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Mini Review: Logistic, Ditribution and Procurement

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A R T I C L E I N F O

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A B S T R A C T

The purpose of the study to see whether these three variables already exist that discuss quantitatively or qualitatively, will also be presented scientific articles related to the three variables above the research method used is a literature review derived from existing scientific articles from various journals in the world related to variables. The results of research whose perspective the researcher does not exist directly state the results with certainty are only the perspective of previous authors and add strongly to the results of previous research.

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INTRODUCTION

Logistics concerns activities that involve planning, execution, involving people, supervision, information, movement of goods from one place to another, the process involves coordinating various activities such as transportation, warehousing, warehousing, packaging and distribution to ensure that products are delivered to customers efficiently and cost-effectively, this is in accordance with the reinforcement of (Kappauf et al., 2011) which states that the integrated planning, design, management, implementation, and control of all material flows, as well as the corresponding information flows, begins with the customer (request) and usually covers several stages of production and distribution until the delivery of goods, known as distribution logistics as well as subsequent subscription and billing as indicated, it All are logistic. The existence of the sea highway will greatly assist the distribution of national logistics (Susanto et al., 2021)

In addition, purchasing logistics is one of the most important segments of the company, because the effectiveness of purchasing depends on meeting customer needs (Profile, 2021). Logistics plays a key role in supply chain management, i.e. the process of controlling the flow of goods and services from raw materials to finished products. Effective logistics management can help companies improve operations, reduce costs, increase customer satisfaction, and gain a competitive advantage. According with reinforcement according to (Botti et al., 2017) It's a sophisticated service system, supply chain. Logistics involves the use of technology and information to streamline processes and increase transparency throughout the supply chain. This includes using tools such as transportation management systems, warehouse management systems, and warehouse management systems to track and manage real-time inventory, shipping, and delivery, and continuous technological advances also enable this "smarter" method of managing service systems. The phrase "intelligent service system" is therefore used (Spohrer et al., 2012).

Logistics does not escape distribution, after receiving the sales order, start the delivery procedure, the transportation process is to unload the cargo at the destination—complete the delivery process. (Profile, 2021), Order processing, storage, picking, packing, inventory control, and transportation are some of the processes involved in distribution (Andrejić &; Kilibarda, 2015). The supply chain of a company or organization includes logistics and distribution as important components, in distribution is also embraced by the possibility of reliability, according to (Yu et al., 2012) Distribution flexibility can be defined as the ability to change the distribution process efficiently or effectively to suit the needs of either customer directly or indirectly. Procurement is also related to distribution and logistics.

Where procurement involves internal firms or organizations, the problem of distributed transportation procurement, which is solved by distributive effective auction mechanisms, is usually a problem of matching supply and demand through transportation networks (Xu & Huang, 2014), as an illustration of procurement that held by public or government organizations according to (Серебренников &; Баранов, 2009) Government procurement is defined as a

legal authority appointed to advise, plan, acquire, deliver, and evaluate government spending on goods and services necessary to meet specific objectives, commitments, and activities to achieve desired political objectives, which The result is used. Self-procure within the organization to ensure that the company has sufficient inventory to meet customer demand, while also minimizing costs and risks.

For organizations procuring sustainable participation requires a certain level of entrepreneurship and risk-taking, a booking framework was introduced to assess whether some organizations are systematically pursuing sustainability goals (Prier et al., 2016).(Prier et al., 2016)(Prier et al., 2016)

After seeing the explanation from the introduction above between logistics, distribution, and procurement, this paper wants to review the three variables above with the aim of seeing whether these three variables There are already those who discuss quantitatively or qualitatively, scientific articles related to the three variables above will also be delivered.

THEORETICAL REVIEW

Logistics

According to theory (Bowersox, D. J; Closs, 1996) in his book logistics is a system consisting of several components, such as the acquisition of raw materials, production and distribution of finished products to customers. The purpose of the logistics system is to improve the efficiency and effectiveness of the process in order to better serve customers. Timely and cost-effective delivery of goods is a logistical task, which includes functions such as inventory, transportation, storage, and procurement (Christopher &; Holweg, 2011).

Distribution

Distribution management according to is a decision-oriented approach, indicating that the focus is on policy making. Effective planning and organization is the first step, (organization), driving (renewal) and management (management), not only in the explanation of how channels work.

