Strategic Risk Management and Talent Retention in Nigeria: Assessing HR Policies to Mitigate Workforce Turnover in High-Risk Industries

[1]Kingsley Okechukwu WOGWU., [2]Olajide Solomon FADUN

[1]Department of Business Administration, School of Doctorial Studies Unicaf University, Malawi Campus

[2]Department of Actuarial Science and Insurance, University of Lagos, Lagos, Nigeria

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ABSTRACT

Workforce turnover is a significant challenge for people working in organisations classified as high-risk industries. The loss of 'good' and talented staff may compromise safety, service delivery and longer-term sustainability. This paper examines the incorporation of a strategic risk management approach into human resource (HR) policies to manage turnover risks in three major establishments, namely: University of Port Harcourt Teaching Hospital (UPTH), Brightwaters Energy Limited (BEL), and Port Harcourt International Airport (PHIA). Quantitative research was conducted through a survey distributed within the organisations, with 420 questionnaires administered and 372 valid responses collected. Factors examined were turnover intention, job satisfaction, organisational commitment, HR policy effectiveness, and sector-specific retention issues. Statistical Description and Correlation analyses (means, standard deviations) between variables were performed using Statistical Package for Social Sciences (SPSS). Results indicated moderately high levels of organisational commitment, although job satisfaction was somewhat more variable, with recognition and work–life balance as among the weaker areas. The turnover intention remained a risk, especially in situations where competitive external labour markets exerted strong pull forces. Of particular significance was the finding that strategic, risk-based HR interventions, such as succession planning, risk-informed wellbeing programmes, and targeted retention packages, have a significant influence on staff retention outcomes. The study also finds that high-risk environment organisations need to prioritise risk-based, strategic HR policies not only to address turnover but also to achieve resilience, continuity and competitive advantage in an increasingly turbulent labour market.

Keywords: Workforce Turnover, Risk Management, Job Satisfaction, Organisational Commitment, Retention Strategies, High-Risk Industries

INTRODUCTION

High-risk industries like healthcare, oil & gas, and aviation are most often confronted with issue of employee turnover. These industries are distinguished by variable working conditions, heightened safety concerns, long working hours, and high workplace stress. These factors play major role in determining employee discontent and turnover considerably. As talented employees leave the industry, Gevorkian (2025) observes that the few who remain face increased pressure due to heavier workloads.

In recent times, Nigerian health administrators have expressed serious concerns about the outflow of health workers, particularly from institutions such as the University of Port Harcourt Teaching Hospital (UPTH), to foreign nations (Raufu, 2002). Some of the primary reasons cited by these health professionals, including physicians, nurses, and paramedical personnel, for the mass exodus include, but are not limited to, poor working conditions, inadequate remuneration, and limited opportunities for career advancement. This has resulted in the annual loss of a substantial number of skilled workers in this sector due to migration and fatigue, jeopardising service delivery and patient care (Osigbesan, 2021).

Similarly, in the petroleum and natural gas industry, as reflected in corporations such as Brightwaters Energy Limited, there is a high personnel turnover rate due to the hazardous nature of operations, an uncertain political situation, and the worldwide poaching of technical talent despite the high wages employees receive annually. Most importantly, the industry's cyclical structure as well as pressures to performance optimally, ageing workforce, market volatility like fluctuations in oil and gas prices, which affect investment choices, causing project delays and cancellations, impact staff morale and job security, contributing immensely to worker instability (Sumbal et al., 2017). Keeping these employees that are exceptionally qualified in the areas such as the upstream operations has become more challenging as global rivals provide more appealing work conditions and remuneration packages (Belanger et al., 2024).

In the aviation industry, citing the Port Harcourt International Airport as a case study, the rate at which both technical and operational workers leave the industry is compounded by such factors as unpredictable hours of work, increased security threats, and inadequate career advancement. Many times, employees feel dissatisfied when they work longer hours than necessary arising from flight delays and maintenance issues. The aviation sector is likewise under constant pressure to satisfy worldwide safety and regulatory requirements despite a shrinking workforce. This setting has highlighted the inadequacies of standard HR strategies for managing employee expectations and risks.

Considering the high costs expended when the industry loses qualified staff in terms of recruitment, training, and operational disruptions, organisations in these sectors must strategically implement risk management approaches that are advantageous to the industry and also match the HR policies with the particular risk factors of the workplace environment. It is pertinent to emphasise that excellent retention tactics are no longer negotiable; rather, they are critical to maintaining performance and institutional resilience in high-risk businesses.

Statement of the Problem

Organisations operating in high-risk sectors struggle to retain their workforce due to elevated stress levels, safety hazards, and unpredictable working conditions. Despite increased awareness of these issues, numerous companies continue to implement general or reactive Human Resource (HR) policies that fail to address the specific challenges that can hinder employee retention (Kwong et al., 2021). The disparity between HR practices and risk exposure has resulted in a continuous loss of personnel, decreased productivity, and increased operating costs, particularly in high-risk sectors such as healthcare, oil and gas, and aviation.

The Nigerian health sector has experienced a significant loss of personnel, particularly among medical professionals seeking more favourable working conditions abroad. The turnover can be attributed to inadequate management by both previous and current leaders, insufficient compensation, employee burnout, and limited opportunities for professional growth (Osigbesan, 2021). Similarly, in the oil and gas sector, companies such as Brightwaters Energy Limited face challenges retaining experienced employees, who are frequently drawn to international firms that offer more competitive salaries and safer working conditions (Zeb-Obipi & Momodu, 2021). Lastly, the Port Harcourt International Airport, as a component of the aviation sector, faces challenges related to employee dissatisfaction stemming from erratic scheduling, security concerns, and insufficient opportunities for professional advancement. This results in increased employee turnover rates (Kazaishvili et al., 2024; Stanfast, 2028).

Risk management is increasingly significant in operational planning. However, it is frequently absent in HR plans designed to retain employees. The lack of strategic alignment between HR policies and the specific risk environment of these industries consistently undermines organisational performance and employee sustainability (Filemon et al., 2024). This study, therefore, aims to assess the incorporation of strategic risk management within HR strategies to effectively mitigate staff turnover in high-risk sectors in Nigeria.

The objectives of the study are to: (1) examine the primary risks of high employee turnover that make it hard to keep workers in the healthcare, oil & gas, and aviation industries, (2) assess the current HR policies at the chosen companies and see how well they deal with the risks of turnover, and (3) investigate the extent strategic risk management principles are integrated into HR policy frameworks in these high-risk industries.

Scope of the Study

The study primarily targets high-risk sectors, particularly organisations operating within healthcare, oil and gas as well as aviation sectors. While the data was based on a selected organisation, the study is conceptualised to provide insights applicable to similar organisations facing workforce turnover risks. The focus area highlights the strategic risk management principles with HR policies to avoid talent loss. The selected industries are characterised by high dynamics, critical-safety environments and severe competition for qualified skilled labour. As a result, this study should yield generalisable results to high-risk industries, in which retention of a skilled workforce is central to organisational stability and performance.

Significance of the Study

There are several theoretical or practical implications that need to be considered in this research. Firstly, by integrating strategic risk management into human resource management, it serves to complement some earlier studies. High-risk industries, however, remained largely unresearched as previous studies primarily focused on employee abandonment or isolated HR activities. They rarely examined the integration of strategic risk concepts into HR policies to stabilise the workforce. On the basis, this research creates a conceptual framework that (a) hones academic understanding of the sustainable workforce in an extremely volatile work environment; and (b) gives guidance for future studies.

Secondly, the investigation offers practical guidance to public organisations in such high-risk sectors as healthcare, oil and gas and aviation. Port Harcourt Teaching Hospital for example, may use it to suggest measures for addressing medical staff turnover and improving service quality. Brightwaters Energy Limited stands to benefit from more refined talent management techniques in a worldwide competitive environment. Given its vulnerability to staff disaffection, Port Harcourt International Airport will gain a better understanding of employee satisfaction in modern times.

Lastly, the study shows policymakers and personnel managers that high employee turnover is caused by bigger flaws in the system that may be better understood on-site. At the same time, it suggests the earliest possible measures for enhancing organisational resilience and engendering employee loyalty.

