

**ELECTRONIC ORDERING AND COST CONTROL IN PUBLIC ORGANIZATIONS IN SOUTH-SOUTH
REGION, NIGERIA**

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Abstract

Electronic ordering and cost control was the concern of this study. For this purpose, the specific objectives were to evaluate the effects of domestic and international e-ordering on overhead and material cost controls. A sample size of 294 was drawn judgmentally from six public organizations in south-south Nigeria, using questionnaire. The data were analyzed using SPSS for paired correlations. The results showed that domestic e-ordering had significant direct relationship with material cost control. Similarly, international e-ordering had a positive correlation with material cost control. It was concluded that electronic ordering has a significant positive relationship with procurement cost control. It was among others recommended that; both international and domestic ordering alternatives should be considered, where applicable, with preference to domestic platforms for more effectiveness on cost control.

Key words: *Electronic ordering, cost control, material cost control, overhead cost control, domestic electronic ordering, and international electronic ordering.*

Introduction

Electronic ordering as the process of applying and receiving products and services by an organization within the framework created in a systemic purchasing process, is gaining attention recently in the current technologically digitized business environment. E-ordering describes the process of creating and approving purchasing requisition. It encompasses placing purchase orders and receiving services and products that were ordered. What makes it electronic is that all this is done through information technology-based software systems which smoothen the supply chain management. E-ordering entails looking for a good or service that fits organizational requirements in an ordering catalog system. (Davey, 2010). As soon as the product or service of choice has been selected, an order request is created and additional products and services can be added. At the completion of the order request, based on the needs of the ordering

organization, it is submitted. Where necessary, an approval procedure is started and followed. If after a period of time the products/services are supplied, the recipient organization can register this in the ordering catalogue system. In the end, invoices from the suppliers also arrive and with the help of the orders and registered receipts, the invoices can be made payable.

E-ordering has been recognized as an efficient method of keeping procurement documents in one place (Chepkwony, 2022; Austin, 2022), E-ordering is also useful in improving and fastening the process of procurement request. Furthermore, through e-ordering, purchasing becomes easier, with a better overview of the diverse needs of stakeholders, bundling all purchases in one invoice from one supplier. Although setting up e-ordering platform can be demanding, depending on the quality of products available to the platform designer, once information is online, e-ordering becomes simple, and can be a daily routine, making purchasing easier and cheaper. Highlighting more benefits of the e-ordering practice, Zhang, Ahn and Baardman,(2022) assert that e-ordering solution automates the purchase order management process. In other words, the order data is integrated with the management system. Moreover, e-ordering is associated with significant reduction in errors (Hill, Koch & Hommey 2018), thereby improving customer service. It is also noteworthy that e-ordering shortens the payment cycle since the system automatically issues an invoice once the order has been filled. This reduces processing and filing costs hence reducing bulky paper work (Edicom Global, 2020).

E-ordering has both domestic and international dimensions. At the international level, the requesting organization is allowed to place an order from one country to another, making sure that the required documentations are kept and that the requested product is legal in the recipient's country. Quality restrictions and cross-border edicts may be different at this level and must be adhered to by both parties. At the domestic level, national laws are the same but state jurisdictions may vary. In both cases, the political, legal, economic, technological and socio-cultural business environments are considered in placing orders.

Since electronic ordering reduces bulky paper work, saves time, helps automate the procurement process, among other benefits, it is supposed to have a significant effect on organization's cost control. The Chartered Institute of Management Accountants defines cost control as the practice of identifying and reducing expenditure. It is a corrective practice which, through continual analysis of costs achieves real and permanent reduction in the unit cost of goods manufactured or services rendered by an organization without impairing their sustainability for the intended use. Dubla & Knoss (2019) posit that cost control can be achieved through simplifying the process of manufacture as well as by changing the features of the product suitably, without diminishing the quality of the product. In this regard, Dubla and Kross identified cost control practices to include material control, labour control, design improvement, production planning/control, automation, operations research, financial control, market research and measurement, cost benefit analysis and contribution analysis, among a plethora of others.

