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# A Systematic Analysis Of Literature Review On E-Commerce, Supply Chain Management

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***Abstract:***
*A systematic literature review (SLR) is an important part of academic research that aims to map and evaluate current knowledge and find gaps on particular subjects. Using a comprehensive search approach, evaluating the quality of chosen research, analyzing data, and reporting findings, this process is scientific, transparent, and reproducible. Both the planning and the outcomes are guaranteed by a well-designed method. The purpose of meta-analysis is to provide more reliable evaluations by combining and analyzing the findings of several investigations. The hallmarks of systematic literature reviews (SLR) are well-articulated research questions and goals, an exhaustive search method, quality and validity evaluation, data synthesis and presentation, and access to the results for scientific and policy-making reasons.*
*Finding unmet needs in the literature on Cluster 1-specific "development" and "technology" is the primary goal of this research. Those studying and working at the crossroads of development and technology may find the results beneficial. In addition to examining Cluster 3-specific literature shortages, the research delves into e-commerce, supply chain management, and system integration. Cluster 5, an important field of study in management and business, also has its "customer" and "supplier" keyword gaps examined in this study. Insights for future studies and additions to the current body of knowledge are both provided by the results.*
***Keywords***: *SLR (Systematic Literature Review), Supply chain management, E- Commerce, Meta-analysis*

## INTRODUCTION

In any academic discipline, doing a thorough examination of the applicable literature assessment is essential. For the purpose of creating a thorough knowledge base, it is essential to map, evaluate, and identify gaps in the current body of information. In contrast to conventional narrative reviews, the systematic literature review (SLR) technique takes a clear, scientific, and repeatable approach. One useful way to address a research question is to gather all the relevant articles and resources that meet our inclusion criteria. In order to minimise the possibility of bias, the study uses strict and methodical approaches to perform a thorough search, uncover relevant studies, assess their quality, synthesise their conclusions, examine the data, and summarise the findings. With careful and error-free execution of the procedure, the research may provide credible results that can guide decision-makers and scientific practitioners to the right course of action. The implementation of a well-designed procedure for the systematic literature review (SLR) process is crucial in guaranteeing that the work is meticulously planned prior to the commencement of the review. Meta-analysis involves the utilisation of statistical methods to analyse and synthesise results obtained from multiple studies that are related, with the aim of combining data. The utilisation of this approach may potentially facilitate the production of more accurate assessments pertaining to the subject matter being investigated. Both the SLR and the meta-analysis that goes along with it have a number of distinguishing characteristics. Firstly, the research question must be clearly defined in order to guide the study. Secondly, the study must have explicitly stated objectives that can be reproduced using a consistent methodology. Thirdly, a thorough search technique must be used to locate all pertinent studies that satisfy the qualifying requirements. Fourth, the reliability of the cumulative estimates and the validity of the chosen studies must be evaluated, together with the danger of bias. Fifthly, the data extracted from the selected studies must be systematically presented and

synthesised. Finally, the study findings must be made available for scientific purposes and decision-making.

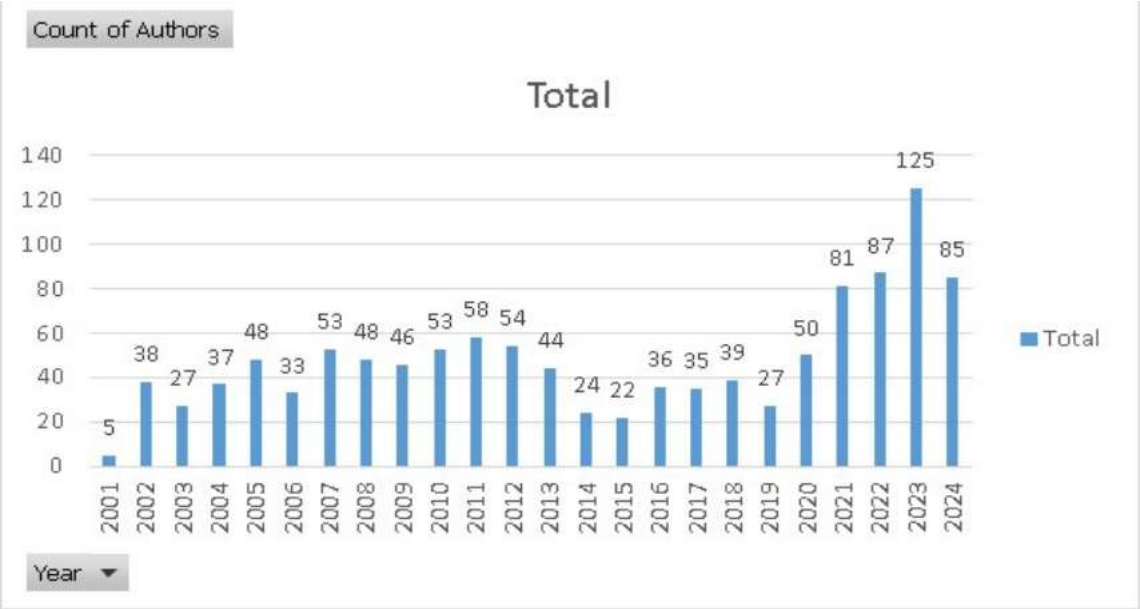


Fig 1:Global Publication trend

The present study examines the publication trends of a certain lease over a period of 22 years, from 2001 to 2024. The data reveals that the initial publication count in 2001 was 5, while the highest publication count was recorded in 2023 with a value of 125.

