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Information Management System (Ims) And Resource Control: Evidence From Hospitality Firms In Anambra State, Nigeria

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Abstract: *In an ideal situation, firms are supposed to use IMS to efficiently deploy resources, however, the researchers observed that the hotels studied seem not to be aware of IMS, or implementing it wrongly, hence, necessitating this study to examine the relationship existing between IMS and resources control in Anambra State hotels, as the broad objective. The work was anchored on the Management Information System Theory, Resource Based View Theory and Hobfoll's Conservation of Resources Theory. A descriptive survey research design was used for the study. The study's population comprised all managers and Information and Communication Technology (ICT) personnel of the studied hotels, with an estimated 221 personnel across the two categories of the population. A complete enumeration method was adopted for the study. Data was sourced through primary source using questionnaire, which was subjected to both validity and reliability tests. Data collected for the study were analyzed using both descriptive and inferential statistical techniques, and the hypothesis was tested at a 5% level of significance. The result showed a correlation coefficient (R) of 0.591, indicating a moderate to strong positive relationship between the predictors (information processing, TDSS, information analysis, information security, and information quality) and operational efficiency. The R^2 value of 0.349 showed that approximately, 35% of variations in operational efficiency were explained by the combined effect of the five independent variables. The study, therefore, concluded that improving the analytical and decision-support capabilities of information systems will substantially enhance operational efficiency in the hospitality sector. Sequel to this, and among others, it was recommended that the management of the hotels studied should prioritise timely decision-support systems by focusing their limited resources on deploying real-time decision-support tools to improve speed and accuracy in operational decisions.*

Keywords: Resource Control**,** Information Management System, Information Processing**,** Information Analysis, Information Security**,** Information Quality.

INTRODUCTION

The competitive nature of the hospitality industry globally has made it impossible for them to ignore things that will make them stand out and outcompete each other. This competition is even present in Nigeria, and Anambra state is one of the states where competition is rife. One of the most significant ways to compete fairly in the hospitality environment is through the adoption of technology, and Information Management Systems (IMS) stands tall amongst technologies they can adopt, because of the characteristics of the environment. In alignment with this trend of thoughts, Anusi and Dlamini (2025) contend that hospitality enterprises must integrate sustainability concepts into their comprehensive management frameworks, encompassing information management and resource consumption, to maintain long-term competitiveness.

In recent times, IMS has been observed to be indispensible in the operational dynamics of firms, especially those operating within the hospitality space, most especially hotels, which is the focus of this current study. This is because IMS see to the maximum utilization of critical data for organisational decisions making. IMS as a concept has been defined in several ways. Malak (2025) asserts that it is a systematic framework that facilitates firms in the efficient collection, storage, processing, and retrieval of data and information. It integrates technology, processes, and personnel to facilitate decision-making, optimize operations, and safeguard data, so augmenting production and organizational efficacy (Okigbo, Mbamalu, & Asogwa, 2025).

The importance of IMS in the sustainability discussion of firms cannot be over emphasized as they support decision making, swiftly and correctly when utilized in the correct manner. Okigbo, et al., (2025) opine that IMS integration has been made a necessity for firms because of the globalisation question and speed. It is made even more integral when resource control is paramount for firms. Where resource control is the efficient and effective procurement and utilization of resources to fulfil organizational objectives (Cambalikova & Misun, 2017).

In an ideal operational business environment, firms are supposed to use IMS to efficiently utilize resources, however, what the researchers observed in the hotels studied seem to be a case of negligence, unawareness, or misapplication and misalignment of IMS components into the resource control operationalization. The persistence of this situation if not handled swiftly and appropriately might lead to the death of these hotels, as resources might continue to be misused, misappropriated and misaligned to the goals of the hotels. It is, therefore, against this backdrop that this study was necessitated to examine the place of IMS in resources control, using hotels in Anambra State as the case study. The broad objective of the study is to ascertain the effect of Information Management System on Resource Control of Hotels Firms in Anambra state, Nigeria. However, the study specifically seeks to:

i. Assess the effect of information management system proxies (information processing, timely decision support system, information analysis, information security and information quality) on operational efficiency in hospitality firms in Anambra state, Nigeria.

REVIEW OF RELATED LITERATURE

Information Management Systems (IMS) and Resource Control

Information Management Systems (IMS) are digital frameworks that collect, organize, and distribute data to support operational and strategic activities. Contemporary IMS integrate artificial intelligence, cloud computing, and data-analytics modules to improve coordination and learning across departments. Ghosh, Bose, and Pal (2024) emphasize that such integration turns scattered organizational data into a "single source of truth" that enhances collaboration and innovation. Cloud-based IMS also reduce infrastructure costs while enabling remote access and real-time analytics (Kumar & Singh, 2025). Empirical studies show that AI-driven IMS can predict demand patterns, manage knowledge repositories, and streamline decision cycles (He et al., 2024). Zhao, Xu, and Wang (2023) demonstrate that IMS adoption improves accountability and transparency in both public and private sectors by ensuring data traceability. Overall, IMS have evolved from passive storage systems to active knowledge infrastructures that connect information resources to strategic foresight and competitiveness (Almeida et al., 2024; Liang et al., 2023).