Material control is a management function that is concerned with the storage, handling and use of materials to minimize waste and improve inventory accuracy. This process can be beneficial for companies to reduce cost and improve organizational productivity (Einsenberger, 1990; Dubla & Kross, 2019; Boadi & Osarfor, 2022). Sequel to material control in this study is overhead cost control. Overhead costs are those costs that are not directly related to the production of goods or services but are necessary for the operation of the business; such as rent, utilities and insurance. Overhead control's goal is to distribute expenses that cannot be immediately tied to an organization's goods or services as closely as possible to their root causes. (Jason, 2015).

This work assesses the relationship between electronic ordering (Domestic and International) and organizational cost control (material and overhead controls), using six public organizations in South-South, Nigeria as a reference organization.

Statement of the Problem

Every government strives to establish efficient, transparent procedures in all aspects of government operations. This need applies to public procurement where governments continually try to improve the procurement practices of their agencies. This can be achieved through the use of digital procurement system rather than the manual prototype that has outlived technology. However, many public organizations and government agencies that claim to have adopted digital procurement may not have effectively employed the e-ordering strategies and competences in their procurement practices. This may affect organizational performance in the current environment of technological digitization. There are research gaps that need to be filled: empirical studies previously conducted by scholars like (Einsenberger, 1990; Dubla & Kross, 2019; Boadi & Osarfor, 2022) did not examine electronic ordering independently but lumped it together with other practices like e-invoicing, e-tendering, e-informing and e-sourcing as procurement competencies. Digital procurement research does exist which either investigate the broad uptake and adoption of e-procurement or inadequacies in implementation. They very rarely examine cost control in terms of material control and overhead control nor break down the procurement process into its operating parts or assess e-ordering from the international and domestic dimensions. This study fills the gap by examining the effects of international and domestic electronic ordering on organizational material and overhead controls.

Research Objectives

The study assesses the relationship between electronic ordering and organizational cost control. The specific objectives are to:

1. evaluate the relationship between international electronic ordering and overhead costs control.
2. examine the effects of international electronic ordering and material cost control.
3. identify the effects of domestic electronic ordering on overhead cost control.

4. assess the relationship between domestic electronic ordering and material cost control.

Research Questions

In the course of investigating the objectives of the study, the following questions were asked.

1. What is the relationship between international electronic ordering and overhead cost control?
2. To what degree does international electronic ordering affects material cost control?
3. What are the effects of domestic electronic ordering on overhead costs control?
4. What is the relationship between domestic electronic ordering and material cost control?

Research Hypotheses

The hypotheses that are formulated to guide the attainment of the objectives are stated in null form as follows:

Ho₁: There is no significant relationship between international e-ordering (IEO) and overhead control (OHC).

Ho₂: International e-ordering (IEO) has no significant effect on material control (MC).

Ho₃: Domestic e-ordering (DEO) has no significant effect on overhead control (OHC).

Ho₄: There is no significant relationship between domestic e-ordering (DEO) and material control (MC).

Scope of the Study

The content scope of the study is coverage of electronic ordering and cost control. Specific measures of e-ordering covered are international ordering and domestic ordering while those of cost control are overhead control and material control.

The geographical scope of this study is South-South Nigeria comprising six states. However, the study concentrated on Rivers, Bayelsa and Akwa Ibom states.

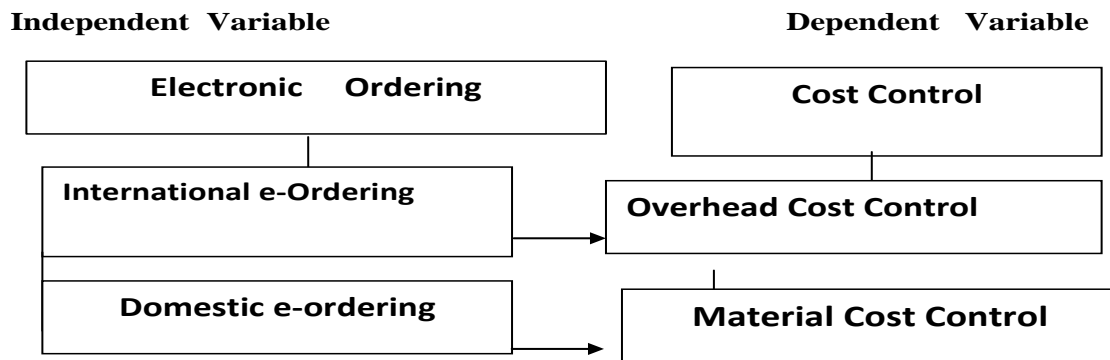
The unit scope focused on workers in the functional units of the study organizations. The functional units include Accounting/Finance, Human Resources, Stores, Marketing, Project and Procurement units etc.