LITERATURE REVIEW

Conceptual Review

Strategic Risk Management

Strategic risk management is the process of identifying, assessing, and reducing risks to the workforce in a planned way, using proactive HR policies and practices to ensure organisational continuity and performance, with the aim of realising an organisation’s long-term strategic objectives (O'Reilly, 2023; Ramos, 2024). In HR, it refers to anticipating the threat to workforce stability like turnover, skill shortages, succession gaps and building risk management strategies to mitigate the risks (Okoye & Odo, 2021). Unlike legacy risk management, which is reactive, strategic risk management is proactive and involves combining HR policies with organisational resilience planning, as implicit in HR policies and strategic risk management (Ogunyomi & Bruning, 2022).

Talent Retention

Talent retention is the capacity of an organisation to maintain skilled employees and reduce voluntary turnover. It means practices aimed at keeping the employees happy, motivated and committed to the organisation for a long period (Akinwale & George, 2020). Retention strategies are usually comprised of attractive pay and fringe benefits, career advancement, training and development, conducive work environment, among others (Oluwafemi & Anyiam, 2021). Recurrent guidelines on employee retention is vital for high-risk industries where the loss of skilled employees could lead to serious setbacks in operation and escalating operational risk (Ikechukwu & Okezie, 2021).

Voluntary Attrition and Its Determinants

Voluntary attrition means exit of employees from an organisation as a result of voluntary decisions, rather than initiated at the behest of an employer. This usually happens when an employee quits a job, due to career opportunities, low pay scale, lack of growth opportunity or work-life balance issues or undesirable working conditions. This especially result in the loss of skilled and experienced personnel which adversely influences organisational performance, productivity, and knowledge continuity (Hom et al., 2017). Voluntary attrition at high levels is often seen as a sign of problems within the organisation, with poor HR policies, lack of employee engagement or external labour markets competing well (Hausknecht & Trevor, 2011). As a result, organisations utilise more strategic HR and risk management approaches to be able to identify and eliminate voluntary turnover risks.

HR Policy Effectiveness

This measures the effectiveness of organisational human resource policies in terms of employee attitudes, behaviour and retention outcomes. Well-balanced HR policies incorporate fair compensation, career development opportunities, training and effective performance management in addition to employee wellbeing activities that enhance job satisfaction and organisational commitment. When implemented effectively, these policies lead to lower retention intentions and greater workforce stability. On the other hand, ineffective or poorly implemented HR policies lead to dissatisfaction and voluntary attrition. Consequently, the effectiveness of HR policy emerges as an important operational variable for assessing whether strategic HR practices will help reduce workforce turnover risk in high-risk industries (De Winne et al., 2019; Onyango & Omwenga, 2024).

Integration of Strategic Risk Management into HR

The integration of Strategic Risk Management into HR entails incorporating workforce risk identification, succession planning, and mitigation actions into HR frameworks. This allows organisations to proactively manage talent gaps, mitigate turnover exposure and improve workforce resilience and organisational continuity in most at-risk industries (Gillam, 2023; Aguinis & Burgi-Tian, 2021).

Job Satisfaction

Job satisfaction is defined as the overall degree of positive feeling employees have about their jobs, such as recognition received, work conditions, career development opportunities and an adequate balance of work–life. It is an operational variable that measures the extent to which positive job experiences affect employee retention and reduce turnover intention. Higher levels of job satisfaction are found to promote better organisational commitment and productivity whereas lower levels lead to increased rates of voluntary attrition, especially in high-risk industries (Judge et al., 2022; De Winne et al., 2023).

Organisational Commitment

Organisational commitment is the state of psychological and emotional attachment, loyalty and willingness of an employee to remain with an organisation. It is an operational variable that assesses the degree to which employees feel emotionally invested in, identify with organisational objectives and intend to remain with the institute. A strong commitment to the organization reduces the desire to leave and make it easier to keep workers, especially in high-risk sectors where performance needs to be stable and service needs to be consistent (Meyer et al., 2012; Park & Shaw, 2012). This support is critical in high-stakes industries where maintaining a stable workforce facilitates sustaining performance levels (Yanto & Yandi, 2020).

Strategic HR Risk Management Interventions

Strategic HR risk management interventions are proactive human resource processes undertaken to identify warning signs or markers in the workforce that preclude a risk event from materialising, thereby impeding employee retention. These interventions are risk-based succession planning, cross-training, targeted retention packages and wellbeing programmes specific to high-risk work environments. Such strategies reinforce

workforce stability, lower turnover intention, and contribute to operational and service continuity in organisations prone to operational or safety risks by aligning human resource policies more closely with organisational risk management (Sari et al., 2025; De Winne et al., 2023).

Sector-Specific Retention Challenges

Sector-specific retention challenges encompass elements inherent to industries that directly influence employee retention, including hazards, task availability and intensity, irregular scheduling, and competitive labour markets. These difficulties affect employees' turnover intentions and need the formulation of targeted initiatives within human resources, particularly for high-risk organisations in oil and gas, aviation, and healthcare. Challenges peculiar to sectors are most effectively addressed through customised policies that boost job satisfaction and organisational commitment, thereby enhancing workforce stability (De Winne et al., 2023; Mwanthi, 2018).

HR Practices and Retention Related Policies

Human error and turnover carry significant operational ramifications in high-risk industries, especially oil and gas, healthcare, and aviation, which is why Strategic Risk Resources (SRM) focuses heavily on HR practices and retention-related policies. Well-defined HR processes like structured recruitment, continuous training, as well as performance management and remuneration system, reduce risks associated with the workforce and contribute to organisational stability. Okoye & Odo (2021) maintain that retention policies, leadership career development programs and succession planning interventions, as well as employee engagement strategies that address the loss of skilled employees, are critical in safety-sensitive environments. These practices serve as preventative controls, reducing operational weakness and enhancing resilience in SRM terminology. Studies show that companies with strong HR retention strategies have lower turnover rates and better safety performance (Guest, 2017; Boxall & Purcell, 2022; Uzonwanne & Eze 2022).

Importance of Strategic Risk Management in Human Resources (HR)

Since organisations are constantly confronted with complex issues such as high employee turnover, talent shortages, and unexpected external conditions, human resources (HR) must transform from a mere administrative role to a strategic collaborator that has the capability of predicting and reducing people-related risks in any organisation (Kess-Momoh et al., 2024). Consequently, strategic risk management in HR become very critical for guaranteeing workforce stability, organisational resilience, and long-term competitive advantage, particularly in turbulent and high-risk sectors.

Gallow (2022) and Faugoo (2024) assert that HR is categorised as one of most valuable assets any organisation can possess. This position makes it very critical in areas relevance and comparability for the organisations to pay more attention to its management. Where this is completely neglected, may result in high probability of costly disruption of activities in the organisation. Strategic risk management will provide opportunity for HR professionals to recognise possible dangers seamlessly as to guarantee that workers are retained in the organisation (Adagbabiri & Okolie, 2020; Odunayo & Adegbie, 2020). These threats encompass such variables as employee unhappiness, insufficient remuneration structures, dangerous working conditions, or a lack of career progression possibilities. HR can avoid talent turnover, lower recruiting, onboarding, and lost in productivity costs by addressing these challenges proactively.

The repercussions of employee departures are significantly severe in sectors with elevated risks including healthcare, oil and gas, and aviation. These industries have major concerns in areas like safety, inefficiency in operation, and service delivery failures. Strategic human resource risk management ensures that organisations in these industries build resilience into their workforce planning by implementing policies like succession planning, skill development, mental health programs, and flexible work arrangements (Oyewole et al., 2024).

Furthermore, integrating HR strategy with organisational risk profiles enables decision-makers to prioritise investments in people-related systems and capacities, encouraging a culture of preparation and agility. As the external environment evolves, organisations that include strategic risk management into HR responsibilities

are better positioned to retain top personnel and maintain long-term success. Figure 1 shows the study's conceptual framework.

