

**STRATEGIC INFORMATION MANAGEMENT AND ORGANIZATIONAL RESTRUCTURING  
EFFECTIVENESS IN OIL AND GAS FIRMS IN RIVERS STATE.**

**Dr. Elsie E Pollyn-Ejiowhor**

*Department of Office and Information Management  
Ignatius Ajuru University of Education, Rumuolumeni Port Harcourt, Nigeria.  
[elsie.pollyn@iaue.edu.ng](mailto:elsie.pollyn@iaue.edu.ng) 08061287383*

**Dr. Wahua Ichela Vincent**

*Department of Business Administration,  
Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt, Nigeria.  
[Ichela.wahua@iaue.edu.ng](mailto:Ichela.wahua@iaue.edu.ng); 08038765284.*

**Dr. Erien-naikachep Maurice Ikuru**

*Department of Office and Information Management  
Ignatius Ajuru University of Education, Rumuolumeni Port Harcourt, Nigeria.  
[eriennaikacap.ikuru@iaue.edu.ng](mailto:eriennaikacap.ikuru@iaue.edu.ng); 08064345396.*

**Abstract**

This study investigated the relationship between the effectiveness of organizational restructuring and strategic information management in oil and gas companies in Rivers State, Nigeria. Specifically, it investigated the relationship between information quality, access to information, integration of information and operational coordination, cost effectiveness and adaptation capability, as well as the moderating effect of the leadership support. The study was grounded in the Technology Acceptance Model and the Organizational Change Theory, both of which provide a foundation for understanding the impact of information systems and leadership on employee acceptance, coordination and organizational adjustment in the context of restructuring. The Cross Section Survey research design was used and data collected from 90 employees of twenty-five oil and gas company in Rivers State. The respondents were comprised of IT and cybersecurity staff, compliance officers, internal auditors and secretaries and a census sampling technique was employed. A structured five-point likert scale questionnaire was used to collect data and it was comprised of items that were expert validated and reliable with a Cronbach alpha coefficient of 0.82. Spearman's rank order correlation coefficient was used to test the hypotheses at 0.05 level of significance. The results indicated that the information quality was found to be significantly correlated with operational coordination, information accessibility was found to be significantly correlated with cost effectiveness, information integration was found to be significantly correlated with adaptation capability, and leadership support was found to be significantly correlated with organizational restructuring effectiveness. Overall, the study found that proper use of Strategic information management improves coordination, efficiency and adaptability, which leads to better restructuring results, and that leadership support facilitates the restructuring process.

**Keywords:** *Strategic information management, organizational restructuring effectiveness, information quality, information accessibility, information integration, leadership support, oil and gas firms, Rivers State.*

**Introduction**

In today's ever-evolving business landscape, particularly within industries like oil and gas, where market dynamics and fluctuations, regulatory landscapes, and technological advancements demand constant

adaptation, organizational restructuring has emerged as a key approach for companies to effectively navigate these challenges (Obobo, 2024; Olaniyi & Omogoroye, 2024). Restructuring typically includes the redesign of organizational structures, processes and procedures, reporting system and decision-making for greater efficiency and competitiveness. The success of these restructuring processes, however, is driven very strongly by information management and use throughout the organization. Within the oil and gas industry, effectiveness of the restructuring effort may be measured by increased efficiency in operation, better coordination, quicker decision making and flexibility in reacting to environmental changes. When not executed correctly, restructuring can result in confusion, inefficiencies, communication problems, and lower productivity. In this study, the effectiveness of restructuring the organization is defined as structural flexibility, operational efficiency and decision responsiveness.

The strategic information management is an important part of achieving desired outcomes from restructuring. It is the systematic collection, processing, storage and sharing of relevant information to support the organization's objectives (DeLone & McLean, 2003). Inaccurate, inaccessible and poorly integrated information can impede organisations' ability to respond to change, coordinate activities and align resources. This research study has been applied to the concept of strategic information management by studying information quality, information accessibility and information integration. In oil and gas companies where timely data is critical, regulatory adherence, logistics, and risk management play significant roles, these dimensions are especially crucial (Obobo, 2024). More quality information reduces the uncertainty, more accessible information can improve communication, and more coordinated information across departments can be achieved using more integrated information systems. All together, these components ensure better restructuring processes.

Information management is not the only factor that influences restructuring success; leadership support also plays a role. Leaders shape the way information is utilized, the way in which change is communicated and how staff adapt to new structures. In that sense, the support of the leaders is considered as a moderating variable in this study, which appears in strategic direction and the commitment to change. Although the need of information systems in organizational transformation has been recognized, there has been scanty empirical studies on the impact of strategic information management on effectiveness of restructuring process in oil and gas companies in Rivers State. The gap requires investigation of the role of information quality, accessibility, and information integration on restructuring results, moderated by the role of leadership support.

#### Statement of the Problem

Technological advancements, regulatory requirements and competition are driving oil and gas companies in Rivers State into a need to restructure (Obobo, 2024). But too often, restructuring initiatives fail to produce the desired results because there is poor information flow, loose systems, and an unclear and underdeveloped organizational unit coordination. Strategic information management should help to restructure by providing accurate, timely and pertinent information for decision-making and operation (DeLone & McLean, 2003). Whereas information quality is low, accessibility is limited, and systems are not integrated, however, restructuring efforts may lead to inefficiencies, delays, and poor performance outcomes.

