factors were analyzed- wearing price, inventory cost, Transportation value, garage and warehousing cost, cloth coping with cost, protecting packaging cost, facts value, Order processing cost, customer support price, manufacturing lot first-class cost, insurance price. specified interpretation together with evaluation of speculation is being supplied here.

Around 41% respondents either agree or strongly agree that inventory cost will reduce after adopting supply chain management. Unmanaged supply chain and fractured coordination with suppliers leads to increase in inventory cost. Only modern supply chain is the solution to resolve the discussed issue.

Researcher found that 43% of respondents are agree or strongly agree that transportation cost will reduce after adopting supply chain management and because of unawareness of importance of supply chain management 30% respondents replied cannot say.

Around 42% respondents are either agree or strongly agreed that warehouse, storage and material handling cost will reduce after implementation of supply chain management. Respondents also indicated that protective packaging cost will also reduce in same way if supply chain is implemented effectively.

Survey revealed that 45% of respondents are either agree or strongly agree that order processing cost will reduce after implantation of supply chain management. Because of whole process is integrated from suppliers to customer. Orders are process automatically without involvement of human being.

42% respondents are positively agreed that buyer finding cost, Business to business advertising cost and information sharing cost will reduce after implementation of supply chain management.

Research revealed that 49% of respondents are either agree or strongly agree that customer service cost will reduce after implementing supply chain management. For the purpose of analyzing this hypothesis following aspect along with sub indicator are used. These aspects are as follows Production Unit Location Variable, Supply Chain, Uncertainty Variable, Order Management Variable, Advance technology Variable, Inventory Management Variable, Operational Practices Variable, Supply chain flows Variable.

**Production Unit Location:** Let us first of all consider production unit location. The sub indicators of the aspect are considered as infrastructure, business services, skilled labor, Government, Customer/Market/Resource completions. All these are vital parameter

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affecting production unit location finding regarding these issues are follows:

Around 44% respondents either agree or strongly agree that they require educated employees at operational level.

It is quite encouraging that 49% respondents either agree or strongly agree that they get government support. Similarly, around 43% respondents consider Utter Pradesh government's corporate policy as stable however 30% are undecided on this issue.

In the research it was found that 47% respondents are either agree and strongly agree that they are well connected with the market and proximity is appropriate with production house.

Now, the overall impact of above indicators is being presented. Production unit location is found to be correlated by a value of 0.85 with respect to gaining competitiveness, which clearly concluded that production unit location helps in improving strategic position in market.

**Supply Chain Uncertainty:** Supply chain uncertainty is one of the core issues, which Aligarh lock industry have to manage. This variable further have sub indicator which are market demand uncertainty, Operational uncertainty, supplier uncertainty.

Around 47% respondents are either agree or strongly agree that their supplier supply row material at right time. However, 26% respondents are undecided on these issues. 43 % respondents say that they are facing the problem of piracy. Suppliers use to sell their product to other buyer.

Research reveals that Aligarh lock industry has regional advantage. Skilled labour is available. 43% respondents are either agree or strongly agree that availability of labour with help to manage operational uncertainty.

Relation with the supplier is old and strong. They are dealing with them since a long time so 42% of respondents are agree that they have strong relation with them so they can manage operation uncertainty however 29 % respondents are undecided. Researcher found that they are generally inexperience in comparison to others.

Overall impact of supply uncertainty indicators is being presented. Supply chain uncertainty is found to be correlated by a value of 0.86 with respect to gaining competitiveness; Research revealed that managing supply chain uncertainty helps improving strategic position in market

**Order Management:** Researcher found that order management has significant effect on improving competitiveness of Aligarh lock industry. The sub indicator of this dimension are order entry, credit checking, inventory availability, return position, order acknowledgement, order editing and modification.

40% respondents are either agree or strongly agree that manager alter the orders before production. Supply chain management provides the facility to alter the order without hindering the system.

Around 44% respondents are either agree or strongly agree that accuracy of production requirement increase after adopting supply chain management.

36% respondents are agreeing and strongly agree that relation of manufacturer with suppliers and customers will improve and 35% respondents are unable to say any con not say.

Around 31% respondents are rate time require to check the order status as average but 41% respondents rate this process take high or highest time which can be reduce by adopting modern supply chain management.