Review of Related Literature

This work reviewed the related literature under the following sub-headings; conceptual, theoretical and empirical review

Conceptual Review

Figure 2.1 Operational Framework



(Source: Research's Desk, 2023)

Electronic Ordering

Zhang, Ahn, , and Baardman, . (2022). define electronic ordering (e-ordering) as the application and receiving of products and services by an organization or individual. Gan,, Sethi, ., and Xu, . (2019). define e-ordering as the placement of purchase orders and receiving the products and services. Saidat, Nasir and Joss (2021) define e-ordering as the process of creating and approving purchase requisitions, through information technology based software systems that smoothen supply chain management. All definitions of e-ordering obtained from different author are basically the same. However, Saidat (2021) definition of the concept recognizes that e-ordering is part of supply chain or procurement practice of an organization. We therefore describe e-ordering as the process of generating an order electronically with the frameworks created in the tactical purchasing process.

Finding a good or service that meets the requirements of the company is the first step in the e-ordering process. An ordering request is generated as soon as the desired good or service has been chosen. If necessary, the order request is submitted once it has been completed in line with the requirements of the ordering organization, and the approval process is initiated. The receiver organization enters the transaction into an ordering catalog system when the goods or services are delivered. The provider also sends invoices, which are made payment with the aid of the order and recorded receipts (Zhang, Ahn, and Baardman, 2022).

Gan,, Sethi, ., and Xu, . (2019). notes that online ordering process can be very useful as it speed up and improve the process of request. It is also an efficient method of keeping all transactions together in one place. According to Saidat et al (2021), through e-ordering, purchasing becomes easier, with a better overview of the diverse needs of stakeholders. Although setting up e-ordering platform can take months, depending on the quantity of products available to the supplier, once an information gets online, e-ordering becomes simple and can become a daily routine; making purchasing easier and cheaper(Gan,, Sethi, , & Xu, 2019).

In recent years, electronic orders have become the norm in many sectors such as healthcare, public-private relations and retail. The explanation for this evolution in the healthcare industry is quite logical (Gan,, Sethi, ., & Xu, 2019). It arose from the need to ensure continuous operation of healthcare infrastructure and the great variety of products being tracked and managed by healthcare centers. E-ordering is beneficial to both buyers and their suppliers; the

most important benefits of the system in addition to those identified by Austin et al (2022) are speed, security, standardization and traceability. Hill, Koch & Hommey (2018) and Otundo & Martin (2021) note that e-ordering has international and domestic dimensions.

International Electronic Ordering (IEO)

International electronic ordering is the placement of orders across country borders designed for the purpose. (Ayyagari, Knill, & Syvrud, 2019). With the growth of global markets today, ordering goods from across the world is no longer as expensive and tasking as it used to be. According Ayyagari, Knill, and Syvrud, (2019), almost every organization is ordering products from overseas particularly when such goods are unavailable in the domestic market.

Identifying the basic steps for ordering goods from another country, Yelena & Maksin (2022) assert that the ordering organization or individual should know the goods properly, choose suitable suppliers and a convenient geographic location to order from, check customer support options of the supplier, abstain from paying more than the legally approved deposit amount of 30% of product value, choose the correct payment method; and select shipping address and couriers. The ordering organization should have knowledge of the documents that are associated with international e-ordering process. Ogunsanya, Aigbavboa, Thwala and Edward (2019) enlists the documents to include bill of entry, commercial invoice, customs packing lists, bill of lading, import license, certificate of insurance, letter of credit and other documents for specific goods such as industrial license and note of declaration. In addition, the ordering company will have to pay shipping charges, customs duty and currency conversion changes.