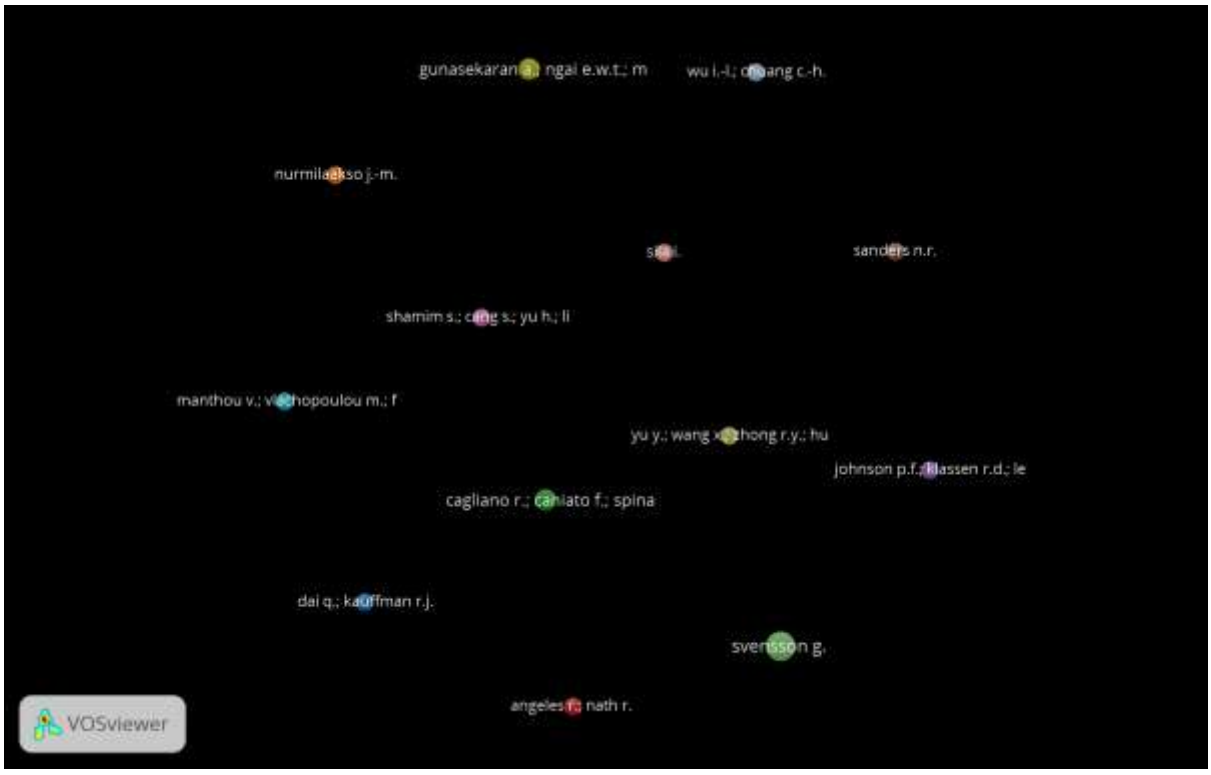


Fig 2: Global authors trend

**Literature Review**

In the world of business-to-consumer (B2C) e-commerce, the final leg of distribution, known as last-mile distribution (LMD), has brought about a significant transformation in supply chain management (SCM). A fresh array of environmental and economic challenges has surfaced. The disparity between sustainability and greenhouse gas (GHG) emissions from commodity transportation remains unresolved.

This study investigates the impact of different delivery timing methods on the distance covered by Last Mile Delivery (LMD) vehicles. Discrete events were used to simulate logistics scenarios involving consolidation level and delivery time. Based on the findings, it seems that making changes to cargo aggregation and delivery timetables could potentially decrease the overall distance traveled by the transportation fleet. These vehicles significantly reduce fuel consumption and greenhouse gas (GHG) emissions, all while minimizing the impact on end-users.. (Pereira Marcilio Nogueira G., 2022)

Company returns and surplus inventory can be attributed to the impact of e-commerce and shifting client preferences. Numerous companies opt to sell their surplus inventory on secondary marketplaces in order to maximize their profits. Many academics studying supply chain management overlook the untapped potential of the secondary market. An investigation was conducted into the alternative distribution routes of organizations. An analysis was conducted on the longitudinal survey data from the US and China spanning from 2014 to 2017. According to this study, American companies demonstrate a higher level of proficiency in utilizing secondary markets compared to their Chinese counterparts. In contrast to China, secondary markets in the US have reached a higher level of maturity. Nevertheless, it seems that the gaps between different regions are becoming smaller. (Sandoval M.G., 2022)

Internet merchants with financial restrictions can now get funding through the e-economy. E-commerce platforms offer credit to these merchants instead of banks. E-commerce platforms use marketplace channel partnerships and reselling. This study examines online merchant finance and e-commerce platform-channel sales collaborations. Research uses Stackelberg game theory. The study explores traits and conditions from four viewpoints. The e-commerce vendor's working capital affects both parties' preferences. Platform direct funding is not better than bank financing for limited operational capital. Balance between sales and interest revenue affects higher-level operational choices on an e-commerce platform. The study found that internet trade data can mitigate risk for e-commerce platforms. This method ensures reciprocal advantages and solves operational expenditure finance. Our analysis suggests that platform commission rates should be carefully considered since excessive commission costs might drastically limit online shop profitability. This study suggests transfer payment platforms need use fees. This study illuminates working capital management for self-employed persons, small and medium-sized firms, and online merchants on e-commerce platforms' online markets. (Rogers Z.S., 2022)

Cold chain logistical concerns pose a significant challenge for emerging e-commerce platforms in the agricultural commodities sector. The cold chain logistics industry suffers from a lack of logistics technology, an inefficient infrastructure, and a poorly established supporting system. Thoughtful selection of distribution channels is essential for successful e-commerce and effective urban circulation. Considering the challenges of urban logistics distribution, we present a novel approach and collaborative system for the efficient transportation of fresh agricultural products in urban areas. This paper explores the e-commerce shipping prices, cold chain logistics protocols, and consumer retention rates from a logistics and supply chain management perspective. This research examines the differences between self-established logistics, third-party logistics, and a hybrid approach. A hybrid approach was developed to address the impact of cold chain logistics distribution on city mobility. This approach combines self-established logistics with third-party logistics and collaborative distribution. Effective coordination among the government, businesses, and third-party logistics providers is crucial for the successful implementation of cold chain logistics and the delivery of fresh electricity. A visual model has been developed in the field of green logistics to assess the distribution costs associated with cold chain logistics, taking into consideration factors such as carbon tax and freight damage. The development of the graphical model was driven by the desire to achieve cost savings. A global approach was developed to address the issue of local optima in the core artificial fish swarm technology. The results of the experiments demonstrate the effectiveness of our technique. (Kim N., 2022)

