Xi'an Shiyou Daxue Xuebao (Ziran Kexue Ban)/
Journal of Xi'an Shiyou University, Natural Sciences Edition
ISSN: 1673-064X
E-Publication: Online Open Access
Vol: 69 Issue 10 | 2026
DOI: 10.5281/zenodo.23620773

SUPPLY CHAIN MANAGEMENT AND PERFORMANCE OF FEDERAL HEALTH INSTITUTIONS IN SOUTH EAST NIGERIA

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Abstract

The study examined supply chain management and performance of federal health institutions in Southeast, Nigeria. The study sought to assess the effect of information technology- enabled supply chain management on productivity, and determine the effect of enterprise resource planning systems on product delivery. The study opted for a survey design. The findings revealed that information technology- enabled supply chain management and enterprise resource planning systems respectively had positive effects on productivity and product delivery. The study affirmed that an effective supply chain management systems are vital aspect of production and operations management that ensure the quality distribution of goods. However, the study proposed that Public sector organisations need to invest in continuous service improvement, digital innovation and strategic planning, to enhance competitive advantage and overall performance.

Keywords: Supply Chain Management, Information Technology, Enterprise Resource Planning, Productivity, Product Delivery.

1. INTRODUCTION

Supply chain management (SCM) is the broad range of activities required to plan, control and execute a product's flow from materials to production to distribution in the most economical way possible. SCM encompasses the integrated planning and execution of processes required to optimize the flow of materials, information and capital in functions that broadly include demand planning, sourcing, production, inventory management and logistics or storage and transportation (whatls.com).

Effective SCM manages the flow of materials, information, and products from suppliers to customers. Also, effective supply chain improve product quality, customer service, and inventory management. Supply chain management incorporates ethical and environmental considerations. Thus, SCM tries to control the production and distribution of a product to enhance efficiency and value. In managing the supply chain, companies

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cut costs, deliver products faster, and remove non-value added steps. Supply chain management is based on the fact that many products that come to the market reveal the efforts by multiple companies that make up a supply chain (www.investopedia.com).

In the late 1990s, supply chain management (SCM) rose to prominence, and operations managers began to use it in their titles with increasing regularity (Jacoby, 2009; Feller et al, 2006 & Blanchard, 2010). A supply chain, as opposed to supply chain management, is a set of firms who move materials "forward" or a set of organizations, directly linked by one or more upstream and downstream flows of products, services, finances, or information from a source to a customer. Supply chain management is the management of such a chain (Mentzer, et al, 2001).

An effective supply chain management systems are vital aspect of production and operations management that ensure the quality distribution of goods. Over time, firms have devised new means to ensure that their supply chains meet the primary function of effective and efficient delivery of goods and the secondary function of innovating better systems, reducing unemployment, and overall growth (Arora, Haleem and Farooquie, 2017; Li, Ragu-Nathan, Ragu-Nathan, & Rao, 2006).

According to the Council of Supply Chain Management Professionals (CSCMP), supply chain management encompasses the planning and management of all activities involved in sourcing, procurement, conversion, and logistics management. It also includes coordination and collaboration with channel partners, which may be suppliers, intermediaries, third-party service providers, or customers. Supply chain management integrates supply and demand management within and across companies (www.wikipedia.org) Lambert & Cooper, 2000 posit that supply chain is not a chain of businesses with one on one business to business relationships, but a network of multiple businesses and relationships. SCM capture the synergy of intra- and intercompany integration and management.

Supply chain management techniques with the aim of coordinating all parts of SC, from supply of raw materials to delivery of products, ensures that total costs is minimized with respect to the existing conflicts among the chain partners. The conflicts involve the interrelation between the sales department desiring to have higher inventory levels to fulfill demands and the warehouse for which lower inventories are desired to reduce holding costs (Mousavi, Mohsen, Taghi & Akhavan 2016; Salam & Khan, 2018; Kaipia, 2009. Supply chain management goes through persistent challenges which constrain operational efficiency. The challenges include changing customer expectations, price pressures, globalization, increasing operational costs and short product life cycles (Almasri, Ying, Aljaber and Namahoro, 2025). The traditional supply chain framework is actually not adequate to tackle the challenges, thereby, required information technology-enabled supply chain that enhances productivity (Atieh Ali, Sharabati, Allahham, & Nasereddin, 2024). Organisational performance is a measure of how effectively and efficiently managers utilize resources to satisfy customers and achieve organizational goals (Jones, George and Hill, 2006).

