

E-PERFORMANCE MANAGEMENT AND ORGANISATIONAL AGILITY IN OIL AND GAS COMPANIES IN RIVERS STATE, NIGERIA

Dr. Helen Nneka Ofor & Dr. Kalapapa Benjamin Dappa

helen.ofor@iaue.edu.ng, kalapapa.dappa@iaue.edu.ng,

**Department of Employment Relations and Human Resource Management,
Faculty of Administration and Management,**

**Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt, Rivers State,
Nigeria**

Abstract

This study examined the relationship between e-performance management and organisational agility in oil and gas companies in Rivers State, Nigeria. The increasing adoption of digital technologies in human resource management has transformed performance management through electronic performance appraisal and electronic performance feedback, enhancing information flow, decision-making, and workforce management. E-performance management was measured using electronic performance appraisal and electronic performance feedback, while organisational agility was assessed through responsiveness and adaptability. The study was anchored on the Dynamic Capabilities Theory and adopted a correlational research design. The population comprised 520 employees from 10 purposively selected oil and gas companies in Rivers State, Nigeria, and the sample size was determined using the Krejcie and Morgan (1970) sample size determination table. A total of 226 questionnaires were distributed, with 214 (94.69%) retrieved and valid for analysis, while 12 (5.31%) were not returned. Data were collected using a structured questionnaire validated and tested for reliability with Cronbach's Alpha. Descriptive statistics and the Pearson Product Moment Correlation Coefficient (PPMCC) were used to analyze the data at a 0.05 level of significance using IBM SPSS Statistics Version 27. The findings revealed that electronic performance appraisal and electronic performance feedback have strong positive and significant relationships with responsiveness and adaptability. The study concludes that effective e-performance management enhances organisational agility and recommends strengthening digital performance management systems and integrating e-performance practices into strategic organisational processes to improve agility and competitiveness.

Keywords: E-Performance Management, Electronic Performance Appraisal, Electronic Performance Feedback, Organisational Agility, Adaptability.

INTRODUCTION

The contemporary business environment is characterized by rapid technological advancement, intense competition, and increasing customer expectations, compelling organisations to adopt digital technologies that enhance efficiency and responsiveness. Human resource management (HRM) has also undergone digital transformation through electronic human resource management (e-HRM), which automates key HR functions, including performance management. Studies have shown that digital HRM improves operational efficiency, information quality, decision-making, and organisational performance (Zhou et al., 2022; Theres & Strohmeier, 2023).

E-performance management is a key dimension of e-HRM that applies digital technologies to support performance appraisal, monitoring, documentation, and continuous feedback. Unlike traditional systems, it provides timely access to performance information, improves evaluation accuracy, enhances transparency, and supports evidence-based decision-making (Theres & Strohmeier, 2023; Zhou et al., 2022). Its major components—electronic performance appraisal and electronic performance feedback—promote objective evaluation, continuous communication, employee development, and organisational learning (Theres & Strohmeier, 2023).

As organisations face increasing technological disruption and environmental uncertainty, organisational agility has become essential for sustaining competitiveness. Organisational agility refers to an organisation's ability to respond quickly to environmental changes and adapt its structures and processes to changing conditions. It is commonly reflected in responsiveness and adaptability, both of which are strengthened through digital technologies that improve communication, learning, and decision-making (Ciampi et al., 2021).

The need for organisational agility is particularly important in the oil and gas industry, which faces challenges arising from fluctuating oil prices, digital transformation, environmental concerns, cybersecurity threats, and regulatory changes (Ramos et al., 2021). In Nigeria, especially in Rivers State, oil and gas companies operate in a complex environment requiring agile organisations supported by effective digital HR practices.

Despite growing investment in digital HR technologies, many organisations still experience delays in performance appraisal, inconsistent feedback, fragmented performance information, and slow managerial decision-making, which may limit organisational responsiveness and adaptability. Although studies have established positive relationships between digital HRM and organisational performance (Zhou et al., 2022; Theres & Strohmeier, 2023) and between digitalization and organisational agility (Ciampi et al., 2021), empirical evidence on e-performance management in the Nigerian oil and gas industry remains limited. Existing Nigerian studies have focused on related areas such as green performance management and organisational agility (Akpobolokami, 2022), with little attention given to electronic performance appraisal and electronic performance feedback.

Against this background, this study examined the relationship between e-performance management and organisational agility in oil and gas companies in Rivers State, Nigeria, focusing on how electronic performance appraisal and electronic performance feedback relate to organisational responsiveness and adaptability.

Statement of the Problem

The increasing digitalization of business operations has transformed human resource management, particularly employee performance management. Organisations are replacing traditional paper-based systems with electronic performance management (e-performance management) to improve the efficiency, transparency, and timeliness of performance appraisal and feedback. Studies show that electronic human resource management (e-HRM) enhances operational, relational, and transformational HR outcomes (Zhou et al., 2022), while digital HRM positively influences individual, HRM, and organisational performance (Strohmeier & Theres, 2023).

Organisations also operate in increasingly dynamic environments characterized by technological change, intense competition, regulatory pressures, and economic uncertainty, making organisational agility a critical capability. Digitalization enhances agility by improving information processing, organisational learning, decision-making speed, and resource reconfiguration (Ciampi et al., 2021).

In Rivers State, Nigeria, oil and gas companies face challenges including fluctuating crude oil prices, technological innovations, environmental regulations, and security concerns. Although organisations are investing in digital technologies, many still experience delays in performance appraisal, inconsistent employee feedback, fragmented performance information, and slow decision-making, which may limit organisational responsiveness and adaptability.