Procurement

According to (Brown et al., 2018) methodical strategies for managing the procurement of goods and services, integrated into the overall business strategy

METHODOLOGY

Qualitative research by describing the literature review comes from scientific articles related to the variables in this scientific article.

RESULTS

The results of research from the summary of existing scientific articles are related to variables including; from (Cammarano et al., 2022) with the results of research related to procurement and distribution variables stated that the buying and selling process can be redesigned through a sustainable approach that considers the three dimensions of sustainability. Qualitative research

methods with literature review. The next article from (Profile, 2021) three variables exist from this paper using qualitative methods with the aim of analyzing 15 KPIs of procurement logistics and 12 distribution logistics to determine the top 5 for each process, The results of the study stated the application of the method showed that the top five KPIs of logistics procurement from order to delivery time, shipping price, average delivery time, profit per order and percentage of on-time delivery. On the other hand, the five most important distribution logistics KPIs include total distribution cost, timeliness rate, distribution flexibility, timeliness of goods delivery, and profitability per batch. (Gundlach et al., 2006) three variables are related to this paper, with the aim of the study examining and mapping the changing nature and landscape around the disciplines of supply chain management, distribution marketing channels, logistics, and procurement. Highlighting the remarkable developments and advances taking place within and between these disciplines, the results of this new landscape research offer opportunities and challenges for future scholarship and practice in these related disciplines.

Furthermore, from the scientific article belonging (Andrejić &; Kilibarda, 2015) the purpose of the study presents the efficiency of distribution channels as one of the most important selection criteria. The effectiveness of sales channels affects logistics costs and customer satisfaction simultaneously, the results of research on the main characteristics of distribution channels such as delivery time, service level, transaction volume, error rate, and different cost categories, this paper uses the PCA-DEA approach to measure the efficiency and selection of specific types of distribution. Channel suggested. The model is tested on numerical examples. The results show great strength of the proposed model, research using the literature quality method, subsequent articles from (Sarrafha et al., 2015) research with qualitative models using literature review with the research objective of developing a multi-cycle framework for supply chain network planning (SCND) involving suppliers, factories, distribution centers (DCs), and retailers. Logistical decisions are tactical in nature and include sourcing raw materials from suppliers, producing finished goods in factories, distributing finished goods to retailers through distribution centers, and storing raw materials and finished goods in factories and distribution centers, with research results being that no benchmarks are available in the literature, Multi-Objective Simulated Annealing Algorithm (MOSA) parameter matching and sorting algorithms Popular non-dominance genetics (NSGA-II) was developed to validate the results obtained and evaluate system performance. MOBBO with randomly generated trial events.

The next article from (X. Yang, 2013) with the research objective provides a comprehensive overview of sales topics in logistics and supply chain management, and the results of future research should consider an integrated approach to sales planning and consider the concept of sustainability, research using qualitative methods using literature review, subsequent articles from (Xu &; Huang, 2014) with the aim of the study to propose an efficient auction mechanism of allocation for distribution transport procurement (DTPP) issues, which are generally concerned with matching the demand and supply of

transport networks, with the results of the study preparing a one-way Vickrey-Clarke-Groves (O-VCG) combination auction for DTPPs, where operators can bid on line packages. O-VCG auctions minimize total transportation costs (i.e., allocation efficiency) and encourage transportation companies to bid honestly (i.e., incentive compatibility). Furthermore, to simplify the conduct of auctions, we propose Primal Dual Vickrey (PDV) auctions based on insights from the famous Ausubel auction and the Primal Dual Algorithm. The PDV auction is actually a multi-round downhill auction, which seems quite simple for bidders. PDV auctions implement VCG payments and actual bidding under seller sub-modularity conditions, meaning that each operator's influence diminishes as the coalition grows. That's what happened with DTPP in an oversupplied transportation market. The problem of determining the winner of the O-VCG auction is solved by the proposed prima-dual algorithm when seller submodularity prevails. Finally, operators may disclose less personal information in PDV auctions due to their dynamic procedures.

