



## SUPPLY CHAIN CHANNEL SELECTION EFFICACY AND MARKETING PERFORMANCE OF AGRICULTURAL PRODUCTS' FIRMS IN NIGERIA

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**ABSTRACT:** *Despite the increase in supply chain channel management research and the development of the nation's agricultural industry, there seem to be few empirical research on supply chain channel selection as it relates to marketing performance of agricultural products' firms. Particularly, it appears that there have not been studies on the relationship between supply chain channel selection and Marketing performance within the agricultural industry. The lack of literature by scholars with respect to supply chain channel selection in the agricultural industry to trigger innovations in channel techniques and strategies could properly be the root cause of ineffective marketing performance of agricultural products' firms in terms of customer's service, profitability and product availability. The researchers therefore, sought to discuss this limitation, thereby bridging acknowledge gap. Based on the objective of the study, cross sectional survey design was utilized to obtain information from 391 management staff members of agricultural product enterprises, and one hypothesis was developed. The data were analyzed using descriptive and inferential statistical techniques. The results demonstrated a favourable and significant association between Marketing performance of agricultural product companies and supply chain channel selection. It was concluded that if supply chain channel selection is well implemented, there would be an increase in marketing performance as measured by client fulfilment, profitability and product availability. Considering the results, it was recommended that sales, supply chain and marketing managers should carefully select their supply chain channels.*

**KEYWORDS:** Agribusiness, channel selection, marketing Performance, resource based – view, supply chain management.



## INTRODUCTION

According to Mpuon and Oyong (2019a), Stevens (1989) and Srivastava (2022) a supply chain is a link of interconnected and dependent business that cooperate and collaborate to facilitate the movement of goods into markets. Mpuon (2018a, 2018b), Jeresa et al. (2022) and Sillanpaa (2010) Maintained that SC is a collection of techniques and strategies used to reduce system – wide costs, increase the availability of goods in the market, meet service level requirements, effectively integrated middlemen, producers, storages facilities, and shops to enhance production and accurate dissemination of the products, to the appropriate paces and at the right times. Mpuon et al. (2023a, 2023b), Bokrantz and Dul (2022) and Lee (2010) SC, according to their argument, consists of customers, suppliers, intermediaries, producers, manufacturing plants, vendors of material, and dissemination offerings, all of which are linked by a forward-looking movement of supplies and a reciprocal movement of intelligence. Supply chain management in the assertion of Mukhamedjanova (2020), Flynn et al. (2018) Stek and Schiele (2021) and Mpuon et al. (2021a, 2021b) is the process of planning, controlling and coordinating the various tasks required to deliver a finished good or service customers. Raimbekov et al. (2023), Panayides et al. (2018) and Angus (2015) affirmed that these processes begin with the raw materials and come to an end with the finished goods or service delivered to the final purchaser. Similarly, Mpuon (2018a, 2018b), Ketokivi and Mohoney (2020), Gu and Yu (2022), Ray (2020) and Amed et al. (2020) opined that SCM promotes the overall value chain, supply and demand channels, integration, coordination, collaboration across organizations, long-term benefits of cooperation, commitment, trust, honesty and integrity through process integration, knowledge integration and information sharing for all stakeholders in the SC and effectively and efficiently manage supply chain channels.

Supply chain channel management refers to the techniques and strategies used in transferring products (goods and services) from the production centers to the consumption center (end users) Spacey (2018) and Mpuon (2019). Supply chain channel management deals with the act of planning, analyzing, coordinating and managing a company's sales channels by integrating intermediaries, supplier manufacturers and end users in the value chain Mpuon. (2018), Abolagba et al. (2016), Ufiobor (2017), Ogbemor (2013) and Msimangira and Venkatraman (2014). In the assertion of Garritet al. (2010), Mpuon (2021), Omorogbe et al. (2018) and Hu et al. (2020) Creating channel tactics, developing sales channels, choosing channel participants, inspiring channel participants, overseeing channel tactics with channel participants, assessing channel member success, and dealing with channel conflict are the seven decision-making areas that make up supply chain channel management. Mpuon et al. (2020) maintained that supply chain channel management like other business disciplines need meticulous administrative management techniques, strategies and policies to assist a firm achieve its organizational marketing goals and objectives with distinct benefits which are concomitantly very difficult to emulate by competitors. Stek & Schele (2021) argued that supply chain channel management of agricultural products' producing firms involves all activities concerned with the flow of agricultural products such as food crops, industrial crops, continental crops, livestock and forestry products. Omotayo (2011) argued that supply chain channel management of agricultural products' producing firms facilitate the selling of farm inputs such as seeds, and fertilizers and the disposal of agricultural produce to the final consumer. While, Xu and Sun. (2018) maintained that supply chain channel management of agricultural products' firms encourage effective market penetration and market spread by selecting suitable type of channel members and a reasonable number of intermediaries to help in enforcing control and



evaluating of channel members who are bound to contribute to marketing effort of agricultural products. Similarly, Mpuon et al. (2019, 2020, 2021) and Raimbekov et al. (2023) argued that supply chain channel management dynamics enhance marketing agricultural products' producing firms by helping marketing intermediaries to manage their supply chains in order to facilitate on – time delivery, flexibility and rapid response to customer requirements, increase client satisfaction, strike an equilibrium amid expenses and offerings, and provide the business a competitive edge.