Writing on the legal status of international e-ordering Saidat Nasir and Joss (2021) not that the requesting organization must ascertain that all required documentation are kept and that the requested product is legal in the recipient's country. As Saidat et al points out, quality prescriptions and cross-border edicts may be different from one country to another; a product can be legal in its home country and illegal in the final destination. After a successful ordering process, a document of proof, known simply as electronic order, is generated. Spencer and Bojraff (2022) describe electronic order as a purchase order document that serves as a proof of request for goods and services from a supplier, in accordance with the conditions agreed upon by the parties involved in the transaction. Purchase orders apply to both domestic and international e-ordering platforms.

Domestic Electronic Ordering (DEO)

Zhang, (2015) defines domestic electronic ordering as the activity of requesting for products and services that are delivered or manufactured within the buyer's home country. The logic behind international e-ordering is that the ordered goods are not available in the domestic market at the quality and price needed. Where the product is available in the home market, domestic ordering is the norm. Collinson (2013) outlines advantages of domestic ordering over international or imported orders.

Fast delivery, consumer confidence, cost benefit, job opportunities, and time zone advantage are among the benefits identified by Collinson (2013). When considering fast delivery advantage, domestic routes are usually closer to the ordering organization than importation sources. Orders of raw materials, services or products, for example, can be delivered in shorter periods of time, compared with foreign orders. After delivery, exchange or refunds of faulty products will benefit as well, as it is always easier to communicate with local businesses rather

than international organizations. Furthermore, there is also quicker reaction to emergency situations or faster decision making to uncertainties in the market.

Consumer confidence is another advantage that accrues from domestic ordering. Xia, and Chen, (2012) write that shorter time for transportation ensures that products such as food and drinks stay fresh. Customers thus have confidence buying local goods for their freshness. With domestic ordering strategy, selling local products can help to gain the support of consumers who are concerned about the origin of the product that they are buying, for political, ethical or environmental reasons. Cost benefit is another benefit of domestic ordering. According to Anorak (2019) organizations which have strong relationship with local suppliers do not have to go through a long supply chain. This invariably helps to reduce ordering costs for the recipient organization, resulting in lower selling prices that would attract more customers. Less transportation between the suppliers and the recipient can also reduce cost.

Furthermore, increase in domestic ordering rather than international ordering increases job opportunities for the local country. If all local businesses support domestic ordering and the demand increases, more job opportunities are created to meet the new demand. Also, when there is an increase in demand for domestic products, local suppliers hire more workers to meet the rise in demand. The new workers will spend more money in the local economy which would produce a positive multiplier effect. (Dai, Yoshikawa., & Sugiyama, 2021)

Cost control

Subho (2019) defines cost control as a planned positive approach to reduce expenditure. It is a corrective practice of continually analyzing costs. The Chartered Institute of Management Accountants (2012) defines cost control as the achievement of real and permanent reduction in the unit cost of goods manufactured or services rendered without impairing their suitability for the use intended. Based on this definition, the reduction must be a real one in the course of manufacturer or service rendering.

Mazibuko and Gevenda (2017) posits that real cost control comes from greater efficiency or productivity in the procurement of inputs. Greater efficiency can be achieved through obtaining a large quantity of products from the same facilities or using materials of lower price and of different quantity without sacrificing the quality of the finished products. That is, reducing costs through the process of input substitution. Cost control can also be achieved through simplifying the process of manufacture as well as by changing the features of the product suitably, without comprising the quality of the product. In addition, cost reduction must be genuine and should aim at the elimination of wasteful elements in methods of operation. It should not be at the cost of quality and it should be a continuous process of critically examining various elements of cost and each aspect of the business; procedures, methods, products, management, market and finance. Notably, Dubla and Kross (2019) add that cost reduction (in procurement as an example) requires higher efficiency in ordering, sourcing informing, invoicing and tendering.

