CHAPTER - II

REVIEW OF LITERATURE, CONCEPTUAL FRAMEWORK

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REVIEW OF LITERATURE, CONCEPTUAL FRAMEWORK DEVELOPMENT

2.1 INTRODUCTION

This section provides details about the research based on the literature reviewed. A review of literature is a comprehensive and structured summary of the research studies that pertain to a specific subject. Its primary objective is to evaluate and combine the most important literature available in a particular field of study. It aims to illustrate the evolution of knowledge in the domain, outlining what has already been accomplished, what is generally recognized, what is emerging, and what the current state of thinking on the topic is. Furthermore, a literature review identifies research gaps and describes how a particular research project can fill them.

The literature review has been conducted from various secondary sources, viz., books, contemporary articles, online sources, the EMIS database, Euromonitor, academic journals from databases such as Science Direct, Emerald, Scopus, and scholar.google.com, as it has a combined list of major journal databases. etc. to build the theoretical foundation for the dissertation. Supply chain management, retail supply chain management, retail supply chain challenges, retail supply chain performance, and firm performance were used as core areas and key words to search the articles.

2.2 SUPPLY CHAIN MANAGEMENT

Supply Chain Management is a critical factor in determining the success and profitability of a sports goods retail business. Cooper et al. (1997) reported that the concept of supply chain management emerged in the mid-1980s. (Stevens, 1989) defined the supply chain as "a system that comprises material suppliers, production facilities, distribution services, and customers interconnected through the forward flow of material and the backward flow of information".

During the early 1990s, many of the research on supply chain management focused on defining it. The Council of Supply Chain Management Professionals (CSCMP) defines supply chain management as the planning and management of activities involved in sourcing, procurement, conversion, and logistics management. It also involves coordination and collaboration with channel partners, which may include suppliers, intermediaries, third-party service providers, or customers. Supply chain management integrates supply and demand management within and across companies. Frederico and Martins (2014) highlighted that supply chains have received significant attention since the 2000s, not only due to the advantages they bring but also due to the challenges of managing them.

In 1995, New and Payne stated that supply chain management as the coordination of critical business processes among a network of interdependent suppliers, manufacturers, distribution Centre's, and retailers. The goal is to enhance the flow of goods, services, and information from original suppliers to end

customers while simultaneously reducing system-wide costs and maintaining the required levels of service.

Lambert et al. (1998), developed a supply chain structure with components of supply chain management, network structure, and business processes. They concluded that integrating business processes with key supply chain members contributes to achieving competitiveness and profitability.

According to **Lummus & Vokurka (1999),** supply chain management encompasses all the activities involved in delivering a product from raw material to customer, including sourcing, manufacturing, warehousing, distribution, and information systems.

According to **Mentzer et al. (2001),** Supply chain management involves coordinating traditional business functions across all businesses in the supply chain to improve long-term performance. It involves understanding the strategic implications of tactical activities in managing supply chain flows and suggests further research to develop a theoretical framework for supply chain management.

Croxton et al. (2001) emphasize the importance of supply chain management in managing market operations, describing eight processes defined by The Global Supply Chain Forum, offering guidance for administrators and content for professors to structure supply chain management.

Tan's (2001) discusses how supply chain management has evolved from traditional sourcing and logistics roles. He outlines two tracks that have merged into a holistic and strategic approach to operations, materials, and logistics

management. Tan clarifies the concept of supply chain management and discusses various techniques and favorable circumstances for its implementation.

Vickery et al. (2003) examined the impact of integrative supply chain strategy on customer service and financial performance. The study specifically focused on the combination of integrative information technologies and supply chain integration. By analyzing these factors, the researchers aimed to understand how they influence both customer service and financial outcomes.

M. V. R. Reddy (2012) explains that optimizing the supply of products, supplies, and knowledge from seller to customer is a crucial aspect of supply chain management and logistics.

Laukkanen (2012) highlights the significance of supply chains in economic productivity and stability, with inventory storage and transportation being key logistics roles that contribute to high costs. Slow network construction and technology implementation contribute to these costs. The article explores the impact of supply chain management on benefits and customer loyalty.

2.2.1 Summary

The supply chain is the process of producing and delivering a final product or service, from suppliers to customers. The effectiveness of the entire supply chain determines a firm's competitiveness in the marketplace. Research on supply chain management has evolved from the evolving concept to areas such as performance management, optimization, sourcing and logistics, distribution management, responsive supply chain, structure, implementation, and information

management. However, the aspect of supply chain challenges has been under-researched. Most studies focus on narrow areas of supply chain management, highlighting the need for a detailed study of retail supply chain management and its challenges. This section 2.3 focuses on retail supply chain management and its challenges.

2.3 LITERATURE ON RETAIL SUPPLY CHAIN MANAGEMENT

This literature review explores retail supply chain management, focusing on its challenges, and development of a research framework. The objective of retail supply chain management is to ensure the right product is supplied to the right place at the right time and price for both retailers and manufacturers. Globalization has increased demand uncertainty, necessitating greater responsiveness to customer needs. Retailers must make decisions about location, target markets, suppliers, staff, and marketing mix in a competitive global environment. Retail logistics have become increasingly important since the 1990s, generating a competitive advantage by increasing product availability at lower costs.

Sampson and Fawcett (2001) examined the impact of disintermediation in the retail supply chain, identifying both challenges and advantages, and examining its effects on trust, promotional arrangements, and after-sales service in the retail industry.

Cho and Kang (2001) explore the challenges that retail firms face in global sourcing, including logistics, regulations, cultural differences, and national uncertainty. The challenges vary depending on the demographic and managerial

characteristics of the firm, as well as product type, number of imports, experience, and sourcing regions.

Yu et al. (2001) found that information-sharing retail supply chain partnerships can reduce decentralized control issues and the "bullwhip effect," leading to improved system performance, reduced inventory levels, and cost savings.

Kent et al. (2003) explored the impact of inter-organizational information technology on the retail supply chain, emphasizing the importance of supply chain management for success in today's competitive retail environment.

Lundvall, P., and Gullberg, M. (2004) identified challenges faced by retailers, including the need for time-to-market reductions due to shorter product life cycles and greater product diversity, which require strong supply chain responsiveness. They found that retailers can now manage their supply chains more efficiently and that the product's demand trend is crucial in deciding how to manage it.

Chiles and Dau (2005) discovered best practices in retail supply chains through case studies of Wal-Mart and Amazon.com, revealing similar concepts despite different structures and processes. They recommend transferring these processes to other industries.

Hedderich (2005) highlights challenges in retail supply chain, such as improvement, sourcing location, language barriers, unforeseen delivery risks, and customer service.

Ashayeri and Kampstra (2005) discuss the changes in distribution network structure and performance requirements due to business and technology advancements. They outline steps for resolving major challenges in distribution chains and networks.

Retailers face technological and competitive challenges, as well as customer protection issues **(per Jones, P., et.al 2005)**. RFID offers advantages across the supply chain, potentially increasing systemic concentration in the retail sector. It impacts store activities and consumer buying experiences.

Baker (2006) highlights the challenges faced by retail supply chains, particularly distribution centers, due to globalization and market instability. To address these, distribution centers are designed to be more adaptable.

Sahay et al. (2006) identified critical factors in supply chain processes, with Demand Management being the most significant influence. They recommended investigating potential antecedents of Demand Management in the Indian SC environment.

In retail, ensuring product availability is crucial, and thus, supply chain management has become increasingly important in sports goods industry. SCM operations have a significant impact on retail outcomes, and poor logistics execution at the retail level can lead to unsatisfactory results **(Fisher et al., 2007)**.

Paulraj and Chen (2007) found that environmental uncertainty significantly impacts strategic supply management initiatives, but demand uncertainty does not significantly affect business performance. These findings suggest that the

performance of buying and providing companies is closely related to strategic supply management.

A. Baseer and G.L. Prabha (2007) stated that the retail market in India has undergone significant changes in the past decade and is currently the world's ninth-largest retail market. They identified several challenges in the industry, including higher taxes, multiple regulations, bad policy choices, inadequate facilities and logistics, and high machinery and packaging material costs.

The study by **Zhou and Benton Jr. (2007)** found that effective information sharing in supply chain management improves practices, and both data sharing and practices are essential for good performance.

Sun, et al., (2009) suggested that adopting an appropriate supply chain strategy can enhance retail SCM performance, using Lee's uncertainty framework to investigate how matching the SCM strategy with environmental uncertainty affects perceived performance.

Demand management is a complex and demanding task. Demand coordination with SC management is challenging, and it required extensive research from a retail supply chain perspective **(Taylor and Fearne, 2009)**.

