The Emanating Role of Information Management in Social Performance: A Case of Logistics Operations in Medical Supply Stores in Lagos State

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Abstract

BACKGROUND: Information management is a framework of data identity, procedure, characterization, and dissemination utilizing hierarchical, social, and technological entities. Consequently, information management requires collaboration and a specific depiction for each echelon within logistics operations to achieve optimality and also impact social performance.

AIM: The study examined the emanating role of information management in social performance in the boundaries of logistics operations in medical supply stores in Lagos State, Nigeria.

METHODS: The study adopted a survey with an aggregate of eight hundred and fifty (850) questionnaires. It was apportioned to employees in the logistics and operations division of sixty (60) medical supply stores in Lagos State. Notwithstanding seven hundred and ninety-five (795) were substantial for analysis. The respondents were also impact social performance.

RESULTS: The study identified the emanating role of information management in social performance based on the statistical outcome ($\beta = 0.415, R^2 = 0.173, t$-statistics$=4.738 > 1.96, p = 0.000 < 0.05$).

CONCLUSION: This infers that information management plays a critical role in social performance within logistics operations in the medical supply stores in order to achieve optimal performance.

Introduction

Information management has moved from a helping capacity to a fundamental resource to achieve optimality for various manufacturing firms. Information management assumes a fundamental and supporting component within any entity. Consequently, information management by the means of information technology is a focal point for correspondence, administration, data frameworks, and client relationship. The rapid development of information technology and business openings has created a trend of innovation-based economy [1]. Therefore, information management is the fulcrum of planning, investigations, activities, and, most importantly, growth and advancement. Information availability can help clients with a degree of precision, practicality, dependability, security, and access [2]. In line with this various ventures have carried out information management procedures to improve social sustainability. Given this sustainability has turned into a focal point for organizations as they look to maximize business profitability. Extent literatures have explored sustainability in terms of monetary and ecological measures however, less consideration has been given to social sustainability [3]. The social element in this study is fundamentally based on medical supply stores in the context of logistics operations. These include well-being and security, a supportive workspace, work rights, and measures pointed towards working on practices that are ethical. Furthermore, information management can enhance the dynamics of decision making and efficiency by adopting business resource frameworks, inventory chain, and social reference frameworks [4].

Contrasted with the economic and ecological bottlenecks, social bottlenecks within the echelons of logistics operations in the medical and health industry are abound. Checking the social aspects of sustainability in a multi-layered logistics framework turns out to be difficult. In the context of logistics operations, dependable information is fundamental for tracking so that the returned products can be conveyed in their present condition [5]. Moreover, information management assists in comprehending the justification of the client’s complaint and uncovering patterns and causes. Information requirements include the essential role of data in the accomplishment of hierarchical objective and planning [6]. The echelon of information management within the circumference of logistics

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operations is very important because it determines service optimality, especially in medical supply stores. This is due to the lopsided and cumbersome nature of logistics operations in the medical supply store chain. Therefore, the fulcrum of service delivery between the medical supply store and the client is dependent on information management frameworks. Given this, the study utilized a schematic approach to analyze social performance via information management framework within logistics operations in medical supply stores, Lagos State, Nigeria.

**Statement of the research problem**

The adoption of a credible information framework aids the movement of valuable information within and outside an organization thereby enhancing the social performance of an organization. In other words, information management improves the relationship with clients and their loyalty, as well as the proficiency and social well-being of employees [7]. For example, [8] decried the level of the disloyalty of Nigerians due to poor information. He described the deluge of smuggled products in significant medical markets in Kantin Kwar, Kano, Balogun, and Oshodi, Lagos stressing that “it sabotages the local business, steals occupations, denies the authority of revenue and reduces the country’s foreign exchange reserves. Every echelon within the production chain of the medical and health industry has severe flaws. This phenomenon has influenced the performance of logistics operations to be below average. The outcome of this performance was due to poor information transfer. It is on this surmise that the study attempts to dissect the role of information management in social performance.