Besides, weak leadership support can further reduce the effectiveness of information systems in restructuring. If leadership is not clear in their direction and willing to commit, then employees can become dispirited in using information effectively to meet new structures. The issue, then, is that there is limited empirical evidence of the effect of strategic information management on the effectiveness of organizational restructuring in oil and gas companies in Rivers State, Nigeria, with the moderating effect of leadership support.

### Conceptual Framework

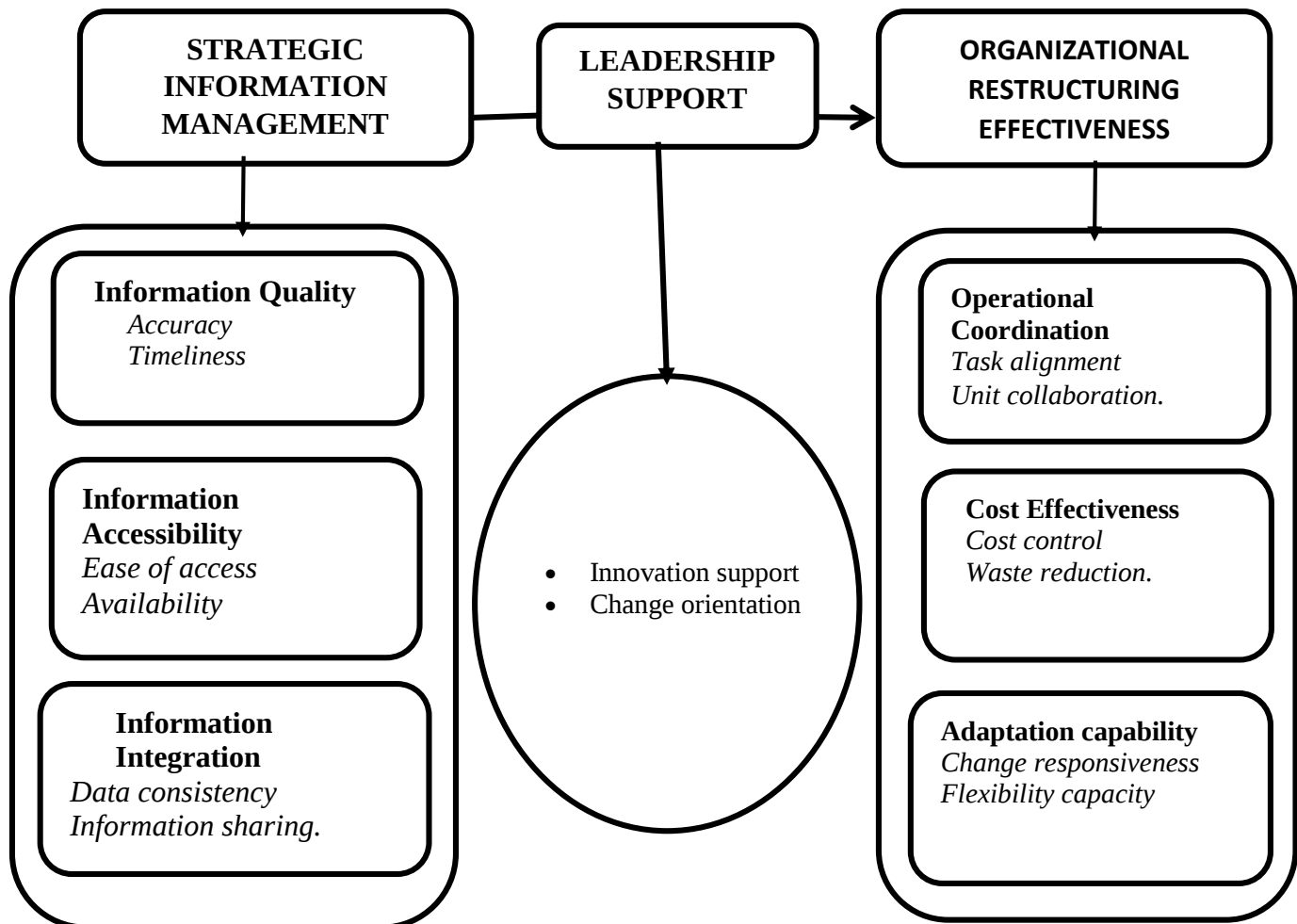


Fig. 1.1 Conceptual Framework of strategic information management and organizational restructuring effectiveness in oil and gas firms in Rivers State, Nigeria  
Source: Researcher's conceptualization, 2026, adapted from Obara (2025).

### Aim of the Study

The aim of this study is to examine the relationship between strategic information management and organizational restructuring effectiveness in oil and gas firms in Rivers State, Nigeria.

### Objectives of the Study

The specific objectives of the study are to:

- Examine the relationship between information quality and operational coordination in oil and gas firms in Rivers State, Nigeria.
- Determine the relationship between information accessibility and cost effectiveness in oil and gas firms in Rivers State, Nigeria.
- Assess the relationship between information integration and adaptation capability in oil and gas firms in Rivers State, Nigeria.

- iv. Examine the moderating influence of leadership support on the relationship between strategic information management and organizational restructuring effectiveness in oil and gas firms in Rivers State, Nigeria.

### **Research Questions**

1. What is the relationship between information quality and operational coordination in oil and gas firms in Rivers State, Nigeria?
2. What is the relationship between information accessibility and cost effectiveness in oil and gas firms in Rivers State, Nigeria?
3. What is the relationship between information integration and adaptation capability in oil and gas firms in Rivers State, Nigeria?
4. What is the moderating effect of leadership support on the relationship between strategic information management and organizational restructuring effectiveness in oil and gas firms in Rivers State, Nigeria?