Ganesan et al. (2009) examined how retailers leverage their supply chain partners' competencies beyond their organizational limits to create value and a competitive advantage. The study identified three trends affecting retail supply chains: global sourcing practices, multichannel routes to market, and relationship-based innovation.

C.C. Defee et al. (2009) studied the upstream side of the supply chain, revealing specific challenges faced by retailers and producers. They identified gaps and potential for improvement.

Ganesan, S., and colleagues (2009) examine three current trends that are reshaping the retail industry, including global sourcing, multichannel marketing, and relationship-based innovation. These trends are leading to improvements in performance, and the authors provide an overview of relevant literature, identify key issues, and offer suggestions for future research.

Thomas, R. W., et al. (2010) state that retailers must build highly sensitive supply chains in order to meet rapidly evolving consumer demands. They found that time pressure can decrease collaboration activities, satisfaction, and value in retailer-supplier relationships. The study used scenario-based experimental methods to quantitatively examine the impact of time constraints on these relationships.

Amer, Y., et al. (2010) present a model that optimizes, monitors, and controls the order fulfilment process in a major retail firm's supply chain using Design with Six Sigma and fuzzy logic, which improves supply chain integration and coordination among partners.

Singh et al. (2011) studied the factors affecting retail challenges and organizational performance in organized retail. They found that strategic, environmental, and consumer challenges all influence supply chain challenges and impact organizational performance.

Randall et al. (2011) investigated US retailers' supply chain tactics, finding that they are adopting more agile and responsive techniques to manage costs and adapt to volatile economic conditions. The SCM tactics used by retailers depend on their business model.

Hung Lau (2012) suggests that efficient management of retail supply chain management enhance overall efficiency while ensuring responsiveness to meet genuine customer needs.

Ashish Bhatnagar (2012) explores supply chain management, also known as end-to-end operation management, which involves managing the distribution of content, goods, and funds. He examines India's role as a global economy source and market, its supply chain processes, challenges, and opportunities, and discusses supply chain efficiency solutions and the role of information technology in addressing inefficiency challenges.

Sinha (2012) explored the impact of changing consumer culture on Indian supply chain strategy, finding that mega retailers' innovative retail formats have prompted smaller businesses to offer a wider product variety. However, retailers must navigate diverse consumer habits, state-specific regulations, and international investment limitations in the unique Indian retail environment.

Hübner et al. (2013) propose a framework that systematically organizes retail demand and supply chain planning problems. This approach, which includes a consistent demand and supply chain planning matrix, emphasizes the interconnectedness of planning and provides a structure for retail operations. The

framework can aid designers in understanding decision challenges and aid in advanced decision support system research.

Xie and Allen (2013) explored the role of information technologies in retail supply chains (SCs) and their strategic and operational opportunities and challenges. They found that while IT integration can enhance SC performance, challenges like high setup costs, complexity, and privacy concerns need to be addressed. However, if SC participants are aware of these opportunities, they can transform challenges into opportunities for cost, response efficiency, and customer satisfaction.

Chen et al. (2014) studied an online retail supply chain with one referral intermediary and one retailer and developed a horizontal cooperative contract to manage the supply chain, which led to benefit optimization and successful collaboration.

Roscoe and Baker (2014) evaluated the factors that influence supply chain segmentation when selling to customers across retail chains using a case study of two sporting goods brands. They developed a supply chain segmentation framework that aligns promotion, distribution, demand forecasting, and supply chain roles.

Forslund (2015) examines the factors that influence the degree of integration of performance improvement frameworks in retail supply chains. The study identifies dependence, brand value, business process alignment, output demand, and the presence of a performance improvement standard as positively

linked to integration in a partnership. This study provides new insights into the retail industry and the industrial supply chains.

Rana et al. (2016) identified warehouse control, IT usage, transportation management, and teamwork as the most crucial factors affecting retail supply chain efficiency, offering valuable insights for managers to improve efficiency in a competitive market.

Mishra and Banerjee (2017) surveyed Indian food retailer executives to understand their perspectives on supply chain management and market intelligence. They found that nine SCM dimensions and four competitive advantage dimensions are directly related to firm efficiency.

Vizinger and Jerovnik's (2018) study highlights the vulnerability of retail supply chains and suggests solutions to improve effectiveness, flexibility, and convenience. They propose efficiency estimations for optimal distribution strategies, incorporating strategic decisions into the modelling approach and providing numerical illustrations for applicability.

Rana, S. S., and Osman, A. B. (2018) found that the position of vendors, the use of technology, inventory management, transportation management, and teamwork are all major factors in retail supply chain efficiency.

Ishfaq and Raja's (2018) study highlights the significant organizational challenge faced by retailers in fulfilling online orders while maintaining traditional store-based distribution operations. The study provides managerial insights into

each fulfillment option and the organizational and expense levels that determine the preferred option, aiding retailers in identifying suitable solutions.

Ekinci and Baykasolu (2019) explored uncertainty in retail supply chains and identified three categories of supply chain uncertainty: system, perceived, and value addition. System dynamics modelling was used to gain insight into dynamic behavior and reflect the fluid relationships in retail supply chains.

Mao, L. L. (2020) highlights the significant market of sporting products retailing, with gross sales of $52.2 billion in 2018. The research examines the retail quality of these stores, focusing on customer service and shop dimensions.

In **2020, S. S. Rana** examined the factors that impact retail supply chain responsiveness, highlighting the significance of retailers, technology usage, inventory control, and teamwork.

Bonfanti and Yfantidou's (2021) study explores the evolving role of sports equipment stores in the in-store consumer shopping experience. They found that immersive architecture, sensorial environments, social relationships, trial ability, and experience sharing are crucial factors in creating a fun shopping experience in sports shops.

Alikhani et al. (2021) highlights the challenges of creating a resilient retail supply chain network in the face of uncertainty. They identify several factors, such as warehouse fortification, inventory prepositioning, direct-to-store shipping, and inventory sharing, that contribute to resilience.

2.3.1 Summary

There is no literature on retail supply chains that is relevant to retail supply chain challenges in the sports business environment. Researchers have studied aspects such as performance measurement, responsiveness, technology use, distribution strategy, demand management, uncertainty, efficiency, sourcing and distribution systems, and information management. However, many aspects of the retail supply chain have been overlooked. This research identified five factors of retail supply chain challenges through an extensive literature review. The study evaluated the impact of these challenges on retail supply chain performance and firms' performance indicators through assessing downstream process performance. The study adopted demand management, distribution management, environment uncertainty, information management, and sourcing from earlier studies as retail supply chain challenges. However, the literature is inadequate to determine the challenges for the sports goods industry.

2.4 LITERATURE ON RETAIL SUPPLY CHAIN CHALLENGES

Developing measurement constructs is crucial for theory building, particularly in retail supply chain management. Researchers have made valuable contributions to the supply chain field, and by combining their insights and considering the unique requirements of the retail industry, a research framework has been developed. Through reviewing and consolidating existing literature, five dimensions of supply chain management challenges have established, which have an impact on performance in the retail sector. The dimensions are Demand Management Challenges (DeMC), Distribution Management Challenges (DiMC),

Environment Uncertainty Challenges (EUC), Information Management Challenges (IMC), and Sourcing Challenges (SC).

2.4.1 Literature on Demand Management Challenges

Demand management is a critical component of retail supply chain operations, encompassing the forecasting, planning, and management of customer demand to align it with supply chain capabilities. Effective demand management is essential for optimizing inventory levels, minimizing costs, and ensuring customer satisfaction.

Crandall, R. E., and Markland, R. E. (1996) examine the challenge of demand management in service industries, highlighting the significance of demand and capacity management and the classification of demand management strategies, as well as identifying some of the factors that may influence the choice of demand management strategies.

Frohlich, M. T., and Westbrook, R. (2002) examines the factors influencing the adoption of DCM and identifies rational efficiency and bandwagon effects as major drivers. These findings hold significant implications for both theoretical understanding and practical applications in manufacturing and service organizations seeking to enhance their performance.

Sahay et al. (2006) identify the importance of DMC as a critical factor influencing the supply chain process. They recommend investigating the antecedents of DMC, specifically in the Indian supply chain environment.

Adebanjo, D. (2009) discusses the challenges of demand management in the food industry, particularly in the context of forecasting and promotion management.

Taylor and Fearne (2009) highlight the complexity and challenges involved in demand management and its coordination with supply chain management. They emphasize the need for extensive research from a supply chain perspective to address these challenges effectively. The framework suggested by the authors seeks to address these problems and improve demand management in the value chains.