Resource control refers to the systematic planning and supervision of financial, human, and technological resources to achieve efficiency. Recent scholarship links resource control with digital governance, where analytics platforms monitor utilization and prevent waste (Ahmed & Rahman, 2022). Automated monitoring supported by IoT sensors and predictive models enhances transparency and responsiveness (Pujari & Balaramakrishna, 2025). Kusumba (2025) describes integrated maintenance-management systems that merge operational and financial data for holistic resource visibility. In dynamic markets, adaptive resource control supported by AI enables real-time reallocation when disruptions occur (Nair et al., 2023). Effective control mechanisms bridge strategy and execution, aligning resource flows with organizational objectives and sustainable development goals (Silva & Patel, 2021; Hernandez & Brooks, 2024).

Information Processing

Information processing covers data acquisition, storage, transformation, and dissemination. It is the cognitive core of organizational learning, determining how effectively raw data become knowledge. Modern systems employ big-data pipelines and natural-language processing to manage unstructured information at scale (Bhardwaj & Singh, 2024). Kim and Park (2023) found that efficient processing improves decision accuracy and reduces uncertainty. Luo et al. (2025) highlight that machine-learning algorithms enhance forecasting and anomaly detection. Information processing also underpins agile decision frameworks by enabling near-real-time insights (Wang & Li, 2022; Osei & Mensah, 2024). As digital ecosystems expand, robust processing architectures are vital for speed, precision, and organizational intelligence (Zhang & Li, 2021).

Timely Decision Support System

Decision Support Systems (DSS) combine databases, analytical models, and user interfaces to assist managers in complex decision environments. The modern generation of DSS leverages AI and cloud computing for instant data retrieval and predictive analytics (Rahman et al., 2023). Tang and Yu (2025) note that timeliness is a competitive advantage because delayed decisions erode responsiveness. Cloud-based DSS improve collaboration by providing shared dashboards accessible across organizational tiers (Garcia & Santos, 2021). Empirical findings indicate that DSS enhance risk assessment, resource planning, and scenario simulation, enabling proactive rather than reactive management (Musa & Hassan, 2024; Lee et al., 2022). Overall, DSS have transitioned from advisory tools to strategic enablers that fuse analytics with experiential knowledge for agile decision-making (Kilari, 2025).

Information Analysis

Information analysis transforms processed data into actionable insights through statistical, computational, and semantic evaluation. Xu et al. (2024) argue that advanced analytics frameworks identify inefficiencies and predict opportunities for innovation. Chen and Zhao (2022) show that machine-learning algorithms improve analytical precision and shorten reporting cycles. Integrating qualitative and quantitative analysis widens managerial insight and strengthens evidence-based policy design (Eze et al., 2023). Patel and Singh (2025) observe that automated analysis platforms deliver real-time performance dashboards, reducing decision latency. Torres and Hassan (2024) further demonstrate how natural-language processing expands analysis to textual data such as customer feedback or

reports. Effective information analysis, when coupled with IMS and DSS, underpins continuous improvement and organizational adaptability (Zhang & Li, 2021).

Information Security (Cyber Security)

Information security ensures confidentiality, integrity, and availability of data, whereas information quality assures accuracy, completeness, and relevance. Adeoye and Kim (2023) maintain that the two are mutually reinforcing—security breaches degrade data quality, while poor quality undermines protection protocols. Gupta, Lin, and Zhou (2023) highlight integrated governance frameworks aligning cybersecurity with data-quality management. Recent studies stress blockchain and zero-trust architectures as mechanisms for ensuring authenticity and traceability (Zhou et al., 2022). Lee and Choi (2024) find that automated validation tools reduce data redundancy and error propagation. Compliance with global standards such as ISO 27001 and GDPR further improves trust and operational reliability (Rao & Lin, 2024; Hassan et al., 2025). In the digital economy, strong security-quality integration is therefore central to sustainable organizational integrity.