Highlighting the advantages of cost reduction to the organization, Eisenberger (1990) notes it leads to a definite increase in profit margins, accumulation of savings which can be passed to customers in form of lower prices or more quantity at the same price. This creates more demand for the products, economies of large scale production, employment through industrialization and improvement in the standard of living. Moreover, through cost reduction,

organizational expansion is made possible. Expansion creates more employment and the overall industry becomes more productive.

Smriti (2014) identified various techniques for achieving cost control to include material control overhead control, budgetary control, standard costing, standardization of products, tools and equipment, product simplification, improvement in design, labour control, production planning/control, automation, operations research, market research, financial control, value analysis, quality research and measurement, cost benefit analysis and contribution analysis, among various others. This study examines material control and overhead control as metrics of cost reduction.

Material Control (MC)

Material control is the management, storage, and usage of materials with the goal of reducing waste and enhancing inventory accuracy (Pawar & Gaikwad, 2019). Organizations may benefit from this method to lower expenses and boost productivity. Solanki (2020) describes material control as providing the necessary quantity and quality of material in a timely manner, at the appropriate location, at the lowest possible cost. Solanki (2020) asserts that better material management enables an organization's productivity (input-output ratio) to increase. Morrel (2010) lists the following seven goals for material control: fixation of different stock levels at maximum, minimum, and optimum levels as necessary; provision of current material information; maintenance of previously established product or service quality; maintenance of minimal wastage by checking obsolescence, pilferage, evaporation (for fluid products), etc.; ensuring less expensive purchasing by making sure that materials are procured at the most competitive rates from suppliers; avoiding overstocking in order to cut down cost of storage; and avoiding under stocking to prevent stock out and ensure steady availability of the product.

Lodha (2023) depicts material control as being made up of six techniques – level setting, determination of economic order quantity (EOQ), Just in Time Inventory System, ABC analysis, VED (Vital Essential and Desirable) analysis, as well as Perpetual Inventory Modelling. Lohda (2023) explains level setting as a technique of material stock control where at least, five stock levels are determined and maintained. The levels are re-order level, minimum level, maximum level, danger level and average stock level. Economic order quantity is a technique that tries to determine optimum quantity of product orders in a situation where demand can be estimated with a reasonable degree of accuracy. Just-in-Time is the purchase of materials in such a way that the delivery of the purchased items is assured before their use or demand. ABC analysis a control technique whereby materials are divided into three categories for the purpose of exercising selective control on the materials. VED analysis is used primarily for spare parts control. The spare parts are divided into three categories – vital (V), essential (E) or Desirable (D) (Lodha, 2023; Solanki, 2020; Dubla & Kross, 2019).

Overhead Control (OHC)

Jason (2015) explains overhead cost control as the analysis of costs that cannot be directly assigned to the production of goods and services of an organization. According to Jason, as overheads grow, the proportion of directly assignable costs shrinks. Consequently, it is important to analyze and treat overhead costs. Ibem et al (2021) recognizes that sophisticated tools are needed to facilitate the application of overhead to production orders and other cost objects. Ibem et al (2021) points out that the main purpose of overhead cost control is to take

costs that cannot be assigned directly to the products of the organization and allocate them as far as possible in accordance with their cause. Account assignment objects for such costs include cost centers and internal orders, as examples. This means that within the planning process, it is possible to plan not just costs but also internal activities that can be used to calculate prices for the activity types. This consists of planning, allocation, control and monitoring of overhead costs (Jason, 2015; Ibem, 2021).