Lau, K. H. (2012) emphasizes the importance of demand management in retail supply chains, highlighting the balance between efficiency and customer responsiveness. Techniques like customer segmentation and price discrimination can enhance distribution efficiency while meeting individual customer needs, ensuring essential responsiveness.

Rexhausen, D., et al. (2012) assert that demand management has emerged as a novel dimension at the interface with consumers. Traditionally, distribution has been considered the crucial link between a company's internal supply chain and its customers. Based on their findings, they highlight that achieving high demand management performance has a substantial positive impact on the overall performance of the supply chain.

A. C. K. Lee and colleagues (2013) defined demand management challenges as the challenges experienced in monitoring, directing, and managing demand, particularly when demand exceeds available resources.

In the study conducted by **P. Appelqvist et al. (2016)** in the sports goods industry, they explore the challenges and the impact of weather changes on demand and supply chain performance. The study reveals that weather conditions influence the demand-delay dependency structure, which changes over time.

Mahmood, S., and Kess, P. (2016) emphasize the significant challenge of meeting real customer needs in a timely manner, particularly in the present business environment where demand calls for a wider variety of products within shorter intervals.

2.4.2 Literature on Distribution Management Challenges

Distribution management is a critical aspect of the retail supply chain, encompassing the processes involved in moving goods from manufacturers to retailers and ultimately to consumers. The efficiency and effectiveness of distribution strategies directly impact the overall performance of retail supply chains. **Fernie (1989)** emphasizes the significant role distribution plays in retailers' marketing strategies, with many companies reevaluating their distribution strategies and making substantial modifications.

Ashayeri and Kampstra (2005) provide steps for addressing major challenges in distribution chains and networks highlighting the recent business and technological advancements that led to structural changes and increased

performance requirements in distribution networks as many companies are grappling with the need to reorganize their distribution chains.

Baker (2006) study explores the challenges faced by distribution centers, particularly in the context of rising globalization and market instability. The research examines the importance of agility in the design process and assesses the financial, time, and service level implications of managing demand and supply fluctuations.

LaLonde (2007) explores the challenges faced by carriers in managing complex distribution networks. It identifies several antecedents of logistics complexity, including customer requirements, product characteristics, transportation requirements, and information systems.

Mangan, J., et al. (2008) provides a comprehensive overview of challenges faced in distribution management in global logistics and supply chain management including network design, inventory management, and transportation.

Brintrup, A., et al. (2017) address the challenges of order picking and delivery routing in retail distribution operations. It discusses distributed optimization techniques to improve operational efficiency and customer service in the context of distribution management.

2.4.3 Literature on Environmental Uncertainty Challenges

The retail supply chain operates in an environment characterized by rapid changes, global interdependencies, and frequent disruptions. Environmental uncertainty in the retail sector is a significant challenge, impacting supply chain

efficiency, responsiveness, and resilience. Environmental uncertainty in the retail supply chain context refers to the unpredictability of external factors that affect the flow of goods and services from suppliers to consumers.

Davis (1993) stated that environmental uncertainty encompasses demand variability, supply disruptions, and changes in market conditions, all of which can destabilize supply chain operations. This uncertainty stem from various sources, including economic fluctuations, technological advancements, regulatory changes, and geopolitical risks.

Environmental uncertainty in retail supply chains poses a major challenge to retailers, causing demand volatility that can lead to stockouts or excess inventory **(Fisher 1997).**

Lewis and Harvey (2001) developed a Perceived Environmental Uncertainty (PEU) scale to evaluate uncertainty related to the natural environment, building on Miller's scale for the commercial environment, focusing on upstream risks in the retail supply chain.

Kreiser and Marino's (2002) study on environmental uncertainty in strategic management and organizational theory provides a systematic analysis of its historical development, offering a more precise framework for conceptualizing and operationalizing uncertainty, especially in the context of the retail industry.

Fynes, B., et al. (2004) study provides valuable insights into how environmental uncertainty impacts supply chain performance through the lens of

relationship quality. The findings reinforce the critical role that strong, collaborative relationships play in achieving supply chain success in uncertain environments.

Choi, T. Y., & Krause, D. R. (2006) Examine the relationship between the supply base and environmental uncertainty and highlight how the complexity of the supply base affects transaction costs, risks, responsiveness, and innovation in supply chain management.

Paulraj and Chen's (2007) study explore the impact of environmental uncertainty on strategic supply management and firm performance. They propose a conceptual framework that integrates resource dependence theory and strategic supply management, arguing that environmental uncertainty influences firms' strategic actions and their ability to effectively manage their supply chains.

Sun et al. (2009) suggested that the right supply chain management strategy can improve performance, focusing on Lee's uncertainty framework. They examined how aligning the strategy with environmental uncertainty affects perceived performance, aiming to identify the optimal approach based on environmental uncertainty and its impact on performance outcomes.

Wong, C. Y., et al. (2011) investigate the impact of environmental uncertainty and strategic supply management on supply chain responsiveness and firm performance. They provide theoretical and empirical insights into the contingency impacts of the EU and emphasize the need to align supply chain strategies with environmental uncertainty for improved performance outcomes.

Meng, X., et al. (2019) provide a comprehensive review of the environmental uncertainty and supply chain risk management. It discusses various dimensions of environmental uncertainty and explores strategies for managing supply chain risks in uncertain environments.

Liu, B and Wang's (2020) study examines the impact of various environmental uncertainties on supply chain risk, including disruptions, volatility, and complexity. They discuss strategies to mitigate these effects and suggest future research directions. The authors emphasize the importance of understanding and managing environmental uncertainty in supply chain management.

R. Anthony et al. (2021) examine the relationship between environmental uncertainty, supply chain agility, and supply chain performance, finding that agile retailers fully mediate the relationship between uncertainty and performance.

2.4.4 Literature on Information Management Challenges

Information management is a crucial component of retail supply chain operations, involving the collection, processing, and dissemination of data across various supply chain activities. Effective information management ensures accurate decision-making, improves efficiency, and enhances the responsiveness of the supply chain. Information management in the retail supply chain involves the processes and technologies used to manage data related to inventory, orders, shipments, and customer interactions.

Lee and Whang (2000) highlight the significant impact of information system technology on supply chain management. They argue that these advancements have enabled supply chain partners to collaborate, optimize performance, and share profits. They emphasize the importance of information exchange in supply chains, including inventory, sales, demand forecasts, order status, and production schedules.

Yu, Z., et al. (2001) demonstrate the advantages of information-sharing supply chain partnerships. The power of information technology may be used to enable supply chain members to develop partnerships for better supply chain system performance.

Zhou et al. (2007) found that effective information sharing and supply chain practices significantly improve the overall supply chain management environment. As information sharing levels increase, the importance of effective supply chain practices increases, emphasizing the need for continuous improvement.

Fawcett et al. (2007) analyze two dimensions of information sharing: connectivity and willingness, to understand how information technology enhances supply chain performance. Both dimensions impact operational performance and are crucial for developing effective information sharing capabilities.

Nyaga et al. (2010) highlights the positive relationship between information sharing, trust, commitment, customer satisfaction, and firm performance. Based on these findings, it is hypothesized that information sharing has a positive impact on firm performance.

Prajogo and Olhager (2012) emphasize the significant challenge of information technology and information sharing on logistics integration.

Information sharing facilitates synchronized replenishment and collaborative product design and development, leading to improved supply chain performance **(Sundram et al., 2011; Gawankar et al., 2013)**.

Prajogo and Sohal (2013) emphasize the importance of communication and teamwork in effective supply chain integration, highlighting the need for a comprehensive understanding of technologies and the impact of environmental concerns, especially limited capital, on supply chain strategies.

Xie and Allen's (2013) study examined the functionalities, features, strategic opportunities, and challenges of information technologies in a retail supply chain.

Kwak J. K., and Gavirneni S. (2015) explored the influence of information challenges on supply chain performance when demand information is shared between retailers and suppliers.

As discussed by **Choi, et al., (2016)** achieving real-time information sharing is challenging due to the need for advanced technology infrastructure, such as cloud computing and Internet of Things (IoT) devices.

Burmeister and Liang (2016) emphasize the importance of understanding specific information requirements and offerings from the retailer's perspective for a successful and efficient retail supply chain, identifying nine significant information sharing issues.

2.4.5 Literature on Sourcing Challenges

Sourcing is a critical function in retail supply chains, involving the procurement of raw materials, components, and finished products from suppliers. Effective sourcing strategies are essential for maintaining cost efficiency, ensuring product quality, and minimizing supply chain disruptions. However, sourcing in the retail sector presents several challenges, including supplier selection, cost management, ethical considerations, and geopolitical risks.