This essay is published in honor of IJPDLM's golden anniversary. The analysis considers the journal's future and evaluates the influence of IJPDLM on LSCM. During the course of this study, papers that met the criteria were selected for publication in the International Journal of Physical Distribution & Logistics Management (IJPDLM) between 2015 and 2019. This paper provides a thorough examination of the journal. The journal's contributions are emphasized through a thorough analysis of the selected articles. The future of IJPDLM after 2020 will be determined by the changes implemented at that time. Invited

articles offer valuable insights from experts in the field and offer guidance for future research. The findings indicate that IJPDLM has played a significant role in improving LSCM knowledge and advancements. The research encompasses a wide range of topics, including sustainability, e-commerce, retail logistics, omni-channel, complexity, risk, resilience, volatility, and the development of new digital technologies. The journal utilizes a range of methodologies, including design science, experimentation, conjoint analysis, qualitative comparison analysis, and story analysis, in addition to both quantitative and qualitative approaches. This compilation of invited essays offers distinct perspectives on three subjects. First, the authors revisit the journal's original purpose. Additionally, ideas can be further developed through the application of grounded theories and thorough examination of existing research. Lastly, they provide some valuable insights into startup environments and the supply chain. The study highlights how the International Journal of Physical Distribution & Logistics Management (IJPDLM) uses model articles to educate governments, enterprises, and logistics professionals about LSCM. The study's uniqueness and significance stem from its comprehensive coverage of both present and future advancements in LSCM. (Ren J., 2021)

Many sectors, as well as supply chain professionals and specialists, are becoming more interested in reverse logistics. Reverse logistics management has become more of an industry concern as a result of globalisation, environmental concerns, and customer demands. E-commerce Rejected packages, undelivered items, and exchanges are where reverse logistics starts. Reverse logistics is just now being embraced and its implications are being thought about in Pakistan. This study demonstrates that e-commerce businesses choose downstream logistics over forward logistics. This study aims to identify logistical bottlenecks. The study also aims to resolve the obstacles and prioritise them. Logistics experts and other professionals can prioritise problems using this rating. After researching the literature and talking to experts, our research identified 14 obstacles to the implementation of reverse logistics.(C.Y., 2021)

To develop an omni-channel supply network for e-commerce that is sustainable, inventory pooling regulations are considered. Finding an efficient integration policy for online and offline stores is the major objective in order to lower the cost of the supply network, lessen the environmental impact of fewer shipments from the main depot, and increase responsiveness. E-commerce is expanding as companies utilise the internet and information technology more to stay competitive. Business-to-business (B2B) concepts, which enable organisations to exchange business applications, are essential in today's competitive supply chain management environment. Strategic alliances are partnerships between two or more organisations that manage various stages of the partnership while considering the interests and well-being of all parties. Strategic alliances are likely given stage inventory sharing regulations. Alliances would improve network flexibility, profitability, and sustainability. This study examines how inventory sharing regulations affect strategic alliances to construct a network that minimises demand unpredictability and maximises profitability. Businesses share their inventories with network partners through inventory sharing rules. This reduces traffic-related transportation expenses and CO2 emissions. This study optimises (s, S) inventory levels for six inventory sharing regimes. We want to reduce network cost. Simulation modelling is used. The study compares several strategies based on optimal network cost, primary warehouse shipments, and lost sale cost. The research suggests the best policy design. (Naseem M.H., 2021)

E-commerce, new goods, and supply chain frameworks are changing the food industry. These innovations will transform food procurement, distribution, and exchange. However, their environmental effects are still unknown. This study reviews e-commerce's environmental impacts. It discusses important trade-offs and research gaps. Trade-offs related to transportation, customer behaviour, and rural delivery service paradigms are discussed. E-commerce services in rural areas and the implications of fulfilment centres, refrigerated logistics, and e-commerce on consumer purchasing and food waste behaviours are the knowledge gaps. To grasp these issues, more study is needed. (İzmirli D., 2020)

The intelligent system has improved to the point that it is used in many different sectors. Online retailers are increasingly using sophisticated technology. International e-commerce platforms enhance their supplier management intelligence systems employing machine learning theory. With the use of machine learning and the wisdom algorithm, a global e-commerce platform optimizes its supplier credit system.

The cloud model evaluation approach and the difference matrix decision matrix method are used to optimize the assessment of supplier credit. The selection of suppliers and the distribution of orders are both handled by a multi-objective joint decision model. By using a multi-objective evolutionary algorithm and analyzing real-world instances, the model's efficacy and feasibility were confirmed. Intelligent decision-making makes use of evaluations of cloud models and preferences of decision-makers. Rough sets and gray relational analysis make up the procurement supply evaluation approach. According to the research, cloud model calculation may be used to assess the three broad procurement supply chain indicators. In this assessment, the preferred option weights for the three goal functions in the multi-objective optimisation model for cross-border e-commerce supplier selection and order allocation are represented indirectly. Provider evaluation and selection were both facilitated by the procurement supply assessment approach utilized in this research. Furthermore, it provides a theoretical basis for overseeing vendors on a global e-commerce site. (Gee I.M., 2020)