Information Quality

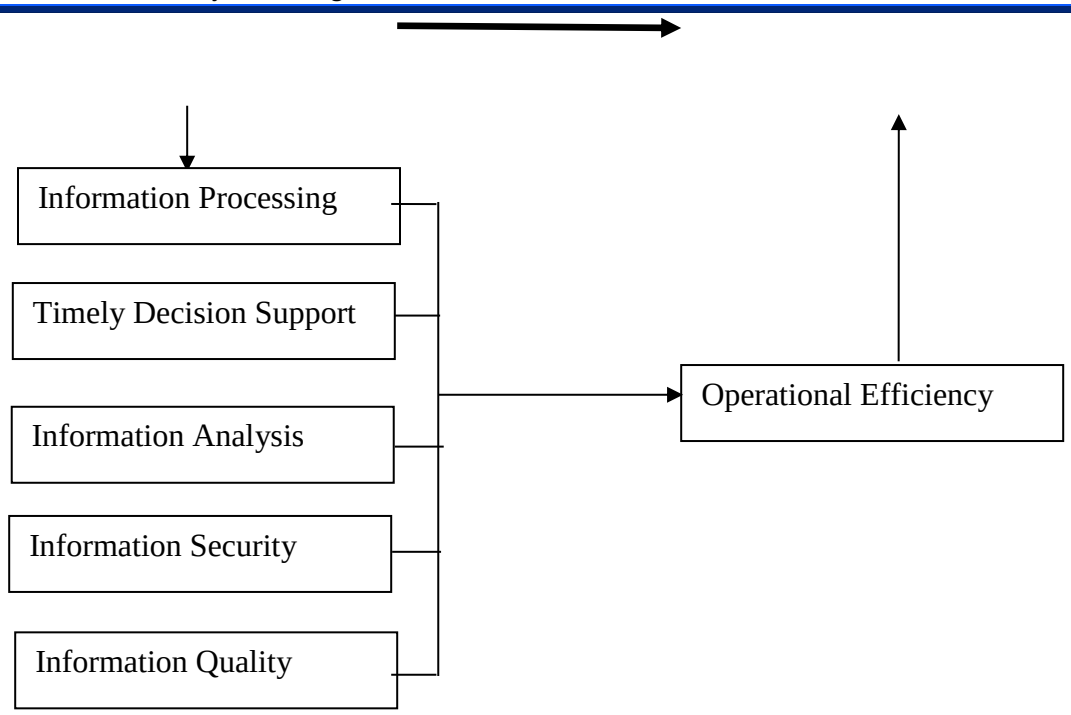
In contemporary organizations, information is vital. Stvilia et al. (2007) assert that information quality influences organizational decisions and actions. The quality of data influences both tactical and strategic decision-making, among other factors. Information quality management protocols mitigate an organization's susceptibility to data quality issues. The quality control of information is essential for the efficacy of decision support systems.
Price and Shanks (2005) contend that the definitions of quality and the corresponding quality criteria and categories within information system(s) (IS) literature and practice are oriented towards products or services, employing empirical, practitioner, theoretical, or literature-based methodologies. They assert that the product-oriented perspective, or data quality, prioritizes design and internal information systems. This viewpoint characterizes quality as the extent to which information systems data fulfills initial needs specifications or corresponds with significant real-world events. Completion and accuracy are typically assessed objectively. Conversely, service-based quality, or information quality, emphasizes the task-oriented interactions of the information consumer with the information system. This methodology of quality directly addresses the assurance of adequate quality for unforeseen or modified data utilization by perpetually evaluating customer quality perceptions. Information consumers assess timeliness, relevance, and accessibility. Consequently, they concur with the prevalent definition of quality as 'fitness for use.' Information quality is consistently defined as fulfilling user requirements.

Operational Efficiency

Operational efficiency denotes the optimal use of resources to maximize output and minimize waste. Almeida, Ferreira, and Silva (2024) describe it as the interplay between technology, process design, and human capability. Information systems drive efficiency by automating workflows, cutting cycle times, and improving coordination (Kaur & Sharma, 2023). Digital transformation initiatives integrate production, logistics, and finance data to enhance visibility and reduce duplication (Santos et al., 2025). Li and Han (2023) demonstrate that data-driven IMS adoption correlates with measurable productivity gains. Agile management frameworks supported by analytics further sustain efficiency under uncertainty (Raj & Prasad, 2022; Nwosu & Zhao, 2022). Hence, operational efficiency reflects the cumulative effect of effective IMS, resource control, information processing, and timely decision support.

Conceptual Framework

Here, the interaction or the interconnectivity of the variables of the study is shown to know how one affects the other. This is shown in figure 2.2 below:



Source: Researcher's Conceptualization, 2025
Figure 1: Conceptual Framework Diagram Showing the Relationship Between the Study Variables

This framework outlines the relationships between various factors in the study of information management system and its effects on resource control within the hospitality firms in Anambra state, Nigeria. The independent variable, information management system, is investigated for its prevalence and specific types experienced which is linked to the dependent variable of resource control. Information processing, timely decision support, information analysis, information security and information quality are identified as moderating variables that influence the relationship between information management system and resource control. These factors can either exacerbate or mitigate the effects of information management system. This framework helps to identify how different elements interact and contribute to the overall research objectives, providing a comprehensive view of the dynamics within hospitality firms in Awka, Anambra State.

2.3 Theoretical Framework

This work is informed by three theories: Management Information System Theory, Resource Based View Theory and Hobfoll's Conservation of Resources Theory.

Management Information Systems (MIS) Theory

Management information system theory is not attributed to a single individual but is rooted in General Systems Theory propounded by Ludwig von Bertalanffy in 1950s. General Systems Theory which proposes that systems, regardless of their nature (biological, social, mechanical), share common principles. This foundational theory influenced how we understand and design information systems by emphasizing the interconnectedness and interdependence of system components.