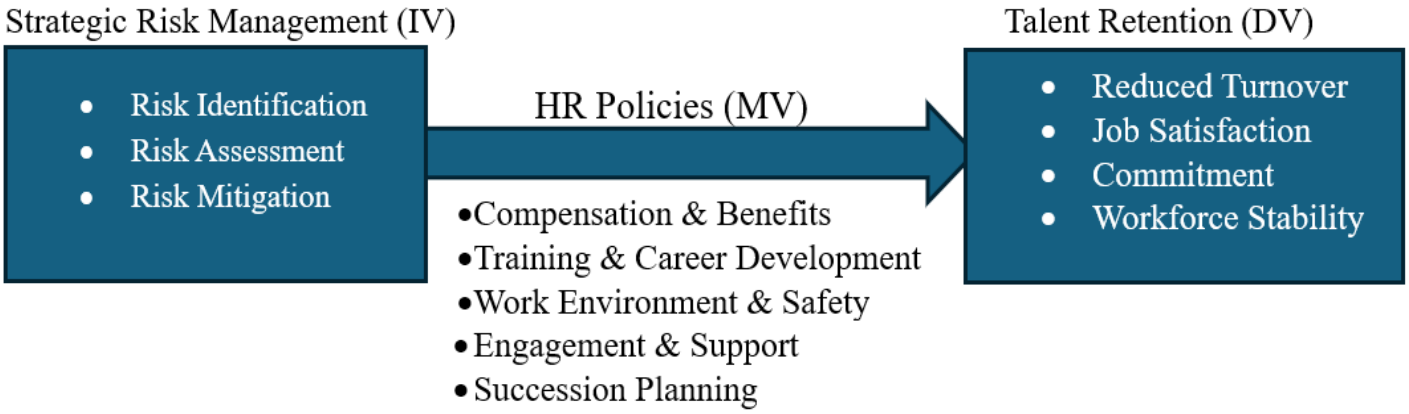

Figure 1: Conceptual Framework

Theoretical Framework

(a) Human Capital Theory

Human capital theory suggests that employees are the most important type of capital for organisational effectiveness (Ogunyomi & Bruning, 2022). It highlights the importance of hiring and investing in individuals that align with the organization's culture. According to this theory, investment in employees pays off with innovation, reduced turnover and increased productivity. For the purposes of this study, retention programs are needed in high-risk areas where talent is scarce and expensive to fill. It creates organisations where employees are considered strategic assets and demonstrates a history of investing in these types of programs, making such performance more likely to be sustainable.

(b) Risk Management Theory in HRM

Risk Management Theory focuses on the identification, assessment and management of risks that could threaten organisational objectives, including those associated with human resources (Hopkin, 2018). From an HR development perspective, the theory implies that turnover risk should be considered a risky operation and a strategic threat. Companies that include risk assessment in their HR policies can identify where their employees are most vulnerable and use their resources more effectively. They take steps ahead of time to keep employees from leaving by offering retention bonuses, health and safety programs, or leadership training.

Empirical Review

In the context of medicals (University of Port Harcourt Teaching Hospitals/UPTH). Recent empirical evidence reveals high and consistent turnover of health worker in modern healthcare systems throughout Nigeria and the world due to burnout, low wages, unsafe or under-equipped work surroundings and lack of promotion opportunities (Ren et al., 2024). Looking at Nigerian university teaching and other tertiary health institutions, Ajufoh et al. (2024) argued in their studies that favouritism, unfavourable working conditions, and attrition are among the few reasons why health professionals leave Nigeria. These studies underscore the fact that attrition of clinical workers will erode provision of services and increase recruitment and training costs for the institutions.

In the Oil and Gas (upstream sectors), empirical review and sectoral studies in Nigeria uncover skill-poaching, unsafe work environment and project-cycle employment as principal contributors for attrition in this industry (Eleogu et al., 2023). Additionally, studies reveal a substantial correlation between remaining with a multinational operator and competitive total rewards, explicit career pathways and targeted training for technological experts. They all contribute to the areas where domestic players frequently fail, increasing the

chance of turnover. Corporate announcements and industry documents also emphasis labour turnover, and the increasing importance of safety and wellness programmes in attracting prospects.

Empirical evidence of arbitrary scheduling of flights following the COVID-19 pandemic, fatigue, regulatory pressure, and market shocks (such as returning after the agony of a spread or crisis), resulted in higher attrition and labour shortages in ground handling, technical roles, and safety-critical jobs in the aviation industry globally and in Africa specifically (AFRAA. 2023). Retention poses a challenge due to the arduous nature of the labour and the allure of other industries. The pandemic has prompted numerous employees to reassess their professional objectives and prioritise work-life balance, compensation, and organisational culture. Furthermore, as a significant portion of the trained aviation workforce approaches retirement age, measures must be implemented to address the skills gap and facilitate knowledge transfer for the industry to survive (Daglish, 2024,)

Cross-National and Local Comparative Perspectives

Comparing cross-sector and cross-national perspectives exposes both commonalities as well as sector specific patterns. Typical drivers such as perceived low compensation, career stagnation, safety, fatigue and work–life balance issues, cut across healthcare, oil & gas and aviation industries. These are featured in both international meta-analyses and African studies (Ren et al., 2024). However, sectoral disparities are significant for policy formulation. Healthcare attrition is evidently linked to burnout and migration patterns, the oil and gas sector is shaped by global labour markets and project-based contracting, while aviation is predominantly influenced by regulatory safety culture and scheduling methodologies (Ren et al., 2024; Arzahan, 2022; AFRAA, 2023). This research indicates that standard methods to retain employees (such as compensation and training) can be beneficial, yet industry-specific HR strategies aligned with risk profiles are more effective.

Gaps in the Literature

The recent empirical literature has highlighted three important gaps. First, the integrated empirical research examining how a strategic risk management framework is implemented in HR policy designed to curtail turnover (that is, retention and risk as opposed to two independent systems) has yet been scarce. Second, there is a paucity of case-based empirical studies on large Nigerian organisations (e.g., UPTH, Brightwaters Energy Limited and Port Harcourt International Airport) that integrates the analysis of HR policies, employee perceptions, and organisational risk assessments. Much of the indigenous literature has been descriptive or fragmented along the line of economic sub-sector. Third, although safety culture and fatigue management have been widely reported in the line of inquiry globally, insufficient evidence exists on the effectiveness of specific risk-based HR interventions (e.g., tailored succession planning linked to high-risks, retention pay tied to operational risk exposure) in the context of Nigeria's high-risk sector. These gaps warrant a comparative cross-institutional mixed-methods case study as suggested in this research.

Hypotheses Development

The following hypotheses are developed for the study:

H_{o1}: There are no major concerns of employee turnover that might impair employee retention in the healthcare, oil & gas, and aviation industries.

H_{o2}: The HR policies that are already in place at the chosen organisations are not effective in addressing workforce turnover risks.

H_3: There are no major differences in organisations' retention problems and sector-specific methods.

METHODOLOGY

A quantitative cross-sectional research design was employed to examine strategic risk management in the context of talent retention in high-risk industries. This design was suitable for collecting standardised data and applying statistical analyses to assess the associations among workforce turnover risk factors, HR policy

effectiveness measures, strategic HR practices, and retention outcomes. The population consists of staff from three organisations: University of Port Harcourt Teaching Hospital, Brightwaters Energy Ltd, and Port Harcourt International Airport, including clinical, technical, administrative, and support staff such as doctors, nurses, engineers, pilots, administrative staff, and support personnel. Cochran's formula indicated that a sample size of 420 respondents was required, of which valid responses from 372 people were used for analysis which was an acceptable response rate.

A structured questionnaire was developed using existing literature on HR policy effectiveness, workforce turnover risk, job satisfaction, organisational commitment and strategic HR risk management interventions. The instrument consisted of three parts: demographic characteristics, key study constructs measured with five-point Likert scale (from strongly disagree to strongly agree). Surveys were conducted directly with respondents at the three organisations. To sure that the questionnaire was valid, experts in human resource management and organisational behaviour looked over the items to guarantee that they were clear, relevant, and adequate. Before the final administration of surveys, their recommendations were also included. Cronbach's alpha was used to assess instrument reliability. The total reliability coefficient was 0.88 and the individual constructs varied between 0.80 to 0.89, thereby exceeding the minimum acceptable level of 0.70. This suggests a satisfactory internal consistency of the instrument and ensured that the data collected is valid, reliable and statistically analysable.