Cho and Kang's (2001) study examined the advantages and challenges of global sourcing for retail firms, considering demographic and managerial factors.

R. Lowson's (2001) study examined the challenges of sourcing low-cost goods from foreign suppliers, focusing on operational plans and decision-making.

Kocabasoglu and Suresh (2006) explored strategic sourcing and its implementation challenges, identifying key characteristics such as the purchasing function's status, internal coordination, information exchange with suppliers, and supplier development within the firm.

Freytag and Mikkelsen's (2007) study underscored the growing significance of sourcing strategy in business decision-making, highlighting managerial challenges in sourcing and the need for organizations to effectively manage their roles and network cooperation.

Khan, A., and Pillania's, R.K, (2008) study found that strategic sourcing significantly enhances supply chain agility and firm performance, highlighting the positive impact of strategic sourcing on organizational performance.

Towers, N., and Song, Y. (2010) evaluated sourcing challenges using a model developed from the Kaufmann and Hedderich (2005) framework. The study identified unexpected delivery risks, language barriers, and inflexible negotiations as major sourcing challenges.

Sourcing challenges in the supply chain include supplier failure, exchange rate volatility, trade restrictions, a longer lead time, and problems with supplier reliability **(Prasanna Venkatesan, et al. 2012).**

Choi et al. (2013) investigated the challenges of sourcing and pricing decisions for fashion products, considering information asymmetry. The study highlighted how retailers manage uncertainty and risks in sourcing decisions and pricing strategies, especially in the context of fashion retail.

Shruti et al. (2015) stated that sourcing challenges in the supply chain include single sourcing risk, sourcing flexibility risk, supplier selection or outsourcing, supply product monitoring or quality, and supply capacity.

Verhoef et al. (2015) highlighted the challenges of sourcing products across retail channels, ensuring inventory availability, and delivering a seamless customer experience, emphasizing the significance of effective sourcing strategies for competitiveness.

Fernie and Sparks (2018) provided an overview of retail logistics and sourcing challenges. They discussed the historical context, current practices, and future trends, emphasizing the significance of efficient sourcing strategies to meet customer demands and remain competitive in a rapidly changing retail landscape.

2.4.6 summary

The contributing factors to retail supply chain management challenges are discussed and presented in Section 2.4.6. The challenges factors to the retail supply chain management study, according to the literature, evolved from operational management research. Initially, the focus was to define each of the study retail supply chains challenges dimension and identifying the specific components within them. The review also explored the impact of the challenges on retail supply chain performance and firm performance indicators. The literature suggests that these challenges have significant implications for the operational efficiency of retail businesses. Overcoming these challenges, it requires to address the functional aspects of the retail supply chain.

2.5 LITERATURE ON SUPPLY CHAIN PERFORMANCE

The objective of this section is to examine the various aspects of Supply Chain Performance. Performance measures serve as indicators of how well an organization is progressing towards its goals, mission, and values. Supply chain performance parameters refer to a collection of variables employed to evaluate the efficiency and effectiveness of an established supply chain system or to make comparisons among different alternative systems.

Neely, A. (1995), conducted a review of literature on performance measurement system design that explores its purpose, objectives, and challenges, as well as various approaches, frameworks, and methodologies.

Beamon (1999) discusses the importance of evaluating and measuring supply chain performance, highlighting the use of metrics like cost, quality, flexibility, and delivery time. He discusses the challenges and complexities of measuring supply chain performance and provides insights on integrating performance measurement systems into supply chain management strategies.

Neely's 1999 study explores the increasing significance of performance measurement in organizations, its role as a strategic tool, and the factors driving this revolution. He also discusses challenges and future directions in performance measurement, offering valuable insights into its evolving landscape and its role in enhancing organizational performance.

According to **Hausman (2000),** supply chain performance is characterized by fulfilling end customers' requirements, which include factors such as product availability, on-time delivery, and maintaining the necessary inventory and capacity within the supply chain to ensure a responsive delivery of such performance.

Gunasekaran et al. (2004) introduced a performance measurement framework that includes order planning, supply link evaluation, production level metrics, customer service and satisfaction measurement, and supply chain and logistics costs.

Bhagwat and Sharma (2007) emphasize the importance of a holistic approach to assess supply chain performance, considering financial, customer service, internal processes, and learning and growth. Their research provides a

comprehensive measurement method for supply chain management, aiding organizations in monitoring and enhancing their performance.

Wanke, P. F., et al. (2008) investigate the impact of strategic supply chain decisions on retail operations' performance. They analyze various factors and decisions within the supply chain, providing insights into how these decisions can influence retail performance outcomes.

Akyuz and Erkan (2010) conducted a review of literature on supply chain performance measurement explores various dimensions, approaches, and methodologies used to evaluate and measure supply chain performance. They emphasize the importance of performance measurement in improving supply chain management and decision-making processes.

Wong et al. (2011) conducted separate analyses to assess the influence of supply chain integration on performance. Their studies focused on understanding the impact of integrating various aspects of the supply chain on overall performance outcomes.

Sundram et al. (2011) conducted a study on the correlation between supply chain management practices and performance, focusing on supplier strategic partnerships, customer relationships, information sharing, quality, postponement, agreed vision, goals, and risk and reward sharing.

Qrunfleh and Tarafdar (2013) aimed to investigate the relationship between supply chain strategy and supply chain information system strategy.

Additionally, they examined the impact of these strategies on both supply chain performance and firm performance.

Anand and Grover (2015) propose a theoretical framework linking key performance indicators (KPIs) like transport optimization, information management optimization, inventory optimization, and capital optimization to a company's financial performance.

Singh, R., et al. (2018) study explores the correlation between supply chain management practices, competitive advantage, and organizational performance. The research reveals that effective supply chain management practices enhance overall organizational performance and contribute to gaining a competitive edge.

Ying, S., et al. (2021) study evaluated the impact of supply chain performance on RFID. They identified seven key factors: suppliers, inventory, distribution, ordering, planning, sales, and forecasting. The findings highlight the significant influence of these factors on supply chain performance.

2.5.1. Summary

It provides a comprehensive overview of various studies and frameworks related to supply chain performance measurement. It discusses the importance of performance metrics in evaluating the efficiency and effectiveness of supply chains and highlights key factors influencing supply chain performance. There are both qualitative and quantitative performance indicators provided. The literature review highlights the need for using key supply chain performance and metrics aligned with organizational objectives and strategies to measure supply chain

performance. The literature serves as a valuable resource for practitioners and researchers looking to improve supply chain performance measurement and management practices.

2.6 LITERATURE ON FIRM PERFORMANCE INDICATORS

The study by Borucki and Burke (1999) found a strong positive correlation between customer satisfaction and retail firm performance, with high-quality service leading to better financial performance and customer loyalty. The study suggests implementing a service-oriented culture can enhance customer satisfaction and financial performance. According to Chopra and Meindl (2001), the performance of inventory plays a vital role in determining the efficiency and responsiveness of the supply chain, making it a crucial driver of overall firm performance.

Performance measurement is the process of quantifying the efficiency and effectiveness of an action. It helps organizations determine their performance in terms of profitability, turnover, market share, operational efficiency, customer satisfaction, and financial (**Gharakhani et al. 2012), and (Gawankar et al. 2013)**.

Kumar, P., and Anand, A. (2012) investigate the factors that influence the performance of retail firms in the Indian retail industry. They analyze various internal and external factors impacting retail firm performance and provide valuable insights into the drivers of success in the dynamic Indian retail market.

Grover, N. (2016) study on retail firms' performance measurement identifies four key metrics: transport optimization, information technology

optimization, inventory optimization, and resource optimization. However, further research is needed to confirm their significance and impact on financial performance.

Through literature the study identified firm performance indicators that used in various other research area and established four firm performance indicators to study such as Delivery Performance (DP) (Stewart, G. 1995; Johnson, M., et al. 2019; Ahmad, S., and Schroeder, R. G. 2001), Financial Performance (FP) (Byrd and Davidson. 2003; Vickery et al. 2003; Chen and Paulraj, 2004; Hada, I. D., 2020), Inventory Performance (IP) (Ying, S., et al. 2021; Lee and Billington, 1992; Sridhar et al. 2021), Customers Service and Satisfactions (CSS) (Waller et al., 1999; Coyle et al., 2002; Germain et al. 2008; Gharakhani et al. 2012; Gunasekaran et al. (2004).