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Thus, the specific objectives of this study are to determine the effect of information technology- enabled supply chain on productivity, and assess how enterprise resource planning systems affect product delivery.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Phases of Supply Chain Management

The supply chain management process consist of the following phases:

Planning: supply chain management process usually begins with planning to match supply with manufacturing and customer demands. Companies need to predict their future needs. This involves considering the raw materials, equipment capacity, and staff needs for each manufacturing stage. Enterprise resource planning (ERP) software can help coordinate the process for large businesses.

Sourcing: Supply chain management processes heavily rely on strong relationship with suppliers. Supply chain sourcing involves ensuring that the raw materials and components meet the needed manufacturing specifications for production of the goods. The vendor has a proven record of timely delivery of good quality goods, and has the flexibility to deliver emergency materials. Manufacturing: This is the main phase of the supply chain management which transforms raw materials into finished goods through a series of well managed steps like inspection, testing, assembly, and packaging. During the manufacturing process, companies need to be conscious to minimize waste. Enterprise resource planning (ERP) systems enhance the manufacturing phase by optimizing production schedules, manage inventory levels, and ensure that equipment and labour are effectively used.

Delivery: Supply chain management involves delivery of products which focuses on getting the finished products to the customers. It involves order processing, warehousing, transportation, and customer services. Enterprise resource planning (ERP) systems help this phase by automating order processing, optimizing delivery routes, and managing shipping logistics to ensure delivery on time. Companies need to have robust logistic capabilities and delivery channels to ensure safe, timely, and low cost delivery of its products.

Returns: Companies need to ensure the capability to receive returned products and assign refunds for them. Returns offer valuable feedback that helps companies identify and rectify defective or poorly designed products. The SCM process will have failed if the underlying cause of a customer return is not addressed, hence, the returns will likely persist. Effective management requires a process for handling returned products, by assessing their condition, and reintegrating them into inventory if necessary (www.ecisolutions.com).

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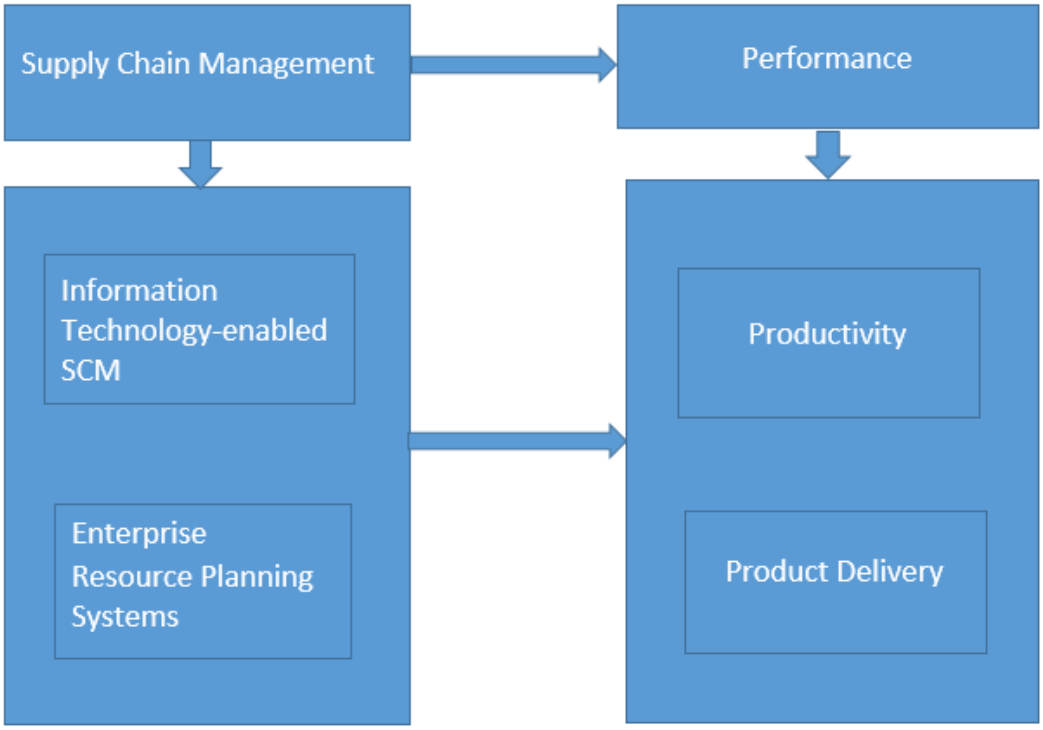


Figure 2.1: Supply Chain Management and Performance

Source: The Researchers, 2026.