This study examines the existing research on blockchain technology, recent advancements in the industry, and its potential application in supply chain management (SCM). The study focused on analyzing the titles, keywords, or abstracts of articles that mentioned the term "blockchain." Research suggests that blockchain technology is rapidly gaining widespread adoption across various industries. By eliminating intermediaries, it can greatly simplify supply chain management. There are certain constraints present in this study. This study analyzes a total of 299 papers obtained from EBSCO, all of which were published in December 2018. This study demonstrates the importance of blockchain technology in the fields of innovation and technology. This initiative aims to educate academics about blockchain technology, which is the main focus. Blockchain technology aims to enhance consumer trust and benefit society in various ways. This research adds to the current body of knowledge by examining the application of blockchain technology in the field of supply chain management. Researchers can utilize this data to gain a deeper understanding of the optimal applications for blockchain technology. (Y., 2020)

Blockchain technology is popular nowadays. Blockchain-based supply chain management is proposed in this article. A new supply chain management system is presented. Many companies and people believe blockchain technology might drastically alter the supply chain. Blockchain has disrupted supply chains. Blockchain technology aids the supply chain business. It can reduce corruption, middlemen, and expenses while improving product security and traceability. Blockchain also boosts supply chain expansion. The article details industry and individual processes. The above procedure might be a major advance. Businesses and sectors should think about its potential implications. The purpose is to inform readers of the benefits of blockchain technology for supply chain administration. Blockchain for supply chain management is a topic of research for IBM. Blockchain supply chain technology from IBM increases efficiency and transparency. Blockchain has several potential uses beyond cryptocurrencies, including supply chain management. Therefore, many organisations and sectors believe blockchain technology will soon dominate. (Gurtu A., 2019)

Despite continuous efforts to improve operational efficiency and reduce costs, the e-commerce supply chain still faces persistent challenges in terms of managerial issues and strained strategic relationships, which hinder optimal performance. Contract models based on game theory have been widely utilized in the field of supply chain studies. This approach focuses on addressing the challenges associated with strategic interactions and decision-making among different players in the supply chain. In order to guarantee that all parties involved are sufficiently motivated to adhere to the terms of the agreement, contracts in these situations are carefully designed with incentive compatibility constraints. There has been a lack of attention given to contract models that incorporate various levels of supply chain activities influenced by e-commerce. The aim of this research is to put forward a cost-sharing agreement with incentive compatibility restrictions for a three-tiered e-commerce supply chain. The objective is to address the challenges arising from information asymmetry related to costs. This work focuses on addressing the disparity in knowledge regarding costs between the upstream and downstream industries. Dividing up the operating expenses is the shared responsibility of the products seller and the third-party logistics (3PL) operator. Analysis of the consumer goods retailer According to the research findings, the implementation of cost-sharing arrangements resulted in a significant reduction in the overall cost of the supply chain. Furthermore, the results indicate a significant improvement in cost reduction. (Khosla D., 2019)

In the last century, there have been notable transformations in the food retail industry, observed in both developed and developing nations. This transformation has witnessed a transition from conventional neighborhood shops to supermarkets and, more recently, the rise of online shopping. This study investigates the advancement of food retail by analyzing a store choice equilibrium model and a detailed illustrated discourse. The retail patterns observed in a particular time and location across various store types, including conventional shops, supermarkets, and e-commerce platforms, depend on two main factors. Consumer behavior is greatly influenced by various factors, such as their personal characteristics, including income, preferences, and the costs involved in shopping at different stores or buying products online. The stores' cost structures consist of two primary components. Firstly, there are the costs incurred from upstream producers, and secondly, there are the costs of procurement supply chains for perishable items, which extend beyond the item's price. In addition, the expenses associated with storing items in physical stores are also included in the overall cost structure. The objective of this study is to analyze the conditions that facilitate the coexistence of different retail types and identify the most influential ones. In addition, we explore how goods are distributed among retailers based on their type, specifically dry packaged foods versus perishables. (Rathnasiri S., 2019)

A primary emphasis of the aforementioned literature is the conveyance of perishable agricultural goods via online marketplaces and "agriculture-supermarket jointing." In addition to variables such as channel pricing and the cross-price elasticity coefficient of the channel, this research takes into account the time-varying variable of fresh agricultural product quality degradation. The next step is to construct a matching model after defining the demand function for fresh product agricultural items. This study evaluates the best discount rates and market clearing techniques used by supermarkets and agricultural cooperatives under various decision-making scenarios, including both distributed and centralised decision-making. The research takes into account scenarios with zero, single, and multiple discounts. The ideal discount rate for agricultural cooperation, supermarkets, and supply chain profit is examined in the study along with the implications of a number of factors, including the conventional channels' market share, the sensitivity of channels to price, and the coefficient of cross-price elasticity of channels. Management advice is often presented via the use of simulations. Using a number of time-related variables, this research analyses the supply chain's profitability. According to our findings, the effect of the discounting periods on the supply chain profit trend is unaffected by the dual channel characteristics. (Lu L., 2018)

This paper examines MCIN as a cyber-physical social system. This paper examines MCIN modelling and develops MCIN-ASA, a smart agricultural architecture. It integrates production, administration, and commerce, unlike vertical designs. MCIN-ASA businesses, personalities, and commodities make up architecture. The suggested solution uses business and individual portals in an architecture. Six-degrees-of-separation blockchain connects these sites. The authors desire an operating system that is self-managing, open, and ecological. This system will include active and customised consumption, direct and centralised distribution, and dispersed and smart manufacturing. Smart supply, demand, and management features make MCIN in agriculture feasible and efficient, according to the research. Three MCIN-ASA participants modelled this concept. The article presents a framework-based proof-of-concept platform. The authors believe MCIN-ASA can boost agriculture and production-marketing-combined electronic commerce. Its individuality is valued. (Tang R., 2018)