While previous studies have established positive relationships between e-HRM, digital HRM, and organisational performance (Zhou et al., 2022; Strohmeier & Theres, 2023), limited empirical evidence exists on how specific e-performance management practices—particularly electronic

performance appraisal and electronic performance feedback—influence organisational agility in Nigeria's oil and gas sector. This study therefore examines the relationship between e-performance management and organisational agility, focusing on electronic performance appraisal, electronic performance feedback, organisational responsiveness, and organisational adaptability among oil and gas companies in Rivers State.

Aim of the Study

The main aim of this study is to examine the relationship between e-performance management and organisational agility in oil and gas companies in Rivers State, Nigeria.

Specific Objectives

The specific objectives of the study are to:

- i. Examine the relationship between electronic performance appraisal and organisational responsiveness in oil and gas companies in Rivers State, Nigeria;
- ii. Determine the relationship between electronic performance appraisal and organisational adaptability in oil and gas companies in Rivers State, Nigeria;
- iii. Assess the relationship between electronic performance feedback and organisational responsiveness in oil and gas companies in Rivers State, Nigeria; and
- iv. Examine the relationship between electronic performance feedback and organisational adaptability in oil and gas companies in Rivers State, Nigeria.

Research Questions

The study seeks to answer the following research questions:

- i. What is the relationship between electronic performance appraisal and organisational responsiveness in oil and gas companies in Rivers State, Nigeria?
- ii. What is the relationship between electronic performance appraisal and organisational adaptability in oil and gas companies in Rivers State, Nigeria?
- iii. What is the relationship between electronic performance feedback and organisational responsiveness in oil and gas companies in Rivers State, Nigeria?
- iv. What is the relationship between electronic performance feedback and organisational adaptability in oil and gas companies in Rivers State, Nigeria?

Research Hypotheses

The following null hypotheses will guide the study:

- H₀₁: There is no significant relationship between electronic performance appraisal and organisational responsiveness in oil and gas companies in Rivers State, Nigeria.
- H₀₂: There is no significant relationship between electronic performance appraisal and organisational adaptability in oil and gas companies in Rivers State, Nigeria.
- H₀₃: There is no significant relationship between electronic performance feedback and organisational responsiveness in oil and gas companies in Rivers State, Nigeria.
- H₀₄: There is no significant relationship between electronic performance feedback and organisational adaptability in oil and gas companies in Rivers State, Nigeria.

Conceptual Framework

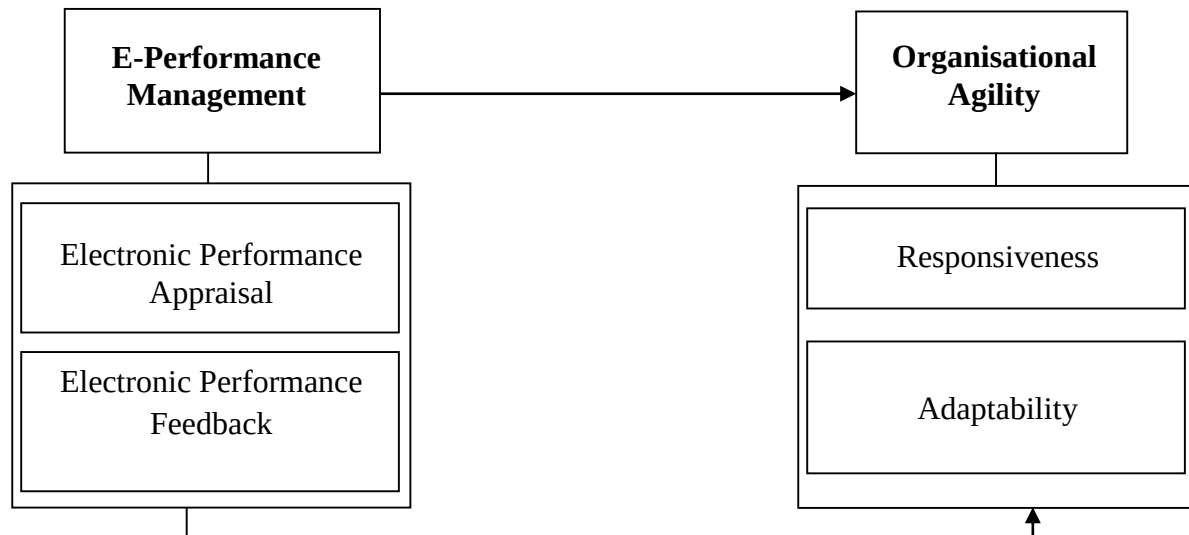


Figure 1: Conceptual Framework Showing the Relationship between E-Performance Management and Organisational Agility in Oil and Gas Companies in Rivers State, Nigeria

Source: The dimensions of E-Performance Management, comprising Electronic Performance Appraisal and Electronic Performance Feedback, were adapted from Bondarouk and Ruël (2009, 2013), Strohmeier (2020), Zhou et al. (2022), and Strohmeier and Theres (2023). The measures of Organisational Agility, comprising Responsiveness and Adaptability, were adapted from Teece (2018, 2023), Ciampi et al. (2021), and supported by Mollet and Kaudela-Baum (2023).

