International Journal of Social Sciences and Management Research E-ISSN 2545-5303
P-ISSN 2695-2203 Vol 11. No. 1 2025 www.iiardjournals.org Online Version

Effect of Risk Communication on the Performance of Manufacturing Companies in North-Central Nigeria

Taiwo Rebecca Aiki
Department of Global Operations and Supply Chain Management,
University of Derby, UK
DOI: 10.56201/ijssmr.vol.11no1.2025.pg.137.154

Abstract

this article is carried out to ascertain the effect of Risk Communication on the performance of Manufacturing companies in North-Central Nigeria. Risk communication was used as the independent variable while performance of selected manufacturing companies was employed as the dependent variable. Survey research methodology was adopted, correlation and Anova were used as estimation techniques to ascertain the relationship between the dependent and independent variable. Findings from the study revealed that risk communication has negative, but significant effect on the performance of selected manufacturing companies in North-central Nigeria. This means that an increase in the organization's risk communication will lead to a decrease in its performance. Manufacturing companies in north central Nigeria should identify and pursue the right means and method of communicating risk in the organization.

Keywords: *Risk communication, performance, manufacturing companies, North-central, Nigeria, risk policies*

Background to the study

Risk is an integral part of doing business, and without taking risk, businesses will not be able to create value for investors or stakeholders. Risk management is an uninterrupted, progressive process that is an important part of business and technical management processes. (Mariana & Fiany, 2020). This implies that risk is part of every business and a business cannot exist without one form of risk or another. Organizations are faced with various types of risks such as; liquidity, credit, company, and operational risk (Agyekum 2015). Managing these risks is an overbearing concern in the global environment of today's business world. Risk management has played a crucial role in organization's ability to avoid, cut, balance or turn risks into opportunities. However, risk management has evolved from a traditional approach to a more modernized approach with time (Adegbola, et al, 2021)

ERM represents a leading standard, supporting organizations to identify, evaluate, and manage risks at the enterprise level. This holistic approach to managing risk is sometimes described as enterprise risk management because of its emphasis on anticipating and understanding risk across an organization. ERM has added an ideal blow to the risk management domain, encouraging organizations to assess their own risk attitude, to identify risk types they are exposed to, and to rank risky events to which they may be vulnerable in the future, categorizing these risks as acceptable, moderate or unacceptable (Abeyrathna & Lakshan, 2021). The major contribution of ERM is the way it allows organizations to develop an overall strategy accelerating the adoption of ERM best practices with the discretion of all the relevant stakeholders (The Committee of Sponsoring Organizations of the Treadway Commission, (COSO) 2017). In addition to a focus on internal and external threats, enterprise risk management (ERM) emphasizes the importance of managing positive risk. Positive risks are opportunities that could increase business value or, conversely, damage an organization if not taken. Indeed, the aim of any risk management program is not to eliminate all risk but to preserve and add to enterprise value by making smart risk decisions.

Based on the discussion of Silva, Silva and Chan (2019), the institutions in developing countries such as manufacturing companies, are faced with much more uncertainty, risks, and challenges that influence their performance compared to that of developed countries. Manufacturing companies in Nigeria, especially in the North central are not left out of these risks. Their ability or inability to manage the various risks that affect them as an enterprise might or might not be the reason for their performance.

Statement of Research problem

Based on the discussion of Silva, Silva and Chan (2019), the institutions in developing countries are faced with much more uncertainty, risks, and challenges that influence their performance compared to developed countries. Therefore, developing countries often need a more robust risk management system for a better organization function.

Manufacturing institutions in the North central of Nigeria are faced with many risks, similar to those from other part of the country. Particularly, the region has been faced with high level of insecurity from herdsmen in Plateau and Benue states to kidnapping and insecure transportation across the region. Also, the region is associated with poor development especially in the aspect of infrastructure and basic amenities. This invariably affects the flow of business, specifically the flow of raw materials and personnel to the plants and the distribution of finished goods to the distribution houses. Given these common and specific risks, enterprise risk management is an essential feature for the success of these organizations. Despite the presence of risk management practices, most manufacturing firms in North-Central Nigeria have been observed to not been optimum in performance. Consequently, evaluating the effect of ERM on performance of manufacturing firms in North-Central Nigeria could be helpful in finding a lasting solution to the existing problem.

Research question

To what extent does Risk communication affect the performance of manufacturing companies in North-Central Nigeria?

Objective of the study

To evaluate the effect of risk communication on the performance of Manufacturing companies in North-Central Nigeria.

Research Hypothesis

Ho_1: Risk communication has no effect on the performance of manufacturing companies in North-Central Nigeria.

Conceptual Review

The study conceptualized the independent variable of Enterprise risk management (ERM) and its component: risk communication. Performance is also conceptualized as the dependent variable of the study measured by growth.