METHOD OF DATA ANALYSIS

Descriptive and inferential statistical methods were used to analyse data from 372 usable questionnaires. Descriptive statistics (frequencies, percentages, means and standard deviations) summarised respondents' demographic characteristics and the distribution of responses for the study constructs including workforce turnover risks, HR policy effectiveness, integration of strategic risk management, sector-specific retention problems, and strategic HR interventions. Mean scores for participants were assessed for each item and interpreted using a five-point Likert scale to categorise the level of agreement.

Chi-square, Analysis of Variance (ANOVA), and regression analysis were used to test the study hypotheses. Chi-square tests were employed to explore associations between categorical variables and whether perceptions related to turnover differed statistically across the three sectors. In assessing sector-specific retention challenges and strategies, a one-way ANOVA was employed to compare the mean responses of employees in the healthcare, oil & gas, and aviation sectors. In addition, multiple regression analysis was performed to assess the predictive power of strategic factors of HR risk management, effectiveness of HR policies and turnover-risk factors on retention outcome measures (turnover intention, job satisfaction and organisational commitment). All hypotheses were tested at the 0.05 level of significance using the Statistical Package for the Social Sciences (SPSS), and results are presented in Table 3 for clarity and interpretation. Hence, these analytical techniques were suitable for exploring relationships, differences, and predictive effects.

Data Analysis

Results were structured by research questions, which underscored sectoral disparities, relationships between variables, and the impact of strategic HR risk management.

Descriptive Analysis of Data

Table 1: Distribution of Sample Demographics (n = 372)

Variable	***Category***	***Count***	***Percentage (%)***
Gender	Male	210	56.5
	Female	162	43.5
Age	20–30	80	21.5
	31–40	120	32.3
	41–50	100	26.9
	51+	72	19.4

Qualification	BSc/HND	160	43.0
	MSc	100	26.9
	PhD	50	13.4
	Others	62	16.7
Years of Service	1–5	140	37.6
	6–10	100	26.9
	11–15	72	19.4
	16+	60	16.1
Employment Type	Permanent	283	76.1%
	Contract	89	23.9%

Source: Researchers' Computation based on data collected (2026)

From Table 1, of the 372 respondents, 210 (56.5%) were male, and 162 (43.5%) were female. The sample is slightly skewed toward males, but not excessively so; hence, it offers insights into both gender views within high-risk industries. The age distribution shows that 80 (21.5%) were aged 20–30 years, while 31 - 40 years had the largest proportion of respondents (120, 32.3%). This is followed by 41–50 years, with 100 respondents (26.9%). Those aged ≥51 years represented 72 (19.4%). This suggests that the majority of the respondents are of active working age, which is a good indicator of sufficient experience to evaluate HR policies and retention efforts. Most of the participants (160; 43.0%) had BSc/HND, followed by MSc (100; 26.9%), PhD (50; 13.4%) and others (62; 16.7%). This indicates that the respondents are well educated and thus likely to provide credible responses regarding strategic HR and risk management practices. In the case of years of service, the largest group was respondents with 1–5 years of service (140; 37.6%), followed by 6–10 years (100; 26.9%), and then respondents with between 11–15 years of experience (72; 19.4%), and finally those with ≥16 years of experience (60; 16.1%). This indicates that many respondents are early- to mid-career employees. Those at that stage in their careers tend to be more sensitive to retention challenges and the threat of turnover. The majority of respondents (283; 76.1%) were permanent staff, and 89 (23.9%) were contract staff. The vast majority of respondents have stable employment relationships, so their perspectives are useful in evaluating longer-term retention approaches.

The demographic profile of respondents depicts experienced, educated individuals who are primarily permanent employees, a characteristic that will provide reliable insight into workforce turnover risks in high-risk industries and the effectiveness of projected HR policies. This diversity in age, qualification and years of service also improved the generalisability of study findings across healthcare, oil and gas and aviation sectors.

Table 2: Distribution of Sample Demographics by Organisation (n = 372)

Organisation	***Category***	***Count***	***Percentage (%)***
UPTH	Doctors	50	13.4
	Nurses	60	16.1
	Academic Staff	22	5.9
	Non-Academic Staff	20	5.4
Brightwaters Energy Ltd	Engineers/Technical Staff	60	16.1
	Administrative Staff	40	10.8
	Support Staff	20	5.4
PHIA	Pilots/Air Crew	20	5.4
	Ground Engineers	30	8.1
	Admin Staff	30	8.1
	Support Staff	20	5.4

Source: Researchers' Computation based on data collected (2026)

The respondents are evenly distributed across organisations, as seen in Table 2, with a balanced representation of the three high-risk industries. Hence, validating the comparative analysis. For the healthcare sector (UPTH), nurses formed the largest group with 60 respondents giving 16.1%; followed by doctors with 50 respondents

giving 13.4%. Academic staff (22, 5.9%) and non-academic staff (20, 5.4%). This indicates that the clinical personnel constitute the majority of the workforce, given the organisational framework of teaching hospitals. In the oil and gas sector (Brightwaters Energy Ltd), engineers/technical staff had the highest response rate, with 60 respondents (16.1%), followed by administrative staff, 40 (10.8%), and support staff, 20 (5.4%). This means that there is a very high concentration of technically skilled employees in the workplace. In the aviation sector (PHIA), there were 30 (8.1%) ground engineers and administrative staff respondents, while pilots/aircrew and support staff each accounted for 20 (5.4%). This indicates a balanced distribution between operational and support positions in the aviation sector.

In summary, the distribution indicates that the sample achieved overall core operational representation across the three sectors, providing confidence that finding on strategic HR risk management and retention challenges are based on respondents who have direct influence over high-risk work environments.

Table 3: Distribution for Perceived Workforce Turnover Risks

Item	***Strongly Disagree (1)***	***Disagree (2)***	***Neutral (3)***	***Agree (4)***	***Strongly Agree (5)***	***Mean***	***SD***
High workload → turnover	25	47	58	140	102	3.7	1.1
Poor compensation/ benefits → turnover	18	42	52	150	110	3.9	1.0
Lack of career development → turnover	30	60	55	135	92	3.6	1.1
Inadequate work–life balance → turnover	22	55	60	140	95	3.7	1.0
Job insecurity → turnover	40	65	70	120	77	3.4	1.2

The mean score in Table 3 for poor compensation and benefits was the highest (M = 3.9, SD = 1.0), indicating that employees view financial rewards as a most salient turnover risk. Job demands, akin to pressure and workload (M = 3.7) as well as work–life balance (M = 3.7), received high scores, indicating that stress and job demand constitute significant retention concerns. Job insecurity (M = 3.4) and lack of career advancement (M = 3.6) were the least severe risks. However, it is important to emphasise that these figures remained significant. The Mean of all five items = 3.66, which suggests a moderate-to-high turnover risk perception level among participants. By implication, policy makers within these establishments may take into account, incentives of competitive pay, acceptable workloads and professional development as part of HR efforts aimed at minimising turnover in high-risk sectors

Table 4: Distribution for HR Policy Effectiveness (N = 372)

Item	***Strongly Disagree (1)***	***Disagree (2)***	***Neutral (3)***	***Agree (4)***	***Strongly Agree (5)***	***Mean***	***Std. Dev.***
Compensation & benefits are adequate	42 (11.3%)	78 (21.0%)	90 (24.2%)	102 (27.4%)	60 (16.1%)	3.16	1.21
Promotion & career procedures fair	36 (9.7%)	66 (17.7%)	108 (29.0%)	114 (30.6%)	48 (12.9%)	3.19	1.10
Training & development sufficient	30 (8.1%)	54 (14.5%)	96 (25.8%)	132 (35.5%)	60 (16.1%)	3.37	1.12
Mental health & wellbeing support	54 (14.5%)	96 (25.8%)	96 (25.8%)	90 (24.2%)	36 (9.7%)	2.89	1.17
Safety protocols enforced	18 (4.8%)	42 (11.3%)	78 (21.0%)	138 (37.1%)	96 (25.8%)	3.68	1.07
Appraisal linked to rewards	48 (12.9%)	78 (21.0%)	84 (22.6%)	108 (29.0%)	54 (14.5%)	3.11	1.21

The distribution of HR policy effectiveness in Table 4 shows that adequate compensation and benefits package have Mean of 3.16. This implies moderate satisfaction or less, indicating that there was risk of turnover among employees. The Promotion and Career Development aspect received a mean score of 3.19, however there is room for improvement in transparency. Training and Development showed Mean of 3.37. This underscores higher degree of favourable evaluation, suggesting that training and development opportunities moderately improve retention. The Mental Health and Wellbeing assessment yielded a mean score of 2.89, reflecting inadequate assessments and highlighting a deficiency in HR policy assistance. The safety protocols and

protection measures are rated with a mean of 3.68. This sector is vital, making oil and gas, as well as aviation, the most critical components that require enforcement. Performance appraisal processes, rewards and development showed Mean of 3.11, confirming that staff are undetermined, which suggests that there is no strong correlation between performance reviews and rewards. In general, HR policies in these high-risk fields work relatively well, but mental health assistance, pay, and evaluation systems are weak points that could lead to people leaving the organisations.