LITERATURE REVIEW

Conceptual Review

Concept of E-Performance Management

E-performance management refers to the application of digital technologies and electronic human resource management (e-HRM) systems to support employee performance planning, monitoring, appraisal, feedback, and performance improvement. It integrates information and communication technologies into the performance management process to improve the efficiency, transparency, accuracy, and timeliness of performance-related decisions. Unlike traditional paper-based systems, e-performance management provides real-time access to performance information, facilitates continuous communication between supervisors and employees, and supports evidence-based managerial decision-making. Consequently, organisations can monitor employee performance more effectively while reducing administrative costs and processing time (Zhou et al., 2022; Theres & Strohmeier, 2023).

The growing adoption of digital HRM has transformed performance management from a periodic administrative activity into a continuous strategic process. Zhou et al. (2022) found, through a meta-analysis of e-HRM studies, that digital HR systems positively influence organisational performance by enhancing operational, relational, and transformational HR outcomes. Similarly, Theres and Strohmeier (2023), in a meta-analysis involving 96 empirical studies, concluded that digital HRM significantly improves individual performance, HR service quality, and overall organisational performance. These findings demonstrate that technology-enabled performance management has become an important strategic resource for organisations seeking greater efficiency and competitiveness.

E-performance management is particularly important in organisations operating in dynamic environments because timely performance information enables managers to make faster decisions, align employee behaviour with organisational objectives, and respond effectively to changing business conditions. Within this study, e-performance management is operationalized through electronic performance appraisal and electronic performance feedback, which represent two core digital mechanisms for evaluating and improving employee performance.

Electronic Performance Appraisal

Electronic performance appraisal refers to the use of computerized or web-based systems to evaluate employee performance against established performance standards. Digital appraisal systems automate appraisal activities, maintain centralized employee performance records, improve rating consistency, and facilitate quicker access to performance information. Compared with conventional appraisal methods, electronic performance appraisal reduces paperwork, enhances transparency, and provides managers with timely information for promotion, training, compensation, and succession planning decisions (Zhou et al., 2022).

Electronic appraisal systems also support continuous monitoring of employee performance through dashboards, key performance indicators, and automated reporting. Employees can monitor their performance progress, while supervisors obtain objective information that supports fair and evidence-based evaluation. Theres and Strohmeier (2023) reported that digital HRM applications significantly improve HR operational effectiveness and organisational performance by enhancing the quality, speed, and efficiency of HR processes. Likewise, Zhou et al. (2022) concluded that organisations implementing e-HRM systems generally experience better organisational performance because digital technologies strengthen HR decision-making and organisational effectiveness.

Within oil and gas companies, where operational efficiency, safety compliance, and timely decision-making are critical, electronic performance appraisal enables managers to evaluate employee performance more accurately and respond promptly to operational challenges.

Electronic Performance Feedback

Electronic performance feedback refers to the use of digital communication platforms and information systems to provide employees with timely, continuous, and constructive information regarding their work performance. Unlike traditional annual feedback sessions, electronic feedback allows supervisors and employees to communicate frequently through HR portals, enterprise systems, mobile applications, and online collaboration platforms. Continuous digital feedback enables employees to identify performance gaps promptly, improve work behaviours, and align individual objectives with organisational goals (Theres & Strohmeier, 2023).

Effective electronic feedback contributes to organisational learning because employees receive immediate guidance that supports continuous improvement. It also promotes employee engagement, accountability, and responsiveness by ensuring that performance issues are addressed before they become significant organisational problems. Recent evidence indicates that digital HRM strengthens organisational effectiveness by improving communication quality, information accessibility, and managerial responsiveness (Theres & Strohmeier, 2023). Similarly, Zhou et al. (2022) demonstrated that e-HRM contributes positively to organisational performance through improved HR service delivery, better information quality, and enhanced employee support.

In technology-intensive industries such as the oil and gas sector, electronic performance feedback facilitates rapid communication between supervisors and employees, enabling organisations to

respond more effectively to operational changes while supporting continuous employee development and improved organisational performance.

Concept of Organisational Agility

Organisational agility refers to an organisation's ability to sense environmental changes, make timely decisions, and rapidly reconfigure its resources, processes, and capabilities in response to internal and external challenges. In today's volatile business environment, organisational agility has become a strategic capability that enables firms to sustain competitiveness through flexibility, innovation, and continuous adaptation. Rather than merely reacting to environmental changes, agile organisations anticipate emerging opportunities and threats and respond proactively to maintain superior performance (Walter, 2021).

The increasing digitalisation of business operations has further strengthened the importance of organisational agility. Digital technologies enhance information processing, communication, and decision-making, enabling organisations to respond more quickly to changing market conditions. Ciampi et al. (2021) argued that digitalisation and organisational agility have a co-evolutionary relationship in which digital capabilities not only facilitate agility but are also strengthened through agile organisational practices.

From a human resource perspective, organisational agility depends on organisational capabilities that enable employees and managers to acquire knowledge, integrate resources, and continuously reconfigure work processes. HRM systems therefore play an essential role in developing the adaptive capabilities required for organisational agility (Boon et al., 2022).

Responsiveness

Responsiveness refers to an organisation's ability to detect environmental changes and respond quickly to customers' needs, technological developments, competitive pressures, and operational challenges. Responsive organisations possess efficient communication systems, timely information, and flexible decision-making structures that enable rapid implementation of appropriate actions (Walter, 2021).

Recent studies indicate that digital technologies significantly improve organisational responsiveness by facilitating faster information sharing, real-time performance monitoring, and evidence-based managerial decisions. Digital HRM systems, including electronic performance management, provide managers with timely employee performance information that supports prompt intervention and improved organisational response to changing business conditions (Wang et al., 2022; Zhou et al., 2022).