The next paper of (Goel &; Gutierrez, 2011) qualitative research with research objectives Consider a company that searches for and sells commodities from the spot market and futures market at randomly fluctuating prices; Goods are distributed downstream to inhomogeneous retailers to meet random demand. We develop models to calculate forecast sourcing and distribution practices but are nearly optimal for these systems and study commodity market values by providing managers with (a) additional supplier flexibility and (b) pricing information, the results of research into the existence of commodity markets and the information they convey can lead to significant reductions in inventory-related costs; However, to achieve this advantage, both the flexibility of principal purchases and the maturity structure of prices produced by commodity markets must be considered when formulating operational policies. Management's views on supply strategies in response to price and demand fluctuations are also discussed. The next paper from (Kaur &; Singh, 2019) with the aim of research to model the relationship between sustainability and resilience at the supply chain design level through the procurement of raw materials and logistics which is considered as the main step of any supply chain with the results of the study The proposed SPL_DRSCM model for MINLP shows significant cost savings while optimizing procurement and logistics under conditions of CO2 emissions. A comparative analysis was performed and detailed numerical results were presented, qualitative assessment with a literature review.

(Nemati &; Alavidoost, 2019) With the research objective of developing three multi-objective fuzzy mixed integer linear programming models for sales and operations planning processes. Then the performance of the fully integrated fuzzy model compared to the corresponding crisp model in terms of total supply chain costs and customer service levels, with the results of the study confirming the advantages of the fuzzy model over the sharp model. In addition, sensitivity analysis was conducted, which analyzed the impact of several key factors on the benefits of SC design integration, research using qualitative literature review, then papers from (Nikkhoo et al., 2018), with research objectives use

quantitative flexibility contracts (QFCs) to coordinate booking activities in a three-tier support chain. This multi-level supply chain consists of aid organizations (i.e. non-governmental organizations), one supplier of relief supplies and affected areas. With the proposed QFC, the aid organization first orders before the disaster occurs and undertakes to purchase an initial amount of at least a pre-agreed amount, with the results of the study when demand is uncertain, the proposed QFC not only prevents large losses in the aid organization, but also increases the satisfaction of the affected area.

The next paper from (J. Yang &; Yu, 2019) with the aim of research tries to understand the role of Third Party Logistics (3PL) companies in providing integrated logistics and procurement services (ILPS) to better understand the management chain, with the results of the study manufacturers generating the largest profits in the Pareto region and retailers can increase the share The advantage is when the standard deviation of demand increases, qualitative research literature review. The paper from (Gholizadeh et al., 2020) with the research objective proposes a versatile and environmentally friendly model for the supply chain, the aim is to minimize total costs, maximize the efficiency of transport vehicles and minimize information fraud when sharing information in supply chain elements, with the results of the proposed model research can avoid failure using programming methods Scenario-based stochastics. Efficient fuzzy hybrid-robust stochastic methods are also used to manage parameter uncertainty and risk-making departure decisions. The extended ε-bound method is used to solve multi objective models. Model performance was examined in extensive computer studies, qualitative research literature reviews.

The next paper of (Liang et al., 2020) research objectives adopts the Vickrey-Clark-Groves (P-VCG) volume discount and the actual double auction mechanism for procurement and applies it to the logistics service procurement market. For the single-customer market, we designed the volume-discounted P-VCG auction, and for the multi customer market, we created a model to maximize social welfare and offer reduced volume discounted trading (TR-QD). Double auction mechanism, with the research results of TR-QD auction mechanism can achieve an increase in the total value of customers, the total value of logistics companies, social welfare, and total business volume.

DISCUSSION

From the explanation of the article above there are various kinds of phenomena, gaps, research objects, and research results found, but indirectly only some are directly related the three variables are in one research result from the paper belonging to (Gundlach et al., 2006), (Profile, 2021), the two studies above are qualitative research with review literature. In addition, there are several other papers related to distribution and procurement variables and all of them use the qualitative literature review method.

This research paper looks for the relationship of the three variables above and according to the perspective researcher there is no directly stating the results with certainty only the perspective of the previous author and adding strongly from the results of previous research.

CONCLUSIONS AND RECOMMENDATIONS

From the results and discussion above, it is limited to getting references between the three variables in real terms from various journals, only two papers related to the three variables from the article this researcher. By indirectly there is no linkage by stating between the three variables only strengthens the results of previous research or adds from the theory, or the perspective of the researcher from Both papers above.

In the future this variable can be continued in research with quantitative research methods, indicators, theories, and definite results.

FURTHER STUDY

For further research with the latest results of research from these three variables

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The logistic field of the results of this study provides additional references for future researchers.

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