Management Information Systems (MIS) Theory is a theory that elaborates how organizations use information systems to support business operations, management, and decision-making. It explains how organizations use information systems to support decision-making, coordination, control, and analysis. It posits that organizations can optimize performance by systematically collecting, processing, and disseminating information to support managerial functions. It is typically defined by three components: input, process, and output. It is concerned with how technology-based systems convert raw data into meaningful information and insights. It emphasizes also the feedback loop, thus ensuring continuous improvement and control in an organisation. Hence, it provides a foundational lens for understanding how organizations use information technologies to manage data, support decision-making, and achieve strategic objectives and goals. This theory integrates principles from management science, information technology, computer science, system theory and organizational behavioural theory to explain the use of information in an organisation. It supports managerial functions such as planning, organizing, controlling, and decision-making.

Another aspect of this theory is socio-technical perspective, which emphasizes that both technical (software, hardware) and social (human, organizational) components must be aligned for the system to be effective. Staff competence is therefore needed to operate the information systems for effective resource control.

It has been criticised as focusing heavily on technology and ignored the social and human dynamics of information use. It also often assumes stable structures and predictable information flows, which is unrealistic in dynamic, complex organisations. Furthermore, many MIS models ignore cultural, political and environmental factors and there is often a disconnect between system design (theory) and user adoption (adoption), leading to failed MIS Nigeria. Markus (1983) argues that MIS projects often fail because they ignore how information systems alter intra-organizational power relations and provoke resistance. Furthermore, Markus and Pfeffer (1983) argue that MIS Theory often fails to explain *why* some information systems succeed or fail, as it neglects organizational politics and power relations in system use.

This theory is most suitable for this research topic for it explains how effective MIS improves resource control in hotels and hospitality settings. It improves operational efficiency, data flow, and resource planning in hospitality firms. It integrates financial, operational, human resource, and customer data to facilitate resource allocation and monitoring. Thus it provides insights into how hospitality firms in Anambra State can effectively manage information to enhance resource control. The theory posits that for managers to control organizational resources, they must rely on an integrated information system that provides relevant and timely data. A properly designed information management system ensures that resource control activities such as overseeing inventory, staff schedules, financial resources, et cetera, are optimally monitored and controlled through real-time data access, reporting and automation. This is done by such tools as point-of-sale systems, property management systems (PMS), and enterprise resource planning (ERP) systems, commonly adopted by hospitality firms. Hence, Information systems support resource allocation, utilization, and monitoring, which are critical aspects of resource control management.

In Anambra State, where hospitality firms operate in a competitive and resource-constrained environment, the ability to manage information effectively by firms could determine operational efficiency and competitive advantage of the firms. Therefore, effective information systems are indispensable tools for achieving strategic and operational control in hospitality firms. By anchoring this research work on Management Information System Theory, it becomes easier to explore how the integration of information systems facilitates efficient resource control of hospitality firms in Anambra State, Nigeria.

Resource-Based View (RBV) Theory

Resource-Based Theory (RBT) was first put forward by Penrose (2009), who proposed a model on the effective management of firms' resources, diversification strategy, and productive opportunities in his work ‘The Theory of the Growth of the Firm’. In 1991, Jay Barney’s work on ‘Firm Resources and Sustained Competitive Advantage’ was critical to the emergence of RBT and became the dominant paradigm in strategic management and strategic planning. RBT provides a framework to highlight and predict the fundamentals of organisation performance and competitive advantage. Kozlenkova et al (2014) hold that the focus of RBT on the firm’s performance based on meso perspectives was a reaction to the earlier managerial interest in the industry structure, a more macro perspective. RBT addresses an internally-driven approach by focusing on internal organisation resources, as opposed to externally driven approaches to understanding the accomplishment or failure of leveraging organisational activities. For Barney (1991), it aims to elaborate on imperfectly imitable firm resources that could potentially become the source of sustained competitive advantage.

Helfat and Peteraf (2003) aver that there are two underlying assumptions of the RBT related to the explanation of how firm based resources generate sustained competitive advantage and why some organisations may continually outperform others by gaining higher competitiveness. First, the bundles of resources owned by firms are different from each other. One of the cornerstones of RBT is the heterogeneity of resources and capabilities in a population of firms, which differentiate the competitive advantage of each firm. The heterogeneity of resources assumes that a firm possesses unique resources in a specific situation can potentially be more skilled to perform particular activities and create competitive advantage. Second, the complexities of trading resources across firms may create persistence in differences in resources (the assumption of resource immobility). Utami and Alamanos (2023), maintains that the development of a broader RBT perspective suggests that firms can achieve competitive advantage not only by utilising critical assets, but also by building new potential capabilities via learning, skill acquisition and the accumulation of tangible and intangible assets over time. Further, Barney (1991) holds that the resource-based logic suggests that if valuable resources (i.e. resources that are costly and difficult to imitate) are possessed by few firms, those firms that are able to control these resources potentially to generate sustained competitive advantage. He holds that resources in RBT refer to assets, business processes, capabilities, the firm’s attributes, knowledge, information, et cetera, controlled by a company to comprehend and implement strategies aiming to enhance efficiency and effectiveness.