2.6.1 Literature on Delivery Performance

Delivery performance is an important aspect of retail supply chains, significantly influencing customer satisfaction, brand reputation, and overall operational efficiency. As the retail landscape has evolved with the rise of e-commerce and omnichannel strategies, the expectations for timely and accurate deliveries have intensified. On-time delivery is a crucial aspect of delivery performance, serving as an indicator of successful and satisfactory deliveries, and it plays a significant role in measuring customer service levels.

Stewart, G. (1995) study identifies various metrics for measuring delivery performance, including delivery-to-request, delivery-to-commit, and order fill lead

time. The study suggests a trend towards reducing lead time as an operational strategy to improve delivery performance, meet customer expectations, and enhance customer satisfaction.

Ahmad, S., and Schroeder, R. G. (2001) establish a conceptual framework, outlining the key components of delivery performance, which include delivery speed, accuracy, reliability, and responsiveness.

Rao, M. C., et al. (2011) introduce delivery performance measurement in the context of integrated supply chain management. They presented the rationale for conducting a case study to explore the practical implementation of delivery performance measurement strategies and also provided an overview of supply chain management and its importance in modern business practices.

Peng, D. X., and Lu, G. (2017) study reveals that delivery performance significantly impacts customer behavior and pricing dynamics. They highlight the importance of effective delivery strategies in enhancing customer satisfaction.

Johnson, M., et al. (2019) study explores the impact of last-mile delivery strategies on performance metrics like speed, cost efficiency, and customer satisfaction, providing valuable insights into the factors influencing the overall performance of delivery firms in last-mile operations.

2.6.2 Literature on Financial Performance

The financial performance of retailers is a key indicator of their ability to generate profit, maintain competitiveness, and sustain long-term growth. Financial performance measurement systems are generally referred to as traditional

accounting methods for measuring supply chain performance. Financial performance is a vital measure of business success, reflecting the achievement of a firm's economic goals (Chen and Paulraj, 2004).

Mukhopadhyay et al. (1995) study explores the impact of supply chain implementation on financial performance measures to understand the influence of supply chain management practices on retailers' financial performance. They found that direct process effects significantly affect profit margins and overall return on assets (ROA) of firms.

In supply chains, assessing financial performance can be achieved by determining the total logistics cost. Cash flow provides crucial information about a firm's cash receipts and payments during its operational period, offering valuable insights into its financial outcome **(Siguaw et al., 1998)**.

Lapide (2000) identified two popular FPMS methods: Activity-Based Costing (ABC) and Economic Value Added (EVA). ABC links financial measures with operational performance by breaking down activities into cost drivers and estimating resources. It relies on pure financial metrics, which may not capture all aspects of supply chain performance. EVA, developed by Stern et al. (1995), estimates a company's return on capital or economic value added, emphasizing long-term value creation for shareholders. Both approaches offer better insights into supply chain processes but may not cover all aspects.

Vickery et al. (2003) study on the overall performance metrics of a firm, such as return on equity, return on investment, return on sales, and market share, rather than specific business process measures aimed at improving performance.

Shawnee K. et al.'s (2003) study examined the impact of an integrated supply chain strategy on customer service and financial performance. They used Structural Equation Modelling (SEM) analysis to analyze the relationship. The study found that an integrative supply chain strategy creates value for customers, which positively affects retailers' financial performance.

Bruce Dehninga, et.al (2007) their research suggests that large-scale empirical studies of the financial benefits from SCM are as elusive as a consensus definition of SCM.

Wagnera et al. (2012) investigated the relationship between supply chain fit and the financial performance of firms. The findings revealed that higher supply chain fit corresponded to higher Return on Assets (ROA) for firms, while those with a negative misfit demonstrated lower performance compared to firms with a positive misfit.

Financial performance is a complex indicator that measures profit, growth, productivity, and value creation in business **(Hada, I. D., 2020)**. They mainly focused on financial indicators and were hence always criticized for being inadequate because they ignored important strategic non-financial measures.

2.6.3 Literature on Inventory Performance

Inventory performance is a critical aspect of retail management, directly influencing a retailer's ability to meet customer demand, minimize costs, and optimize overall operational efficiency. Effective inventory management balances the need to have enough stock to meet customer demand while minimizing holding costs and avoiding stockouts. Inventory is one of the most significant costs in supply chain management. Almost 50% of the cost of current assets is estimated to be inventory items (Fyke and Cohen, 1994). Inventory takes various forms, including raw materials, semi-finished materials, finished materials, sub-assemblies, assemblies, and materials in transit.

Lee and Billington (1992) study highlighted the impact of factors like engineering changes and obsolescence on inventory holding costs. They also highlighted the need for a trade-off when managing inventory in transit, with a faster and more expensive shipping mode potentially saving investment.

Inventory management is crucial in today's customer-driven environment, as it includes total costs of inventory in a supply chain, such as opportunity, service, held-up, risk, scrap, rework, and shortage costs **(Stewart, 1995)**.

Fisher (1997) points out that many industries face inventory challenges due to difficulties in accurately predicting demand. To address these inventory-related issues, Fisher suggests implementing a demand forecasting system that combines actual sales data with on-hand inventory information.

Chopra and Meindl (2001) stated that inventory turnover is a widely used metric that reveals how many times a company sells its inventory within a given

year. It serves as a key indicator for assessing inventory performance, efficient purchasing practices, and overall inventory management.

Sridhar et al. (2021) highlights the importance of effective inventory management in the retail sector, highlighting its crucial role in enhancing organizational performance. Their study focuses on a retail store and examines inventory level, which directly impacts total cost, reorder point, and service level.

2.6.4 Literature on Customer Service and Satisfaction

Customer service and satisfaction are fundamental aspects of retail success, directly influencing customer loyalty, repeat purchases, and overall business performance. Effective customer service leads to enhanced customer experiences, while high levels of customer satisfaction contribute to long-term profitability. Tan et al. (1999) emphasize that maintaining high quality positively impacts growth and return on assets. Another essential performance indicator in the supply chain is customer satisfaction, which gauges how well customer expectations are being met and is vital for building long-term relationships.

To enhance supply chain performance and foster efficiency and growth, **Sabath (1995)** suggests implementing service measurements at each stage of the supply chain. This approach allows retailers to gauge their ability to serve customers effectively.

Retailers are increasingly recognizing customer service as a crucial factor that sets them apart from competitors **Ellram et al., (1999)**.

Key metrics commonly used to assess customer service in the retail sector include on-time order fill rate, product availability, quality, and customer satisfaction **(Chopra and Meindl, 2001)**. These measures provide valuable insights into retailers' performance and their ability to meet customer needs.

Customer service, in essence, is a process aimed at optimizing the overall value for the customer by providing substantial value-added benefits to the supply chain in a cost-effective manner **Coyle et al., (2002)**. The ultimate goal is to create a positive and rewarding experience for the customer while maintaining the efficiency of the supply chain. In evaluating supplier performance (**Wisner and Tan, 2000)** consider product quality as a key criterion.

Customers seek greater value through on-time delivery, low costs, and confirmed delivery dates (**Jesús et al., 2017)**.

To achieve success in their respective fields, companies must prioritize providing excellent services to their customers in a highly efficient manner (**Wang et al., 2018)**.

2.6.5 Summary

The above section overviews the variables of firm performance. Measures of performance reflect how well the firm manages to perform in terms of achieving its objectives, mission, and values. These measurements consist of standard measures of the business unit's performance.

According to the literature review, the most common measures of firm performance are return on asset, market share, return on investment, net profit,

net profit growth, sales growth, productivity ratio, total cycle time, total cash flow time, cost saving, inventory turns, net income before taxes, gross margin, quality performance, inventory management performance, and financial performance. Among these criteria, operational performance parameters such as customer service levels, total cycle time, and delivery, as well as financial performance parameters such as profit, revenues, return on investment. These performance indicators, when analyzed together it provide a comprehensive view of a firm's strengths, weaknesses, and opportunities for improvement. By regularly monitoring these KPIs, firms can make informed decisions to enhance their competitiveness and achieve long-term success.

2.7 RESEARCH CONSTRUCTS

For this research five factors of sports retail supply chain challenges were identified through the review of literature and established. Retail supply chain performance is a critical aspect of the sports retail industry, reflecting the effectiveness and efficiency with which a sports retail firms operates. Retail supply chain research has expanded from being solely focused on sports retail supply chain challenges to become a distinct and comprehensive area within supply chain research. However, the exploration of sports retail supply chain management challenges remains insufficient, given the multitude of challenges, factors driving these challenges, and resulting outcomes that it encompasses. The constructs and the conceptual design structure are explained in the following section.