Review of Related Theories

Agency Theory

Agency Theory is one of the oldest codified modes of social interaction in which one entity or individual acts as an agent to the other. In this simple state are a number of key assumptions about communication, power and the fundamental principles of two way interactions (Lousdale, 2015). Ross (2014), helped in revolutionizing the theory. The key assumption as postulates by Ross describes a given decision making situation involving two parties; were one of the parties, referred to as the agent, acts on behalf of or represents the other party, referred to as the principal. What is of primary interest is the communication and power dynamics in the relationship and how the agency concept has helped in the understanding of this relationship. According to the theory, all contractual arrangements, as between employer and employee, or the state and the governed, contain important elements of agency. This element of agency revolve around a key assumption that there is an asymmetry of information between the two parties in a given decision making situation. A second element of the theory involves power dynamics, depicting how power between the agent and the principal is cognized and exercised. Important to ordering practice is how agency theory can be used to streamline the end-to-end interface between the procurer and the supplier in supply chain management.

Organizational Buying Behaviour Theory

The organizational buying behavior theory states that actors in supply chain management and procurement have bounded rationality and dissimilar motivations and preferences, and that intra-organizational conflict is inevitable in situations of joint decision making. The focus of the theory is what is called the pre-contract or demand management phase of the procurement process. The theory draws from three disciplines – sociology, political locus of intra organizational politics. This in turn highlights the possibility for power to be used to resolve conflicts of interest. Deciding what to order, drawing up a product specification, choosing a shortlist of potential suppliers, assessing the bids submitted and selecting a supplier are seen as intensely political rather than purely technical decisions. The theory also acknowledges that decision conflicts can be resolved without the use of power; through problem solving and persuasion. (Sheth, 1973, Kohli 1989 & Simon 1959).

Empirical Review

Mustapha & Saidu (2021) examined the prospects of e-procurement implementation in the Federal Capital Territory Abuja. The survey study employed a stratified sample of 145 and used percentages, averages and kruskal Wallis test as the analytic tools. The findings showed that there was no significant difference in the opinion of respondents regarding the variables. Mustapha and Saidu concluded that e-procurement practice has a positive prospect in Nigeria.

Ibem, Aduwo, Afolabi, Olumwunmi, Tunji-Olayeni and Ayo-Vaughan (2020) conducted a research to investigate electronic procurement adoption and users' experiences in the Nigerian construction sector. The research employed descriptive statistics and factor analysis to analyze 75% samples gathered from four major construction companies owned indigenously by Nigerians. The results indicated a moderate use of e-procurement tools, with e-ordering ranking 24.6% was used to analyze cost reduction strategies and regression analysis was also employed to establish the relationship model. The study found out that the relationship of cost reduction strategies and the growth of manufacturing firms in Nigeria was significantly linked.

Musau (2018) examined procurement cost reduction strategy and performance of state parastatals in Kenya. The study used the transaction cost theory to investigate how information technology has enabled the reduction of coordination costs. A cross-sectional survey design was employed, using both quantitative and qualitative methodologies. 380 samples in a cluster technique were drawn for the study. Descriptive and inferential statistics were used to analyze the quantitative data. SPSS for simple Graphic Analysis Statistics was employed. The findings showed that there was a direct relationship between procurement cost reduction strategy and e-procurement strategy employed resulting in a significant improvement ($p=18.62\%$) in the performance of procurement.

Methodology

The study was based on descriptive survey research design which involved the use of structured questionnaire to elicit responses from the research subjects. The population of the study was 1110 from six public organizations in three states of the South-South region of Nigeria, namely; Rivers, Akwa Ibom and Bayelsa states. Judgmental sampling procedure was used to select the samples excluding jobs that have no links with procurement, such as cleaners and orderlies. A total sample size of 294 was determined, using the Taro Yamene's formula as a guide. The sample was proportionally distributed to the six public corporations of the study using proportionality coefficient (Akhter, 2016).

Before drawing the samples, the validity of the questionnaire was established by research experts in the field of management. For this purpose, copies of the drafted questionnaire were submitted to the professionals who critically evaluated the correctness of the question items in eliciting the expected responses. Also, the reliability of the questionnaire was established using a test-retest method that involved a pilot study. In this case, a pilot group was served the questionnaire twice in an interval of two weeks. The data for the two occasions were analyzed using the Cronbach's alpha statistic. The value was 0.965, showing a 96.5% agreement between the two sets of data. Hence, the reliability of the instrument was established. Analysis of the collected data was carried out using the version 2.0 of The Statistical Package for Social Sciences (SPSS) for paired correlations.