The sources of firm's resources can be internal and external. Internal resources are R&D capabilities, logistics, brand management, and low-cost processes, et cetera while external resources are the role of suppliers, customer demand, technology change, et cetera. Barney (1991) grouped company resources into three categories, namely physical capital resources, human capital resources and organisational capital resources. He further categorized the resources into tangible and intangible assets. More so, Barney (1991) maintains that the framework of RBT includes four conditions to assess whether a resource has the potential to become and generate a sustainable competitive advantage. The four conditions are (1) value, (2) being rare, (3) immobility and (4) sustainability. In development, the RBT framework presented in the VRIS model (valuable- rareness- inimitable- substitutability) was later replaced by the VRIO model (valuable- rareness- inimitability- organisation). The VRIO model proposes the new criteria of the organisational embeddedness of a resource. This criterion proposes that the importance of an organisation is organised in such a way as to exploit the resource. It replaces the resource criterion concerning substitutability is the VRIS model. Kozlenkova et al (2014) hold that the VRIO model's introduction has acknowledged that the organisation needs to leverage resources effectively instead of being only possessed by the organisation.

It has been criticized as being circular, that is, it defines valuable resources as those that give advantage, then claims that advantage comes from valuable resources. Thus, it is vague and tautologous. To a larger extent, it ignores environmental turbulence, innovation, and rapid technological change. Again, "Value," "rarity," and "inimitability" are hard to measure empirically. It neglects external forces by underplaying market dynamics, regulation, competition, and collaboration, focusing too much on internal resources. Kraaijenbrink et al. (2010) contend that RBV suffers from conceptual ambiguity, weak empirical support, and limited predictive capacity because it fails to specify mechanisms linking resources to performance.
Aligning this theory with MIS theory will help hospitality firms to leverage resources effectively and not only possessing the resources. Thus it positions them from the level of possession to the level of effective utilization.

Hobfoll's Conservation of Resources (COR) Theory

The Conservation of Resources (COR) theory, developed by Hobfoll (1988; 1989), is a motivational stress theory which posits that individuals and organizations strive to acquire, maintain, and protect valuable resources. It provided a framework within which to understand the processes involved in experiencing, coping with and becoming resilient to chronic and traumatic stress. Stress occurs as a response to any set of circumstances that results in the threatened or actual depletion of resources. The stress response, then, comprises an attempt primarily to limit losses and secondarily to maximize gains, with the loss aspect of the equation disproportionately dominant. Hobfoll (1988; 1989) opines that COR begins with basic tenet that people are motivated to acquire, protect, and foster the acquisition of those things which they value- their resources. Resources include tangible assets (like equipment, information systems) and intangible assets (like time, energy, knowledge, and organizational capabilities). Hobfoll and Lilly (1993) identified 74 resources in the Conservation of Resources Evaluation (COR-E). Primary resources such as food, health, housing, and clothing are directly related to survival and are valued cross-culturally. Secondary resources such as social support, employment, and community environment gain their reinforcing value through their associations with primary resources such as food and housing. Tertiary resources, such as accomplishment, financial credit, and social status, are culturally constructed and provide access to primary and secondary resources.

Hobfoll (2001) holds that Resources tend to be highly correlated and nested within individuals, families, communities, and cultures. Observed correlations across distinct resources are referred to as resource caravans because resources tend to be accumulated by individuals and groups and carried across the life span. Whereas resource caravans and passageways explain the accumulation and preservation of resources, risk factor caravans refer to the constellations of hazards nested within individuals and communities which preclude and drain resources.

COR theory begins with the assumption that much of human behaviour and culture is organized around the acquisition and preservation of valued resources. The value of any given resource is determined by the interplay of both phylogenic and ontogenic contingencies. As a result, some resources are essential for survival and are inherently reinforcing across humans, while others are shaped through cultural and personal experiences and so vary cross-culturally, as well as between and within individuals over time.

From the central tenet of COR theory (i.e., that humans are motivated to accrue and conserve resources), several principles and corollaries follow. Principle 1 states that "resource loss is disproportionately more salient than is resource gain" (Hobfoll, 1998), "in both degree
and speed of impact" (Hobfoll, 2011). Thus, loss of a given resource will have a greater psychological impact than will gain of the same resource. The second principle of COR theory states that "people must invest resources to protect against resource loss, recover from losses, and gain resources" (Hobfoll, 1998).