2.7.1 Definition of the Constructs

Demand Management is defined as a firm's ability to understand customers' demands and requirements and balance them against the capabilities of the supply chain. Capabilities include demand forecasting, segmentation, sales and operations planning, and demand adherence (**Lambert and Cooper, 2000; Croxton et al., 2002; Rexhausan et al., 2012)**.

Demand management challenges are defined as the challenges experienced in monitoring, directing, and managing demand, particularly when demand exceeds available resources **(A. C. K. Lee and colleagues, 2013)**.

Distribution Management is defined as a firm's capability to ensure the reliable and efficient flow and storage of goods in order to meet customers' requirements (**Bowersox et al., 2007; Frankel et al., 2008)**.

Dighade, R. R., et al. (2014) *defined distribution management challenges* as the difficulties faced in effectively managing the distribution of resources or products in a system or network.

Strezoski, L., et al. (2019) *defined distribution management challenges* as the difficulties faced in managing and operating distribution systems with high penetration of distributed systems and inaccurate operational planning.

R., Sreedevi, et al. (2017) *define environmental uncertainty* in the supply chain as the challenges faced by firms due to high levels of uncertainty in terms of supply disruptions, production delays, and delivery delays, resulting in poor operational performance.

Environmental uncertainty is defined as environmental risk sources, which include any uncertainties that arise from the supply chain's interaction with the environment as well as the focus firm's ability to endure unexpected occurrences while providing consistent service to customers **(Lee et al., 2009)**.

Environmental uncertainty challenges are defined as the challenges faced in firms supply chains, including environmental and social sustainability, disruption from natural disasters, conflict, and trade disagreements (**Sodhi, M. S., and Tang, C. S., 2021)**.

Information management is defined as an organization's ability to acquire, process, and transmit information to support decision-making **(Yu et al., 2018)**.

Yefu et al. (2019) *defined information management in the supply chain* as the process of collecting, organizing, and utilizing data and information to optimize the flow of goods and services throughout the supply chain.

Lister (2010) *defined sourcing* as the process of identifying potential vendors, conducting negotiations, and signing purchasing agreements to meet a company's procurement needs.

Colin et al. (2011) *defined sourcing in supply chain management* as the process of finding and selecting suppliers to provide the necessary goods or services for an organization.

Sourcing in supply chain management is defined as the process of identifying, evaluating, and selecting suppliers to obtain goods and services needed for the organization's operations **(Cristiane, Biazzin, 2019)**.

Supply Chain Performance is defined as the measurement and evaluation of an organization's ability to manage its supply chain efficiently, effectively, and responsively **(Beamon, 1998; Chen & Paulraj, 2004; Gunasekaran & Chung, 2004; Qrunfleh & Tarafdar, 2013)**.

Firm Performance is defined and measured as the performance that enables an organization to ascertain how they are performing in terms of profitability, turnover, market share, operational efficiency, customer satisfaction, etc. **(Chen & Paulraj., 2004); Gharakhani et al., 2012), Kaynak & Hartley., 2005), Li et al., 2005)**.

Delivery performance is defined as the assessment and evaluation of the efficiency and effectiveness of the products or services that are delivered to customers **(Hedin, J., et al. 2006)**.

Delivery performance is defined as the measurement of how successful a supply chain is at providing products and services to the customer **(Rao, M. C., et al. 2011)**.

Delivery performance refers to the ability of an industrial system to meet customer orders on time and efficiently while minimizing costs and controlling stock **(Fechete, F., & Nedelcu, A. 2017)**.

Financial performance is defined as the process of evaluating the financial strengths and weaknesses of a company to determine its overall performance **(Bhunia, A., et al. 2011)**.

Financial performance refers to the evaluation of a company's profitability, efficiency, and overall financial health based on its financial statements and key financial ratios **(E. Geetha (2017)**.

Inventory performance is defined as the measurement and evaluation of how well a company manages its inventory to meet customer demand while minimizing costs and maximizing efficiency **(Mapes, J. 2015)**.

Inventory performance is defined as the effectiveness and efficiency of managing and controlling inventory levels to meet customer demand while minimizing costs and maximizing profitability **(Kourentzes, N., et al., 2021)**.

Customer satisfaction defined as an evaluative judgement formed by customers based on their consumption experience, which impacts consumer behavior positively **(Sartor, M. 2019)**.

Customer service is defined as the assistance and support provided to customers before, during, and after a purchase. *Customer satisfaction is defined* as the level of contentment or fulfilment experienced by customers with a product or service **(Han, X., et al. 2019)**.

2.8 CONCEPTUAL MODEL

To determine the most appropriate modeling approach, whether a covariance-based structural equation model or a partial least squares structural equation model, a thorough literature review was conducted. The conceptual model, depicted in Figure 2.1, highlights ten critical constructs identified by analyzing gaps in the existing literature.

In this model, five independent variables represent the main challenges faced by sports retailers in their supply chains: Demand Management Challenges (DeMC), Distribution Management Challenges (DiMC), Environmental Uncertainty Challenges (EUC), Information Management Challenges (IMC), and Sourcing Challenges (SC). Supply chain performance (SCP) serves as a mediating variable, linking these challenges to the firm's performance indicators, including Delivery Performance (DP), Financial Performance (FP), Inventory Performance (INP), and Customer Service and Satisfaction (CSS). Further details on the relationships between construct variables are provided in the following sections.

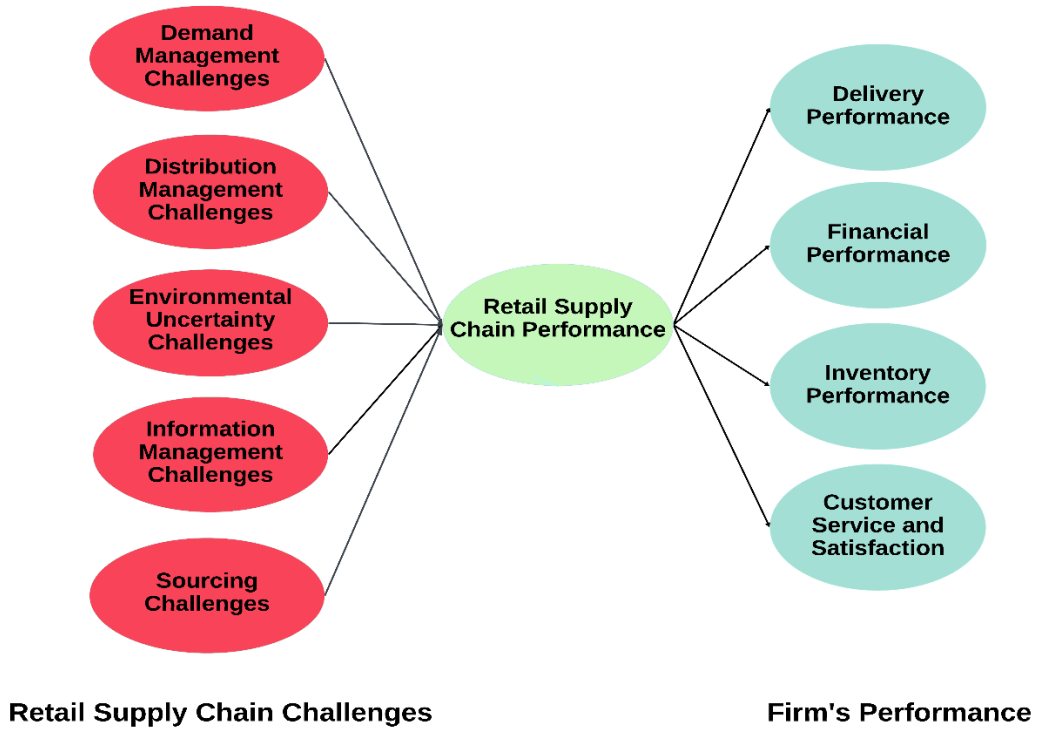

Figure 2.1 Conceptual Model of the Study

2.9 DEMAND MANAGEMENT CHALLENGES VS SUPPLY CHAIN PERFORMANCE VS FIRM PERFORMANCE INDICATORS

Demand management challenges have a profound impact on the overall performance of supply chains and firms' performance, influencing efficiency and effectiveness across various processes, including procurement, production, distribution, and delivery. When demand management is ineffective, it leads to disruptions, inefficiencies, and increased costs throughout the supply chain.