Table 5: Responses for Integration of Strategic Risk Management into HR (N = 372)

Item	***Strongly Disagree (1)***	***Disagree (2)***	***Neutral (3)***	***Agree (4)***	***Strongly Agree (5)***	***Mean***	***Std. Dev.***
Workforce risks systematically identified	30 (8.1%)	60 (16.1%)	84 (22.6%)	132 (35.5%)	66 (17.7%)	3.38	1.14
HR policy guided by risk assessments	42 (11.3%)	72 (19.4%)	78 (21.0%)	120 (32.3%)	60 (16.1%)	3.23	1.20
Succession planning risk-based	48 (12.9%)	84 (22.6%)	90 (24.2%)	102 (27.4%)	48 (12.9%)	3.05	1.18
Risk mitigation integrated into HR (cross-training, rotation)	24 (6.5%)	60 (16.1%)	78 (21.0%)	132 (35.5%)	78 (21.0%)	3.48	1.13
HR policy evaluated with risk-focused KPIs	42 (11.3%)	78 (21.0%)	90 (24.2%)	108 (29.0%)	54 (14.5%)	3.14	1.18
Little coordination between HR & Risk Management	54 (14.5%)	84 (22.6%)	96 (25.8%)	90 (24.2%)	48 (12.9%)	2.98*	1.20

*Mean is **reverse-coded**. After recoding, the mean = **3.52**, suggesting relatively good coordination.

In Table 5, the overall findings indicate that organisations have a moderate level of strategic risk management integration into their HR practices. The workforce risk identification (M = 3.38) study suggests that, despite the fact that a small number of organisations were able to claim that they systematically identify workforce risks, a portion of the population expressed some disagreement with this assertion. This suggests that there may be challenges in the development of an advance register for informing and maintaining formal workforce risk registers. Also, the moderate level of integration in risk-informed HR policy development (M = 3.23) suggests that the guidance from organisational risk assessments is not consistently applied to HR planning. Succession planning (M = 3.05) has the lowest mean, indicating that numerous critical roles are not identified or safeguarded in a systematic manner, rendering them susceptible to abrupt staff departures. Conversely, the maximal mean value of risk mitigation practices (M = 3.48) suggests that operational practices such as job rotation and cross-training are more prevalent in industry-centric, technologically advanced domains of work in general. The risk-based HR evaluation (M = 3.14) remained weak, suggesting that organisations do not frequently evaluate the efficacy of HR policy using risk-focused indicators.

However, the co-ordination between HR and risk management units (recoded M = 3.52) appears to indicate a moderate level of collaboration, while some respondents to the query expressed neutrality, which could suggest a variation across sectors. The results indicate that, despite the existence of some operational risk mitigation measures, there is a lack of a systematic approach to HR planning at the organisational level in relation to risks.

Table 6: Sector-Specific Retention Challenges & Strategies (N = 372)

Item	***Strongly Disagree (1)***	***Disagree (2)***	***Neutral (3)***	***Agree (4)***	***Strongly Agree (5)***	***Mean***	***Std. Dev.***
Safety culture determines retention	18 (4.8%)	42 (11.3%)	66 (17.7%)	144 (38.7%)	102 (27.4%)	**3.73**	1.05
Competitive external labour markets stronger pull	24 (6.5%)	54 (14.5%)	72 (19.4%)	132 (35.5%)	90 (24.2%)	**3.56**	1.11

Sectoral work patterns uniquely affect retention	18 (4.8%)	36 (9.7%)	84 (22.6%)	138 (37.1%)	96 (25.8%)	**3.70**	1.04
Sector-specific retention programs exist	36 (9.7%)	72 (19.4%)	96 (25.8%)	114 (30.6%)	54 (14.5%)	**3.20**	1.14
Sector-specific training retains critical staff	30 (8.1%)	60 (16.1%)	84 (22.6%)	126 (33.9%)	72 (19.4%)	**3.41**	1.13
Good cross-sector learning exists in organisations	42 (11.3%)	90 (24.2%)	108 (29.0%)	84 (22.6%)	48 (12.9%)	**3.01**	1.16

The results in Table 6, suggest that safety culture constitutes an important aspect influencing employee retention, as evidenced by the high mean score (M = 3.73). This shows that most of the respondents concurred that safe working environments contribute to their decision to remain. Likewise, sectoral work patterns (M = 3.70) and competitive external labour markets (M = 3.56) were identified as significant turnover drivers, suggesting that retention across sectors is influenced by schedules, project cycles, and external opportunities. Notwithstanding, Sector-specific retention programmes, received relatively low mean (M = 3.20), which demonstrates that such practices were present but rather superficial across the organisations. Although, participants were cognisant of areas that required improvement; however, there was a moderate degree of agreement (M = 3.41) that sector-specific training facilitated their retention of the information they had acquired.

Of these, the mean score relating to cross-sector learning was lowest (M = 3.01), suggesting that organisations do not work effectively together in terms of sharing successful retention practices. Overall, the findings indicate that while operational risks drive retention; formal retention strategies and inter-sector learning were relatively weak, identifying a need for more advance structure in risk-based HR interventions.

Table 7: Sector-Specific Retention Challenges & Strategies By Sector (Mean Scores)

Item	***UPTH (Healthcare)***	*Brightwaters Energy Ltd* ***(Oil & Gas)***	***PHIA (Aviation)***	***Overall Mean***
Safety culture determines retention	**3.55**	3.80	**3.85**	3.73
External labour markets stronger pull	3.30	**3.95**	3.45	3.56
Work patterns uniquely effect retention	3.40	3.85	**3.85**	3.70
Sector-specific retention programs exist	2.95	**3.50**	3.15	3.20
Sector-specific training retains staff	3.10	**3.70**	3.45	3.41
Cross-sector learning exists	2.85	3.15	3.05	3.01

Retention challenges by sector (health-care, oil and gas, aviation) are shown in Table 7. In all sectors surveyed, safety culture peculiarities were aligned with high mean scores of 3.73. This indicates that they are related to retention in high-risk environments where safety is paramount. Oil and gas had the highest external labour market competition with mean = 3.95, suggesting stronger attraction variables for multinational opportunities. Patterns of work unique in their effect on retention were also more pronounced in oil and gas and aviation (M = 3.85 each) than in healthcare (M = 3.40), reflecting how shifts and operational scheduling can affect those working in these sectors. Sector-specific retention programmes were strongest in oil and gas (M = 3.50) and weakest in healthcare (M = 2.95). Likewise, sector-specific training (M = 3.70) in oil and gas was higher compared to healthcare (M = 3.10). Weak collaboration between sectors meant that cross-sector learning scores the lowest across all three sectors. Conclusively, the results show that there are vast discrepancies in retention challenges across sectors, with oil and gas having significantly stronger retention structures than the other organisations, with less security in healthcare. This is confirmed in the H_3, of Table 3 above.