2.1.2 Information Technology-enabled Supply Chain and Productivity

Information technology supply chain is the integration of information technology into the operations and management of supply chain processes. The integration will allow real-time data exchange, increased efficiency, and improved visibility in the flow of goods, information and necessary payments. The IT tools like transportation management system, enterprise resource planning systems, support the execution of strategies that enable companies to make data- driven decisions. An effective supply chain management requires IT to handle supply chain complexities, ensure timely operations, and adapt to market demands, which optimizes its performance and enhances efficiency. The role of IT in supply chain management involves the following:

Inventory management: the application of IT reduces manual labour, increases accuracy and leads to effective inventory decision-making, improve supply chain management efficiency. By using supply chain technology, companies can leverage the accurate data of its inventory forecasting to reduce waste, minimize stock-outs and thereafter, enhance productivity.

Supply chain visibility: information technology plays an important role in supply chain visibility by using such technologies like radio frequency identification, internet of things, and cloud computing. These tools provide real-time data on inventory levels, logistics

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movements, production status, and enable quicker, informed decisions across the supply chain. Enhanced visibility will lead to a more resilient supply chain which allows supply chain management to respond promptly to supply chain disruption risks.

Product Improvement: in the supply chain, product improvement is derived by IT with enhancing data flow, process automation, improved shipment tracking, and optimized warehouse management systems. These technological advancements lead to improved product quality, and more efficient supply chain operations. Cost reduction: with IT supply chain management tools like advanced analytics and real time monitoring, businesses can minimize inefficiencies, optimize processes and reduce overall costs. This reduction is particularly seen in areas like supplier relationship management, procurement, and transportation management systems where automation and data insights can drive more efficient supply chain management (www.joneselitelogistics.com; Stank, Keller & Daugherty, 2001; Li & Lin, 2006; Lu, Baofeng, & Gu, 2022).

However, productivity measures the efficiency of a system, machine, factory, person, etc, in converting inputs into useful outputs (https://www.betterup.com). Productivity is the efficient use of resources to generate value. Productivity is a measure of economic performance that compares the quantity of goods and services produced with the quantity of the goods and services used to produce. Productivity is a key indicator of organizational competitiveness which measures the ratio of resources utilized with the outcomes achieved (https://www.bls.gov). Employee productivity measures how efficiently and effectively a worker or a group of workers has contributed to achieving organizational goals (https://www.ibm.com).

H1: Information technology-enabled supply chain management has positive effect on productivity.

2.1.3 Enterprise Resource Planning (ERP) Systems and Product Delivery

Enterprise resource planning systems provide an integrated and continuous review of core business processes, by using a shared database. The applications that make up the ERP system can share data across different departments: accounting, finance, human resource, sales, purchasing, manufacturing, etc. The enterprise resource planning system (ERP) has been developed to help companies integrate the information gathered from their internal departments so as to enhance their performance (Bradley and Lee, 2007; Kosalge, and Ritz, 2015, cited in Almajali, Masa'deh and Tarhini (2016). The backbone of business intelligence for an organization is a successful ERP system which provides managers an integrated analysis of the processes involved in it (Lee and Kim, 2007; Al-jabri and Roztocki, 2015; Fadalla and Amani, 2015). Enterprise resource planning system facilitates information flow to all business functions and manages relationships to stakeholders (Radovilsky and Zinory, 2004). Enterprise resource planning (ERP) is a centralized software platform which companies use to integrate and automate core business processes (www.priority-software.com). An ERP system covers the following functional areas:

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Manufacturing: work orders, scheduling, capacity, workflow management, quality control, manufacturing process, projects, and flow, product life cycle management.

Order processing: order entry, order to cash, credit checking, available to promise, inventory, shipping, pricing, sales analysis and reporting.

Supply chain management: This involves supply chain planning, supplier scheduling, product configure, order to cash, purchasing, inventory, claim processing, warehousing.

Customer relationship management (CRM): involves customer contact, sales and marketing, commissions, service, call center support. CRM systems are not always regarded as part of ERP systems but rather business support systems (BSS).

Supplier relationship management (SRM) involves orders, suppliers, payments. Data services: applicable to customers, employees, suppliers.