Demand management challenges significantly affect a company's delivery performance, causing customer dissatisfaction, reduced loyalty, and potential revenue loss. Inaccurate demand forecasting leads to production and procurement delays, resulting in missed delivery deadlines, customer frustration, and potential damage to the company's reputation (Yu, H., & Han, E., 2021). Demand management challenges significantly impact a business's financial performance. Elsayed, K. (2015), study emphasizes the link between demand management and financial performance. Unexpected demand changes lead to extended lead times in procurement and production, causing delays in product delivery, customer satisfaction issues, and potential penalties for non-compliance. Kinaxis, (2018) emphasizes the importance of demand visibility and management in reducing lead times and improving customer service, highlighting the need for effective demand management.

Demand management challenges have a profound impact on inventory performance, affecting how effectively and efficiently a company manages its inventory levels. These challenges lead to issues such as excess inventory, stockouts, and increased carrying costs. The Retail Industry Leaders Association

(REILA, 2017) study highlights the negative impact of excess inventory on profitability, stating that underestimating demand or predicting fluctuations lead to stockouts, missed sales opportunities, dissatisfied customers, and potential damage to brand loyalty. (Agigi, A. F. A., et al., 2016) report the impact of out-of-stocks on sales and customer satisfaction. Inefficient demand management extend the holding period of inventory. To improve inventory performance, companies should focus on accurate demand forecasting, real-time data analysis, and collaboration among supply chain departments.

Demand management challenges have a significant impact on customer service and satisfaction, as they directly influence a company's ability to meet customer expectations and fulfil their needs (Clarke, D., & Kinghorn, R., 2018). Demand management challenges lead to communication breakdowns among departments, causing confusion and potential delays. This led to customer dissatisfaction, emphasizing the importance of transparent communication for overall customer satisfaction (Mulcahy, S., 2020). To enhance customer service and satisfaction in the face of demand management challenges, companies should invest in accurate demand forecasting, real-time inventory visibility, and seamless communication across departments.

It is clear that the existing literature is insufficient to comprehend the underlying problems. To gain a more comprehensive perspective on the impact of sports retail supply chain challenges on performance, it is required to subject them to broader testing.

2.10 DISTRIBUTION MANAGEMENT CHALLENGES VS SUPPLY CHAIN PERFORMANCE VS FIRMS PERFORMANCE INDICATORS

Distribution management challenges significant impact on supply chain performance, as they directly influence the movement of products from manufacturers to end consumers. Effective distribution management is essential for maintaining a well-functioning supply chain and meeting customer demands. Poor distribution management lead to inefficiencies in transportation, including suboptimal route planning, underutilized truck capacity, and higher transportation costs. Inefficient transportation can result in delays and increased lead times, negatively affecting supply chain responsiveness.

Distribution management challenges lead to increased lead times, which affect a company's ability to respond quickly to changes in demand. Gardner, J. T., & Cooper, M. C. (2003) addresses the relationship between lead times and supply chain performance. Grover, V., & Malhotra, M. K. (2003) study the relationship between distribution management and supply chain performance. They find that ineffective distribution management process reduces the overall performance of the supply chain.

Distribution management challenges significantly impact a company's delivery performance, inefficient distribution management results in delays in shipping and transportation, causing missed delivery deadlines and a negative impact on customer satisfaction (Convey, 2021). When there are challenges in distribution management, the time between order placement and delivery is extended. Longer lead times result from delays in order processing, shipping, and transportation, which affect customer expectations and satisfaction.

Distribution management challenges have a direct impact on a firm financial performance. Frost & Sullivan (2018) stated that inefficient distribution processes, such as suboptimal routing or underutilized transportation resources, lead to higher operating costs. These additional costs erode profit margins and negatively affect financial performance. Hiatt's (2019) study explores distribution challenges causing inventory imbalances and product delivery delays. Excessive inventory leads to higher holding expenses, tying up capital and incurring additional storage costs, which significantly impact an organization's financial performance by increasing inventory-carrying expenses. Betts et al. (2016) found that ineffective distribution management leads to late delivery, order inaccuracies, and other issues, causing consumer dissatisfaction. These issues affect a company's reputation, brand image, and financial performance. Farris (2018) cited distribution challenges as causing product delays, leading to higher carrying costs, which affect inventory management efficiency and financial performance.

Ineffective distribution procedures have the potential to cause an excessive buildup of inventory. When transportation is delayed, order processing is inaccurate, or demand forecasting is flawed, it can result in an overstock of products. Bajwa et al. (2020) investigated the impact of excess stock on a company's profitability. This excess inventory not only ties up cash but also increases holding costs and may even lead to obsolescence. Bernstein, F., and Federgruen, A. (2003) stated that this leads to inadequate inventory levels and negatively impacts supply chain responsiveness. Distribution management challenges can have a profound impact on customer service and satisfaction, as

they directly influence a company's ability to meet customer expectations and deliver products on time and in the expected condition. Distribution challenges have a direct impact on customer service quality, ultimately resulting in reduced customer satisfaction and lower rates of customer retention.

2.11 ENVIRONMENTAL UNCERTAINTY MANAGEMENT CHALLENGES VS SUPPLY CHAIN PERFORMANCE VS FIRMS PERFORMANCE INDICATORS

Environmental uncertainty refers to the unpredictability and variability of factors such as customer demand, market conditions, regulatory changes, and supply disruptions. Managing environmental uncertainty is crucial for maintaining supply chain performance and adaptability. Challenges in managing environmental uncertainty have far-reaching impacts on various aspects of supply chain performance. Consequences of poor management of supply chain environment will have adverse effect on supply chain agility, lean organization, and supply chain performance (Gilgor, et al., 2015). Mentzer et al. (2001) explored the environmental uncertainty that causes challenges in demand forecasting, leading to overstocking or stockouts that impact inventory levels and supply chain performance. Brandon-Jones, E., et al. (2015) stated that environmental uncertainty affects supplier relationships and lead to challenges in sourcing materials or components and discuss the impact of supply base environmental uncertainty on supplier relationships and find that unpredictable supply disruptions result in delays and affect production schedules and supply chain performance.

Wong, C. Y., et al. (2011) explore the contingent effects of environmental uncertainty and strategic supply management on supply chain responsiveness and

firm performance. They highlight the importance of aligning supply chain strategies with environmental uncertainty for improved performance outcomes. Inman, R. A., & Green, K. W. (2021) study how environmental uncertainty impacts supply chain performance and highlight the significance of efficiently managing uncertainty in order to maintain constant customer service levels in supply chain operations.

Environmental uncertainty management challenges have a direct and significant impact on delivery performance, as they disrupt supply chains. When a company is unable to effectively manage environmental uncertainties, it results in delivery delays, order inaccuracies, and customer dissatisfaction. Jüttner, U., et al. (2003) discuss the impact of supply chain disruptions on delivery performance. Aberdeen (2014) emphasizes the importance of reducing lead time variability to improve delivery performance. Choy, K. L., et al. (2007) discuss the role of communication in delivery performance and state that environmental uncertainties lead to breakdowns in communication across the supply chain.

Environmental uncertainty management challenges have a significant impact on a firm's financial performance, as they lead to increased costs, disruptions, and fluctuations in revenue. Environmental uncertainties, such as natural disasters and supply chain disruptions, disrupt production and procurement processes (Parast, M. M., & Shekarian, M. 2018). They examine the impact of supply chain disruptions on financial performance. Environmental uncertainty results in cost escalations, such as higher raw material costs or increased transportation expenses due to supply chain disruptions. These cost increases reduce profit margins and negatively impact financial performance (Deloitte, 2021).

Environmental uncertainty management challenges have a profound impact on inventory performance as uncertainties in factors such as demand, supply, and market conditions directly affect inventory planning, control, and optimization. Difficulties in accurately forecasting demand result in overstocking or stockouts, affecting inventory levels and increasing carrying costs. Environmental uncertainties lead to variations in lead times for procurement, manufacturing, and transportation (Arıkan, E., et al., 2014).

Environmental uncertainty management challenges significantly impact customer service and satisfaction, as they disrupt supply chains. Environmental uncertainties, such as supply chain disruptions or unpredictable demand fluctuations (Convey, 2021). According to Clarke and Kinghorn (2018), consumer satisfaction is important in boosting loyalty, as satisfied customers are significantly more inclined to stay connected with a company and make repeat purchases.

The above literature clearly indicates the significance of having environmental uncertainty management challenges and their impact on downstream overall organization performance.