### **Research Hypotheses**

**H01:** There is no significant relationship between information quality and operational coordination in oil and gas firms in Rivers State, Nigeria.

**H02:** There is no significant relationship between information accessibility and cost effectiveness in oil and gas firms in Rivers State, Nigeria.

**H03:** There is no significant relationship between information integration and adaptation capability in oil and gas firms in Rivers State, Nigeria.

**H04:** Leadership support does not significantly moderate the relationship between strategic information management and organizational restructuring effectiveness in oil and gas firms in Rivers State, Nigeria.

### **Conceptual Review**

#### **Strategic Information Management**

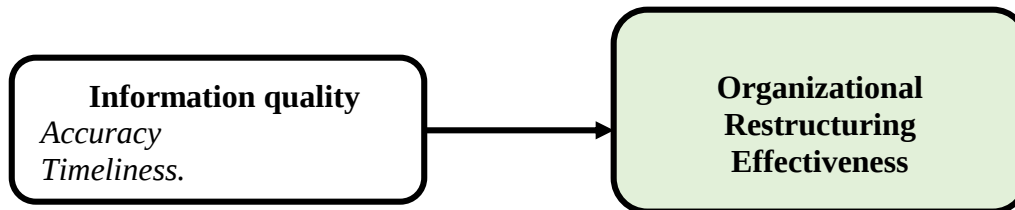
Strategic Information Management (SIM) involves collecting, organizing, analyzing and utilizing information to achieve an organization's future objectives and decision making. Lopes da Costa et al., (2023) defines strategic information management as the proper use of information systems that allows organizations to focus on their strategy by enhancing information quality for decision making, control and planning processes. In a constantly changing and unpredictable business landscape, information has become one of the most valuable resources for a company in making decisions that will help them remain resilient, competitive and successful in the long run, their study notes.

Strategic information management in practice is not simply about the collection or storage of information, it's about turning information into something that can be used to inform action and enhance performance. Effective coordination, uncertainty reduced and quicker response to changes inside and outside the organization are the advantages of effective information management in an organization. In oil and gas companies, it is crucial for timely and reliable information to facilitate compliance, restructuring, operational control and strategic decision making. Organisation can achieve better strategic outcomes and match information resources with business objectives by ensuring information is accurate, accessible and well used.

#### **Information Quality**

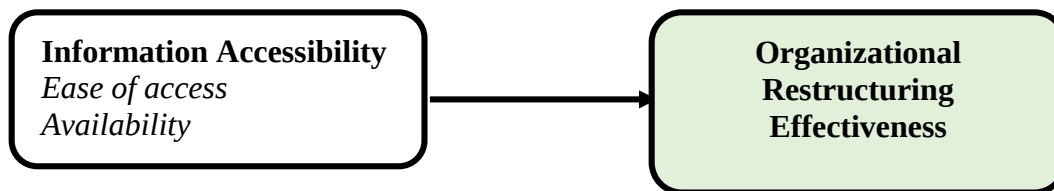
The Marshall University Information Resources and Procurement (2023) defines information quality as the ability of information to meet its purpose in the organization. It is established based on important characteristics like accuracy, completeness, reliability, relevance, and timeliness, which can help to

determine the trustworthiness of information for planning and decision-making. Organizations also benefit from high-quality data, as it allows the managers to make better decisions, avoid conflicting reports, and minimize errors, particularly when restructuring the company. Leadership can address problems more effectively, make the best use of resources, and select restructuring options that are best suited to the realities of the organization when information is accurate and complete. If the information is not of good quality, however, the wrong decisions can be made, effort will be wasted and employees will resist the change process because they will not trust the information.



**Relationship between dimension and criterion variable**

Information quality is critical to oil and gas companies as restructuring can impact many departments including operation, compliance, safety, and coordination. Effective and up-to-date information helps management react swiftly to the changing situation and make restructuring decisions with greater confidence. The aim here is to create information quality that enables the successful organizational restructuring by enhancing the credibility, accuracy and usefulness of information that is used to make strategic decisions.



**Information Accessibility**

Information accessibility is how easy it is for authorized users to access, understand and make use of information at appropriate times. Information accessibility refers to how readily accessible information is for employees to access when they need it and how easy it is for them to use in the workplace (Bawack & Kamdjoug, 2023). Information is not only required to be present within an organization but it must be present in a way that is timely, understandable and usable and can allow staff to act on it quickly.

### **Relationship between dimension and criterion variable**

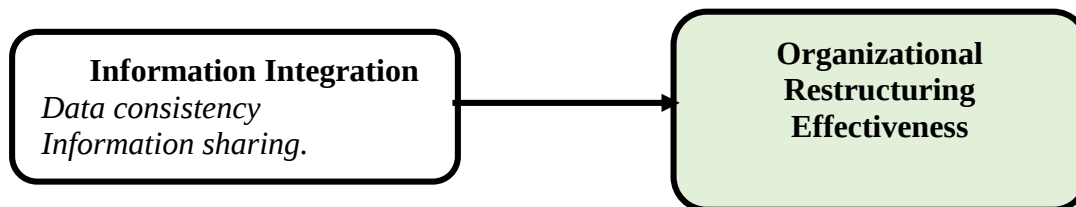
Accessible information facilitates communication, coordination and prevents confusion in times of restructuring. Information that can be easily accessed by employees helps them to better understand new roles, follow new instructions, and work with other departments. This is particularly relevant in oil and gas companies where restructuring often entails reporting line changes, changes to workflow, compliance change and changes to operational control. Accessibility in practical terms means that management and employees are able to respond more quickly to change as it does not have to overcome poor communication or any lack of information flow. Restructuring decisions are more

smoothly implemented, and employees more likely to accept positively the change process when information is easily accessible and usable.