The model links the independent variable (ERM) and the dependent variable of performance. It describes how risk communication links with performance. Performance in this model is measured by growth of the organizations.

Figure 1: (ERM and performance model)

Source: *Researcher's compilation*

Enterprise Risk Management (ERM)

The concept of ERM has gained an attraction of the modern corporate managers as a holistic and an effective approach to managing a wider range of risk factors faced by business firms (Karunaratne, 2018).

COSO (2004), defines ERM as a process affected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives. Enterprise risk management (ERM) is a plan based business strategy that aims to identify, assess and prepare for all risks and other potential disasters, both physical and figurative, that can disrupt the operations and objectives of the organization. Aditya & Naomi (2017) stated that ERM is often referred to as Integrated Risk Management (IRM) and Strategic Risk Management (SRM) which offers a concept of considering the entire company's risk portfolio in an integrated and holistic manner, thus risk mitigation can be early and comprehensive.

Phan et al, (2020), defined enterprise risk management as the set of practices that address the overall risk profile of the enterprise, reducing both the likelihood of and costs from negative events, and taking advantage of the benefits of positive events. (ERM) is an effective agency-wide approach to addressing the full spectrum of the organization's significant risks by understanding the combined impact of risks as an interrelated portfolio, rather than addressing risks only within silos. ERM provides an enterprise-wide, strategically-aligned portfolio view of organizational challenges that provides better insight about how to most effectively prioritize and manage risks to mission delivery. ERM is defined as a process influenced by the Board of Directors, management, and other personnel of the entity, applied to the establishment of a strategy and on all parts of the company, designed to identify potential events that could affect the entity, and manage risks aligned with entity risk appetite, to provide reasonable assurance towards achieving the objectives of the entity (COSO, 2017). Meanwhile, International Organization for Standardization (ISO) defines the risk management process as "coordinated activities to direct and control an organization with regard to risk". It also provides a definition of the risk management framework as "set of components that provide the foundations and organizational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management throughout the organization (ISO, 2018). The term enterprise risk management (ERM) in its simplest term is aggregate approach to treating all the organization's risk which is developed as a result of the failure of the conventional traditional risk methods, which treats risk in a piecemeal or the departmental based approach.

Risk Communication

Enterprise risk management requires a continual process of obtaining and sharing necessary information, from both internal and external sources, which flows up, down, and across the organization. In the view of Ramslade (2020), risk communication in a broad sense can be defined to mean information exchange about events related to the risk. Today, however, it is often viewed as an activity to form agreement about social arrangements among stakeholders (in most cases, administration vs people, or people vs people) with conflict of interest. Risk communication, in the broad sense, in addition to consensus communication, involves care communication for providing help and intervention concerning proper procedures for people at risk. Risk communication is defined as any two-way communication between stakeholders about the existence, nature, form, severity, or acceptability of risks. According to Morgan, et al (2016) Risk communication is communication intended to supply audience members with the information they need to make informed, independent judgements about risks, and effectiveness of the management risk process and the environment.

According to FSB (2014), risk communication refers to providing and receiving risk-related information to enhance decision-making processes. The issue of communication should be considered as an important element in all stages of the risk management process. In fact, at each stage of the process, effective communication must be established between risk beneficiaries, consultants, senior management, asset owners, risk holders, or other stakeholders (Samimi, 2020).

Risk communication is an important purpose of risk assessment and essential to raise general awareness. Effective risk communication should be carried out among the main parties of an industrial site (Paltrinieri et al., 2019). In fact, participation by multiple parties in information sharing amplifies its benefits, especially when the parties face common risks (Phimister et al., 2004) Risk communication is the open, two-way exchange of information and opinion about risks intended to lead to a better understanding of the risks and better risk management decisions. It provides a forum for the interchange of information with the basics (Yoe, 2019).

In the view of Nukic and Delic (2017), risk communication can be defined as a two-way flow of information and risk assessment between experts, stakeholders, government authorities and public. Effective communication between stakeholders is of vital importance when making decisions on risk management

Growth

Starbuck (2019) defines growth as change in an organization's size when size is measured by the organization's membership or employment, and it defines development as change in an organization's age. Growth has to do with the increase in size of facilities, number of employees and customers (Bones 2018). Bass (2020) sees business growth to means an increase in the size or scale of operations of a firm usually accompanied by increase in its resources and output.

Generally, the term ‘business growth’ is used to refer to various things such as increase in the total sales volume per annum, an increase in the production capacity, increase in employment, an increase in production volume , an increase in the use of raw material and power (Twalambani & Arahyel 2015). The study uses growth as a measure of performance.