Running a business requires the cooperation of others and it is beyond a single individual trying to perform all the functions alone Mpuon et al. (2023, 2021), Success in modern business requires interdependent relationships either as an investor, intermediaries, entrepreneurs, customers, employees, agents or managers for the purpose of achieving effective and efficient supply of products in a supply chain Etuk (2008), Kusuma et al. (2022), Lu et al. (2022) and Chadha et al. (2022). Serdaris et al. (2014), Chong et al. (2021) and lyus et al. (2011) argued that the concept of supply chain channel management has created a plethora of explanations in academic literatures. Brahmadev and Leepa (2017), Mutayoba and Deus (2010) and Yagana (2014) noted that literally, the main idea in the explanation of the concept emphasizes that supply chain channel management is the process in which the mutual goals and objectives of an organization is realized through cooperative efforts and actions of others (Inyang, 2004). Supply chain channels refers to outside firms that an enterprise deploys to accomplish its dissemination goals Jun aid (2012), Inyang (2004), Julia and Kim (2018) and Ntale (2016). A supply chain channel can further be defined as a pipeline in which a product moves on its path to the customer (Kalu, 1998). A firm's supply chain channels play a major role in its entire marketing strategy based on the fact that these channels provide the enabling environment by which the firm makes the products available to the end users Bonne and Kurtz (2008), Guang (2019) and Odunze (2019). According to Obaji (2011), Ogbemor (2013) and Srivastava et al. (2022) supply chain channels consist of middlemen who move goods from the place of production to consumption centers. Jeresa et al (2022), Omid et al. (2016) and Shehu (2017) argued that Supply chain channel consists of merchants who take title to the goods and resell them latter for a profit and functional middlemen (agents) who do not purchase products outright, they do not take title but negotiate and expedite exchange between buyers and sellers. Park (2010), Wei et al. (2014) and Ejionueme (2017) asserted that supply chain channels management should not be limited to the choice of a channel only, that supply chain channel actors should reflect on the necessity of channel management by maintaining and developing strong relationship between channel actors. Furthermore, Iwena (2015), Iwuchukwu and Igbokwe (2012), Bonne and Kurtz (2008) opined that supply chain channel actors need to put more of their effort by weighing the decisions concerning pricing, promotion, profit, and customer service and product availability in order to enhance their marketing performance. Ikporah (2012), Eze et al. (2010), and Mutayoba and Deus (2010) noted that supply chain and marketing managers are managing trade channels in collaboration and partnership with other channel partners by setting up channel strategies, design, evaluation, coordination, conflict management techniques and motivation programs to encourage their marketing performance in terms of product availability, customer service and profitability.

According to Zhang et al. (2022), Mpuon et al. (2022), and Jin et al. (2023) the management of supply chain channels dynamics such as channel strategy, design, selection, conflict management and motivation mainly concerned with effective and efficient market coverage and penetration by selecting suitable number of trade channel intermediaries and correctly



assessing the contribution of each partner to marketing performance. Al – Majali & Prigmore. (2010), Stek and Schiele (2021) stated that it is important for the organization to adopt channel dynamics to help in determining whether the firm need a single channel or multiple supply chain channels that facilitates the movement of products to consumers. In the view of Obaji (2011) and Raimbekov et al. (2023) supply chain channel management dynamics enhanced marketing performance of agricultural products' firms by profit maximization, product availability and customer service through intermediary's cooperation, collaboration and cordial relationship that strengthen useful provision of services to customers at the lowest cost. Cai (2012) and Hamdy et al (2022) submitted that the primary objective of supply chain channel management dynamics is to choose the correct, effective, efficient and profitable distribution channels that are flexible and responsive to customers need and requirements. In the assertion of Ufiobor (2017) and Grubor & Nikola (2016) supply chain channel management dynamics commences as a firm entered in production and exchange of goods and services. Gu and Yu (2020), Cai (2012) observed that in managing a supply chain channel, marketing intermediaries must be chosen, trained, motivated and examined to ascertain their reliability and commitment. They also noted that, the modification of channel structure is necessary for effective customer service, profitability and product availability. In the submission of Okpeke & Ellah (2017) and Gaudio et al. (2023) supply chain channel management dynamics improves on marketing performance of agricultural products firms by making it possible for producers to improve on customer service, increase return on investment, and sales, reduce cost of exchange and make sure the goals and objectives of customer satisfaction and product availability are achieved through well-organized channel governance mechanism. Supply chain channel management dynamics encourages the process in which marketers do ensures the efficiency and effectiveness of its middlemen with regards to product knowledge, product availability, sale volume and profitability achievement Omorogbe et al (2014). Raimbekov et al. (2023) declared that supply chain channel managers must create the needed tools for intermediaries to skillfully promote and sell their product in the market by providing them with enough incentives based on the fact that the middlemen are not employees of the marketer and definitely will not give in to the same objective with that of the market if not given some incentives.

In the assertion of Mpuon (2023a, 2023b) supply chain channel management dynamics involves the formulation of appropriate policies, decisions, strategy, design, structure, sales techniques, sales management, procedures to achieve effective and efficient marketing performance, and organization cooperation, collaboration and good will leading to the achievement of its objectives and retaining cooperative and collaborative relationship with other channel partners. Supply chain channel management is a concept in an organization that deals with channel strategy, channel design, channel architecture, sales and operations planning, promotion, channel conflict, partner relationship management, pricing policies, revenue management, sales management, brand experience and distribution Uche et al (2022). According to Achayo and Owino (2017) supply chain channels are of great significant to firms since they aid in the movement of goods from the producers to the consumers. Importantly, Aabolagba et al. (2016) and Uche et al. (2022) affirmed that partners in supply chain channels include suppliers, agents, wholesalers and retailers, manufacturers, and customers. Supply chain channel play a major role in company profitability, product availability and effective customers services Liu (2018). Like other business enterprises, supply chain channel need adequate management, as favourable channel management policies and strategies enable a company achieve superior advantage over competitors by Supply chain channel management enabling them to analyzed, organized, planned and controlling a company's distribution