Within the oil and gas industry, responsiveness enables organisations to react promptly to operational disruptions, regulatory changes, safety concerns, and fluctuations in global energy markets. Organisations possessing higher levels of responsiveness are better positioned to maintain operational continuity and achieve sustainable competitive advantage.

Adaptability

Adaptability refers to an organisation's capacity to modify its structures, processes, technologies, and work practices in response to changing environmental conditions. Adaptable organisations continuously learn from experience, embrace innovation, and reconfigure organisational resources to sustain long-term effectiveness. Organisational adaptability enables firms to cope successfully with uncertainty while maintaining operational efficiency and competitiveness (Walter, 2021).

Dynamic organisational capabilities are fundamental to organisational adaptability because they enable firms to build knowledge, integrate organisational resources, and continuously reconfigure strategic capabilities. Boon et al. (2022) argued that HRM dynamic capabilities strengthen strategic agility by enhancing organisational learning, knowledge integration, and resource reconfiguration.

Digital HRM also contributes to organisational adaptability by improving communication, facilitating continuous learning, and providing managers with accurate workforce information for strategic decision-making. Consequently, organisations that effectively utilise digital HRM practices are more capable of adapting to technological change and evolving market demands (Theres & Strohmeier, 2023; Zhou et al., 2022).

E-Performance Management and Organisational Agility

E-performance management and organisational agility are closely related because technology-enabled performance management improves the availability, quality, and timeliness of performance information required for rapid organisational decision-making. Electronic performance appraisal provides managers with objective performance data that facilitate workforce planning, performance improvement, and resource allocation, while electronic performance feedback promotes continuous communication and timely employee development.

Evidence suggests that digital HRM enhances organisational performance by strengthening HR effectiveness, improving decision quality, and supporting organisational flexibility (Wang et al., 2022; Zhou et al., 2022). Likewise, digitalisation enables organisations to develop higher levels of agility through enhanced information processing, faster decision-making, and continuous organisational learning (Ciampi et al., 2021).

Accordingly, organisations that effectively implement electronic performance appraisal and electronic performance feedback are expected to improve their responsiveness and adaptability because managers receive timely performance information, identify emerging issues quickly, and implement corrective actions with minimal delay.

Theoretical Framework

Dynamic Capabilities Theory

This study is anchored on the Dynamic Capabilities Theory (DCT) developed by Teece, Pisano, and Shuen (1997). The theory posits that organisations achieve sustained competitive advantage through their ability to integrate, build, and reconfigure internal and external competencies in response to rapidly changing environments. Contemporary literature continues to recognise Dynamic Capabilities Theory as one of the most appropriate theoretical perspectives for explaining organisational agility and digital transformation (Walter, 2021; Boon et al., 2022).

Dynamic capabilities emphasise organisational sensing, seizing opportunities, and transforming organisational resources to address environmental uncertainty. Digital HRM practices, including e-performance management, contribute to these capabilities by providing timely information, enhancing organisational learning, and improving managerial responsiveness. Consequently, organisations become more capable of adapting to environmental changes while sustaining operational effectiveness.

Dynamic Capabilities Theory is considered appropriate for this study because it explains how organisations develop capabilities that enable them to respond effectively to changing business environments. Electronic performance appraisal and electronic performance feedback improve organisational knowledge, communication, and decision-making, thereby strengthening organisational responsiveness and adaptability. Since the study seeks to examine how e-

performance management influences organisational agility in oil and gas companies in Rivers State, Dynamic Capabilities Theory provides a strong theoretical foundation for explaining these relationships.

Empirical Review

Several empirical studies have examined the relationship between electronic human resource management (e-HRM), digital HRM, organisational agility, and organisational performance.

Zhou et al. (2022) conducted a meta-analysis of 83 empirical studies and found that e-HRM significantly improves organisational performance through enhanced operational, relational, and transformational HR outcomes. However, the study examined e-HRM broadly without focusing specifically on electronic performance appraisal and electronic performance feedback.

Theres and Strohmeier (2023) synthesized findings from 96 empirical studies and reported that digital HRM positively influences individual, HRM, and organisational performance. Nevertheless, the study emphasized digital HRM generally and did not examine organisational agility as an outcome.

Ruiz et al. (2024) found that digital HR strategy significantly enhances firm performance by strengthening organisational capabilities and aligning HR processes with digital technologies. However, organisational agility was not investigated as a mechanism through which digital HR practices influence performance.

Khammadee (2023) examined the relationship between e-HRM, organisational agility, sustainable competitive advantage, and organisational performance among SMEs in Thailand. The study revealed that e-HRM positively influences organisational performance, with organisational agility serving as a partial mediator. However, e-HRM was treated as a composite construct rather than focusing on e-performance management.

Elsawy and Elbadawi (2021) reported that e-HRM practices, including electronic performance appraisal, significantly improve organisational performance. However, the study did not examine organisational agility or its dimensions of responsiveness and adaptability.

Epebinu et al. (2024) found that e-HRM significantly improves organisational performance among brewery firms in Nigeria, with e-recruitment, e-compensation, and e-performance systems contributing positively. However, the study focused on organisational performance rather than organisational agility.