Thanks to the rapid progress of technology, both consumers and marketers now have an abundance of options at their disposal. The reach and possibilities of online commerce on a global scale have significantly expanded. E-commerce, also known as electronic commerce, involves the exchange of goods and services through electronic networks like the Internet or other platforms. Several significant advancements in the field of electronic commerce encompass automated data collection systems, electronic funds transfers, online transaction processing, supply chain management, Internet marketing, and electronic data interchange (EDI). The World Wide Web is commonly utilized in various stages of the transactional life cycle in modern electronic commerce practices. Additionally, alternative technologies such as email can be utilized. This study seeks to identify the factors that impact consumers' choices to participate in online shopping. The study utilized a sample size of 120 participants, employing a straightforward random sampling technique to collect data. Participants were given a self-administered

questionnaire through Google forms. In addition, individuals who had made previous purchases on the E-Commerce site were contacted via email.(Gu X., 2017)

This article explores the current state of express logistics and e-joint commerce's development. It starts by looking at their individual growth and then analyses the most glaring instances of non-cooperation during the course of their cooperative development. In order to illuminate the fundamental causes of this lack of collaboration, the paper also conducts a pertinent cause analysis. The current study suggests a collaborative management strategy that precisely addresses the difficulties involved in e-commerce and express logistics' joint development. To achieve this, a cooperative model is created with the aim of improving express logistics distribution in the context of e-commerce. The branch and bound approach has been found to be efficient for resolving small-scale issues through the creation, comparison, and analysis of outcomes processes. It is harder to provide exact solutions using this approach as the scale goes up. The current analysis concludes that the recommended approach's stability is more ideal. The algorithm's optimization impact has been successfully seen, and its efficacy has been verified. (Phani Bhaskar P., 2017)

Rapid growth has been seen in the Indian e-commerce market. Therefore, geocoding addresses is a big deal in supply chain management. Spatial coordinates are generated from textual addresses using address geocoding. Logistics, analytics, and supply chain fulfillment all rely on precise address geocoding. It was challenging to develop Flipkart's address geocoding engine. Unique geocoding engine issues in India are examined in this research. These issues include, but are not limited to, regional boundaries, changing topography, and the standardization of place names. The importance of accurate and trustworthy address geocoding to businesses is highlighted in this research. It is our firm belief that a number of commercially available solutions do not meet our requirements. There have been three solution prototypes and pilot trials for SAGEL. This research details the steps used to create the first version that was ready for production by considering the results of each step. In this research, we detail the steps used to index and store map data on an Apache Solr cluster in the SolrCloud service. Additionally, we detail the geocoding method that, upon retrieval, discovers the most suitable matches. The paper provides an overview of the design of our research system. Keeping tabs on how customer addresses varied throughout India allowed us to gauge how accurate our geocoding engine was. With the use of a big dataset of addresses, we checked the verified latitude and longitude of each address against these variances. In this study, we test how well the system geocodes buildings, towns, and urban areas. Our geocoding engine was compared to Google's utilizing verified latitude-longitude addresses in the investigation. Compared to Google's geocoding technique, ours is just as precise, and we cover more area. (X., 2016)

Because they make it easier to build and integrate business apps, web services have been quite popular in the last several years. In this research, we look at a web service pricing issue where two suppliers are in a constant state of dynamic price rivalry. Web services given by different providers of varying quality classes are analyzed in the research. Users may buy the web service they wish using a reservation system. The goal is to maximize profit and control demand by setting pricing for online services and modifying them over a certain period of time. Anyone may pay a penalty and end their service at any time; no one can force them to do so. In this research, we take a look at a situation where several types of web services work together in a dynamic setting. It is necessary to construct a time continuous model in order to price online services competitively. After analysing the problem's equilibrium state using open-loop differential games, we propose an algorithm that would provide the suppliers the optimum pricing strategy. To further explore how different factors influence the control and state variables, numerical studies are also conducted. (Chatterjee A., 2016)

In China, where online food shopping is popular and delivered to clients' doorsteps, e-tailing has grown significantly. Online grocery ads emphasise fresh fruit's particular issues. Fruit must be provided in a perfect, ready-to-eat state. Delivery is further complicated by flavour and texture differences across parts. E-commerce has the same issues as conventional fruit trade, especially when customers don't choose the fruit. Thus, e-tailers are fully responsible for customer discontent. E-commerce enterprises require more complex technologies since brand dependability is important. Now, the fruit supply chain has to increase trustworthiness and security. The worldwide fruit trade will be compelled to become information-centric by business-to-consumer e-commerce, necessitating the integration of several new sensor technologies.

The entry of technology companies into the fruit industry, from farming to retail, is likely to increase interest in emerging technologies. These businesses are able to develop, use, and profit from such technology. Predictive data mining, postharvest condition management, and orchard and fruit monitoring will all be used in the fruit supply chain. (Safari E., 2015)

This research presents a cloud paradigm for the mobile phone industry that encourages consumer participation in smartphone personalization services. The integration of cloud computing services and the social production theory allows for the use of many forms of 3D technology, as well as unique process technology for cooperative management, e-commerce, logistics, and intelligent dynamic value chain analysis. A breakthrough model constructed employing a range of technologies, but at the cost of mass production, has made it feasible to customize telephones. With this method, everyone from the initial brainstorming to the final assembly works together to create something that everyone can be proud of. Many different types of industries stand to benefit from the introduction of this innovative service style. In addition to reducing uncertainty at every step of the supply chain, it will meet the growing need for customer-specific goods and services. In addition, new economic development is expected to be stimulated by this service approach. (McDonald R.M., 2015)

The last mile is a major challenge for businesses since it is both the most expensive and environmentally damaging element of the supply chain. This is because customers get their orders straight from the manufacturer. Quite a few new eco-friendly projects have emerged in response to the growing movement for socially and environmentally responsible supply chains. As a commercial trend, retailers are now providing home delivery. This research compares the carbon emissions from conventional shopping methods—like people picking up their items while trip chaining—against those from e-commerce-based online retailing, which brings things directly to consumers' doorsteps. Customers' break-even point for carbon emissions equivalence is examined in this research. A required service level for last mile delivery is evaluated using demand area radius and delivery time. A method is used to determine the variation in carbon emissions. It has been shown that this technique can assess the environmental effect of many approaches and determine the one with the least negative effect. (Su B., 2014)