channels Mpuon (2020, 2021). Considering a large number of publications by authors in view of explaining the theory of channel management, they seem to be a general consensus that channel management consist of seven key decision areas, these are: creating a channel plan and handling channel disputes, setting up a channel scheme, selecting channel members, evaluating the efficiency of the channel participants, motivating channel members, designing marketing channels Xu and Sun (2018) and Xu (2022). All the seven areas are effective for supply chain channel management and marketing performance in terms of improvement in customer service, increasing mutual understanding and maintaining long term productive relationship among channel actors. In the subsequent sections, these variables are going to be examine in details to enable us develop research hypotheses.

Farming is a naturally dispersed and disorganized industry that entails a wide variety of unique players, including input suppliers, farmers, traders, commission agents, processors, and vendors requiring effective and efficient supply chain channel management to enhanced marketing performance in terms of product availability, profitability and customer service Araujo et al. (2022), Amed et al. (2022) and Junaid (2012). In the assertions of Kushwaha (2012), Xu (2022), Rajiv et al. (2013), Lu and Reardon (2018) and Ray (2020) Every step of the agribusiness supply chain is unproductive, the inadequate channel strategy, poor channel design and selection of agricultural channel members, inadequate conflict techniques resolutions among channel actors, lack of motivational programs to induce intermediaries, poor substructure for acquiring farm products from the farms entrance to the end users has brought about inefficiency and ineffectiveness in marketing performance of agricultural products' producing firms. Similarly, Halife and Alshukur (2022), Mpuon et al. (2023a, 2021b), argued that despite the increase in channel management research and the agricultural industry development, there seem to be no empirical research on supply chain channel management dimensions adopted in this current study as they relate to marketing performance of agricultural products producing firms. According to Mpuon (2022, 2020), it appears that there has not been much studies on the impact of supply chain channel management dimensions such as formulating channel strategy, evaluating channel design, channel selection techniques, developing motivational programs for channel members and seeking for appropriate approaches to resolve conflict among channel participants within the agricultural industry. Gu and Yu (2022), Ray (2020) and Mpuon (2021) maintained that the lack of literature by schools with respect to supply chain channel management dimensions in the context of agricultural products producing firms to trigger innovations in channel techniques and strategies might probably be the root cause of poor marketing performance of agricultural products in terms of effective customers service, profitability, product availability, while multiple levels of middlemen secure enormous profits, businesses and farmers virtually every benefit from price increases. Therefore, the goal of this work was to discuss this drawback and close the knowledge deficit. This study contribute to knowledge by developing an expanded model on supply chain and channel management to facilitate cooperation, integration, collaboration and coordination of activities needed in maintaining harmony between supplier, producers, intermediaries, consumers and also to facilitate the interdependence of organizations to achieve predictability and trust ability.



## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Channel selection refers to strategic decisions that influences the choice of a distribution channel for the success of a business enterprise both in the immediate and long terms Hu et al. (2020) and Young and Xu & Sun (2018). Supply channel selection involves rational thinking and systematic analysis in particular, producer, product, market, and competitive considerations. Yong and Qian (2015), Wei et al, (2014) Glaudio et al. (2023). Odunze (2019) and Okpeke & Ellah (2017) argued that an essential component of supply chain and marketing strategy is determining the most efficient distribution channel. Businesses must identify and pick the appropriate channel intermediates to ensure the success of their marketing campaigns in terms of customer service, product availability and profitability. Similarly, Uche et al. (2022), Omorogbe et al. (2014) and Megha (2014) maintained that the final deciders of a marketing channel's success or failure are, of course, the selection and performance of a particular partner or partners. In the assertion of Nikoleta et al. (2018), Negbo and Ejionueme (2017) and Yagana et al. (2014) appropriate choice of Supply chain channel selection can save considerable costs, accelerating technological change heightened by market place demands, fierce competition on a worldwide scale, changes in the labour force and demographics of the population causing businesses to reevaluate basic presumptions about how they approach their markets while maintaining a high level of customer service. According to Al –Majali and Prigmore (2010), Megan and Ernest (2010) and Stek & Schele (2021) in channel selection decisions pricing and product quality are the important decision factors of Supply chain enabling channel actors to evaluate and analyzed different channels characteristics, profitability, service level, availability of products in the market and overall marketing performance. Jin et al. (2023), Jeresa et al. (2022) and Liu (2018) opined that Channel selection helps minimize the negative effects of distribution channel conflicts, such as dual degrading and double marginalization, by effectively satisfying the shopping demands and habits of the intended clients within the seller's cost constraints.