The reviewed studies show that e-HRM and digital HRM positively influence organisational outcomes, including HR effectiveness and organisational performance (Zhou et al., 2022; Theres & Strohmeier, 2023; Ruiz et al., 2024; Khammadee, 2023; Elsayw & Elbadawi, 2021; Epebinu et al., 2024). However, most studies focused on e-HRM as a broad concept and organisational performance as the outcome, with limited emphasis on electronic performance appraisal, electronic performance feedback, and organisational agility dimensions such as responsiveness and adaptability. The limited evidence from Nigeria's oil and gas sector highlights the need for this study on e-performance management and organisational agility in oil and gas companies in Rivers State, Nigeria.

METHODOLOGY

The study adopted a correlational survey research design to examine the relationship between e-performance management and organisational agility in oil and gas companies in Rivers State, Nigeria. The study population comprised 520 employees from 10 purposively selected oil and gas

companies in Rivers State, Nigeria. The companies were selected because Rivers State serves as a major hub for oil and gas exploration, production, servicing, and administrative activities in Nigeria, hosting several multinational and indigenous firms. The selection of these 10 companies was considered appropriate because they have established organisational structures, employ a diverse workforce comprising managerial, supervisory, technical, and administrative personnel, and actively utilize human resource management practices, including digital performance management systems. Their operational scale and exposure to technological changes, regulatory demands, and competitive pressures also make them suitable contexts for examining organisational agility.

The sample size was determined using the Krejcie and Morgan (1970) Sample Size Determination Table. Based on the population of 520 employees, a sample size of 226 respondents was considered adequate. Proportionate stratified random sampling was adopted to ensure fair representation of employee categories. The population was stratified into managerial, supervisory, technical, and administrative staff, after which respondents were selected proportionately from each stratum using simple random sampling. Out of the 226 questionnaires distributed, 214 copies were retrieved and used for analysis, representing a response rate of 94.69%, while 12 copies (5.31%) were not returned.

Data were collected using a structured questionnaire comprising measures of e-performance management, represented by electronic performance appraisal and electronic performance feedback, and organisational agility, measured through responsiveness and adaptability. The questionnaire items were adapted from established scales in the literature and modified to suit the context of oil and gas companies in Rivers State. The instrument was subjected to face and content validity by experts in Human Resource Management and Measurement and Evaluation, while a pilot study was conducted to determine reliability using Cronbach's Alpha. All reliability coefficients exceeded the recommended threshold of 0.70.

Data analysis involved descriptive and inferential statistics. Frequencies, percentages, means, and standard deviations were used to summarize demographic characteristics and answer the research questions. The hypotheses were tested using the Pearson Product Moment Correlation Coefficient (PPMC) to determine the relationships between e-performance management dimensions and organisational agility measures. All analyses were conducted using IBM SPSS Statistics Version 27 at a 0.05 level of significance.

Ethical standards were maintained throughout the study. Respondents were informed of the study purpose, participation was voluntary, informed consent was obtained, and confidentiality and anonymity were assured. Data collected were used strictly for academic purposes, and respondents were protected from coercion, discrimination, or harm.

Measurement of Variables and Reliability Coefficients for E-Performance Management and Organisational Agility

Table 1: Variables Measurement/Operationalization

S/N	Variables	Dimensions/Measures	Number of Items	Cronbach's Alpha
1	E-Performance Management	Electronic Performance Appraisal	5	0.861
		Electronic Performance Feedback	5	0.874
2	Organisational Agility	Responsiveness	5	0.856
		Adaptability	5	0.868

	Overall Reliability Coefficient		20	0.865
--	--	--	-----------	--------------

Source: Researcher's Instrument Design (2026), adapted from established measures of electronic human resource management (e-HRM), digital HRM, and organisational agility.

The reliability results indicate that all constructs are internally consistent and reliable, with Cronbach's Alpha values of 0.861 for electronic performance appraisal, 0.874 for electronic performance feedback, 0.856 for responsiveness, and 0.868 for adaptability, all exceeding the acceptable benchmark of 0.70. The overall reliability coefficient of 0.865 confirms that the research instrument is reliable and suitable for data collection and subsequent analysis.

Table 2: Response Rate of Questionnaire Distribution and Retrieval for E-Performance Management and Organisational Agility in Oil and Gas Companies in Rivers State, Nigeria

Details	Frequency	Percentage
Number of Copies Distributed	226	100%
Number of Copies Retrieved	214	94.69%
Number of Copies Not Returned	12	5.31%
Number of Copies Invalid	0	0%
Number of Copies Used for Analysis	214	94.69%

Source: Researcher's Field Survey, 2026.

The table shows that 226 questionnaires were administered to employees of selected oil and gas companies in Rivers State. A total of 214 questionnaires were successfully retrieved, representing a response rate of 94.69%, while 12 questionnaires were not returned, accounting for 5.31%. All retrieved questionnaires were properly completed and considered valid for analysis. Therefore, 214 questionnaires were used for the final analysis, indicating a high response rate and confirming that the data collected were adequate and suitable for descriptive analysis and hypothesis testing.

DATA RESULTS

Table 3: Descriptive Statistics on Electronic Performance Appraisal

S/N	Electronic Performance Appraisal Items	N	Min.	Max.	Sum	Mean	Std. Dev.
1	The company uses electronic systems to evaluate employee performance effectively	214	1.0	5.0	878.0	4.103	0.8124
2	Digital appraisal systems provide accurate information about employee performance	214	1.0	5.0	871.0	4.070	0.8251
3	Electronic performance appraisal improves transparency in performance evaluation	214	1.0	5.0	884.0	4.131	0.7936
4	Online appraisal systems help managers monitor employee performance regularly	214	1.0	5.0	868.0	4.056	0.8347
5	Electronic appraisal supports timely performance-related decisions	214	1.0	5.0	889.0	4.154	0.7815
	Valid N (listwise)	214					

Source: IBM SPSS Statistics Version 27 Result, 2026.