#### Information Integration

Information Integration: It is the process of merging information and data from multiple information sources into a coherent, consistent, and coherent system. DeLone & McLean (2003) define information integration as the level to which organizational information systems are connected and can share and exchange information easily among departments. Simply put, it involves information being distributed throughout the organization, rather than being siloed in distinct units, so that coordination, consistency and shared understanding is promoted. Integration allows staff across various departments to have a shared source of information, to minimize duplication of effort and to work from the same source of information.

When restructuring, it is particularly crucial to integrate information so the change in the organization may involve a change in the role of a department, its reporting structure, and its work processes. Poor communication, conflicting records, and delays in decisionmaking can slow restructuring if information is broken up. However, once the systems are linked together, their management can be enhanced by enabling people to track activities, assign resources to new systems, and ensure that employees are working for the same purpose. DeLone & McLean (2003) explain that the value of information systems doesn't just lie in the fact of their existence, but in their ability to support the use of the organization and their performance outcomes. Integrated systems are especially useful in the oil and gas sector, where the business has various departments like technical, finance, compliance, audit, and administration.



**Relationship between dimension and criterion variable**

A well-integrated information system facilitates the exchange of information between these units on time, coordinates their responsibilities and improves their ability to meet restructuring requirements. This facilitates teamwork, enhances an organization's alignment, and decreases resistance due to confusion or uncertainty. This way, information integration reinforces the restructuring process, because decisions are based on information and communication is consistent, actions in departments remain synchronized.

#### Concept of Organizational Restructuring Effectiveness

Organizational restructuring effectiveness is defined as the degree to which restructuring goals are achieved with respect to organization performance, activity coordination and change adaptation, according to Meyer et al. (2002). In other words, restructuring is successful when it contributes to more efficient operations, faster responses to challenges, and synergy between people, systems, and resources and new strategic goals. Just making a change in the structure of a firm is not enough; it needs to be a change that helps achieve better organizational results.

Effectiveness in restructuring is reflected in improvements in communication across units, improved reporting relationships, faster decision making, more efficient use of resources, and increased responsiveness to internal and external pressures. If the restructuring is successful, the employees will

have a better understanding of their responsibilities, they will have better relationships with each other, and management will be better able to execute their strategic goals without confusion or delay. Especially in the oil and gas industry, where regulatory, technological and market moves can lead to the need for structural reconfiguration in a rapid and sophisticated way. Meyer et al., 2002) argue that restructuring is more significant when it enables the organization's adaptability. An adaptable organisation is one that is able to change its methods, roles and systems without becoming disorderly or losing focus of the strategy. For this reason, it is important to assess the effectiveness of the organizational restructuring not only by the fact of the restructuring itself, but also by the improvements in the coordination, performance, and the organization's ability to adapt to future needs.

### **Operational Coordination**

Operational coordination is the degree of interdependence in the organization, in terms of aligning tasks, reporting lines and processes, to allow different parts of the organization to operate together effectively towards common objectives. This is particularly relevant in the oil and gas industry where operations are complex, interdependent, and risky, requiring careful attention to detail, safety, and market conditions. As energy companies grapple with shifts in operating models, talent, leadership, and mergers and acquisitions, they need to stay agile, fast, and efficient. This certainly highlights the important role of coordination in organizational effectiveness in the sector.

With good coordination, management can arrange for responsibilities to be shared, link departments and simplify processes without causing confusion or unnecessary disruptions. This enables the company to meet operational needs promptly and continue to operate between units. The pressure on energy companies to operate an established but powerful core business, while simultaneously pursuing new businesses in fast-paced sectors like renewables, low-carbon solutions, power and retail, has increased the need for internal coordination even more, according to McKinsey & Company (2024). In this sense, operational coordination is defined as the skill of the company in coordinating its own operations, as part of the restructuring, to achieve smoother execution and better performance.

### **Cost Effectiveness**

Cost effectiveness is the way the resources are used by an organization to get the desired results at the minimum expense. In an oil and gas company, it is a significant indicator of the success of the restructuring as it enables them to determine whether the restructured company is being more effective in eliminating waste, managing costs and maximising value from available resources. Drought-Hastie, Crew and Wall (2025) propose that long lasting cost savings in oil and gas will come from linking cost projects with strategic goals, defining clear responsibilities and bringing in robust cost management practices. It is evident that restructuring must not only alter the formal organization structure, but also enhance the transformation of resources to create value.

If restructuring is successful, the firm should be able to remove duplication of effort, optimise workflows and utilise staff, time and resources more efficiently. This translates to work and management being able to do things without additional delays and with reduced loss of resources, while keeping the same or better performance. Additionally, according to Audu and Ojo (2015), cost efficiency is a critical consideration in oil and gas industry in Nigeria as the firms have to manage their costs while maintaining profitability and performance in their operations. Cost effectiveness can then be used as a good measure of the effectiveness of the organizational restructuring process since it tells the reader whether the restructuring process has generated greater efficiency, less waste and better utilization of organizational resources.