Empirical Review

Iwedi et al (2020) while studying Enterprise risk management practice and shareholders value: evidence from selected quoted firms in Nigeria, examined business risks and risk management as well as their effects on shareholders' value using data from selected non-financial firms in the Nigerian Stock Exchange by focusing on reward systems to firm owners through dividend and other earning structures. The study employs panel data for 48 non-financial firms in the Nigerian Stock Exchange for the period 2011 to 2018. The panel data analytical framework is used in the empirical analysis with focus on the Random Effects estimation technique. The results show that in general, the effect of risk on shareholder value depends on the pattern of risk, as well as on the value being considered. The study also finds that increased business risk lowers both dividend per share and earnings per share of the firms. On the other hand, financial risks were shown to have positive impact on shareholder value, especially the value not related to dividend payout. Also, it is found that risk management based on institutional shareholding has the most effective positive impact on shareholder value.

Augustine (2022) analysed on the effect of enterprise risk management (ERM), risk committee, on earning capacity of African banks. The study covered a study period of ten (10) years spanning from 2009 to 2018. The study covered Nigeria, Ghana, and South Africa. Data for the study were gotten from the fiscal reports of the banks under investigation. The study was analyzed using the panel data methodology. The study found that both ERM and risk committee efficiency have the greatest effect on the earning capacity of Nigerian firms (R^2 = 60%) than the rest two countries. More so, our model has shown that South Africa has performed on a closer chase to Nigeria, in generating returns to the shareholders using the repressor mentioned above (R^2 = 56%). Finally, Ghana has performed the least so to say as the same variables generated or made the least input to ROE (R^2 = 24%).

Also, Olayinka et al. (2017) carried out a study to examine the impact of Enterprise Risk Management (ERM) on financial performance in the emerging market with special focus on the Nigerian financial sector. The study investigates 40 companies from the period 2012 to 2016 resulting into 200 firm observations. The method used to measure Non-financial performance was Return on Assets (ROA) while Value at Risk (VaR) was used as a proxy for Enterprise Risk Management (ERM). The study used other control variables such as Leverage Board Size, Firm Size, Institutional Ownership and Risk Management Committee Size. The empirical findings show that ERM is positively and significantly related to Non-financial performance.

Faisal (2021) examined the mediating effect of investment decisions on the relationship between Enterprise Risk Management (ERM) and firm value. Two hundred and twenty-four companies listed on the Indonesia Stock Exchange for period 2017–2018 were selected as sample by applying Slovin's formula. We used path analysis and Sobel test to check the mediating effect of investment decisions. Our results show that the implementation of ERM in Indonesia public listed companies is still in the initial stage. In addition, the regression tests show that ERM and investment decisions have a positive effect on firm value. The path analysis and Sobel's test results show that investment decisions act as partial mediation on the relationship between ERM and firm value.

In the study by Salaudeen et al. (2018), they evaluated the relationship between enterprise risk management and performance of Twenty (20) consumer goods companies listed on the Nigerian Stock Exchange. The independent variables used are existence of risk management committee, existence of financial expertise, existence of audit committee, existence of Chief risk officer and board size. The collated data were analyzed using descriptive statistics and generalized least square. The results reveal that risk management committee, financial expertise and board size have significant positive effect on performance. The results also revealed that existence of audit committee has a significant negative effect on performance while existence of chief risk officer has no significant effect on performance. They therefore recommended that the regulatory authorities and other relevant institutions are enjoined to reassess their supervisory role with the view to strengthen the ERM process and taking the issue of risk management seriously at every level of organizations to provide reasonable assurance.

Kung (2019) assessed the effect of ERM in the financial performance of selected state-owned enterprises under the ministry of energy and petroleum in Kenya. The study was guided by the following research objectives: to establish the ERM practices adopted by selected state owned enterprises in the ministry of energy and petroleum, to determine the extent of the implementation of ERM, establish the financial performance trends and to determine the effect of ERM on the financial performance of selected state owned enterprises in the ministry of energy and petroleum in Kenya. The sample size of the study was 42 senior staff from the state owned enterprises. The study used descriptive research design and purposeful sampling. Primary data was collected using questionnaire while secondary data was collected from the financial statement over a period of five years (2011-2015). Data was analysed using SPSS v 23. The study revealed that risk identification and mitigation played the most significant role in influencing financial performance of SOEs. The study also established that the SOEs focused on strategic risk management practices to a large extent while focus to liquidity, market and credit risk management practices is to a moderate extent.

Candy (2021) examined the role of enterprise risk management (ERM) on rural banks' performance. ERM is measured by the structure, governance, and process in the risk management process. The bank performance as the dependent variable use measurement both financial and non-financial. This study uses a quantitative method by using primary and secondary data. Data collection is done by distributing questionnaires and collecting financial data from the rural banks' financial reports. The study sample is the rural banks in Riau Island provinces, consisting of 63 questionnaires as the data for further analysis. The result showed that ERM enhances the rural banks' performance, both financial and non-financial. It showed that the practice of ERM does well when the rural bank is well established.