Contract management: involves creating, monitoring, and managing contracts, reducing administrative burdens and minimizing legal risks. Management of schools and educational institutes (www.wikipedia.org; Zaid, M., Farooqi, R. & Azmi, S. N. 2025).

Product delivery is a process of delivering high quality products quickly and efficiently to customers. It ensures that products are delivered on time and meet customer expectations. It depends on the agile methodology that pronounces collaboration, continuous improvement, and flexibility. Product delivery enables collaboration between teams, which leads to good communication and effective problem-solving. Product delivery enables teams to adapt quickly to changing customer needs and market conditions, resulting in more agile products. Product delivery focuses on delivering the product that meets the needs and expectations of the consumers and which continues to evolve and improve over time. (https://learningloop.io).

H_2: Enterprise resource planning systems have positive effect on product delivery.

Theoretical Review

Social Network Analysis/ Relational View: This theoretical view examines the structure of relationships and the trust of legally independent firms in a supply chain which highlights how social ties, information sharing and communication hold long term collaboration.

Systems Theory: This theory views the entire supply chain as a single, interrelated living organism rather than isolated. A disruption in one part instantly affects the entire network, requiring synchronized control and visibility.

Resource-based View Theory (RBV): This theory states that a firm’s capabilities, skills and unique internal resources provide a competitive advantage. In SCM, the RBV states how partners combine special operational competencies and assets to achieve outstanding performance (Gautam & Prabhakar, 2019).

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Previous Works

Zhou & Benton (2007) investigate how information sharing and supply chain practices integrate and affect operational performance.

Teixeira, Moraes, Stefanelli, de Oliveira,Teixeira, & de Souza Freitas, (2020) examine green supply chain management and its implementation within Latin America. Most sustainable supply chain research focused on developed nations. Thus this study, closes the gap.

Shou, Li, Park, & Kang, (2018) investigate supply chain integration and operational performance: the contingency effects of production systems. There was evidence to show that the impact of supplier and customer integration on operational performance differs across production systems.

Yuen, & Thai, (2017) examine the influence of supply chain integration on operational performance: A comparison between product and service supply chains.

Wong, Boon-Itt, & Wong, (2011) examine the contingency effects of environmental uncertainty on the relationship between supply chain integration and operational performance.

Zhou, & Benton (2007) investigate how information sharing and supply chain practices interact within manufacturing environments.

Zhao, Xie & Zhang, (2002) examine the impact of information sharing and ordering co-ordination on supply chain performance.

Yu, Jacobs, Salisbury, & Enns, (2014) examine the effect of supply chain integration on customer satisfaction and financial performance: An organizational learning perspective.

Tai, Anderson, Hien Duc, Thai, & Yuan, (2022) investigate strategic information sharing in supply chain with value- perceived consumers.

Lee. Padmanabhan, & Whang (2004) examine information distortion in supply chain: The bullwhip effect.

Lusiantoro, Noviasari, Sholihin, & Ciptono, (2023) Can information sharing predict fresh produce supply chain performance amid the COVID_ 19 pandemic? A social learning perspective.

3. METHODOLOGY

The study opted for a survey design. Primary data were collected through structured questionnaire. The target population for this study comprises 2212 medical and non-medical staff of the federal health institutions in Southeast, Nigeria. The health institutions included the Federal medical centers in Umuahia and Owerri, Federal teaching hospital, Abakiliki, Nnamdi Azikiwe teaching hospital, Nnewi and University of Nigeria, teaching hospital, Ituku-ozalla, Enugu State. The sample size was 513 which was derived from

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Cochran statistical formula. The reliability of the instrument was tested with Spear man rank order correlation coefficient, which yielded a coefficient of r = 0.82, indicating a high level of items consistency and thus, reveals an adequate level of reliability and internal consistency. Thus, 470 copies of the questionnaire representing 91.6% were returned while 43 copies representing 8.4% were not returned. The hypotheses were tested using the ordinal logistic regression, a parametric modeling technique designed specifically for ordinal dependent variables.