Table 4: Descriptive Statistics on Electronic Performance Feedback

S/N	Electronic Performance Feedback Items	N	Min.	Max.	Sum	Mean	Std. Dev.
1	Employees receive timely feedback through electronic platforms	214	1.0	5.0	876.0	4.093	0.8068
2	Digital feedback systems improve communication between employees and supervisors	214	1.0	5.0	882.0	4.121	0.7952
3	Electronic feedback helps employees identify areas for improvement	214	1.0	5.0	870.0	4.065	0.8214
4	Online feedback mechanisms encourage continuous employee development	214	1.0	5.0	885.0	4.136	0.7869
5	Electronic feedback enhances employees' understanding of performance expectations	214	1.0	5.0	891.0	4.164	0.7758
	Valid N (listwise)	214					

Source: IBM SPSS Statistics Version 27 Result, 2026.

Table 5: Descriptive Statistics on Responsiveness

S/N	Responsiveness Items	N	Min.	Max.	Sum	Mean	Std. Dev.
1	The organisation responds quickly to changes in the business environment	214	1.0	5.0	879.0	4.108	0.8015
2	Employees receive timely information needed for quick decision-making	214	1.0	5.0	873.0	4.079	0.8142
3	The organisation quickly addresses operational challenges	214	1.0	5.0	886.0	4.140	0.7847
4	Digital systems improve the organisation's ability to respond to changes	214	1.0	5.0	881.0	4.117	0.7964
5	The organisation adjusts promptly to emerging market demands	214	1.0	5.0	892.0	4.168	0.7706
	Valid N (listwise)	214					

Source: IBM SPSS Statistics Version 27 Result, 2026.

Table 6: Descriptive Statistics on Adaptability

S/N	Adaptability Items	N	Min.	Max.	Sum	Mean	Std. Dev.
1	The organisation adjusts its processes in response to changing conditions	214	1.0	5.0	875.0	4.089	0.8091
2	Employees easily adapt to new technologies and work systems	214	1.0	5.0	883.0	4.126	0.7918
3	The organisation modifies strategies when faced with new challenges	214	1.0	5.0	878.0	4.103	0.8035
4	The organisation encourages learning and adjustment to new situations	214	1.0	5.0	889.0	4.154	0.7796
5	The organisation can restructure activities to remain competitive	214	1.0	5.0	894.0	4.178	0.7654

	Valid N (listwise)	214					
--	---------------------------	------------	--	--	--	--	--

Source: IBM SPSS Statistics Version 27 Result, 2026.

The results presented in Tables 4 to 7 indicate that respondents generally agreed that e-performance management contributes positively to organisational agility in oil and gas companies in Rivers State. Electronic performance appraisal recorded high mean scores, suggesting that digital appraisal systems enhance transparency, accuracy, monitoring, and timely decision-making in employee performance evaluation.

Similarly, electronic performance feedback recorded high mean values, indicating that digital feedback mechanisms improve communication, employee development, and understanding of performance expectations. These findings suggest that technology-enabled performance management practices facilitate effective information exchange between employees and management.

The results for organisational agility show that respondents perceived their organisations as highly responsive and adaptable. Responsiveness recorded high mean scores, indicating that oil and gas companies are able to obtain timely information, address operational challenges, and respond quickly to environmental changes. Adaptability also recorded high mean values, suggesting that organisations are capable of adjusting processes, adopting new technologies, and modifying strategies to remain competitive.

Generally, the descriptive results suggest that effective implementation of electronic performance appraisal and electronic performance feedback enhances the ability of oil and gas companies to develop greater responsiveness and adaptability, thereby strengthening organisational agility.

Inferential Statistical Analysis

The Pearson Product Moment Correlation Coefficient (PPMCC) was employed as the inferential statistical technique for testing the hypotheses of this study. The method was considered appropriate because it determines the strength and direction of the linear relationship between variables measured using continuous scores derived from Likert-scale questionnaire responses. The analysis examined the relationships between the dimensions of e-performance management (electronic performance appraisal and electronic performance feedback) and the measures of organisational agility (responsiveness and adaptability) among employees of oil and gas companies in Rivers State. All hypotheses were tested at a 0.05 level of significance using IBM SPSS Statistics Version 27.

Table 7: Electronic Performance Appraisal and Responsiveness

Pearson Correlation		Electronic Performance Appraisal	Responsiveness
Electronic Performance Appraisal	Correlation Coefficient	1.000	0.746**
	Sig. (2-tailed)	.	0.000
	N	214	214
Responsiveness	Correlation Coefficient	0.746**	1.000
	Sig. (2-tailed)	0.000	.
	N	214	214

Correlation is significant at the 0.01 level (2-tailed).

Source: IBM SPSS Statistics Version 27 Result, 2026.

Table 8: Electronic Performance Appraisal and Adaptability

Pearson Correlation		Electronic Performance Appraisal	Adaptability
Electronic Performance Appraisal	Correlation Coefficient	1.000	0.721**
	Sig. (2-tailed)	.	0.000
	N	214	214
Adaptability	Correlation Coefficient	0.721**	1.000
	Sig. (2-tailed)	0.000	.
	N	214	214

Correlation is significant at the 0.01 level (2-tailed).