Staal (2015), Hu et al. (2017) and Jin et al. (2022) argued that producers are indifferent on how they select channel members, depending on the buyer's situation and the features of the goods, some companies choose shorter routes for distribution while others favour longer channels. Nebo & Ejionueme (2017) asserted that some of the manufacturers sell primarily by selling to consumers straight away, while others sell heavily through a large number of middlemen. Young & Qian (2015), Young & Nancy (2013) and Agbegbor, *et al.* (2013) noted that it is not easy for firms to select channel members based on the restriction involves in channel selection process, factors like the existence of trustworthy intermediaries, customary channel layouts, product attributes, business finances, rivalry tactics, and consumer dissemination inquiries, types of middlemen, locations of trading areas and effective marketing system. Liu (2018) Yada & Sing (2018) argued that no company can choose a channel unless it has a great deal of leeway over marketing policy decisions. While Glaudio et al. (2023) stated that the choice of channel choice is influenced by control strategies in addition to economic considerations or the ability of the producer to manage channel member and assess their performance effectiveness, customer service, increased profitability and ensuring adequate availability of a firm product in the market. According to Vunianti & Arvitrida (2022) and Afiobor (2017) the factors influencing channel selection are: company characteristics, product characteristics, market characteristics, performance characteristics and environmental factors. In the submission of Cai (2012) and Achayo & Owino (2013) a company with good financial and marketing efficiencies may engage in direct contact with customers thereby having control over the

channel while a company with a weak resource base usually uses agents and other intermediaries with marketing efficiencies to market its product. Uche et al. (2022) and Hu et al. (2020) affirmed that this does not afford company a greater control over channel member and even its product. In the view of Nebo & Ejionueme (2019), Odunze (2019) and Nikoeta et al. (2018) firms with large financial, good management and marketing resources feel less need for intermediaries because a large, financially strong manufacturer sells its own goods, and extend credit to retailers or consumers. The authors further opined that a small firm with fewer resources may do better with the aid of intermediaries. Based on the discussion above, we hypothesized as follows:

$H_{01}$ : supply chain channel selection has no significant impact on marketing performance of agricultural products' firms in Nigeria.

In conceptualizing  $H_{01}$  as a dimension of supply chain channel management, Glaudio et al. (2023) and Uche et al. (2022) theorized that in selecting a supply chain channel, product-related factors such as unit value of product, perishability, and technicality, breadth of hire of product, seasonality and degree of market acceptance need to be taken into consideration. Moreover, Liu et al. (2022) and Raimbekov et al. (2023) maintained In conceptualizing channel selection as a dimension of supply chain channel management, it would help in enhancing marketing performance of agricultural products' producing firms by selecting appropriate channel members that will encourage the enforcement of internal and external mechanism by developing channel wide strategies and incentives that facilitates timely production and delivery commitments to final consumers.

### Conceptual framework of the study's variables

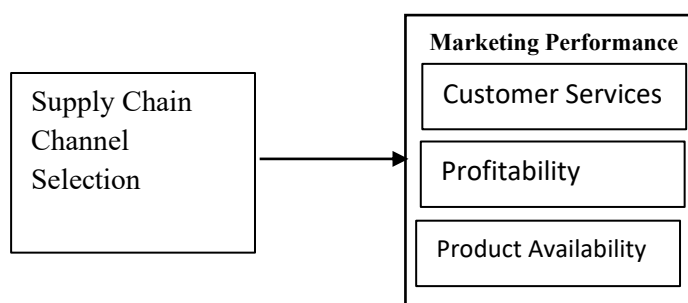


Figure 1: Showing the study's conceptual frame work that establishes the interrelationship between these two groups of variables.

The conceptual structure created to be assessed in this analysis is shown in Figure 1. Other supplemental theories are integrated to establish the conceptual framework, particularly managerial and business insight theories, while resource-based view theory serves as the anchored structure theory. This is because the best course of action for organizational performance depends on both internal and external organizational resources, and the dynamics within marketing channels are dependent on the power of each intermediary. Therefore, the researcher will use resource-based view and bargaining theory as the guiding theories for the study.



## Resource-based view theory

Resource based view theory considered the organization as a collection of resources and how these resources, are integrated, distinguished organizations, allowing them to achieve a competitive advantage Mpuon (2022c, 2020). The central tenet of resource-based perspective theory is that firms can create value-enhancing tactics that are challenging for rivals to imitate when they own essential, separate, distinct, and unalterable. Resources Freeman et al. (2021). According to Aldona and Szymaniec (2012) firm resources are important if they enable businesses to design and implement plans that reduce net costs and enhance net revenues beyond what would have been the case otherwise. Mpuon et al. (2023) and Wade and Hulland (2004) argued that the resource-based view is a multifaceted method that fundamentally alters how we perceive tangible and intangible resources. Asghar et al. (2011) stated that the theory of resource-based view is interdisciplinary since it was developed in the fields of wide-ranging business, supply chain management, marketing, ethics, and law in addition to economics. Barney et al. (2001), asserted although it has roots in Ricardian and Penrosian economic theories, resource-based view theory represents a new paradigm. According to these theories, firms can achieve exceptional returns over the long term if they possess more advanced supplies and are protected from some of the industry's solitary mechanisms. Shymko and Diaz (2010) and Lan (2001) maintained that the exact impact of resource-based view is disputed, two strategic academics own Edith Penrose's 1959 publication "The company's modern resource-based approach was influenced by various concepts stated in "The Theory of the Company's Growth."

The resource-based approach principles defined the strategic supplies that an organization might utilize to gain a sustained competitive advantage in the claims made by Aldona et al. (2021). This theory provides Sales managers, transportation managers, marketing managers, purchasing managers, and other functional managers of companies that produce agricultural products the opportunity to use heterogeneous resources skills, capabilities, and organizational structure that set them apart from other industries to design strategies that improve their company's competitive advantage in the market. This will help other companies in the chain accurately forecast customer demand, achieve sales growth, and increase their market share. Companies that create agricultural goods will be able to preserve a competitive edge by putting into practice a value-creating strategy that is not being adopted concurrently by any rivals, either present or future Shymko and Diaz (2010) and Freeman et al. (2021).