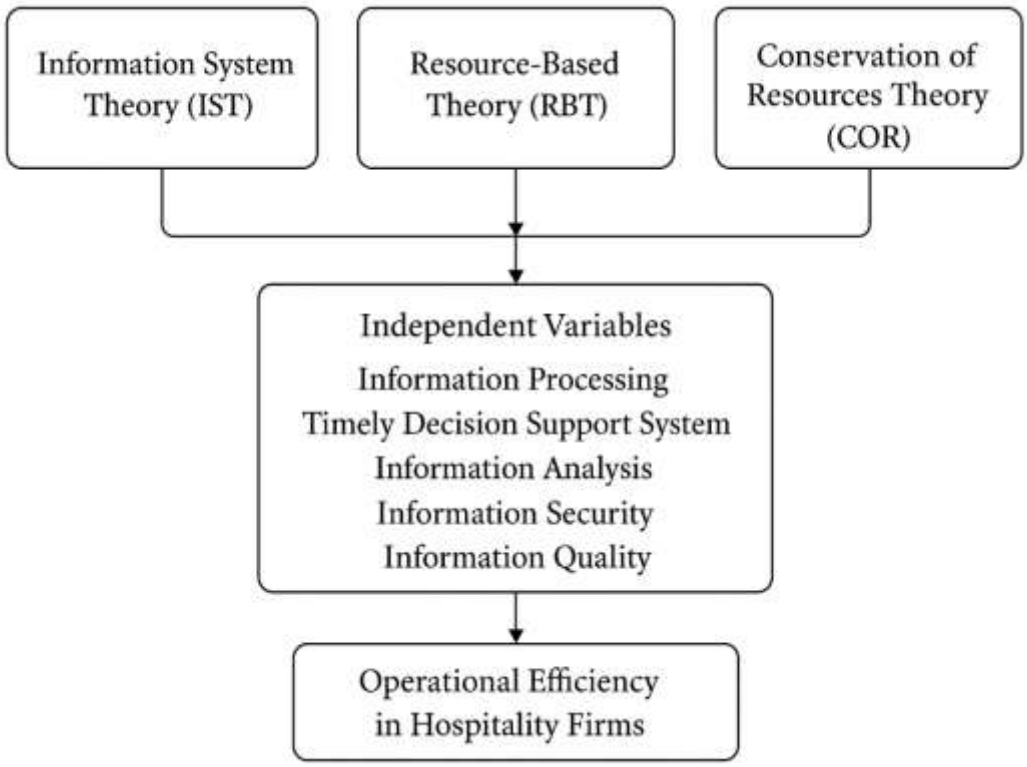
Several corollaries follow from COR theory's basic principles, the first states that those with greater resources are less vulnerable to resource loss and more capable of orchestrating resource gain. Conversely, those with fewer resources are more vulnerable to resource loss and less capable of achieving resource gain … Moreover, those who lack resources are more likely to experience extreme consequences (Hobfoll, 1998).

COR theory is especially relevant in organizational settings where limited resources are often strained and must be strategically managed for survival and growth. It provides a strong theoretical foundation for examining how firms manage and control their resources.

It is criticised as lacking causal clarity, that is, it does not clearly explain how or why resource loss leads to stress or how people prioritize resources. The term 'resource' is loosely defined which reduces precision. In COR, empirical testing is difficult because resources differ across individuals and contexts. Furthermore, the theory focuses on individual-level resource management, overlooking institutional and structural barriers to resource access. It also underestimates cognitive and emotional processes that mediate stress responses. Halbesleben et al. (2014) argue that while COR Theory captures the importance of resource loss and gain, it oversimplifies the complexity of resource interdependence and ignores contextual moderators like leadership and culture.

In alignment with this COR theory perspective, an IMS in hospitality industry functions as both a resource and a resource conservation tool. It functions as a resource by providing timely access to data, reducing uncertainty and improving coordination; also as a resource conservation tool by reducing redundancy, minimizing losses and enhancing performance. When resources are under threat, an efficient IMS helps firms better monitor, allocate, and protect these assets. Investing in IMS offers the dual advantage of safeguarding existing resources and facilitating the accumulation of new ones. The resource caravans and passageways concept within COR theory underscores that resources tend to cluster. Thus, firms with efficient IMS capabilities are more likely to accumulate other resources, such as better financial control, strategic agility, and customer loyalty that help to achieve resource control and organisational goals and objectives. This theory when used with IMS helps to buffer against resource threats, enhance resource acquisition, and build resilience in the face of resource control challenges.

Theoretical Framework



Source: Researcher's Conceptualization, 2025
Figure 2: Theoretical Framework Diagram Showing the Relationship Between the Study Theories

The theoretical framework of this study integrates three interrelated theories- Information System Theory (IST), Resource-Based View (RBV), and Conservation of Resources (COR) Theory- to explain how effective information management enhances operational efficiency in hospitality firms in Anambra State.

The Information System Theory serves as the foundational pillar, emphasizing that organizations rely on systematic information processing to support managerial decision-making, coordination, and control. It explains how well-designed information systems convert raw data into actionable insights that aid in improving performance and achieving strategic goals. This theory directly links to variables such as information processing, information analysis, and timely decision support systems, highlighting their role in facilitating efficiency and accuracy in operations.