4. DATA ANALYSES

Table 1: Information Technology-enabled Supply Chain Management (n = 470)

S/No	Options	SA (%)	A (%)	U (%)	D (%)	SD (%)	Mean
1	Information technology (IT) tools like transportation management system, enterprise resource planning systems, enable supply chain management	190 40.42	232 49.36	35 7.45	7 1.49	6 1.28	4.26
2	An effective supply chain management requires IT to handle supply chain complexities.	401 85.32	54 11.49	8 1.70	4 0.85	3 0.64	4.80
3	An effective supply chain management requires IT to ensure timely operations, and adapt to market demands	208 44.26	235 50.00	4 0.85	11 2.34	12 2.55	4.31
4	The application of IT reduces manual labour, increases accuracy and leads to effective inventory decision-making, improve supply chain management efficiency.	248 52.77	197 41.91	9 1.91	6 1.28	10 2.13	4.42

Source: Field Survey, 2026

Item 1 of table (1) indicates that 190 (40.42%) of the respondents strongly agree that IT tools like transportation management system, enterprise resource planning systems, enable supply chain management. Thus, 232 (49.36%) of the respondents agree, 35 (7.45%) of the respondents were undecided, 7(1.49%) of the respondents disagree while 6 (1.28%) of the respondents strongly disagree. The mean score is 4.26.

Item 2 reveals that 401(85.32%) of the respondents strongly agree that an effective supply chain management requires IT to handle supply chain complexities. Thus, 54(11.49%) of the respondents agree, 8(1.70%) of the respondents were undecided, 4(0.85%) of the respondents disagree while 3(0.64%) of the respondents strongly disagree. The mean score is 4.80. In item 3 indicates that 208(44.26%) of the respondents strongly agree that an effective supply chain management requires IT to ensure timely operations, and adapt to market demands. Thus, 235(50.00%) of the respondents agree, 4(0.85%) of the respondents were undecided, 11(2.34%) of the respondents disagree while 12(2.55%) of the respondents strongly disagree. The mean score is 4.31.

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Item 4 reveals that 248 (52.77%) of the respondents strongly agree that the application of IT reduces manual labour, increases accuracy, leads to effective inventory decision-making, and improve supply chain management efficiency. Thus, 197(41.91%) of the respondents agree, 9 (1.91%) of the respondents were undecided, 6(1.28%) of the respondents disagree while 10 (2.13%) of the respondents strongly disagree. The mean score is 4.42

Table 2: Responses on Enterprise Resource Planning (n = 470)

S/No	Options	SA (%)	A (%)	U (%)	D (%)	SD (%)	Mean
1	Enterprise resource planning (ERP) systems provide an integrated and continuous review of core business processes, by using a shared database.	207 44.04	235 50.00	10 2.13	8 1.70	10 2.13	4.32
2	The applications that make up the ERP systems share data across different departments: accounting, finance, human resource, sales, purchasing, manufacturing, etc.	258 54.89	188 40.00	9 1.92	5 1.06	10 2.13	4.44
3	The backbone of business intelligence for an organization is a successful ERP systems which provides managers an integrated analysis of the processes involved with it.	322 68.51	129 27.45	5 1.06	8 1.70	6 1.28	4.60
4	Enterprise resource planning systems facilitate information flow to all business functions and manage relationships to stakeholders.	310 65.96	150 31.91	2 0.43	3 0.64	5 1.06	4.61

Source: Field Survey, 2026

Item 1 of table (2) indicates that 207 (44.04%) of the respondents strongly agree that enterprise resource planning systems provide an integrated and continuous review of core business processes, by using a shared database. Thus, 235 (50.00%) of the respondents agree, 10(2.13%) of the respondents were undecided, 8 (1.70%) of the respondents disagree while 10 (2.13%) of the respondents strongly disagree. The mean score is 4.32.

Item 2 reveals that 258 (54.89%) of the respondents strongly agree that the applications that make up ERP systems share data across different departments: accounting, finance, human resource, sales, purchasing, manufacturing, etc. Thus, 188 (40.00%) of the respondents agree, 9 (1.92%) of the respondents were undecided, 5 (1.06%) of the respondents disagree while 10 (2.13%) of the respondents strongly disagree. The mean score is 4.44.

Item 3 indicates that 322 (68.51%) of respondents strongly agree that the backbone of business intelligence for an organization is a successful ERP systems which provides

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managers an integrated analysis of the processes involved with it. Thus, 129 (27.45%) of the respondents agree, 5 (1.06%) of the respondents were undecided, 8 (1.70%) of the respondents disagree while 6 (1.28%) of the respondents strongly disagree. The mean score is 4.60.