Within the realm of supply chain management, the utilization of computer technology has presented companies with fresh possibilities to secure a competitive edge. The integration of modern technologies like e-commerce, customer relationship management, and enterprise resource planning has greatly expanded the potential for supply chain management. Currently, it appears that cloud computing is well-equipped to fulfill the requirements of supply chain businesses in terms of managing resources, customer relationships, and online commerce. This chapter aims to emphasize the potential risks that supply chain organizations may encounter during the implementation of cloud systems. These risks can arise from factors such as inadequate management or selecting inappropriate cloud providers and support. There is a potential for the investment options being considered to assist supply chain organizations in aligning their cloud system operations, thereby enabling them to maintain their competitive advantage. (Brown J.R., 2014)

**Objectives**

1. To examine global publication year wise trend.
2. To know the prominent authors and Publishers trend.
3. To know the future research gap by content analysis.

**Research Methodology:**

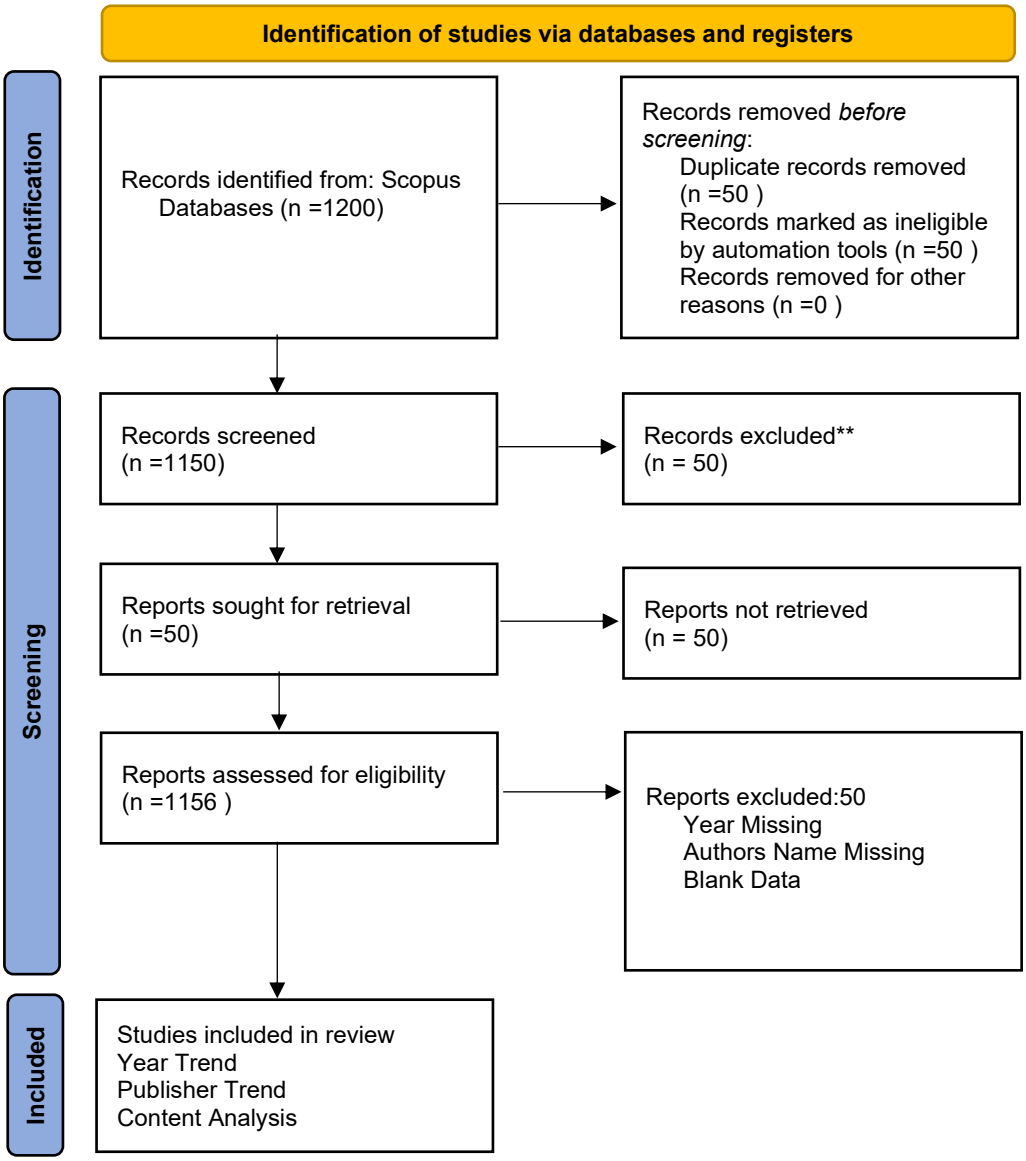


Fig 3: Flow Chart

**Analysis**

The present study reports on the analysis of a corpus of 20,000 documents, from which a total of 20,872 keywords were extracted. The minimum frequency of occurrence for a term was set at 135 times. After applying this criterion, 19 keywords were found to meet the threshold. Finally, a total of 17 keywords

were selected for further analysis.