Research concluded that order management contributes in gaining competitiveness. Order Management process found to have a value of correlation 0.69 with respect to gaining competitive advantage, which clearly found that order management helps in improving strategic position in market. Advance technology is the key driver of modern supply chain management to improve the competitiveness of industry in the competitive world. Technology further depends on sub indicators such as RFID, Computer used, JIT.

**RFID** (**Radio Frequency Identification**): Around 46% respondents are either agree or strongly agree that implementation of RFID technology will make lock industry are competitive industry in global competition while 24% of respondents are not sure about the success of this technology.

**Computer Used:** 49% respondents are either agree or strongly agree that application of computer will make Aligarh lock industry competitive. 34% respondents are in favour that use of information technology will contribute directly in gaining competitive advantage and 43% and 49% of respondents are either agree or strongly agree that integrated system with supplier and customer respectively will make Aligarh lock industry competitive.

**JIT** (**Just in Time**): In the integrated world JIT evolved as a turning point of reducing inventory and improve operational process effectively. JIT is new technology for Aligarh lock industry. But it is good that many entrepreneurs know about advantage of this technology.

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24% respondents are strongly agreeing that JIT will reduce the defect rate while 18% of respondents are agree in this regard.

54% of respondents are either strongly agree or agree that adoption of JIT will reduce the process time which will also help in gaining cost.

Implementation of JIT technology will help in reducing set up time, over production, waiting time and 45 % of respondents are either agree or strongly agree that implementation of JIT will reduce defective operation which would help in improving competitiveness of Aligarh lock industry.

Few companies have the facilities to control operation by statistical control system and 42% respondents are either agree or strongly agree on it that it will improve competitiveness of industry.

It is found that advanced technology contributes in gaining competitiveness of Aligarh lock industry. Advanced technology found to be a value of correlation 0.73 with respect to gaining competitiveness, found that technology helps in improving competitiveness.

Inventory Management is a driver to maintain strategic position in the market in the competitive world. Wal-Mart is one to the finest example of effective management of inventory. Inventory management further depends on sub- indicators such as working stock, safety stock, anticipation stock, pipeline stock, decoupling stock, psychic stock Around 44% of respondents are either agree or strongly agree that implementation of supply chain management will reduce the working stock.

45% of respondents are either agree or strongly agree that buffer stock will reduce and intermediary stock among process will reduce after adopting MSCM.

Research reveals that inventory management contributes in gaining competitiveness in today's scenario. It is found that inventory management has a value of correlation equal to 0.56 of factor analysis with respect to gaining competitiveness; found that inventory management helps in improving strategic position in market.

Supply chain flow helps in improving long term relation by creating trust among suppliers, customer and all stakes holders. This factor further depends on sub-indicators such as information flow, Goods flow, Money flows and value flows.

Around 47% of respondents are either agree or strongly agree that they have strong way to flow information with bank. For implementing modern supply chain management, Companies must have very good flow of information.

Information flows with supplier and customers reciprocally affect companies. Investment of flows is worthwhile if it go in right direction. 43% and 44% respondents are either agree or strongly agree they have information flow with customer and suppliers respectively.

Research reveals that supply chain flows contributing in gaining competitiveness. It is found that supply chain flows has a value of correlation equal to 0.67 of factor analysis with respect to gaining competitiveness, found the inventory management helps in improving strategic position in market.

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# 7. CONCLUSION

This research clearly indicates that there is ample possibility to achieve completive position if we adopt modern supply chain effectively and run awareness program on advantage of supply chain management. The heartening aspect is that almost all companies are convinced that supply chain management will make them more effective. So, the stage is well said for sophisticated training program regarding modern supply chain management be organized for Aligarh lock industry. Government body like NSIC and DIC in collaboration with university like can design and provide such effective programs. In general infrastructure facilities are very poor and for effective supply chain management roads and proper connectivity of road play a very important role. This is an area of concern where only government can extent great supporting role. Such modernization of Aligarh lock industry will require monitory fund and provisions of bank loan must also be strengthen to make such training program successfully implemented. Role of information technology cannot be denied in modernizing Aligarh lock industry particularly with reference to modern supply chain management. So, information technology awareness among workers of Aligarh lock industry is an added advantage and governments have to take an extra effort to develop proper IT infrastructure.

### 8. FUTURE SCOPE

This research opens the door of many research area even in may subject. Study of one individual organization can be a one aspect and applying this research in different industry is second. Further work can be carry out on at a specific variable.

## 9. **REFERENCES**

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