Table 8: Strategic HR Risk Management Interventions (N = 372)

Item	***Strongly Disagree (1)***	***Disagree (2)***	***Neutral (3)***	***Agree (4)***	***Strongly Agree (5)***	***Mean***	***Std. Dev.***
Risk-based succession planning reduces turnover	18(4.8%)	42 (11.3%)	66 (17.7%)	150 (40.3%)	96 (25.8%)	3.71	1.03
Linking compensation to risk exposure improves retention	24(6.5%)	54 (14.5%)	72 (19.4%)	132 (35.5%)	90 (24.2%)	3.56	1.10
Cross-training & job rotation reduce vulnerability	12(3.2%)	36 (9.7%)	72 (19.4%)	156 (41.9%)	96 (25.8%)	3.77	0.99
Risk-informed wellbeing programs improve retention	15(4.0%)	39 (10.5%)	66 (17.7%)	162 (43.5%)	90 (24.2%)	3.74	1.00
HR–Risk Management collaboration strengthens retention	18(4.8%)	42 (11.3%)	78 (21.0%)	150 (40.3%)	84 (22.6%)	3.66	1.04
Targeted retention packs are effective	30(8.1%)	54 (14.5%)	78 (21.0%)	132 (35.5%)	78 (21.0%)	3.47	1.12

These results from table 8 show strong approval for strategic HR risk management interventions as useful tools for achieving employees' retention. The highest mean (M = 3.77) was recorded for cross-training and job rotation, indicating that respondents believe that multi-skilling staff within the same role, or by rotating them to different roles (if one staff member in a critical role leaves their position), will prevent organisational vulnerability. In a similar vein, risk-informed wellbeing programmes (M = 3.74) and risk-based succession planning (M = 3.71) received high scores, as these initiatives suggest that proactive plans and employee support provide critical retention strategies. Moreover, this also appeared significant in HR–risk management collaboration with a mean score (M = 3.66) indicating that integration from the workplace perspective improved retention outcomes at high levels. Linking remuneration to risk exposure received moderate support (M = 3.56), indicating that risk-factor-driven financial incentives may improve retention. Nonetheless, out of all staff retention tactics, financial incentives are less effective than structural and developmental measures, as evidenced by the lowest mean level of satisfaction (M = 3.47), expressed by retention packs targeted every few months. Above all, holistic risk-based HR interventions are seen to be more effective than purely financial retention strategies.

Table 9: Outcome Measures — Turnover Intentions, Job Satisfaction, Organisational Commitment

Table 9A: Turnover Intention

Item	***Strongly Disagree (1)***	***Disagree (2)***	***Neutral (3)***	***Agree (4)***	***Strongly Agree (5)***	**Mean (M)**	**Std Dev (SD)**
Thinking about leaving the organisation within the next 12 months.	60 (16.1%)	75 (20.2%)	80 (21.5%)	95 (25.5%)	62 (16.7%)	3.06	1.29
Likely to look for a job in another organisation within the next year.	55 (14.8%)	82 (22.0%)	90 (24.2%)	85 (22.8%)	60 (16.1%)	3.04	1.27
Intend to stay with this organisation for the next two years. (Reverse-coded)	50 (13.4%)	65 (17.5%)	78 (21.0%)	105 (28.2%)	74 (19.9%)	3.23	1.28
Received a comparable offer from another organisation, I would consider leaving.	40 (10.8%)	58 (15.6%)	72 (19.4%)	110 (29.6%)	92 (24.7%)	3.42	1.23

Table 9A displays respondents' modest intention to leave. Workers expressed moderate agreement that they would think about leaving within the next 12 months (M = 3.06) and that they would probably look for another job (M = 3.04). This suggests that a sizable portion of workers are open to exploring other career options. The second measure of intention to stay, which was reverse coded, had a little higher mean (M = 3.23), suggesting

ambiguous commitment to the organisation. The statement with the mean score (M = 3.42) "If offered a comparable offer from another organisation, I would consider leaving", suggests that many employees would move if an opportunity is presented. The results generally indicate that external opportunities are the most significant organisational level driver of turnover risk.

Table 9B: Job Satisfaction

Item	***Strongly Disagree (1)***	***Disagree (2)***	***Neutral (3)***	***Agree (4)***	***Strongly Agree (5)***	**Mean (M)**	**Std Dev (SD)**
Overall, satisfied with my job.	32(8.6%)	55 (14.8%)	82 (22.0%)	120 (32.3%)	83 (22.3%)	3.44	1.19
Satisfied with the recognition I receive for my work.	45 (12.1%)	70 (18.8%)	88 (23.7%)	100 (26.9%)	69 (18.5%)	3.21	1.25
Satisfied with the balance between my work and personal life.	50 (13.4%)	72 (19.4%)	95 (25.5%)	90 (24.2%)	65 (17.5%)	3.13	1.26
Satisfied with my opportunities for professional growth.	40 (10.8%)	60 (16.1%)	90 (24.2%)	110 (29.6%)	72 (19.4%)	3.31	1.23

Table 9B displays result supporting moderate respondent job satisfaction. Overall job satisfaction proved to be the variable with the highest mean (M = 3.44) suggesting that employees were mainly satisfied in their jobs. Although a moderate degree of satisfaction with prospects for professional development (M = 3.31) suggests that workers can develop within the organisation. Meanwhile, employees' concerns regarding recognition (M = 3.21) and work-life balance (M = 3.13) were evident in their significantly lower mean scores. The work-life balance rating is below the average (3.27), which implies that the demands of high-risk sectors may extend into the personal lives of employees. Finally, according to the study, employees are generally content, but improvements in work-life balance and appreciation are needed to increase retention rates.

Table 9C: Organisational Commitment

Item	***Strongly Disagree (1)***	***Disagree (2)***	***Neutral (3)***	***Agree (4)***	***Strongly Agree (5)***	**Mean (M)**	**Std Dev (SD)**
Feel a strong sense of loyalty to this organisation.	28 (7.5%)	50 (13.4%)	80 (21.5%)	115 (30.9%)	99 (26.6%)	3.56	1.18
Recommend this organisation as a good place to work.	30 (8.1%)	55 (14.8%)	82 (22.0%)	110 (29.6%)	95 (25.5%)	3.49	1.20
Proud to be associated with my organisation.	25 (6.7%)	48 (12.9%)	75 (20.2%)	115 (30.9%)	109 (29.3%)	3.64	1.16
Working for this organisation for the foreseeable future.	35 (9.4%)	55 (14.8%)	85 (22.8%)	110 (29.6%)	87 (23.4%)	3.44	1.21

Average = 3.53

In all three sector, respondents' degrees of organisational commitment were moderately elevated as reflected in Table 9C. Workers expressed strong feelings of loyalty and pride in their work suggesting an optimistic emotional attachment to employers (M = 3.56). Similarly, the participants' high inclination towards recommending the organisation's culture as an excellent place for work was reflected in their responses (M = 3.49). Concerns regarding the intention to remain with the organisation in the near future (M = 3.44) were less pronounced, indicating doubt about potential advancement over time. In conclusion, the results indicate that while employees care about their work and uphold a sense of loyalty and pride in their organisation, this level of engagement may not always translate to retention over time as employees may transit elsewhere based on available opportunities.

Inferential Data Analysis

Table 10: Summary of Hypotheses Testing

Hypothesis	***Statement***	***Statistical Test***	***Test Value***	***p-value***	***Decision***
H_1	There are no major concerns of employee turnover that might impair employee retention in the healthcare, oil & gas, and aviation industries.	Chi-square	$\chi^2 = 18.64$	0.001	Reject H_0
H_2	The HR policies that are already in place at the chosen organisations are not effective in addressing workforce turnover risks.	Regression Analysis	$\beta = 0.42$, $t = 6.21$	0.000	Reject H_0
H_3	The three case study organisations do not have any major differences in retention problems and sector-specific methods.	One-way ANOVA	$F = 5.87$	0.003	Reject H_0

Table 10 summarises the hypotheses testing for this study. The H_1 outcome indicates a Chi-square value of difference ($\chi^2 = 18.64$: $p = 0.001$) thus rejecting the null hypothesis. This shows that significant turnover concerns are shared across the sectors including healthcare, oil and gas, and aviation. Hence, employees in these sectors are at risk to leave their organisations. In H_2, the regression analysis suggests that there is a significant correlation between HR policy effectiveness and employee retention ($\beta = 0.42$, $t = 6.21$, $p = 0.000$). Hence the null hypothesis is rejected and conclude that HR policies have a significant influence on retention outcomes but would still require improvements in order to avert turnover risks completely. Null hypothesis was also rejected for H_3 using one-way ANOVA ($F = 5.87$, $p = 0.003$). It suggests distinct retention challenges and sector-specific strategies for all the three organisations. In general, the results affirm turnover threats exist, HR policies make a difference and retention challenges differ by industry.