**Literature review**

The review examined the emanating function of information management in social performance. The following concepts were examined: information management, social performance, logistics operations, information management, and social performance.

**Information management**

Information management is a complete framework comprising of data that is helpful for an organization to examine its benefits and objectives [9]. These can be utilized across different levels, i.e., junior administration, mid-level administration, and senior administration. The fundamental aim of information management is to give the administrators a viewpoint into departmental outcomes and the exchange of information to accomplish hierarchical objectives. If the data shows any deviations from the objectives, the administrators can quickly make adjustments. The information management framework of any organization addresses the blend of human and material means accountable for handling the business data [10]. It utilizes computer hardware, data sets, processes, systems, investigation models, and dynamic managerial cycles. Customarily information management is planned within each echelon in logistics operations to help and build productivity and functional adequacy. Information management can be characterized as a framework that gives data backing to the dynamics of decisions in any organization [11]. It is additionally characterized as an incorporated arrangement of man and machines that provides data to enhance operations, and administration. It is also a framework that is dependent on the data set of any business developed to provide information.

**Social performance**

Social performance according to [12] is fundamentally based on the mirroring of the division of work among administrative and non-administrative organizational settings that will enhance and influence the societal results. The paradigm of social performance according to [13] is an adjunct from the concept of corporate social responsibility (CSR) that focuses on results accomplished after an organization has embarked on a social project. Furthermore, the paradigm of corporate social performance has been existing side by side with CSR, yet with a marginally unique focus. Therefore, the concept of social performance is a recommended course of an organization and the outcome of CSR activities. The outcome of social performance is based on the responsiveness from the community [14]. stated that corporate social performance envelops standards and processes by which business associations cooperate with their internal and external stakeholders. The results and effects of these connections birth brand trust and loyalty. The outcome from the study by [15] uncovered the actuality of a positive connection between CSR and social performance.

**Logistics operations**

Logistics operations are the progression of products between the point of production and utilization to in-other to meet prerequisites, for instance, clients or corporations [16]. Resources in logistics operations can incorporate actual items, like food, materials, gears, and fluids, just as conceptual items, such as time, and data. The logistics of goods typically include a mix of data flow, material handling, bundling, inventory, transportation, and warehousing. The intricacy of logistics operations can be demonstrated, broken down, imagined, and optimized via simulation. Logistics has turned out to be significant in any production network because of the
rapid development in manufacturing. Consequently, the overall worth of logistics globally arrived at 6.6 trillion USD with a growth pace of 9.1% in 2019 [17]. With this circumstance, the framework of “logistics operations” works with the capacity and productivity of logistics data. Logistics operations are focused on dispatching materials externally to the plant and getting materials within the plant at an optimal cost. The fundamental function of logistics within any manufacturing facility is the minimization of service time [18]. The achievement or disappointment of any logistics framework is dependent on the service and production lead time.

Information management and social performance

Information management, information sharing, and protection are the conspicuous scenarios of issues related to information flow that may prompt pressure and stress [19]. In any case, information flow and communication is an additional answer for work environment-related issues, for example, sharing and trust-building. The investigation by [20] examined information flow at work, and an ideal experience for employees well being within any organization. Connections between work assets, information flow at work, and individual resources were examined, and their relationship with positive/negative feelings at work was additionally explored. Multivariate analysis demonstrated that work resources had a positive connection with information flow at work [21]. in their study comprehended the importance credited to the idea of well-being in the working environment by employees and its influencing factors. The individual attributes recognized by the participants that impact social well-being in the work environment include being certain, communication and information flow, conflict management, and values.

Methodology

Study population and sample

The study embraced purposive sampling procedure and total enumeration technique in other to gather specific details. Information were gathered utilizing questionnaire. While, the assessment populace entails 60 medical supply stores operating in Lagos State, Nigeria in that eight hundred and fifty (850) surveys were scattered to the staff of operations and logistics division. However, seven hundred and ninety-five (795) responses were recuperated and were reasonable for analysis. Partial least square (PLS) was utilized to explain and analyze the information gathered. This is because it explains the effect and connection between the reliant and independent variables objectively.