Item 4 reveals that 310 (65.96%) of the respondents strongly agree that enterprise resource planning systems facilitate information flow to all business functions and manage relationships to stakeholders. Thus, 150 (31.91%) of the respondents agree, 2(0.43%) of the respondents were undecided, 3(0.64%) of the respondents disagree while 5(1.06%) of the strongly disagree. The mean score is 4.61.

Table 3: Responses on Productivity (n = 470)

S/No	Options	SA (%)	A (%)	U (%)	D (%)	SD (%)	Mean
1	Productivity measures efficiency of system, machine, factory, person, etc, in converting inputs into useful outputs	206 43.83	236 50.21	10 2.13	6 1.28	12 2.55	4.31
2	Productivity is a measure of economic performance that compares the amount of goods and services produced with the amount of goods and services used to produce.	202 42.98	236 50.21	9 1.92	7 1.49	16 3.40	4.28
3	Productivity is a remarkable indicator of organizational competitiveness which measures the ratio between resources utilized and outcomes achieved.	333 70.85	106 22.55	15 3.19	6 1.28	10 2.13	4.59
4	Employee productivity measures how efficiently and effectively a worker or a group of workers contribute to achieving organizational goals.	145 30.85	301 64.04	7 1.49	8 1.70	9 1.92	4.20

Source: Field Survey, 2026

Table 3 item 1, indicates that 206(43.83%) of the respondents strongly agree that productivity is a measure of efficiency of system, machine, factory, person, etc, in converting inputs into useful outputs. Thus, 236 (50.21%) of the respondents agree, 10 (2.13%) of the respondents were undecided, 6(1.28%) of the respondents disagree while 12(2.55%) of the respondents strongly disagree. The mean score is 4.31.

Item 2, discloses that 202 (42.98%) of the respondents strongly agree that productivity is a measure of economic performance that compares the amount of goods and services produced with the amount of goods and services used to produce. Thus, 236 (50.21%) of the respondents agree, 9(1.92%) of the respondents were undecided, 7(1.49%) of the respondents disagree while 16 (3.40%) of the respondents strongly disagree. The mean score is 4.28.

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Item 3, reveals that 333 (70.85%) of the respondents strongly agree that productivity is a measure of economic performance that compares the amount of goods and services produced with the amount of goods and services used to produce. Thus, 106 (22.55%) of the respondents agree, 15(3.19%) of the respondents were undecided, 6(1.28%) of the respondents disagree while 10 (2.13%) of the respondents strongly disagree. The mean score is 4.59.

Item 4, reveals that 145 (30.85%) of the respondents strongly agree that employee productivity measures how efficiently and effectively a worker or a group of workers contribute to achieving organizational goals. Thus, 301 (64.04%) of the respondents agree, 7(1.49%) of the respondents were undecided, 8(1.70%) of the respondents disagree while 9 (1.92%) of the respondents strongly disagree. The mean score is 4.20.

Table 4: Responses on Product Delivery (n = 470)

S/N0	Options	SA (%)	A (%)	U (%)	D (%)	SD (%)	Mean
1	Product delivery is a process of delivering high quality products quickly and efficiently to customers.	227 48.30	219 46.60	6 1.28	8 1.70	10 2.12	4.37
2	Product delivery ensures that products are delivered on time and meet customer expectations.	239 50.85	206 43.82	9 1.92	7 1.49	9 1.92	4.40
3	Product delivery enables teams to adapt quickly to changing customer needs and market conditions, resulting in more agile products.	208 44.26	236 50.21	10 2.12	6 1.28	10 2.12	4.33
4	Product delivery focuses on delivering the products that meet the needs and expectations of the consumers and which continues to evolve and improve over time.	245 52.13	201 42.76	7 1.49	8 1.70	9 1.92	4.41

Source: Field Survey, 2026

Table 4 item 1, reveals that 227(48.30%) of the respondents strongly agree that product delivery is a process of delivering high quality products quickly and efficiently to customers. Thus, 219 (46.60%) of the respondents agree, 6 (1.28%) of the respondents were undecided, 8 (1.70%) of the respondents disagree, while 10 (2.12%) of the respondents strongly disagree. The mean score is 4.37.

Item 2, indicates that 239 (50.85%) of the respondents strongly agree that product delivery ensures that products are delivered on time and meet customer expectations. Thus, 206 (43.82%) of the respondents agree, 9(1.92%) of the respondents were undecided, 7(1.49%) of the respondents disagree while 9 (1.92%) of the respondents strongly disagree. The mean score is 4.40.