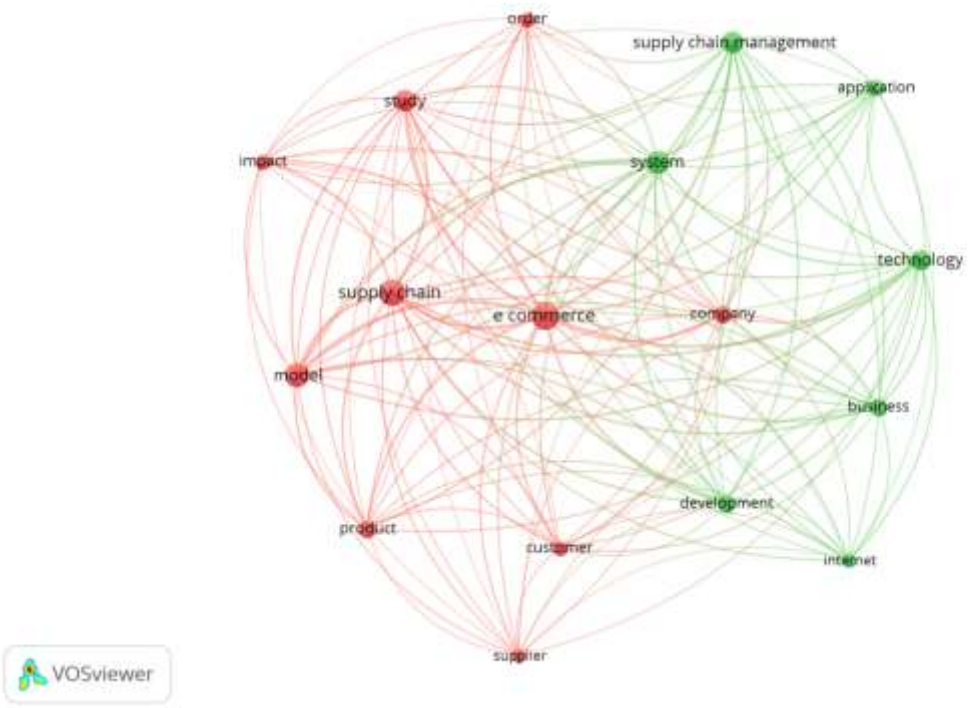


Fig 4: Network - Interconnection between the keywords.

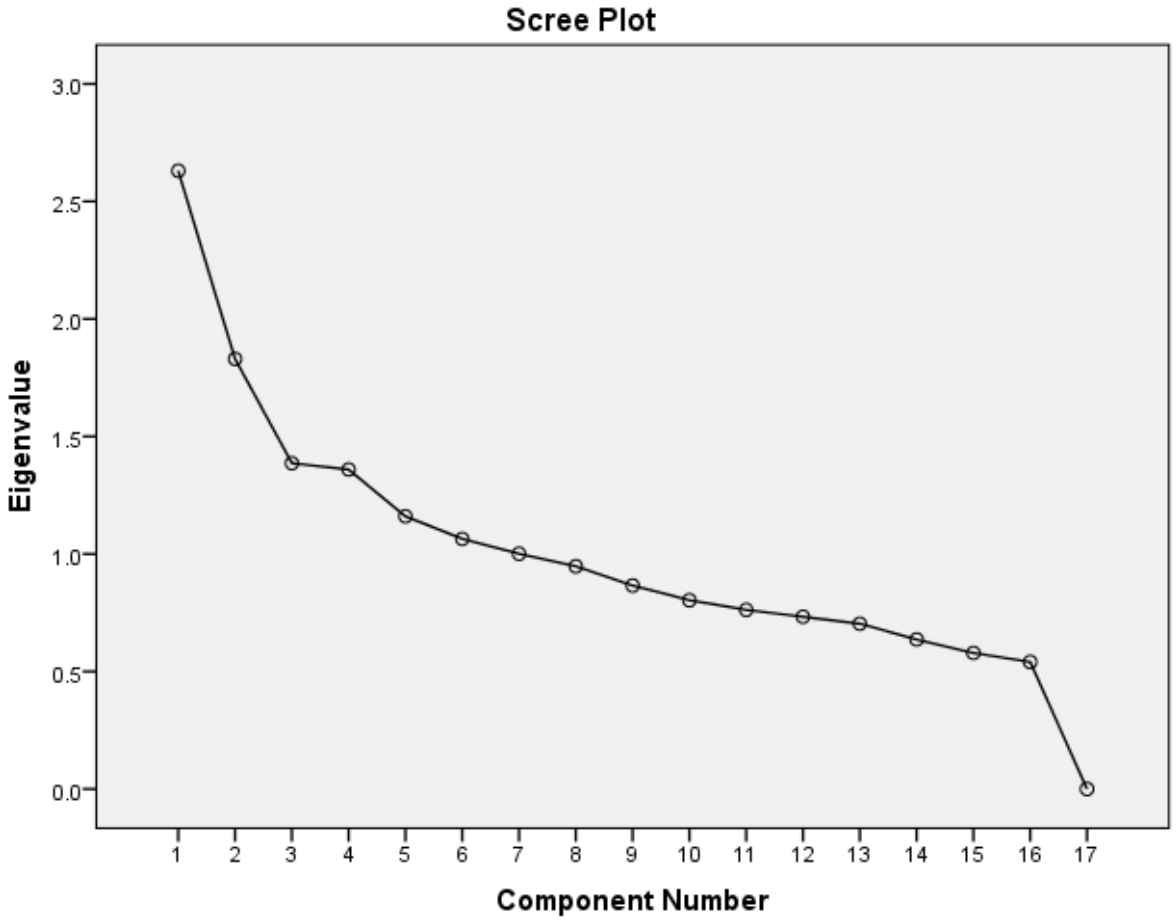


Fig 5: Relationship between Keywords - frequency and eigenvalues

This study examines the relationship between the frequency of keyword usage and their corresponding eigenvalues. Specifically, keywords with eigenvalues less than 1 are hypothesised to be used less frequently, while those with eigenvalues greater than 1 are expected to be more commonly used in the field. The analysis is based on a sample of relevant literature and employs established statistical methods to test the hypothesis. The findings suggest a significant positive correlation between eigen