The Resource-Based View Theory complements IST by focusing on the internal resources of organizations. It posits that information, technology, and knowledge represent valuable, rare, inimitable, and well-organized assets that can create a sustained competitive advantage. This theory aligns particularly with information quality and information security, as these ensure that the organization's informational resources remain valuable and protected from threats. RBV further emphasizes that competitive success depends not merely on possessing these resources but on their effective utilization through managerial competence and technology integration.

The Conservation of Resources Theory adds a behavioural and motivational dimension by emphasizing the importance of acquiring, preserving, and protecting valuable resources within the organization. It argues that resource loss has a greater impact than resource gain and that firms must strategically manage and conserve their limited resources to maintain operational stability. In this context, an efficient Information Management System (IMS) acts as both a resource and a resource conservation tool- reducing redundancy, preventing data loss, and improving coordination.

Generally, these three theories form a comprehensive foundation for understanding how the independent variables- information processing, timely decision support system, information analysis, information security, and information quality- interact to influence the dependent variable, operational efficiency. Arrows connecting each independent variable to operational efficiency in the model illustrate their direct influence on improving performance outcomes. The framework therefore demonstrates that when hospitality firms effectively manage information through the principles of IST, RBV, and COR, they enhance productivity, optimize resources, and achieve sustainable operational efficiency.

METHODOLOGY

A descriptive survey research design is used for this study because of the characteristics of the study which seeks to collect data from sampled respondents about the effect of Information Management System on Resource Control in hospitality firms in Anambra state, Nigeria, which is the area of the study. The study's population comprised all managers and Information and Communication Technology (ICT) personnel of the studied hotels in the study area with an estimated 221 personnel across the two categories of the population. Because 221 personnel is considered manageable, the researchers considered using the entire population. Hence, the study used complete enumeration. Data for the study was sourced through primary source. The source specifically is questionnaire, which was subjected to both validity, using face and content method, and reliability, using the Cronbach Alpha, which showed a reliability coefficient of .814. Data collected for the study were analyzed using both descriptive and inferential statistical techniques. Descriptive statistics such as frequencies, percentages and means were used to analyze the respondents' demographic profiles and summarize responses to the research objectives, while for hypotheses testing**,** multiple regression analyses using the Ordinary Least Square was applied, and it was tested at a 5% level of significance.

ATA PRESENTATION AND ANALYSIS

A total of 221 copies of questionnaire were distributed in accordance to the population/sample size of the study. In the end, 194 copies were collected, but only 184 copies were analyzed, because 10 of the collected copies were not completely filled.

Descriptive Data Presentation

Table 1: Demographic Factors

S/N	Biographic	Frequency	Percentage	Total
1	**Gender**			
	Male	97	52.7	**184**
	Female	87	47.3	
2	**Age**			
	18-25	26	14.1	**184**
	26-35	114	18.5	
	36-45	34	62	

	46 and above	10	5.4	
3	**Educational Qualifications**			
	SSCE (WAEC/NECO)	29	15.8	**184**
	OND/NCE	31	16.8	
	HND/B.Sc	112	60.9	
	M.Sc/MBA/MA	11	6	
	PhD	1	.5	
4	**Job Category**			
	0 – 5 years	2	1.1	**184**
	6 – 10 years	116	63	
	Above 10	66	35.9	
5	**Years of Experience**			
	Less than 1 year	49	26.6	**184**
	1 – 5 years	106	57.6	
	6 – 10 years	18	9.8	
	Above 10	11	6	

Source: Field Survey, 2025

Table 1 shows the demographic statistics of the respondents. The Table shows that out of the 184 respondents, 52.7% were male and 47.3% female, indicating a somewhat balanced gender representation in the sampled hospitality firms. In terms of age, the majority (61.9%) fell within the 26–35 years range, suggesting that the workforce in the hospitality sector is relatively young and active. About 18.5% were aged 36–45, 14.1% were between 18–25, while only 5.4% were 46 years and above. Regarding educational attainment, 60.9% of the respondents possessed HND/B.Sc qualifications, 16.8% had OND/NCE, 15.8% held SSCE, and only 6% had M.Sc/MBA/MA degrees, with 0.5% holding a PhD. Concerning job category, 63% had 6–10 years of work experience, while 35.9% had over 10 years, implying a workforce with solid industry experience. Finally, 57.6% of respondents had 1–5 years of experience in their current firms, while 26.6% had less than a year, showing a mix of both new and experienced employees that can contribute diverse insights.

Test of Hypothesis

The model specified for the effect of information processing, timely decision support system, information analysis, information security and information quality on operational efficiency in hospitality firms in Anambra state, Nigeria.