### **Adaptation Capability**

Adaptation capability is the ability of the organization to change the structures, processes and decisions in order to react to internal and external changes. It is a measure of how well managers and employees understand new situations, how they interpret information and how they respond that helps to achieve the goals of the organization. Auda et al., (2024) stated that flexibility and adaptability in an organization enables the firm to stay competitive, as they can make changes to their structures and practices when needed. This demonstrates that adaptation capacity is not just about being able to respond to issues, it's also about creating an organization that can be effective despite uncertainty.

The importance of adaptation capability is accentuated in the oil and gas sector because of its complex operating environment, which includes regulatory pressure, market dynamics, technological advances, and operational risks. A company with good adaptability can adapt quickly to these changes, make timely adjustments, and stabilize itself in restructuring. It is also key to oil and gas organisations having disciplined and aligned processes to survive fluctuating market conditions and to maintain performance; this is also highlighted by Hastie et al., (2025). This should enhance the organisation's ability to learn, adapt and continue to operate in a changing environment when needed.

Adaptation capability is thus an important measure of the effectiveness of organizational restructuring in this study, as it demonstrates if the restructuring process is leading to a more rapid adaptation, improved decision action and increased organizational strength.

### **Concept of Leadership Support**

Shao, Feng and Hu (2016) define leadership support as how much direction, commitment and resources top management gives to successful implementation and use of organizational systems and change initiatives. Their efforts have demonstrated that leadership plays a key role in enterprise system success as effective leadership impacts enterprise system adoption and implementation as well as the assimilation of these systems into enterprise work practice.

Restructuring is a time when leadership support is particularly crucial, as it may be the time when employees seek direction, clarity, and reassurance from leaders. Restructuring is more likely to be successful when the communication is clear, there is enough and the right resources, and leaders actively participate in the change process. Effective management also minimizes confusion, enhances coordination and increases confidence in the use of strategic information systems in helping decision making. In practice, leadership support facilitates strategic information management, and strategic systems are effectively aligned to organizational priorities, and staff are encouraged to use them effectively. New research also reveals that the behaviors of leaders can enhance system assimilation and IS-business strategic alignment particularly when organizational culture fosters collaboration and learning. The support of leadership is thus identified as an important moderating variable in this study as it may augment the contribution of strategic information management towards effective restructuring in oil and gas companies.

### **Theoretical Review**

Technology Acceptance Model (TAM)

The current study is based on the Technology Acceptance Model (TAM) of Davis (1989). The theory suggests that the willingness of the users to use a technology is determined by perceived usefulness and perceived ease of use. Perceived usefulness is the degree of employee perception that using the information system will benefit his or her job and perceived ease of use is the degree that the information system will be easy to use and easy to learn. TAM is relevant to this study as strategic information management relies on the employees' responses to information systems made available to them in oil and gas companies. When workers feel that the system will enhance reporting, coordination,

compliance, and decision making, they will be more effective in using the system when the restructuring process arises. The theory then provides an explanation of the effect of employee acceptance of information systems on the success of restructuring.

TAM can also be very helpful when restructuring eliminates new technologies, new workflows and new reporting structures which can cause uncertainty or resistance within employees. Resistance to change is likely to be minimal when the workers are confident with the value of the system and feel confident about using it. TAM thus offers a powerful explanation of how the perceived value of strategic information systems can contribute to the effectiveness of restructuring in oil and gas companies in Rivers State, Nigeria.

### **Organizational Change Theory**

The use of Organizational Change Theory in this study is also supported by the theory which is an explanation of how organizations change from one state to another when faced with some internal or external pressure. The theory places great importance on planning change, communicating it clearly, supporting it with leadership and allowing it to be accepted by all employees. Relevant to this study because restructuring of the organization is an example of planned change, and this change will be defined as successful if the organization is adept at managing the transition. Restructuring in oil and gas companies may include the restructuring of reporting lines, coordination systems, decision procedures, redistribution of resources etc. Organizational Change Theory provides an explanation on why leadership support, communication and employee adaptation is important for successful restructuring.

The theory is also consistent with the study as it indicates that restructuring can be unsuccessful just because a new structure is brought about. Instead, success will rely on the ability of the organization to match the people, systems and processes to the change objective. The strategic role of information management in this study is that it helps to feed into the guiding of change, minimize uncertainty and enhance the coordination of the project. Leadership support is also important since the likelihood of change being successful is higher if managers actively lead, reinforce, and maintain the restructuring process. Therefore, Organizational Change Theory is complementary to the TAM as it explains the human reaction to technology and organisational adaptation during restructuring.

### **Relevance to study**

These two theories complement each other very well in the study. The decision of employees to accept and use information systems is explained in TAM, and organizational change is successfully implemented when the change is managed and supported. Theories of restructuring are all very relevant to oil and gas companies in Rivers State as they have to operate in a very complex environment where the use of information, support of leadership and adaptation to change is paramount for effective restructuring.