Study Variables: $y = \mu x + e$ (1)

$x$: Information Management, $y$: Social Performance, $\mu$: Independent Variable Coefficient, $e$: Error.

The analysis used an interface of $x$: Information management (Independent), and $y$: Social performance (reliant variable).

Theoretical review

This part involves the theory that is pertinent to the investigation. The theory of constraints (TOC) was engaged to choose and understudy information management.

Study Results

$H_0$: Information management has no significant role in the social performance of medical supply stores in Lagos State.

The study broke down the connection between information management and social performance. For a comprehension of the figured hypothesis evaluated in the study, an integer value, t-estimations, R-square outcome, and p-values were utilized. The emanating role of information management on social performance was concluded by the coefficient values introduced in Figure 1.

Figure 1 shows the PLS model of information management and social performance of medical supply stores in Lagos State. The coefficient value of 0.415 shows the effect of information management on social performance. The R-square outcome is significant, moderate, or weak (>0.75, >0.50, and 0.25), respectively. Therefore, the r-squared portrayed in the model, implies that social performance represents a 17.3% variation in information management. Thus,
Information management has a critical role in social performance.

**Operational equation of research variable**

\[ y_3 = \text{Social Performance}, \quad x_3 = \text{Information Management}, \quad e = \text{error}, \quad \mu_3 = \text{Independent Variable Path Coefficient} \]

Coefficient from equation 3. Based on the PLS analysis, \( y_3 = 0.415, x_3 = 0.173, e = 0 \)

\[ 0.415 = 0.173x_3 + 0 \]  
(2)

Equation 2 shows that the social performance of the medical supply stores is 0.415. A unit expansion in information management will prompt a 0.173 increase in the social performance of the medical supply stores. Subsequently, the outcome demonstrated the emanating role of information management in the social performance of medical supply stores in Lagos State.

Information Management and Social Performance of the medical supply stores in Lagos State Output.

Table 1 portrays the keen PLS result, which zeroed in on information management’s role in social performance. The discoveries show that information management significantly affects social performance at \( (\beta = 0.415, \quad R^2 = 0.173, \quad t\text{-statistics} = 4.738 > 1.96, \quad p = 0.000 < 0.05) \). The coefficient of 0.415 demonstrates that information management has a reasonable role in social performance. The R2 value of 0.173 shows that 17.3% change in social performance can be clarified by information management.

### Result of Findings

**Theoretical findings**

The TOC identified information management constraints that could be itemized to cause system improvement. These constraints hinder system optimality such as uncertain demand, regular lead times, and information gap. These are the constraints that convolute and entangle social performance. The TOC estimation relies on the interconnecting elements that include the role of information management in social performance. TOC is subsequently significant in analyzing the dynamics of information management in social performance.

### Conclusion

Based on the findings the study corroborates with other similar findings such as [19], [22] who posited that information management is a useful and effective mechanism that coordinates and integrates the processes within logistics operations for efficient performance [23]. Also, effective information sharing mechanisms also focus on the activities of disseminating useful information among people and system units within a manufacturing firm. This reduces sharing costs, eliminates information deficiency or overload, and improves responsiveness.

Communication networks, according to [24] are the mechanism by which information flows and individuals in an organization communicate and exchange information. Complicated and nuanced messages would necessitate a more efficient means of communication that improves transparency. Moreover, knowledge exchange plays an important role in preserving social equilibrium by ensuring that goods and services are transferred flawlessly and quickly from one place to the next. With the mutual partnership of production frameworks information turns out to be a significant resource for optimality [25]. However, [26] affirmed a minimal impact of communication on employees, but their findings opined a moderating role of communication on performance. In a nutshell, information management has an emanating role in the social performance of medical supply stores in Lagos State, Nigeria.

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