Item 3, indicates that 208(44.26%) of the respondents strongly agree that product delivery enables teams to adapt quickly to changing customer needs and market conditions, resulting in more agile products. Thus, 236 (50.21%) of the respondents

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agree, 10 (2.12%) of the respondents were undecided, 6(1.28%) of the respondents disagree while 10 (2.12%) of the respondents strongly disagree. The mean score is 4.33.

Item 4, indicates that 245(52.13%) of the respondents strongly agree that Product delivery focuses on delivering the products that meet the needs and expectations of the consumers and which continues to evolve and improve over time. Thus, 201(42.76%) of the respondents agree, 7(1.49%) of the respondents were undecided, 8(1.70%) of the respondents disagree while 9 (1.92%) of the respondents strongly disagree. The mean score is 4.41.

Hypothesis Testing

Ho_1: Information technology-enabled supply chain management does not have positive effect on productivity.

Ha_1: Information technology-enabled supply chain management has positive effect on productivity.

Table 5: Parameter Estimates

		Estimate	Std.Error	Wald	DF	Sig.	95%Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Productivity=16]	66.413	13.531	17.113	1	.000	66.413	76.129
Location	[Information tech-enabled supply chain managements =10]	15.774	6.757	27.600	1	.000	15.774	27.600
Link function: Logit.								

Interpretation of Result

Table 5 reveals that information technology –enabled supply chain management has positive effect on productivity. With an increase in productivity at an odds ratio of 15.774 (95% cl, 15.774 to 27.600), Wald x^2 (1) = 27.600, p = 0.000 < 0.05. Therefore, the alternate hypothesis which states that information technology enabled supply chain management has positive effect on productivity is accepted and the null hypothesis rejected.

Hypothesis Two

Ho_2: Enterprise resource planning systems does not have positive effect on product delivery

Ha_2: Enterprise resource planning systems have positive effect on product delivery

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Table 6: Parameter Estimates

		Estimate	Std. Error	Wald	Df	Sig.	95%Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Product delivery=18]	53.851	19.603	36.601	1	.004	53.851	54.609
	[Enterprise resource planning systems=25]	71.526	9.102	68.075	1	.000	71.526	114.880
Link function: Logit.								

Interpretation of Result

Table 6 reveals that enterprise resource planning systems have positive effect on product delivery. With an increase in product delivery at an odds ratio of 71.526 (95% CI, 71.526 to 114.880), Wald χ^2 (1) = 68.075, p = 0.000 < 0.05. Therefore, the alternate hypothesis which states that enterprise resource planning systems have positive effect product delivery is hereby accepted and the null hypothesis rejected.

4.3 Discussion of Results

Hypothesis one was tested using the Ordinal Logistic Regression to determine the effect of information technology- enabled supply chain management on productivity. The finding revealed that information technology- enabled supply chain management had positive effect on productivity. (β = 15.774, p = 0.000 < 0.05). Atieh Ali, Sharabati, Allahham, & Nasereddin, 2024, posit that the traditional supply chain framework is actually not adequate to tackle the challenges, thereby, required information technology- enabled supply chain that enhances productivity.

Hypothesis two was tested using the Ordinal Logistic Regression, to determine the effect of enterprise resource planning systems on product delivery. The result revealed that enterprise resource planning systems have positive effect on product delivery. (β = 71.526, p = 0.000 < 0.05). Adekunle, Tajudeen and Sunday (2013) established that information technology had positive effect on service delivery. Auseklis and Fabian (2022) revealed that IT is positively and significantly associated with service delivery.

5. CONCLUSION

The goal of supply chain management is of course, to represent the network of companies that make up the supply chain through upstream and downstream connections to the numerous processes and activities that result in value creation in the form of goods and services. Successful, businesses are carefully managing their operations by organizing, scheduling, and controlling supply chain activities. Supply chain management boosts a company's operational efficiency, profitability and market share by optimizing materials' flow, reducing costs and strengthening partner collaboration.

ISSN: 1673-064X
E-Publication: Online Open Access
Vol: 69 Issue 10 | 2026
DOI: 10.5281/zenodo.23620773

Recommendations

The following recommendations emerge from the findings:

i. Health institutions need to have effective supply chain framework that can boosts productivity and service delivery.

ii. Health institutions need to adopt information technology which will actually enhance productivity, service delivery, and meet patients' needs and satisfaction.

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