Source: IBM SPSS Statistics Version 27 Result, 2026.

Table 9: Electronic Performance Feedback and Responsiveness

Pearson Correlation		Electronic Performance Feedback	Responsiveness
Electronic Performance Feedback	Correlation Coefficient	1.000	0.758**
	Sig. (2-tailed)	.	0.000
	N	214	214
Responsiveness	Correlation Coefficient	0.758**	1.000
	Sig. (2-tailed)	0.000	.
	N	214	214

Correlation is significant at the 0.01 level (2-tailed).

Source: IBM SPSS Statistics Version 27 Result, 2026.

Table 10: Electronic Performance Feedback and Adaptability

Pearson Correlation		Performance Feedback	Adaptability
Performance Feedback	Correlation Coefficient	1.000	0.734**
	Sig. (2-tailed)	.	0.000
	N	214	214
Adaptability	Correlation Coefficient	0.734**	1.000
	Sig. (2-tailed)	0.000	.
	N	214	214

Correlation is significant at the 0.01 level (2-tailed).

Source: IBM SPSS Statistics Version 27 Result, 2026.

Interpretation of Results

The results presented in Tables 8 to 11 reveal a positive and statistically significant relationship between e-performance management and organisational agility in oil and gas companies in Rivers State.

Table 8 shows that electronic performance appraisal has a strong positive relationship with responsiveness ($r = 0.746$, $p < 0.01$). This indicates that organisations that effectively utilize electronic appraisal systems are more capable of obtaining timely performance information, making quick decisions, and responding effectively to operational changes.

Table 9 reveals a strong positive and significant relationship between electronic performance appraisal and adaptability ($r = 0.721$, $p < 0.01$). This suggests that digital performance evaluation systems support organisational learning, continuous improvement, and the ability of organisations to adjust to changing business conditions.

Table 10 indicates that electronic performance feedback has a strong positive relationship with responsiveness ($r = 0.758$, $p < 0.01$). This implies that timely digital feedback enhances communication between employees and supervisors, thereby improving the organisation's ability to respond quickly to workplace challenges and environmental changes.

Finally, Table 11 shows that electronic performance feedback has a strong positive relationship with adaptability ($r = 0.734$, $p < 0.01$). This demonstrates that effective electronic feedback mechanisms encourage employee development, knowledge sharing, and adjustment to new operational requirements.

Taken together, the findings indicate that e-performance management, through electronic performance appraisal and electronic performance feedback, significantly enhances organisational agility by improving responsiveness and adaptability among oil and gas companies in Rivers State, Nigeria.

Summary of Hypotheses

Table 11: Summary of Hypothesis Testing

S/N	Hypothesis	Result	Decision
H01	There is no significant relationship between electronic performance appraisal and responsiveness in oil and gas companies in Rivers State.	$r = 0.746$, $p\text{-value} = 0.000$	Reject H01 since $p\text{-value} < 0.05$
H02	There is no significant relationship between electronic performance appraisal and adaptability in oil and gas companies in Rivers State.	$r = 0.721$, $p\text{-value} = 0.000$	Reject H02 since $p\text{-value} < 0.05$
H03	There is no significant relationship between electronic performance feedback and responsiveness in oil and gas companies in Rivers State.	$r = 0.758$, $p\text{-value} = 0.000$	Reject H03 since $p\text{-value} < 0.05$
H04	There is no significant relationship between electronic performance feedback and adaptability in oil and gas companies in Rivers State.	$r = 0.734$, $p\text{-value} = 0.000$	Reject H04 since $p\text{-value} < 0.05$

Source: Researcher's Field Survey and IBM SPSS Statistics Version 27 Output, 2026.

The summary of hypothesis testing presented in Table 12 shows that all four null hypotheses were rejected because the p-values (0.000) were less than the 0.05 level of significance. The results indicate that electronic performance appraisal and electronic performance feedback have significant positive relationships with organisational agility measures, namely responsiveness and adaptability, in oil and gas companies in Rivers State, Nigeria. Therefore, the findings confirm that effective implementation of e-performance management practices contributes significantly to enhancing organisational agility.

DISCUSSION OF FINDINGS

The findings of this study indicate that e-performance management has a significant positive relationship with organisational agility in oil and gas companies in Rivers State, Nigeria. Specifically, electronic performance appraisal and electronic performance feedback were found to have strong positive relationships with responsiveness and adaptability. These findings support previous studies which show that digital HRM practices enhance organisational capabilities by improving information accessibility, HR processes, decision-making efficiency, and organisational performance (Zhou et al., 2022; Theres & Strohmeier, 2023).

A strong positive relationship was found between electronic performance appraisal and responsiveness ($r = 0.746$), indicating that organisations that utilize electronic appraisal systems are more capable of accessing timely employee performance information and responding effectively to operational demands. This finding agrees with Zhou et al. (2022), who established through a meta-analysis that e-HRM positively influences organisational performance by improving HR information management, operational effectiveness, and the ability of organisations to utilize technology-driven HR processes.

Similarly, electronic performance appraisal demonstrated a strong positive relationship with adaptability ($r = 0.721$). This suggests that digital appraisal systems provide organisations with continuous performance information that supports employee improvement, learning, and adjustment to changing workplace conditions. This finding is consistent with Theres and Strohmeier (2023), who found that digital HRM contributes significantly to individual, HRM, and organisational performance outcomes by improving the effectiveness of HR processes and strengthening organisational capabilities.