DISCUSSION OF FINDINGS

In conclusion, these results show that workforce turnover is still a concern in high-risk industries where moderate levels of turnover intention are reported by respondents but there appears to be comparatively high levels of organisational commitment. It implies that employees possess a degree of emotional commitment toward their organisations while staying open to other job opportunities. Such a result supports Human Capital Theory, which believes that employee's choice of workplace depends on their potential return to work (that is, the employment decision is based on expected benefits, prospects in the career line, and working state). Where these elements are inadequate, and even where commitment exists, employees may consider parting organisation. Recent studies show similar results claiming that employees in high-risk environments tend to be loyal but remain very responsive to labour-market options and pressures from the workplace.

It also demonstrated the intermediate degree of job satisfaction, together with low ratings for recognition and work–life balance. Our findings indicate that employee attitudes in high-risk sector workforce might be negatively impacted by operational demands, volatile schedules, and workload pressures. This finding is in line with former research pointing out that job stress and lack of recognition are the strongest predictors of voluntary turnover in safety-critical sectors. Relatively higher organisational commitment (surprisingly) was observed, which may be captured by professional identity, job security and esteem reasons (particularly in healthcare and aviation), persuading the employee to stay with moderate satisfaction.

The study also found that existing HR policy effectiveness only moderates, meaning current policies are addressing some retention problems but not all. Although safety measures and compensation systems were more or less in place, there were gaps in career development paths, training opportunities, and employee wellbeing. This aligns with prior studies showing that retention-related HR policies are generally compliance driven, not strategy oriented, and therefore potentially less effective in terms of workforce stability. Organisational factors (such as limited resources, bureaucratic fixity and sectoral operational constraints) may also account for moderate effectiveness.

Moderate scores were given for workforce risk identification and risk-informed HR planning, with succession planning emerging as the lowest scoring. It implies that organisations are aware of the workforce risks but fail to use them as an input in HR decisions. This finding affirms Risk Management Theory that focuses on early identification and risk mitigation to guarantee continuity. Yet increased ratings for cross-training and job rotation show that employers tend to favour near term operational mitigation tactics over more strategic workforce planning.

A significant disparity analysis across sectors was shown through the sector specific analysis. The primary driver of retention was found to be the culture around safety, especially in oil and gas and aviation. This finding reflects the dangerous nature of these sectors, where employee safety concerns directly affect the decision to stay or leave a company. External labour market competition was particularly prevalent in the oil and gas sector suggesting a proportionate pull factor from multinationals providing useful remuneration packages and mobility. This other phenomenon accounts for why the sector has been showing relatively stronger retention packages. Conversely, healthcare organisations documented less rigorous sector-specific retention strategies and training programs which could be attributed to limited funding, skill shortages, and elevated service demand. Such foundational struggles might not allow healthcare institutions the space to put in place a full-spectrum retention strategy.

The results also show significant support for strategic interventions on HR risk management. Cross-training, wellbeing programs and risk-based succession planning were rated as effective ways to improve retention by respondents. Most interesting is that, targeted financial incentives were rated much lower than other non-financial practices, believing money alone cannot keep anyone in a high-risk job (to some extent). This confirms recent studies advocating for integrated retention strategies that include financial, developmental, and psychological factors. In addition to monetary benefits, employees seem to value (1) supportive work environments, (2) professional growth opportunities and (3) organisational stability.

In summary, the hypothesis testing validated that risks of turnover exist in the workforce; HR policy effectiveness influences retention; and retention-related challenges are sector-specific. This in turn confirms both Human Capital theory and Risk Management theory. Human Capital Theory can provide relevant insights for employee mobility and decision making, while Risk Management Theory reinforces the significance of proactive workforce planning process. The results therefore suggest that applying strategic risk management to HR practices improves retention, builds organisational resilience and underpins sustainable performance in hazardous industries.

Limitations Of The Study

This study has some limitations that need to be considered when interpreting the results. First, the sample was pulled from selected organisations in three high-risk industries (ie, healthcare, oil and gas and aviation), which may inhibit generalisability of results to other sectors or contexts of organisational type. While it is believed that the number of responses is sufficient to detect statistically significant differences, the sample size was adequate and organisations may vary in labour relations across broader industry settings.

Second, the study adopted a cross-sectional design in which respondents reported perceptions at a single time point. Such a design precludes the option of establishing causal linkages or query how the risk for turnover at any particular employee level and/or HR policy evolved over time. Longitudinal studies would offer more in-depth understanding of how strategic HR risk management practices impact retention outcomes.

Third, self-reported questionnaire data may be associated with response bias (eg, social desirability) and subjective perception of organisational practices. Despite the measures taken to guarantee anonymity, perceptions of respondents might not translate into actual HR policy being at play.

Notwithstanding these limitations, the study offers important perspectives related to strategic risk compensation and talent retention in high-risk areas.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study concludes that workforce turnover in high-risk industries is influenced by a combination of organisational practices, sector-specific conditions, and external labour market pressures. Although employees exhibited moderate levels of job satisfaction and relatively high levels of commitment to the organisation, intentions to leave were apparent when recognition, work–life balance and career development were perceived as poor. The results further showed retention struggles differ within healthcare, oil and gas and aviation industries. Strategic HR risk management interventions importantly, such as succession planning, cross-training, and wellbeing programs were shown to also improve retention. Thus, the study contends that adapting risk-oriented human resource policies are necessary for enhancing employee retention and organisational resilience.

Recommendations

In line with the results of this study, some suggestions are made in order to enhance talent retention for strategic risk-based HRM within high-risk organisations:

1. Critical roles should be identified by organisations as part of their workforce assessment, turnover risks forecasted and Human Resources (HR) management structures be brought in line with the enterprise risk management frameworks.

2. Establish plans of action for key posts on a systematic basis, so that no shocks be received from major staff changes. This is particularly important when individual roles may pose high risks of shock or break down if not carefully managed. Moreover, when people leave, such unexpected departure may be both difficult to plan for and disturbing at all levels in their departure's wake.

3. Develops wellbeing initiatives specifically tailored for each industry, look into flexible working arrangements and programs addressing both job stress and/ or burnout. This, particularly in the health and aviation sectors

4. Design retention approaches that are tailored to individual sectors and organisations. These include such things as danger allowances, channels for career advancement and well-funded remuneration scales which reflect the dangers of each industry.

5. Examine the facts regarding patterns in turnover. Maintaining tighter relationships between HR's department and those for risk management units will help HR make proactive decisions about loading. This will immediately add some consideration to their relationship and provide a solid foundation for future decisions.

REFERENCES

1. Adagbabiri, M. M. & Okolie, U. C. (2020). Human resource management practices and organisational performance: An empirical study of oil and gas industry in Nigeria. RUDN Journal of Public Administration, 7(1), pp. 53-69. https://10.22363/2312-8313-2020-7-1-53-69
2. Aguinis, H. and Burgi-Tian, J. (2021) Talent management challenges during COVID-19 and beyond: Performance management to the rescue. BRQ Business Research Quarterly, 24, pp. 233-240. https://doi.org/10.1177/23409444211009528
3. Ajufoh, U. S., Nwafili, A. K., & Okwuise, U. Y. (2024). Career trajectory and employees' retention in public university teaching hospitals in South-South Nigeria. African Journal of Management and Business Research (Afropolitan Journals), 15(1). https://doi.org/10.62154/xs4g1y73
4. Belanger, R., Carbone, G. & Fantaguzzi, I. (2024). Employee retention trends and challenges in the oil and gas industry. Retrieved July 16, 2025 from https://www.mckinsey.com/industries/oil-and-gas/our-insights/employee-retention-trends-and-challenges-in-the-oil-and-gas-industry
5. Boxall, P., & Purcell, J. (2022). Strategy and human resource management (5th ed.). London: Palgrave Macmillan

6. Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). London: Sage.
7. Daglish, M. (2024, September 24). Staffing and retention: Current challenges the business aviation industry is facing. Retrieved 25th March, 2026 from https://www.itic-insure.com/our-publications/the-wire/staffing-and-retention-current-challenges-the-business-aviation-industry-is-facing-159137/
8. De Winne, S., Marescaux, E., Sels, L., Van Beveren, I., & Vanormelingen, S. (2019). The impact of employee turnover and turnover volatility on labor productivity: A flexible non-linear approach. The International Journal of Human Resource Management, 30, pp. 3049-3079. https://doi.org/10.1080/09585192.2018.1449129
9. Eleogu, T. F., Odulaja, B. A., Obinyeluaka, M. I., & Udeh, C. A. (2023). A systematic review of the strategies and practices for managing talent specifically within the oil and gas sector in Nigeria, focusing on recruitment, retention and development. Business and Economics in Developing Countries, 1(1), pp. 6-51. https://10.26480/bedc.01.2023.46.51
10. Faugoo, D. (2024). Human resources as valued assets/Human capital: An essential prerequisite for organisational success. 5th International Conference on Management, Education, Social Sciences and Innovation
11. Filemon, T., Lubbe, S., & Mynhardt, H. (2024). The assessment of risk management in human resources practices in the public sector. SocioEconomic Challenges, 8(2), pp. 342-359. https://doi.org/10.61093/sec.8(2).342-359.2024.
12. AFRAA. (2023). African Airlines Association Annual/Industry Report 2023 (industry recovery, workforce impacts). Retrieved from https://www.afraa.org/wp-content/uploads/2024/03/AFRAA_2023-AR%E2%88%9A-4.pdf?utm_source=chatgpt.com
13. Gallow, S. (2022). Human resources remain our biggest assets. IntechOpen. https://10.5772/intechopen.98942
14. Gevorkian, D. (2025, May 25). Retaining Top Talent in Healthcare: Challenges and Sustainable Workforce Strategies. Retrieved July 15, 2025 from https://peoplethriver.com/importance-of-employee-retention-in-healthcare/
15. Gillam, S. (2023, May 10). The importance of HR integration in today's landscape. Zalaris. Retrieved 17th April, 2026 from https://zalaris.com/consulting/resources/blog/the-importance-of-integration-in-todays-hr-landscape
16. Guest, D. E. (2017). Human resource management and employee well-being. Human Resource Management Journal, 27(1), pp. 22–38.
17. Hausknecht, J. P., & Trevor, C. O. (2011). Collective turnover at the group, unit, and organizational levels: Evidence, issues, and implications. Journal of Management, 37(1), pp. 352-388. DOI:10.1177/0149206310383910
18. Hom, P. W., Lee, T. W., Shaw, J. D., & Hausknecht, J. P. (2017). One hundred years of employee turnover theory and research. Journal of Applied Psychology, 102(3), pp. 530–545.
19. Hopkin, P. (2018). Fundamentals of risk management: Understanding, evaluating and implementing effective risk management. Kogan Page Publishers. https://books.google.co.uk/books?hl=en&lr=&id=bzFiDwAAQBAJ&oi=fnd&pg=PP1&dq =16.%09Hopkin
20. Kazaishvili, A., Kuchuashvili, D., & Janjghava, G. (2024). Job satisfaction and employee turnover - challenges in the aviation field. Retrieved August 9, 2025 from https://www.researchgate.net/publication/387400306_Job_Satisfaction_and_Employee_Turnover_-_Challenges_in_the_Aviation_Field
21. Judge, T. A., Zhang, S. & Glerum, D. R. I2020). Job satisfaction. In book: Essentials of job attitudes and other workplace psychological constructs (pp.207-241). London: Taylor & Francis. https://10.4324/9780429325755-11
22. Kess-Momoh, A. J., Tula, S. T., Bello, B., Omotoye, G. B. & Daraojimba, A. I. (2024). Strategic human resource management in the 21st century: A review of trends and innovations. World Journal of Advanced Research and Reviews, 21(1):746-757. https://10.30574/wjarr.2024.21.1.0105
23. Kwong, C., Demirbag, M., Wood, G., & Cooke, F. L. (2021). Human resource management in the context of high uncertainties. The International Journal of Human Resource Management, 32(17), pp. 3569–3599. https://doi.org/10.1080/09585192.2021.1966203

24. Meyer, J. P. Stanley, L. J. Parfyonovameyer, N. M. (2012). Employee commitment in context: The nature and implication of commitment profiles. Journal of Vocational Behavior, 80, pp. 1-16. https://doi.org/10.1016/J.JVB.2011.07.002
25. Mwanthi, T. N. (2018). The role of internal organisational factors in strategy implementation in Kenyan universities. Kabarak Journal of Research & Innovation, 5(2), pp 72-88. http://eserver.kabarak.ac.ke/ojs/
26. Odunayo, A. O. & Adegbie, F. F. (2020). Human resource accounting and quality of financial reporting of quoted oil and gas companies in Nigeria. International Journal of Accounting Finance and Risk Management 5(4), p. 195. https://10.11648/j.ijafrm.20200504.14
27. Ogunyomi, P., & Bruning, N. S. (2016). Human resource management and organisational performance of small and medium enterprises (SMEs) in Nigeria. The International Journal of Human Resource Management, 27(6), pp. 612-634. https://doi.org/10.1080/09585192.2015.1033640
28. Onyango, R. A., & Omwenga, J. (2024). Human resource management practices and employee retention at Kenya Women Finance Trust, Migori County. Journal of Economics, Management Sciences and Procurement, 3(1), pp. 109-124
29. O'Reilly, S. (2023, December 12). Risk Management Strategies. Accessed August 24, 2025 from https://www.spiderstrategies.com/blog/risk-management-strategies/
30. Osigbesan, O. (2021). Medical brain drain and its effect on the Nigerian healthcare sector. Accessed August 9, 2025 from https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=12099&context=dissertations
31. Oyewole, A. T., Okoye, C. C., Ofodile, O. C., Odeyemi, O., Adeoye, O. B., Addy, W. A., Ololade, Y. & Puslecki, Z. W. (2024). Human resource management strategies for safety and risk mitigation in the oil and gas industry: A review. International Journal of Management & Entrepreneurship Research, 6(3), pp. 623-633. https://10.51594/ijmer.v6i3.875
32. Park, T. Y., & Shaw, J. D. (2012). Turnover rates and organisational performance: A meta-analysis. Journal of Applied Psychology, 98(2), pp. 268-309. https://10.1037/a0030723
33. Ramos, C. (2024, January 19). Strategic Risk Management: Overview and Guide. Optro. Retrieved 17th April, 2026 from https://optro.ai/blog/strategic-risk-management
34. Raufu, A (2002). Nigerian health authorities worry over exodus of doctors and nurses. British Medical Journal, 13(325), p. 65. https://10.1136/bmj.325.7355.65/b
35. Ren, H., Li, P., Xue, Y., Xin, W., Yin, X., & Li, H. (2024). Global prevalence of nurse turnover rates: A meta-analysis of 21 Studies from 14 Countries. Journal of Nursing Management, 2024, 5063998. https://doi.org/10.1155/2024/5063998
36. Sari, F., Iskandar, S., & Fitriadi, Y. (2025). Resilience in human resource management: How organizations adapt to uncertainty and crisis. International Journal of Economics and Management Research. 4(1), pp. 750-757. https://10.55606/ijemr.v4i1.491
37. Saunders, M., Lewis, P., & Thornhill, A. (2019). Research methods for business students (8th ed.). London: Pearson Education.
38. Sekaran, U., & Bougie, R. (2020). Research methods for business: A skill-building approach (8th ed.). London: Wiley.
39. Stanfast, B. S. (2028). Job satisfaction and employee turnover in organisations. International Journal of Advanced Research 4(11), p. 12-21.
40. Sumbal, S., Tsui, E., Kuen, E. W., & Barendrecht, A. (2017). Knowledge retention and aging workforce in the oil and gas industry: a multi perspective study. Journal of Knowledge Management, 21(4), pp. 907-9240. https://10.1108/JKM-07-2016-0281
41. Yanto, W. & Yandi, A. (2020). Factors affecting organisational commitment (a human resource management literature study). Dinasti International Journal of Management Science. 2(2), pp. 320-335. https://10.31933/dijms.v2i2.679
42. Yin, R. K. (2018). Case study research and Application: Design and methods (6th ed.). London: Sage Publication
43. Zeb-Obipi, I., & Momodu, A. M. (2021). Pay scheme and work attitude in oil and gas multinational companies in Nigeria. International Journal of Marketing Management and Research, 7(2), pp 18-28.