**Meta-Analysis of Empirical Studies**

| Author(s)/Year                                  | Focus/Objectives                                                                                                                  | Country/Scope                                    | Methodology                                                             | Major Findings                                                                                                                                                              | Strengths                                                                                                       | Weaknesses/Gaps                                                                                                                        |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Yousafzai, Foxall &amp; Pallister (2007)</b> | Examined the validity of the Technology Acceptance Model across empirical studies and tested the strength of its core predictors. | Multi-country, multi-sector studies              | Meta-analysis of prior TAM studies                                      | Perceived usefulness and perceived ease of use were strong and consistent predictors of technology acceptance                                                               | Large evidence base; strong confirmation of TAM's predictive power across contexts                              | Did not focus on oil and gas firms or on restructuring outcomes specifically; the studies were broad and technology-centered.          |
| <b>Saleh et al. (2024)</b>                      | Investigated factors influencing citizen adoption of e-government services in developing countries.                               | Asian and African developing countries           | Systematic review and weighted meta-analysis of 43 quantitative studies | Perceived trust, perceived quality, self-efficacy, facilitating conditions, and effort expectancy significantly shaped behavioral intention                                 | Recent cross-regional evidence; included multiple behavioral and contextual determinants.                       | Focused on e-government adoption rather than organizational information system use in restructuring; did not examine oil and gas firms |
| <b>King &amp; He (2006/2007)</b>                | Explored determinants of IT innovation adoption and the robustness of TAM across settings.                                        | Mixed organizational and socio-economic contexts | Meta-analysis of empirical TAM studies                                  | Subjective norm and contextual factors influenced usefulness perceptions and intention to use technology, showing that TAM effects vary by context                          | Demonstrated TAM's flexibility across technologies and user groups                                              | Not specific to strategic information management, organizational change, or restructuring effectiveness in a sector like oil and gas   |
| <b>Recent Industry 4.0 review (2025)</b>        | Assessed factors influencing the acceptance of Industry 4.0 technologies across sectors.                                          | Multiple sectors and regions                     | Systematic review and meta-analysis                                     | Perceived usefulness, perceived ease of use, and social influence significantly predicted behavioral intention, with perceived usefulness showing the strongest association | Up-to-date evidence; broad sectoral coverage; highlighted the importance of user perception in digital adoption | Concentrated on Industry 4.0 adoption and did not examine organizational restructuring or resistance to change in oil and gas firms    |

### **Methodology**

The study had a cross sectional survey research design aimed at evaluating the relationship between strategic information management and effectiveness of organizational restructuring in oil and gas companies in Rivers State, Nigeria. The design was found suitable as it could provide data for the respondents at one point and the researcher was able to find out the nature of the relationships among the study variables. The respondents for the study were 90 employees of the 6 oil and gas companies in the state of Rivers. The respondents were drawn from four major groups of personnel in an organisation namely IT/Cybersecurity, Compliance Officers, Internal Auditors and Secretary. The population was relatively small and all were relevant to the study making it appropriate to use a census sampling technique.

Structured questionnaire that was developed on a five point Likert scale having the values of Strongly Agree, Agree, Neither agree nor disagree, Disagree and Strongly Disagree was used in data collection. The instrument was prepared to collect data with regard to the predictor variable, strategic information management, the criterion variable, organizational restructuring effectiveness and the moderating variable, leadership support. The questionnaire was content validated to ensure the content and the questions are valid, clear and relevant to the study objectives by experts in information system and management studies. The reliability of the instrument was obtained by running Cronbach's alpha reliability where the obtained coefficient is 0.82, which means the instrument is reliable for the study. Out of the 90 questionnaires that were sent out, all were returned, and considered usable, giving a 100% response rate from the census population. Spearman's Rank Order Correlation Coefficient was used for analysis of the data with the help of SPSS version 22.0. The hypotheses were tested at 0.05 level of significance; the null hypothesis was not accepted if p value was less than 0.05.

**Table 3.1 Oil and Gas Firms in Adopted for the study**

| <b>S/N</b> | <b>Oil and Gas Firm Name</b>               | <b>Status</b> |
|------------|--------------------------------------------|---------------|
| 1          | Shell Petroleum Development Company (SPDC) | Included      |
| 2          | TotalEnergies Nigeria                      | Included      |
| 3          | Nigeria LNG Limited                        | Included      |
| 4          | Seplat Energy                              | Included      |
| 5          | Oando PLC                                  | Included      |
| 6          | Nigerian Gas Company                       | Included      |
| 7          | AOS Orwell Ltd                             | Excluded      |
| 8          | A. P. Moller Terminal Ltd                  | Excluded      |
| 9          | Adamac Pipe and Coating Services Limited   | Excluded      |
| 10         | Alcon Nigeria Limited                      | Excluded      |
| 11         | Ana Industries Limited                     | Excluded      |
| 12         | Arkleen Oil and Gas Ltd                    | Excluded      |
| 13         | Bellsea Limited                            | Excluded      |
| 14         | BK Tubulars Nigeria Limited                | Excluded      |
| 15         | Ocean Marine Solutions Ltd                 | Excluded      |
| 16         | Osis Limited                               | Excluded      |
| 17         | Tecon Oil Services Limited                 | Excluded      |
| 18         | Vallourec Nigeria Limited                  | Excluded      |

|    |                                                    |          |
|----|----------------------------------------------------|----------|
| 19 | Moni Pulo Petroleum Development Limited            | Excluded |
| 20 | SOWSCO Well Services                               | Excluded |
| 21 | Nero Oil & Gas Nig Ltd                             | Excluded |
| 22 | Chevron Nigeria Limited                            | Excluded |
| 23 | Chevron Nig                                        | Excluded |
| 24 | Schlumberger Testing & Production Services Limited | Excluded |
| 25 | Baker Forex Nigeria Limited                        | Excluded |