## Marketing performance

Marketing performance help firms to ensure that managers carry out their duties and responsibility of facilitating the production and smooth flow of goods from production centers to consumption centers and make sure that employees know what has to be done, are skilled at it, and finish it to a high enough degree for the benefit of all parties involved and customers Mpuon (2024). Evaluation of performance is a strategic instrument that offers the means of accomplishing the goals necessary to complete a firm's purpose and strategy statement. It is essential to the evaluation of any system Xu (2022) and Obaji (201). According to Mpuon (2021) marketing performance is a metric for assessing the efficacy of marketing strategies and planning efforts aimed at promoting products and services in the marketplace which might be also referred as marketing activity appraisal system. Evaluating marketing performance is necessary in order to identify areas that need adjustments and changes for the improvement of organizational image and the leveraging of its sales performance which in turn has a positive



impact on company's performance in terms of sale growth, profitability, product availability, customer service, loyalty, patronage and satisfaction (Morgan, 2012). According to Uche et al. (2022) and Okpeke & Ellah (2017) when marketing is effective, sales and market shares increase, organizational reputation is strengthened, and institutional brand name positioning in the market improves. To appreciate the necessity of marketing performance indicators in organization Mpuon et al. (2014) defined marketing as the actions taken by a corporation as a whole with the goal of increasing shareholders value. The authors argued that is not the division of a marketing campaign or a particular segment that determines the company's success in marketing, however, the business's overall effectiveness and marketing accomplishments. They argued that it is necessary to adhere to some criteria in line with the following classifications, competing market metrics including market share, share of voice, relative price, and proportion of promotion are used to assess the effectiveness of marketing. Monetary indicators, such as sales volume, turnover, profit and capital returns. Customer service and fulfilment, availability, and delivery are examples of trade-related direct customer metrics. Intermediate consumer (end user) measures include behaviour, dedication willingness to buy, and perception of quality.

However, whatsoever performance metric chosen by organization, it tries to minimize individual biases as argued by Hu et al. (2020) and Zhang et al. (2022) argued that three basic principles should be considered when choosing marketing performance metrics – clear definition, accurate measurement standards and reward or punishments. In line with the above mentioned marketing performance metrics, in this study, customer services, product accessibility and profitability are used as measures of marketing performance. The act of anticipating and fulfilling the needs of clients by providing competent, supportive, and superior service and assistance before to, during, and following the resolution of those demands is known as customer service Joost (2001). Client service is about attending to each customer's requirements and wishes and it deals with the provision of service prior to, during and after purchase Mpuon et al. (2022). Product availability does not imply that products are always available hundred percent in the market, but rather they are available when the customer requires them Mpuon (2021, 2018). According to Yael et al. (2013) product availability is a matching game in which producers and suppliers try to time the preparation of an item to coincide with when the customer wants it. Hamidy et al. (2022) argued that product availability necessitates planning for the flow of goods and services, policy clarity and accuracy, constant control, continual improvement, and constant communication with business partners. Profitability is the state in which a company turns a profit and is reached when total revenue for an audit season is greater than total costs. According to Raimbekov et al. (2023) supply chain channel management dynamics enhanced agricultural firm's profitability by strengthening the company's ability to create income that exceeds its expenses through efficient utilization of resources and value creation in the chain of distribution. Xu and Sun (2018) argued that profitability is a company's return on investment that encourages intermediary ability to profit from its operations and value enhancements while satisfying the needs and wants of consumers.



## RESEARCH METHOD

The study adopted cross – sectional field survey of the quasi experimental research design as a useful aid in examining the extent to which supply chain channel selection explain or predict the variables in marketing performance. A quasi – experimental design is an empirical interventional study used to estimate the causal impact of an intervention on a target population without random assignment. The survey relies on a sample of elements from the population of interest which are measured at a single point in time. It is also a small sample approach that is particularly useful when examining the interrelationships among a number of variables. The research setting is a natural setting and the researcher cannot manipulate the research elements. Private agricultural enterprises in Nigeria that are listed on the Nigerian stock market or registered with the Nigerian Corporate Affairs Commission, both of which were formed in 1990 under the Companies and Allied Issues Act No. 1990 as amended, served as the empirical context for our study.

The population of the study comprised of registered agricultural products' enterprises in Nigeria.

Four hundred (400) questionnaire were given to the management staff of the companies' survey, three hundred and three hundred and ninety-one (391) was retrieved, 9 of the questionnaires were not suitable for inclusion in the final analysis resulting to a modified Sample size of three hundred and ninety-one (391). The investigator used the purposive sampling technique, believing that choosing the right sample units would be crucial to producing pertinent data for the study based on the researcher's experience and understanding of the units. The employees of these enterprises are involved in agricultural products and marketing nationwide to final consumers and industrial users.

A structured questionnaire was administered face to face to sales, procurement, logistics, supply chain, marketing and general managers as source of data collection for the study by the authors and five additional persons hired and trained mainly for this purpose. The respondents were chosen because of their expertise in supply chain management and marketing efficiency with respect to agricultural products in the Nigerian agricultural industry based on their training, length of service and skills. The companies selected are focused on the production and distribution of agricultural products in Nigeria and have significantly contributed to the development of the industry. The questionnaire was split into two parts. The questionnaire initial section was designed to collect demographics data on the respondents' highest educational level, gender, age bracket and respondents' years of experience. The second part of the questionnaire focused on Supply chain channel selection and marketing performance scale which consists of 2 items that represent how the respondents believe that supply chain channel management dynamics enhance marketing performance of agricultural products' producing firms in terms of customer service, profitability and product availability. The scale used to measure marketing performance is made up of 10 items that score participants perception of how important product availability, profitability and customer service is to agricultural products' producing firms. Exception of the demographic and filter questions in the first part of the questionnaire, all other items were graded on a five (5) point Likert Scale of Agree = 1, Strongly Agree = 2, Neutral = 3, Disagree = 4 and strongly disagree = 5 was used to generate data. As stated earlier, these primary data were collected using structured questionnaire title channel management questionnaire (CMQ) adapted from Ntale (2016) and Rajiv et al., (2013) and were modified for the purpose of this research. Each questionnaire



contains thirty-one (31) questions, shared in two parts. The first part consists of six questions in the demographic characteristics while the second part consist of thirty five (25) questions in the independent and dependent variables.