**Total Variance Explained**

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 2.630 | 15.473 | 15.473 | 2.630 | 15.473 | 15.473 | 1.682 | 9.895 | 9.895 |
| 2 | 1.830 | 10.764 | 26.238 | 1.830 | 10.764 | 26.238 | 1.628 | 9.575 | 19.470 |
| 3 | 1.386 | 8.154 | 34.391 | 1.386 | 8.154 | 34.391 | 1.542 | 9.071 | 28.541 |
| 4 | 1.359 | 7.994 | 42.385 | 1.359 | 7.994 | 42.385 | 1.534 | 9.025 | 37.565 |
| 5 | 1.160 | 6.824 | 49.209 | 1.160 | 6.824 | 49.209 | 1.439 | 8.464 | 46.030 |
| 6 | 1.064 | 6.260 | 55.469 | 1.064 | 6.260 | 55.469 | 1.363 | 8.015 | 54.045 |
| 7 | 1.001 | 5.888 | 61.357 | 1.001 | 5.888 | 61.357 | 1.243 | 7.312 | 61.357 |
| 8 | .948 | 5.574 | 66.931 | | | | | | |
| 9 | .866 | 5.092 | 72.023 | | | | | | |
| 10 | .803 | 4.724 | 76.747 | | | | | | |
| 11 | .762 | 4.483 | 81.230 | | | | | | |
| 12 | .733 | 4.310 | 85.540 | | | | | | |
| 13 | .703 | 4.136 | 89.676 | | | | | | |
| 14 | .636 | 3.741 | 93.417 | | | | | | |
| 15 | .579 | 3.404 | 96.821 | | | | | | |
| 16 | .540 | 3.179 | 100.000 | | | | | | |
| 17 | 1.000E-013 | 1.000E-013 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

Table 1: Variance

**Rotated Component Matrix[a]**

| | Component | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| VAR00018 | .064 | -.163 | .264 | .545 | -.183 | .111 | .377 |
| VAR00019 | .136 | .700 | .128 | .057 | .056 | .149 | -.075 |
| VAR00020 | -.039 | .716 | .002 | .008 | -.005 | -.242 | .076 |
| VAR00021 | .119 | .246 | -.061 | -.169 | .587 | -.112 | .233 |
| VAR00022 | .467 | -.235 | .023 | .065 | -.270 | .200 | -.367 |
| VAR00023 | .017 | -.011 | .073 | .021 | -.051 | -.001 | -.835 |
| VAR00024 | -.697 | -.071 | -.190 | -.002 | -.087 | .059 | .080 |
| VAR00025 | .387 | .295 | .049 | -.036 | -.006 | .511 | .208 |
| VAR00026 | -.022 | -.429 | -.335 | -.414 | -.070 | -.208 | -.051 |
| VAR00027 | .134 | .164 | -.121 | -.022 | -.065 | -.788 | .072 |
| VAR00028 | .043 | -.068 | .025 | -.843 | -.011 | .185 | .196 |
| VAR00029 | -.681 | -.049 | .034 | -.023 | -.084 | .054 | -.063 |
| VAR00030 | .039 | -.098 | -.069 | .024 | .871 | .146 | -.079 |
| VAR00031 | -.141 | -.218 | -.810 | .004 | -.075 | -.018 | .017 |
| VAR00032 | -.001 | -.022 | .703 | .117 | -.333 | .125 | -.082 |
| VAR00033 | .337 | -.255 | .353 | .201 | .132 | -.376 | .271 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| VAR00034 | .414 | .225 | .016 | .512 | -.258 | .269 | .133 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 9 iterations.
Table 2: Rotated Component Matrix

| **Rotated Component Matrix**[a] | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Component | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Application | | | | .545 | | | |
| Business | | .700 | | | | | |
| Company | | .716 | | | | | |
| Customer | | | | | .587 | | |
| development | .467 | | | | | | |
| e commerce | | | .073 | | | | |
| Impact | | | | | | | .080 |
| Internet | | | | | | .511 | |
| Model | | | | | | | |
| Order | | .164 | | | | | |
| Product | | | | | | | .196 |
| Study | | | | | | .054 | |
| Supplier | | | | | .871 | | |
| supply chain | | | | | | | .017 |
| supply chain management | | | .703 | | | | |
| System | | | .353 | | | | |
| Technology | .414 | | | | | | |

Table 3: Final Matrix

Future research gap:
One goal of this research is to fill in any blanks about what people mean when they talk about "technology" and "development." Cluster 1, which is pertinent to this matter, is given special attention. By conducting a comprehensive literature review, this study hopes to provide light on where the field stands at the moment and identify gaps that need more investigation. The findings of this research might be useful for academics and professionals trying to understand the relationship between development and technology. Findings from this research fill a gap in the existing literature about the meanings of "Business," "Company," and "Order." Cluster 2 has the most research gaps in this area, according to the data. Further investigation is required to understand the relationship between these concepts and their potential impacts on business operations. To address any gaps in our understanding of e-commerce, supply chain management, and system integration, this research set out to collect relevant data. Cluster 3 is the primary focus of the inquiry of these phrases in combination. The study's overarching goal is to identify potential knowledge gaps and provide avenues for further investigation. By reviewing the existing literature, this research hopes to contribute to our understanding of how systems, supply chain management, and online commerce may work together. Group 4: A Keyword Application Gap Analysis This research aims to fill any gaps in Cluster 5's literature about the combined use of the terms "customer" and "supply." This cluster is a crucial topic for study in the areas of management and business. In order to fill any gaps in our present inquiry and contribute to the existing body of knowledge, this study will review the relevant literature and provide recommendations for future research. The purpose of this research is to fill any gaps in the literature about the definitions of "internet" and "study." The focus of this research is Cluster 6, where the previously indicated words seem to be underrepresented. This study intends to do a comprehensive review of relevant literature in order to identify the reasons for this gap and explore

possible avenues for future research in this field. The present research aims to fill any gaps in the literature about the words "impact," "product," and "supply chain management." The topic of this research, Cluster 7, is described by the keywords provided above. Examining the existing literature on the topic and identifying any gaps that need filling are the objectives of this research. The study used a systematic review approach to examine the relevant literature. The current understanding of the impact of commodities on supply chain management will be enhanced by the findings of this research.

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