**Table 3.1: Names of Oil and Gas Firms Operating in Rivers State and Respondent Categories**

| S/N | Oil and Gas Firm Name                      | IT/Cybersecurity | Compliance Officers | Internal Auditors | Sectary   | Total     |
|-----|--------------------------------------------|------------------|---------------------|-------------------|-----------|-----------|
| 1   | Shell Petroleum Development Company (SPDC) | 4                | 4                   | 4                 | 3         | 15        |
| 2   | TotalEnergies Nigeria                      | 4                | 4                   | 4                 | 3         | 15        |
| 3   | Nigeria LNG Limited                        | 4                | 4                   | 4                 | 3         | 15        |
| 4   | Seplat Energy                              | 4                | 4                   | 4                 | 3         | 15        |
| 5   | Oando PLC                                  | 4                | 4                   | 4                 | 3         | 15        |
| 6   | Nigerian Gas Company                       | 3                | 3                   | 3                 | 3         | 12        |
|     | <b>TOTAL</b>                               | <b>23</b>        | <b>23</b>           | <b>23</b>         | <b>18</b> | <b>90</b> |

Source: Researchers' fieldwork, 2026.

The selected population was the six oil and gas companies from an accessible population of 25 companies in Rivers state, Nigeria. It was purposive and the selection was based on availability of relevant respondents and willingness of the firms to participate. The state has over 25 active oil and gas companies, but only those that met the inclusion criteria and granted access to the desired respondent groups were included for analysis. This was done to guarantee the quality of the data, its feasibility and its adherence to the study goals.

## Result/Findings

### Hypothesis Testing

#### H01

There is no significant relationship between information quality and operational coordination in oil and gas firms in Rivers State.

**Table 4.1: Spearman Correlation for H01**

| Variable                 | Information Quality | Operational Coordination |
|--------------------------|---------------------|--------------------------|
| Information Quality      | 1.000               | .621**                   |
| Operational Coordination | .621**              | 1.000                    |
| Sig. (2-tailed)          | .000                | .000                     |
| N                        | 90                  | 90                       |

Source: SPSS Output from Field Data, 2026.

The result in Table 4.1 shows that information quality and operational coordination are positively and significantly related ( $p=.621$ ,  $p=0.000$ ). Since the p-value is less than 0.05, the null hypothesis is

rejected. This means that information quality has a significant relationship with operational coordination in oil and gas firms in Rivers State.

## H02

There is no significant relationship between information accessibility and cost effectiveness in oil and gas firms in Rivers State.

**Table 4.2: Spearman Correlation for H02**

| Variable                  | Information Accessibility | Cost Effectiveness |
|---------------------------|---------------------------|--------------------|
| Information Accessibility | 1.000                     | .684**             |
| Cost Effectiveness        | .684**                    | 1.000              |
| Sig. (2-tailed)           | .000                      | .000               |
| N                         | 90                        | 90                 |

Source: SPSS Output from Field Data, 2026.

The result in Table 4.2 shows that information accessibility and cost effectiveness are positively and significantly related ( $\rho=.684$ ,  $p=0.000$ ). Since the p-value is less than 0.05, the null hypothesis is rejected. This means that information accessibility has a significant relationship with cost effectiveness in oil and gas firms in Rivers State.

## H03

There is no significant relationship between information integration and adaptation capability in oil and gas firms in Rivers State.

**Table 4.3: Spearman Correlation for H03**

| Variable                | Information Integration | Adaptation Capability |
|-------------------------|-------------------------|-----------------------|
| Information Integration | 1.000                   | .566**                |
| Adaptation Capability   | .566**                  | 1.000                 |
| Sig. (2-tailed)         | .000                    | .000                  |
| N                       | 90                      | 90                    |

Source: SPSS Output from Field Data, 2026.

The result in Table 4.3 shows that information integration and adaptation capability are positively and significantly related ( $\rho=.566$ ,  $p=0.000$ ). Since the p-value is less than 0.05, the null hypothesis is rejected. This means that information integration has a significant relationship with adaptation capability in oil and gas firms in Rivers State.

## H04

Leadership support does not significantly moderate the relationship between strategic information management and organizational restructuring effectiveness in oil and gas firms in Rivers State.

**Table 4.4: Spearman Correlation for H04**

| Variable                                   | Leadership Support | Organizational Restructuring Effectiveness |
|--------------------------------------------|--------------------|--------------------------------------------|
| Leadership Support                         | 1.000              | .589**                                     |
| Organizational Restructuring Effectiveness | .589**             | 1.000                                      |
| Sig. (2-tailed)                            | .000               | .000                                       |

| Variable | Leadership Support | Organizational Restructuring Effectiveness |
|----------|--------------------|--------------------------------------------|
| N        | 90                 | 90                                         |

Source: SPSS Output from Field Data, 2026.

The result in Table 4.4 shows that leadership support and organizational restructuring effectiveness are positively and significantly related ( $p=.589, p=0.000$ )( $\rho = .589, p = 0.000$ )( $p=.589, p=0.000$ ). Since the p-value is less than 0.05, the null hypothesis is rejected. This means that leadership support has a significant relationship with organizational restructuring effectiveness in oil and gas firms in Rivers State.