2.12 INFORMATION MANAGEMENT CHALLENGES VS SUPPLY CHAIN PERFORMANCE VS FIRMS PERFORMANCE

Information management challenges significantly impact supply chain performance, as accurate and timely information is crucial for effective decision-making, collaboration, and overall supply chain visibility. Aviv, Y. (2001) explores the impact of poor information management on supply chain performance and explains how poor information management leads to inaccurate demand forecasts,

which lead to mismatched production and inventory levels, which lead to overstocking or stockouts, affecting supply chain efficiency and customer satisfaction. Patwardhan, D., et al. (2018) highlight the importance of real-time visibility in supply chain management in their study. Inefficient information sharing and communication result in miscommunication between different departments and partners within the supply chain (Dehgani, R., & Navimipour, N. J., 2019). This led to errors, delays, and confusion, negatively impacting overall supply chain performance. So, K. C., & Zheng, X. (2003); Heydari, J. (2009) explore the information management challenges that extend lead times due to delays in information sharing and processing. Longer lead times result in delayed responses to changing market conditions, affecting supply chain performance.

Information management challenges have a significant impact on delivery performance, as accurate and timely information is essential for coordinating and executing the delivery process efficiently. When information is not properly managed, it led to delays, order inaccuracies, and other issues that affect the on-time and accurate delivery of products to customers. Delays in processing orders result in late shipments and impact delivery schedules (Deiva Ganesh, A., & Kalpana, P., 2022).

Information management challenges extend lead times by introducing delays in communication and data sharing across the supply chain (Sauvage, T. 2003), and longer lead times affect delivery schedules and customer expectations. Deloitte, (2019) stated that poor information management lead to inefficiencies in processes, decision-making, and resource allocation, these inefficiencies result in

higher operational costs, affecting profit margins. Information management challenges result in supply chain inefficiencies, including inaccurate demand forecasting and inventory mismanagement. These inefficiencies lead to higher supply chain costs and reduced profitability (Lee, V. H. 2018).

Information management challenges have a significant impact on inventory performance, as accurate and timely information is essential for effective inventory planning, control, and optimization. Inaccurate information leads to stockouts, where products are not available when customers want to purchase them (de Kok, T., 2018). Tan, K. C. (2002) examines the impact of information sharing on inventory performance and states that inaccurate or delayed information leads to inefficient replenishment processes.

Information management challenges significantly impact customer service and satisfaction, as accurate and accessible information is essential for meeting customer needs and expectations. Taylor, C. R., et al., (2020) say that poor information management lead to delays in responding to customer inquiries, requests, and issues. They find that slow response times frustrate customers and lead to dissatisfaction. Dixon, M., et al. (2010) emphasizes the role of accurate order information in customer satisfaction and find that inaccurate information leads to customer confusion and dissatisfaction.

The literature on the impact of information management challenges on performance is not adequate. The literature gap in this area motivated us to include an important construct, information management challenges, as a retail supply chain challenges to test its impact on firms' performance indicators.

2.13 SOURCING MANAGEMENT CHALLENGES VS SUPPLY CHAIN PERFORMANCE VS FIRMS PERFORMANCE

Sourcing management challenges significantly impact supply chain performance, as the sourcing process directly affects the availability, quality, cost, and reliability of materials and components. Sourcing from unreliable suppliers lead to disruptions in the supply chain, resulting in delays and increased lead times Wagner, S. M., & Bode, C. (2008). Supplier performance issues affect the company's ability to fulfill customer orders on time. Poor sourcing decisions lead to issues with the quality of materials or components Jin, Y., (2014). Khan, A., & Pillania, R. K. (2008) examined the dimensions of strategic sourcing and its relationship with organizational supply chain agility and performance. Their results demonstrated a significant positive impact of strategic sourcing on supply chain agility and firm performance.

Sourcing management challenges have a significant impact on delivery performance, as sourcing decisions directly influence the availability, reliability, and quality of materials. Sourcing from unreliable suppliers leads to disruptions in the supply chain, resulting in delays in the availability of materials and components (Wagner, S. M., & Bode, C. 2008). Ray, P., & Jenamani, M. (2016) examines the impact of sourcing decisions on inventory shortages and delivery performance.

Sourcing management challenges have a direct impact on a company's financial performance, as sourcing decisions influence costs, profitability, and overall operational efficiency. Poor sourcing decisions that lead to low-quality materials or components result in higher costs associated with rework, warranty claims, and customer returns (T Kroes, J. R., & Manikas, A. S. 2014). Poor

sourcing decisions lead to inventory shortages of critical components or materials this result in reduced profit margins and lower financial performance (Christopher, M., & Gattorna, J. 2005).

Sourcing management challenges have a significant impact on customer service and satisfaction, as sourcing decisions directly influence the availability, quality, and timely delivery of products to customers. Inefficient or ineffective sourcing led to delays, product quality issues, and inconsistencies in meeting customer expectations, all of which negatively affect the customer experience this leading to dissatisfaction and frustration (Balinado, J. R., et al.,2021). Chang, H. H., et al., (2009) find that sourcing-related challenges lead to inaccuracies in order processing, picking, and shipping. Lack of timely updates about order status, delays, or changes lead to misunderstandings and frustrations (Rababah, K., et al., 2011). Effective communication is crucial for maintaining customer satisfaction. Inconsistent service levels can impact customer expectations and satisfaction. The literature on the impact of sourcing challenges on performance is not adequate.

2.14 SUPPLY CHAIN PERFORMANCE VS FIRM PERFORMANCE INDICATORS

Supply chain performance has become increasingly recognized as a key factor in determining a firm's overall success. Evaluating how well a supply chain contributes to a company's competitive advantage, therefore, requires the use of various performance indicators. Delivery performance is a primary measure of a supply chain's effectiveness, reflecting the ability to meet customer demand promptly and accurately. According to Vickery, et al. (2003), supply chain

integration is a significant determinant of delivery performance, as it facilitates better coordination and information sharing among supply chain partners. Christopher (2016) further emphasizes that supply chain agility the ability to respond quickly to market changes is critical for maintaining high delivery performance, which directly impacts customer satisfaction and retention.

Supply chain performance is closely linked to a firm's financial performance. Efficient supply chains contribute to cost reduction, asset optimization, and revenue enhancement. Ellram and Liu (2002) found that firms with superior supply chain performance experience lower operational costs, which directly improves profitability. Similarly, Gunasekaran, et al. (2004) argue that effective supply chain management practices, such as just-in-time (JIT) inventory systems and lean manufacturing, lead to significant cost savings and higher financial returns.

Inventory performance is another critical area influenced by supply chain efficiency. Properly managed supply chains optimize inventory levels, reducing excess stock and minimizing the risk of stockouts. Chopra and Meindl (2016) note that supply chain performance directly impacts key inventory metrics, such as inventory turnover and days of inventory on hand. Silver, et al. (1998) emphasize that advanced supply chain strategies, such as demand forecasting and inventory optimization, are crucial for enhancing inventory performance, thereby supporting overall firm profitability.

Customer service and satisfaction is significantly impacted by supply chain performance, as it determines a firm’s ability to meet customer needs effectively. Parasuraman, et al. (1985) suggest that the reliability and responsiveness of a

supply chain are key determinants of service quality, which in turn affects customer satisfaction and loyalty. Lambert and Cooper (2000) further argue that a customer-focused supply chain strategy, which prioritizes service quality and customer satisfaction, is essential for maintaining long-term relationships with customers and enhancing a firm's competitive advantage. Rust and Oliver (1994) highlight the importance of meeting or exceeding customer expectations, which is heavily dependent on the supply chain's ability to deliver the right product at the right time and place.

2.15 SUMMARY

This chapter provides details about literature review and conceptual model development. The review process started with identifying suitable database of literature related to supply chain management. Systematic approach followed for reviewing the articles. First step was to review articles related to supply chain management, second step was to review literature related to retail supply chain management, third step is to review literature on selected dimension of retail supply chain challenges, forth step is to review literature on supply chain performance and fifth step is to review literature on firms' performance indicators.

Literature review indicates that the supply chain management research initially focused more on concept development. Researcher later evaluated the implementation issues and also developed framework for implementation of sports retail supply chain management. There were many literatures from the other research area of supply chain management, but the sports retail supply chain management related research is not adequate. There are several dimensions of

sports retail supply chain challenges, supply chain performance and firms' performance indicators are required to be studied.

Section 2.7. provides research construct and definition of the constructs identified through the literature. There are ten reflective constructs identified for the conceptual model. Among the ten constructs five constructs are challenges factors to sports goods retail supply chain and four constructs are indicators to firm performance.

Section 2.8 to 2.14 provides theoretical support to the constructs and its relationships endogenous factors. Based on the theoretical evidence the assumptions are arrived for this study. The conceptual model for this study was developed through systematic review of literature in the area retail supply chain. This conceptual model required to be empirically tested to validate the mode.