The study further revealed a strong positive relationship between electronic performance feedback and responsiveness ($r = 0.758$). This implies that timely technology-enabled feedback enhances communication between employees and supervisors, allowing organisations to identify challenges and respond quickly to emerging operational issues. This finding supports the argument of Theres and Strohmeier (2023) that digital HRM systems create value by improving HR service delivery, communication processes, and organisational performance outcomes.

In addition, electronic performance feedback showed a strong positive relationship with adaptability ($r = 0.734$), indicating that organisations with effective digital feedback mechanisms are better positioned to promote continuous learning, employee development, and adjustment to changing environmental conditions. This finding aligns with Zhou et al. (2022), who reported that e-HRM adoption strengthens organisational outcomes by improving the availability and use of relevant information for managerial decision-making.

Finally, the findings confirm that e-performance management, through electronic performance appraisal and electronic performance feedback, contributes significantly to organisational agility in oil and gas companies in Rivers State. Effective digital performance management systems improve responsiveness and adaptability by facilitating timely information exchange, supporting employee

development, and enabling organisations to make faster and more informed decisions. Therefore, the adoption of e-performance management practices represents an important strategy for organisations seeking to remain flexible and competitive in a dynamic business environment.

CONCLUSION

The study concludes that e-performance management has a significant positive relationship with organisational agility in oil and gas companies in Rivers State, Nigeria. Specifically, electronic performance appraisal and electronic performance feedback significantly enhance organisational responsiveness and adaptability. This implies that organisations that effectively implement digital performance management systems are better positioned to access relevant performance information, improve employee communication, and respond effectively to changing business conditions. Therefore, e-performance management represents an important strategic HRM practice capable of improving organisational agility, strengthening operational effectiveness, and enabling oil and gas companies to remain competitive in a dynamic business environment.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made in line with the objectives, research questions, and hypotheses:

1. Management of oil and gas companies in Rivers State should strengthen electronic performance appraisal systems through reliable digital platforms that provide timely and accurate performance information to improve responsiveness.
2. Organisations should enhance electronic performance feedback mechanisms by promoting continuous digital communication between supervisors and employees to support learning, performance improvement, and adaptability.
3. Human resource departments should provide digital training and technical support to improve employees' competence and effective utilization of e-performance management systems.
4. Oil and gas companies should integrate e-performance management into organisational strategies to enhance flexibility, agility, and sustainable competitiveness.

REFERENCES

- Bondarouk, T., & Brewster, C. (2016). Conceptualizing the future of HRM and technology research. *The International Journal of Human Resource Management*, 27(21), 2652–2671. <https://doi.org/10.1080/09585192.2016.1232296>
- Ciampi, F., Faraoni, M., Ballerini, J., & Meli, F. (2021). The co-evolutionary relationship between digitalization and organisational agility: Ongoing debates, theoretical developments and future research perspectives. *Technological Forecasting and Social Change*, 171, 120879. <https://doi.org/10.1016/j.techfore.2021.120879>
- Harsch, K., & Festing, M. (2020). Dynamic talent management capabilities and organisational agility—A qualitative exploration. *Human Resource Management*, 59(1), 43–61. <https://doi.org/10.1002/hrm.21972>
- Kane, G. C., Phillips, A. N., Copulsky, J., & Andrus, G. R. (2021). *The technology fallacy: How people are the real key to digital transformation* (2nd ed.). MIT Press.
- Kiron, D., Prentice, P. K., & Ferguson, R. B. (2019). The analytics mandate. *MIT Sloan Management Review*, 60(2), 1–25.

- Margherita, A., & Braccini, A. M. (2021). Managing the digital transformation of human resources: A review and research agenda. *International Journal of Human Resource Management*, 32(17), 3457–3483.
- Mishra, P., Walsh, I., & Srivastava, A. (2022). Merchandising digital transformation: The role of digital technologies in organisational agility and innovation. *Technological Forecasting and Social Change*, 175, 121333. <https://doi.org/10.1016/j.techfore.2021.121333>
- Parry, E., & Battista, V. (2019). The impact of emerging technologies on work: A review of the evidence and implications for the human resource function. *Contemporary Social Science*, 14(4), 467–480. <https://doi.org/10.1080/21582041.2018.1508117>
- Sambamurthy, V., Bharadwaj, A., & Grover, V. (2003). Shaping agility through digital options: Reconceptualizing the role of information technology in contemporary firms. *MIS Quarterly*, 27(2), 237–263. <https://doi.org/10.2307/30036530>
- Theres, C., & Strohmeier, S. (2023). Met the expectations? A meta-analysis of the performance consequences of digital HRM. *The International Journal of Human Resource Management*, 34(20), 3857–3892. <https://doi.org/10.1080/09585192.2022.2161324>
- Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, advanced technologies and human resource management: A systematic review. *The International Journal of Human Resource Management*, 33(6), 1237–1266. <https://doi.org/10.1080/09585192.2020.1871398>
- Walter, A. T. (2021). Organisational agility: Ill-defined and somewhat confusing? A systematic literature review and conceptualization. *Management Review Quarterly*, 71, 343–391. <https://doi.org/10.1007/s11301-020-00186-6>
- Zhou, Y., Cheng, Y., Zou, Y., & Liu, G. (2022). e-HRM: A meta-analysis of the antecedents, consequences, and cross-national moderators. *Human Resource Management Review*, 32(4), Article 100862. <https://doi.org/10.1016/j.hrmr.2021.100862>