Results

Paired Correlations

Table 4.1(a)

Model	Variables	Correlation Coefficient	Std Error of Estimate

1	Domestic E-ordering (DEO) & Material Cost Control (MCC)	.543	1.0048
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Table 4.2(b)

Model	Variables	Correlation Coefficient	Std Error of Estimate
1	Domestic E-ordering (DEO) & Overhead Control (OHC)	.602	1.0596

Table 4.3(c)

Model	Variables	Correlation Coefficient	Std Error of Estimate
1	International E-ordering (IEO) & Material Cost Control (MCC)	.598	1.0466

Table 4.4(d)

Model	Variables	Correlation Coefficient	Std Error of Estimate
1	International E-ordering (IEO) & Overhead Control (OHC)	.720	1.3452

Discussion

Table 4.1(a) shows that the paired correlation between domestic electronic ordering (DEO) and material cost control (MCC). From the table, the correlation coefficient of $r = 0.543$ is observed, which has a corresponding coefficient of determination of $r^2 = 0.2948$. A coefficient of determination of 0.2948 (29.48%) depicts that 29.48% variability in material cost control can be explained by changes in domestic ordering. The coefficient of non-determination ($1-r^2$) is 70.52%, which suggests that 70.52% variations in overhead control in the organizations are not accounted for by domestic electronic ordering. Such variability could be attributed to extraneous factors not captured in the study. The standard error of estimate $\alpha = 1.0048$, which negligible relative the critical alpha value of 5.000 for sample size is greater than 30 (Gupta & Cole, 2002).

A similar significant positive relationship is observed between domestic e-ordering and overhead cost control: $r=0.602$. The determination coefficient in this case is 0.3624 (or 36.24%, suggesting that domestic e-ordering can account for 36.24% changes in overhead control. Also, international e-ordering correlate with material cost control with $r=0.598$. The standard error of the estimate is 1.0466 which is insignificant at the 5% level. The coefficient of determination is

0.3576 which means that; while the model accounts for 35.76% variations in material cost control, 64.24% variations in the dependent variable is not explained by the model.

In the same vein, international e-ordering correlates positively with overhead cost control ($r=0.720$).

These results are in agreement with those of Mustapha & Saidu (2021); Ibem, Aduwo, Afolabi, Oluwunmi, Tunji-Olayeni & Ayo (2021), Afolabi, Ibem & Ayo (2019); Egbide 2019) and Musau (2019), among others. Mustapha & Saidu (2021) observed that digital procurement has a prospect to increase procurement performance by 38.6% in Nigeria and other developing countries. Ibem, Aduwo, Afolabi, Oluwunmi, Tunji – Olayeni & Ayo (2021) observed that e-ordering ranked 24.6% in the account of usage of e-procurement tools in four major construction companies in Nigeria. Hepp & Haubner (2022) evaluated the adoption and routinization of digital procurement among German construction firms and found out that imitation of competition was the most significant factor that drove adoption of digital technology and that this accounted for 52.3% minimization.

Conclusion

Electronic ordering as a process of digital procurement has significant positive relationship with organization's cost control. The inferential statistics used in testing the research hypotheses affirms the results through paired correlations that reflected significant positive relationship of international e-ordering and domestic e-ordering with overhead cost control and material cost control. It is therefore concluded that e-ordering has a significant positive relationship with organizational cost control.

Recommendations

The results of this empirical assessment lead to the following recommendations.

1. Procurement agencies and organizations involved in supply chain management should adopt and maintain digital systems in the procurement practice. This will help reduce bulky paper work and increase efficiency.
2. Both international and domestic ordering alternatives should be considered, where applicable, with preference to domestic platforms for more effectiveness on cost control.
3. The management of corporations that are involved in procurement should use domestic and international e-ordering strategically to target at cost control. This applies to the present economic condition of rising supply/production costs.
4. Timely delivery is of essence to stakeholders and customers; procurement agencies can improve timeliness by adopting electronic ordering in their procurement practice.

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