To assess the one –dimensional validity and reliability of the scale constructs, confirmatory factor analysis was utilized. The whole items that supported the various structures gave each construct a substantial amount of weigh. A strong and sufficient model data fit as recommended by Byrne (2016) was discovered after removing the cross – loading elements. Importantly, all the scales satisfied the criterion for discriminating and convergent validity since the average variance extracted (AVE) for each of the variables in table 1 is larger than 0.5, and these values are also greater than the squared correlation coefficient for any pair of constructs as suggested by Fornell and Larcker (1981). To determine the measurement scales, Cronbach’s alpha coefficient ( $\alpha$ ) and composite reliability (CR) scores were determined. Both  $\alpha$  and CR values are more than 0.7, demonstrating strong dependability. When taken together, The CFA values show that the multi – item scales utilized in this study are unidimensional, valid and reliable as shown in Table 1.

### Reliability and Validity Results

**Table 1: Summary results of reliability and validity**

Construct	AVE	Max $r^2$	CR	Cronbach Alpha
Supply chain channel selection	.811	.571	.993	.87
Marketing performance	.932	.467	.996	.89
Customer service	.890	.632	.995	.82
Product availability	.739	.19	.949	.83
Profitability	.721	.544	.935	.85

*AVE- Average Variance Extracted, CR- Composite reliability.*

Result of confirmatory factor analysis shows that the Average Variance Extracted obtained for all constructs were greater than 0.70 and also greater the squared correlation coefficient for any pairs of constructs indicating that the constructs met the requirement for discriminate and convergent validity. The Cronbach Alpha reliability coefficients of .87, .89, .82, .83 and .85 were obtained for supply chain channel selecting, , marketing performance, customer services, profitability and product availability respectively. These reliability coefficients were all above the threshold of .70 which implies that the instrument is reliable. Result shows that both the CR and Cronbach Alpha coefficients for each of the constructs were above 0.70 indicating that the instrument is reliable. Considering the analysis, the constructs were considered acceptable



## RESULTS

**Table 4.1: Demographics of the Respondents**

<b>Demographics Variables</b>	<b>No. Of Respondents</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Male	270	69.1
Female	121	30.9
<b>Total</b>	<b>391</b>	<b>100.0</b>
<b>Age (years )</b>		
20-25 years	130	33.2
26-30 years	64	16.4
31-35 years	58	14.8
36-40 years	27	6.9
41-45 years	51	13.0
46-50	27	6.9
51 and above	34	8.7
<b>Total</b>	<b>391</b>	<b>100.0</b>
<b>Educational Qualification</b>		
None	9	2.3
Primary	78	19.9
Secondary	126	32.2
Tertiary	178	45.5
<b>Total</b>	<b>391</b>	<b>100.0</b>
<b>Marital status</b>		
Married	115	29.4
Single	197	50.4
Widow	40	10.2
Divorced	14	3.6
Separated	25	6.4
<b>Total</b>	<b>391</b>	<b>100.0</b>
<b>Experience</b>		
1- 5 years	95	24.3
6-10 years	154	39.4
11-15 years	83	21.2
Above 15 years	59	15.1
<b>Total</b>	<b>391</b>	<b>100.0</b>

**Source:** *Field survey (2019)*

Of the 400 copies of the questionnaire administered, 391 copies representing 97.75% of the total number of the questionnaire were retrieved and found useable. Results presented in Table 4.1 shows the distribution of the demographics of the respondents. Result reveals that 270 respondents representing 69.1% of the respondents were male and 121 respondents representing 30.9% were female. The distribution of their age shows that 33.2% were between 20-25 years, 16.4% were between 26-30 years, 14.8% were between 31-35 years while 6.9%, 13.0%, 6.9% and 8.7% of the respondents were between 31-35 years, 36-40 years, 41-45 years and 51 and above years respectively. Nine respondents representing 2.3% had no formal



education, 19.9% had primary education, 32.2% had secondary education while the majority of the respondents (45.5%) had tertiary education. One hundred and fifteen respondents representing 29.4% were married, 50.4% were single, 10.2% were widow, 3.6% were divorced while 6.4% of the respondents were separated. Result of the years of experience shows that 24.3% of the respondents had 1-5 years, 39.4% had 6-10 years, 21.2% had 11-15 years while 15.1% of the respondents had above 15 years of experience.