### Discussion of Findings

The first finding revealed that information quality is significantly related to operational coordination in oil and gas companies in Rivers State. This implies that if the information is accurate, complete, timely and relevant, managers and staff can effectively coordinate work processes, distribute responsibility and align tasks. This result is consistent with the study by Yousafzai et al., (2007) which demonstrated that high level of information-related perceptions facilitates improvements in technology use in the various contexts but not specifically restructuring outcomes. In addition, it's consistent with Saleh et al. (2024), which determined that perceived quality has a significant effect on the user intention and the user outcomes in developing country contexts. The point to be gathered from the present study is that high quality information can ease operational coordination during restructuring as it can decrease uncertainty and enhance managerial judgment.

The second finding indicates that information accessibility is significantly related to cost effectiveness. This means that if the information employees and managers need is readily accessible, they can help prevent delays, duplication of effort and inefficient use of organizational resources. The outcome is in line with the reasoning of King and He (2006/2007), who conducted a meta-analysis of the literature on the role of contextual factors in technology use and oil and gas-related organizational outcomes, although they did not focus on organizational outcomes related to the restructuring of oil and gas companies. It also aligns with a 2025 Industry 4.0 review, which concluded that the perceived usefulness and ease of use have a strong influence on technology related outcomes across industries. It seems that accessible information supports the cost effectiveness in this study as it enables the firm to make timely decisions and reduce waste and optimise time and manpower.

The third finding is that information integration is positively related to adaptation capability. This means the organisation can more easily sense the change, disseminate information and make changes to its structure or processes quickly when data is combined from multiple units or systems. The 2025 Industry 4.0 review highlights that user perception and system-related benefits, across industry sectors, will help drive adoption and value of digital technologies. It also demonstrates the results of Saleh et al. (2024) who concluded that facilitating conditions and trust-related factors enhance the response to digital systems under various contexts. Thus, in the context of this study, integrated information systems increase the ability to adapt due to their ability to quickly respond to restructuring needs from within the company and external pressures.

The fourth finding is that there is a significant relationship between the level of organizational restructuring effectiveness and leadership support. Restructuring will be more effective if leaders are directing, encouraging, resourcing and maintaining commitment to the restructuring process. Transition support is provided through strong leadership, which encourages employees to embrace new structures, procedures, and stay on track to achieve organizational goals. While not specifically about restructuring, Yousafzai et al., (2007) found that a number of factors serve as key predictors for stronger adoption-related outcomes. Also, it conforms to the findings of Saleh et al. (2024), which

confirmed the significance of trust, facilitating conditions, and contextual support to support the use of technology-related behaviors. Leadership support seems to enhance restructuring effectiveness by generating stability and confidence within the restructuring process to successfully enforce strategic information management.

### **Conclusion**

The study finds that there is significant relationship between strategic information management and effectiveness of organizational restructuring in oil and gas companies in Rivers State, Nigeria. The results indicate that each of the three dimensions (information quality, information accessibility, and information integration) positively influences the restructuring effectiveness through increasing the coordination, cost effectiveness, and adaptation capability. The study further indicates that the process of restructuring is reinforced through leadership support which gives direction, commitment and the necessary resources to facilitate effective restructuring. Overall, the findings indicate that information management and leadership support of change initiatives are more effective when restructuring takes place.

### **Recommendations**

- i. Employers and employees need to be provided with more accurate information for decision-making in order to more closely match tasks and improve operational coordination.
- ii. Having information easily shared between departments will help eliminate delays, inefficiencies and lost efforts while making things more cost-effective.
- iii. Investment in integrated information systems, which link different units, and facilitates faster adaptation to change, is a good investment.
- iv. Leaders should actively support strategic information management effort through giving direction, providing sufficient resources and encouraging employees during restructuring.
- v. Ensuring consistent leadership involvement during the restructuring process will help to build the overall effectiveness of restructuring.
- vi. Oil and gas companies should periodically audit their information management structures and processes to maintain coordination, efficiency, flexibility and successful restructuring.

### **References**

- Auda, M., Hassan, T., & Bello, S. (2024). Organizational flexibility and adaptability in oil and gas firms in Nigeria.
- Bawack, R. E., Bonhoure, E., Kamdjoug, J. R. K., & Giannakis, M. (2023). Artificial intelligence in information management. *International Journal of Information Management*, 70, 102621.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, 19(4), 9–30.
- Hastie, S., Crew, Q., & Wall, T. (2025). Navigating economic headwinds: Proven strategies for durable cost reduction in oil and gas. *Australian Energy Producers Journal*, 65, EP24054. <https://doi.org/10.1071/EP24054publish.csiro>

- Lopes da Costa, R., et al. (2023). The strategic impact of information systems in organisations: An empirical study. *International Journal of Applied Decision Sciences*.
- Marshall University Information Resources and Procurement. (2023). The importance of data quality.
- McKinsey & Company. (2016, September 27). *The oil and gas organization of the future*.
- Meyer, M. W., Neck, H. M., & Meeks, M. D. (2002). The organization of organizational restructuring.
- Oboho, E. (2024). Digital transformation in supply chain management: Leveraging AI and big data for enhanced efficiency in the Nigerian oil sector. *International Journal of Management and Finance Studies*.
- Olaniyi, A., & Omogoroye, O. (2024). Digital transformation and sustainable administrative competitiveness in commercial banks.
- Shao, Z., Feng, Y., & Hu, Q. (2016). Effectiveness of top management support in enterprise systems success: A contingency perspective of fit between leadership style and system life-cycle. *European Journal of Information Systems*, 25, 131–153.