$RC = f(IMS)\ e_t$……(i)

$OF = f(a_0 + a_1IP + a_2TDSS + a_3IA + a_4 IS + a_5IQ)\ e_t$...……..(ii)

Where:

RC = Resource Control

IMS = Information Management System

f = Function Of

$a_0 – a_5$ = Parameter Structure or Estimate

e_t= Stochastic or Error or Disturbance Term or White noise

IP= Information Processing

TDSS= Timely Decision Support System

IA= Information Analysis

IS= Information Security

IQ= Information Quality

Table 2: Model Summary for Test of Hypotheses

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.591[a]	.349	.331	3.887

a. Predictors: (Constant), IQ, IS, IP, TDSS, IA

Source: Field Survey, 2025

Table 2 shows the Model Summary for the test of hypothesis six which is the combined effect test. The model for the test cumulatively yielded a correlation coefficient (R) of 0.591, indicating a moderate to strong positive relationship between the predictors (information processing, TDSS, information analysis, information security, and information quality) and operational

efficiency. The R^2 value of 0.349 shows that approximately 35% of variations in operational efficiency are explained by the combined effect of the five independent variables. The adjusted R^2 of 0.331, which corrects for model size, also confirms good model fit, implying that information management practices meaningfully influence operational outcomes in the studied firms.

Table 3: ANOVA[a] for Test of Hypothesis Six

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1443.485	5	288.697	19.104	.000[b]
	Residual	2689.971	178	15.112		
	Total	4133.457	183			

a. Dependent Variable: OE
b. Predictors: (Constant), IQ, IS, IP, TDSS, IA
Source: Field Survey, 2025

Table 3 shows the ANOVA for test of hypotheses six. The ANOVA results show an F-statistic of 19.104 with a significance value of 0.000 ($p < 0.05$), indicating that the regression model is statistically significant. This means that information management dimensions collectively have a significant effect on operational efficiency in hospitality firms in Anambra State. The result validates the model and justifies the rejection of the joint null hypotheses, in favour of the alternate hypothesis.

Table 4: Coefficients[a]for Test of Hypotheses

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	31.875	3.140		10.151	.000
	IP	-.216	.162	-.110	-1.331	.185
	TDSS	.444	.161	.236	2.749	.007
	IA	.598	.141	.374	4.241	.000
	IS	.064	.157	.031	.408	.684
	IQ	.187	.156	.113	1.197	.233

a. Dependent Variable: OE
Source: Field Survey, 2025

Table 4 reveals the Coefficientsfor Test of Hypotheses. The table identifies the individual contribution of each variable to operational efficiency. Information analysis ($\beta = 0.598$, $p = 0.000$) and timely decision support systems ($\beta = 0.444$, $p = 0.007$) had significant positive effects, indicating they are major drivers of operational efficiency. Information processing ($\beta = -0.216$, $p = 0.185$), information security ($\beta = 0.064$, $p = 0.684$), and information quality ($\beta = 0.187$, $p = 0.233$) were not statistically significant, meaning that they do not have effect on the operational efficiency of hotels that were studied if cumulatively examined. The result suggests that while all these factors contribute conceptually, only timely decision support system and information analysis exert measurable effects on operational performance cumulatively.

Conclusions

The relationship between Information Management Systems (IMS) and operational efficiency in hospitality firms in Anambra State, Nigeria was the main point of this study, focusing on key components such as information processing, timely decision support, information analysis, information security, and information quality. Empirical results from the regression analysis revealed that while information processing, information security, and information quality did not significantly influence operational efficiency, timely decision support and information analysis exerted strong positive and statistically significant effects. This indicates that the ability to analyze data accurately and support managerial decisions in real-time are major drivers of operational effectiveness among hospitality firms in the state. The findings validate the Information System Theory (IST) and Resource-Based View (RBV) by demonstrating that firms derive efficiency and competitive advantage from effective utilization of information-based resources. The Conservation of Resources (COR) theory also finds relevance, as firms that adopt efficient IMS conserve critical operational

resources, reduce redundancy, and enhance coordination. However, the insignificant results for information processing, quality, and security imply that many firms still operate below optimal technological and analytical capacity, limiting the full potential of IMS adoption. Against this backdrop, therefore, the study makes bold to conclude that improving the analytical and decision-support capabilities of information systems will substantially enhance operational efficiency in the hospitality sector.

Recommendations

Following the findings of the study, it is recommended that the management of hospitality firms in Anambra need to:

i. Prioritise timely decision-support systems by focusing their limited resources on deploying real-time decision-support tools (such as integrated PMS and RMS platforms) to improve speed and accuracy in operational decisions related to pricing, occupancy, and service scheduling.

ii. Strengthen information analysis capabilities by enhancing their operational efficiency through using basic data analytics and business intelligence tools to analyse both real-time and historical operational data, supported by staff training in data literacy to ensure decisions are driven by evidence rather than intuition.

iii. Sustain information processing, security, and quality at basic operational standards to ensure data reliability and regulatory compliance, without making them the primary focus of efficiency-improvement efforts, because they did not show significant direct effects on operational efficiency.

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