**Table 4.2: Descriptive statistics for the research variables**

	n	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
Supply chain channel selection	391	10.00	40.00	28.48	11.60	-0.56	0.12	-1.42	0.25
Marketing performance	391	9.00	36.00	25.73	10.79	-0.65	0.12	-1.47	0.25
Customer service	391	8.00	58.00	21.71	9.27	1.64	0.123	5.02	0.25
Profitability	391	7.00	28.00	18.93	6.54	-0.22	0.12	-1.05	0.25
Product availability	391	4.00	16.00	11.48	5.28	-0.51	0.12	-1.61	0.25
Valid N (listwise)	391								

Source: Researchers Computation with SPSS 20

Table 4.2 presents the summary results of the descriptive statistics for the research variables. Table 4.2 presents the minimum score, maximum score, mean and standard deviation, skewness and kurtosis of the scores obtained on each of the research variable. Result shows that the mean score of 28.48, 25.73, 21.71, 18.93 and 11.48 for supply chain channel selection, marketing performance, customer service, profitability and product availability with standard deviations of 11.60, 10.79, 9.27, 6.54 and 5.28 respectively. In terms of skewness, result shows that the scores obtained for supply chain channel selection (-0.56), marketing performance (-0.56), profitability (-0.22) and product availability (-0.51) were less than 1 meaning that they are skewed to the left while that obtained for customer service was greater than 1 (1.64) meaning that the scores on customer service was skewed to the right. Result also shows that the kurtosis for supply chain channel selection (-1.42), marketing performance (-1.47), profitability (-1.05) and product availability (-1.61) were less than 3.00 while that of customer service (5.02) was greater than 3.00 which is the kurtosis of the normal distribution. This result indicates that among the research variables, only customer service has higher kurtosis than normal distribution suggesting that the scores obtained on customer service is leptokurtic (excess kurtosis). The normality of the scores obtained on each of the variables using Shapiro-Wilks test are presented in Table 4.3.



**Table 4.3: Summary of Normality Test using Shapiro-Wilk test for the Research Variables**

	Shapiro-Wilk		
	Statistic	df	P-value
Supply chain channel selection	0.801	391	0.000
Marketing performance	0.732	391	0.000
Customer service	0.857	391	0.000
Profitability	0.927	391	0.000
Product availability	0.718	391	0.000

**Source:** Author's computation (2019) using SPSS version 20.0

Result displayed in Table 4.3 reveals that supply chain channel selection (P-value = 0.000), marketing performance (P-value = 0.000), customer service (P-value = 0.000), profitability (P-value = 0.000) and product availability (P-value = 0.000) have their P-values less than 0.05 ( $P < 0.05$ ). This indicates that among the research variables, all the research variables were not normally distributed.

**Table 4.4: Correlation between the research variables**

Variables	1	2	3	4	5
1. Supply chain channel selection	1				
2. Marketing performance	0.807** (0.000)	1			
3. Customer service	0.548** (0.000)	0.699** (0.000)	1		
4. Profitability	0.543** (0.000)	0.589** (0.000)	0.813** (0.000)	1	
5. Product availability	0.650** (0.000)	0.611** (0.000)	0.602** (0.000)	0.705** (0.000)	1

*\*significant at 5% ( $p < 0.05$ ), \*\*significant at 1% ( $p < 0.01$ ), Source: Author's computation (2019) using SPSS version 20.0. Values in the parentheses are the p-values.*

Result in Table 4.4 presents the correlation between the research variables. Result reveals that supply chain channel selection has significant positive relationship with marketing performance ( $r = 0.807$ ,  $p = 0.000$ ,  $p < 0.01$ ), customer service ( $r = 0.548$ ,  $p = 0.000$ ,  $p < 0.01$ ), profitability ( $r = 0.543$ ,  $p = 0.000$ ,  $p < 0.01$ ) and product availability ( $r = 0.650$ ,  $p = 0.000$ ,  $p < 0.01$ ). Supply chain Channel selection was found to have significant positive relationship with customer service ( $r = 0.699$ ,  $p = 0.000$ ,  $p < 0.01$ ), profitability ( $r = 0.589$ ,  $p = 0.000$ ,  $p < 0.01$ ) and product availability ( $r = 0.611$ ,  $p = 0.000$ ,  $p < 0.01$ ). Customer service shows significant positive relationship with profitability ( $r = 0.813$ ,  $p = 0.000$ ,  $p < 0.01$ ) and product availability ( $r = 0.602$ ,  $p = 0.000$ ,  $p < 0.01$ ). There was also a significant positive relationship between profitability and product availability ( $r = 0.705$ ,  $p = 0.000$ ,  $p < 0.01$ ).



## Hypothesis 1

Ho<sub>2</sub>: There is no positive significant relationship between supply chain channel selection and marketing performance

**Table 4.8: Model summary for the regression relationship between supply chain channel selection and marketing performance**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
	.723	.523	.522	4.52267	2.337

**Source:** *Researchers Computation with SPSS 20.*

Result in Table 4.8 reveals r- square of 0.523 which implies that 52.3 percent of the variation in marketing performance was accounted for by supply chain channel selection. This result also signifies that if there is any improvement in supply chain channel selection, there will be a corresponding improvement in marketing performance. The Durbin Watson value of 2.337 was obtained which implies that there is no evidence of autocorrelation. This is because The Durbin Watson value of 2.337 is greater than 1 but less than 3.00 which indicate that the error terms are not correlated as suggested by Field (Field, 2009). The result of the Analysis of Variance for the regression is shown in Table 4.9.

**Table 4.9: ANOVA Result for the relationship between supply chain channel selection and marketing performance**

Source of variation	Sum of Squares	df	Mean Square	F-calc.	F-crit.	p-value
Regression	8725.189	1	8725.189	426.565*	3.87	0.000
Residual	7956.806	389	20.455			
Total	16681.995	390				

**\*significant at  $p < 0.05$ . Source: Researchers Computation with SPSS 20.**

From Table 4.9, the F-critical of 426.565 was obtained with p-value of 0.000 while the F-critical of 3.87 at the 0.05 level of significance. The result reveals that the F-calculated (426.565) is greater than the F-critical (3.87) at the 0.05 level of significances which means that there is a significant linear relationship between supply chain channel selection and marketing performance. This result also implies that supply channel selection accounted for significant variation in marketing performance. The estimate of the parameters of the regression model is shown in Table 4.10.

**Table 4.10: Parameters estimates of the regression of profitability on channel strategy**

	Unstandardized Coefficients		Standardized Coefficients	t-calc.	P-value
	B	Std. Error	Beta		
Constant	7.320	.607		12.064	0.000*
Supply chain channel selection	.408	.020	.723	20.653	0.000*

**\*significant at 1 % (  $p < 0.01$ ), t-critical = 1.97. Source: Researchers Computation with SPSS 20.**

Table 4.10 presents the regression coefficient for the model parameters. Result shows that supply chain channel selection ( $\beta = 0.723$ , S.E = 0.020, t-calc. = 20.653, t-crit. = 1.97,  $p = 0.000$ ,  $p < 0.05$ ) has significant positive relationship with marketing performance. Result also yielded standardized beta coefficient of 0.723 was obtained which indicates that if other variables are held constant, for every 1 unit improvement in supply chain channel selection, marketing performance will improve by 0.723. Result also shows that t-calculated (20.653) is greater than the t-critical (1.97) at the 0.05 level of significance. Hence, the null hypothesis stated above is rejected. Therefore, there is a significant positive relationship between supply chain channel selection and marketing performance. This result indicates that effective supply chain channel selection enhances marketing performance.

## DISCUSSION OF THE FINDINGS

The study showed a significant and positive relationship between supply chain channel selection and marketing performance measures of agricultural products' firms in Nigeria (customer service, profitability and product availability). The result of hypothesis one revealed that t – calculated is greater than the t – critical at 0.05 level of significant which implies that there is a significant and positive relationship between supply chain channel selection and marketing performance of agricultural products' producing firms in Nigeria. This assertion is supported by previous scholar's studies such as (Mpuon et al., 2024, Ikaba *et al.*, 2016, Hidajet and Halit, 2015, Isik *et al.*, 2016) who affirmed that supply supply chain Channel selection is driver of marketing performance. The authors asserted that producers of consumer's products should carefully select channel members in order to keep them in conformity with firms marketing strategies, objectives and goals. Also, cordial relationship must be encouraged and maintained with channel management members and intermediaries since distribution cannot be effective and efficient without them.

### Theoretical and managerial implications

In light of the inferences and results drawn from the discussions; the following theoretical and practical implications are deduced; Sales managers must exercise caution when managing distribution networks, giving special attention to developing marketing strategies, inspiring members of the channel, and resolving channel disputes. Multiple regression analysis was used in the study to show statistical correlations between channel management and marketing



performance of agricultural products' firms in Nigeria. The results of previous scholars like (Rajiv et al., 2013, Adefulu and Adenira, 2019, Ikaba et al., 2016, Schoviah, 2012, Hidajet and Halit, 2015, Isik et al., 2016, Ntale, 2016, Ayaga and Alabar, 2017, Obaji, 2011, Edoge, 2014) was verified that supply chain channel selection has a significant and positive effect on marketing performance of agricultural products' firms. As a result, this research complements the notion of resource-based view will enable agricultural products' firms to develop superior tangible and intangible organizational resources and capabilities that are not easily imitated by competitors to enhanced their marketing performance. This study provided the platform for sales managers of agricultural products' firms to take advantage of the various proposed dimensions of supply chain channel management dynamics that will enhance marketing performance of agricultural products. The study also contributed to existing channel management literature by proposing five dimensions of channel management and link them to marketing performance contrary to others studies that failed to emphasize the relevant of this dimensions on marketing performance of agricultural products' producing firms. A model on how supply chain channel selection affect marketing performance of agricultural product firms was established. This study should be conducted on other dimensions like Assessing channel member's performance and coordinating channel strategy. This research was conducted in Nigeria and other geographical factors were not considered which should be handled by future researchers by replicating this study in other countries.

## CONCLUSION AND RECOMMENDATIONS

The research examined the relationship between supply chain channel selection and marketing outcome of agricultural products' businesses. Three hundred and ninety-one registered employees of agricultural products' firm's employees in Nigeria were chosen judgmentally because of the spread of their activities with intermediaries. In keeping with the goal of the study, one research questions and one hypotheses was developed. The research determined the impact of supply chain channel selection on marketing performance by concentrating on one aspects of supply chain channel management. Multiple regression analysis was used to examined the hypotheses, while descriptive statistics was achieved using frequency, mean, weighed mean, percentage, standard deviation, kurtosis and skewness with the help of (SPSS version 21). Based on the hypothesis proposed, the null hypothesis was rejected. Meaning that a significant and positive relationship exist between supply chain channel selection and marketing performance.

Based on the results, the following suggestions are offered: Firms should put in place effective and efficient channel strategies that will produce a supportive atmosphere for the actualization of the overarching business goals and plans of the company. The sales managers of the company ought to concentrate on creating new channels and adjusting the ones that already exist in order to enhance marketing effectiveness. Before selecting channel members, credit history, their reputation and Market coverage should be taken in to consideration for effective marketing outcome. For proper customer service delivery, profitability and product availability firms should adopt various motivational programmes needed induced middlemen to put in more work when marketing the company's goods. For efficient and successful marketing performance, businesses must actively seek out and use conflict management approaches to address conflicts as they negatively impact the performance of channel members.



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