Muhammad et al (2021) analysed the different performance indicators of firm, enterprise risk management and their effect on firm performance. The secondary data on Commercial Banks, Foreign Banks, Investment Banks, Insurance Companies, Development Finance Institutions (DFIs), Leasing Companies, Mutual Funds, Modaraba Companies and Housing Finance Companies are collected from Financial Statement Analysis (FSA) from 2008 to 2016 provided by Statistics and DWH Department of State Bank, Pakistan. This study used Debt to Asset Ratio (DTA) as dependent variable and dummy of firm performance while Cost to Income Ratio (CTI), Enterprise Risk Management (ERM), Equity to Asset Ratio (ETA), Enterprise Value to Asset Value (EVTAV), Leverage (LVG), Return on Capital Employed (ROCE) and Return on Equity (ROE) are used as independent variables. The research found long run relationship among the variables. OLS Regression Test that Enterprise Risk Management (ERM) implementation, Equity to Asset Ratio (ETA), Enterprise Value to Asset Value (EVTAV), Leverage (LVG), Return on Capital Employed (ROCE), Return on Equity (ROE) have significant effect on performance of financial.

Kofi (2020) examined the effect of ERM on the performance of MSMEs in Accra, Ghana. 456 MSMEs were drawn from a population of 1675 using the Taro Yamane formula. A structured questionnaire was adopted for the study using the 5 point Likret scale. Data gotten from respondents was analysed using the multiple regression. Studies found that risk communication and risk strategy and objective setting have significant and positive effect on the performance of MSMEs in Accra, Ghana.

Chih and Inchan (2019) studying Internal Control, Enterprise Risk Management, and Firm Performance, investigates two research questions arising from the regulation of internal controls required by Sarbanes-Oxley Act of 2002 (SOX). The first research question asks whether better internal controls can enhance firm performance. To address this question, the relation between market-value and internal control is estimated by a residual income model. Firms with weak internal controls are identified as those that disclose material weaknesses in internal controls in periodic filings from August 2002 to March 2006, as required by SOX. The empirical results, based on a sample of 708 firm-years with the disclosures of material weaknesses, show that firms with weak internal controls have lower market-value. Building on the' efforts for SOX to improve internal controls, more and more firms are starting to adopt Enterprise Risk Management (ERM), because sound internal control system rests on adequate and comprehensive analysis of enterprise-wide risks. In light of this trend triggered by SOX, the second research question in this dissertation asks whether implementation of ERM has an impact on firm performance? The basic approach to answer this question uses a contingency perspective, since all risks arise from the firm's internal and external environment. More specifically, the basic argument states that the relation between ERM and firm performance is contingent on the proper match between ERM and five key contingency variables: environment uncertainty, industry competition, firm size, firm complexity, and monitoring by the firm's board of directors. A sample of 114 firms disclosing the implementation of ERM in their 2005 10Ks and 10Qs are identified by keyword search in EDGAR database. In developing the proper match, high performing firms are defined as those with greater than 2% one-year excess return to develop the proposed proper match. An ERM index (ERMI) is constructed based on the Committee of Sponsoring Organizations (COSO) ERM's (2004) definition of four objectives: strategy, operation, reporting, and compliance. The contingency view is supported by the empirical evidence, since the deviation from the proposed proper match is found negatively related to firm performance.

Kakiya, et al (2020) studied enterprise risk management effect on organizational performance of state corporations in Kenya. This study was guided by agency theory. The study used explanatory cross sectional survey design. Primary data was collected from structured questionnaires. A survey was carried out on 218 state corporations in Kenya. Data collected was analyzed by use of descriptive and inferential statistics. The research hypotheses were tested using multiple regression analysis. The results revealed that risk structure, governance and process practices had positive and significant effect on organizational performance.

Genrikh, (2015) researched on the impact of ERM in Small and Medium Enterprises (SMEs). The study used data from FAME database that provided financial information on firms based in UK and Northern Ireland. Financial information sourced relates to dates of incorporation, cash flow reports, and profit and loss statements to determine performance of SMEs in terms of cash flow volatility and return on assets. On the other hand, ERM was measured by the amount of auditors' fee, quality score, the proportion male/female board of directors and board structure to explain performance. 208 SMEs were selected according to different assumptions and analyzed. Seemingly unrelated regression was chosen as a method to allow for simultaneous correlation between errors in the 2 regression models. The results obtained drew various conclusions (i.e. number of executive directors has positive impact on performance, but also raises the level of cash flow volatility). However, no significant relation was found between cash flow and ROA.

Pedro and Miguel (2021) studied the effect of ERM on the performance of MSMEs in Madrid, Spain. Independent variable was proxy by the components of COSO 2017 ERM model. Dependent variable was measured using growth. 1237 MSMEs were extracted as population, out of which, 456 was used as sample size. The simple random technique was used to distribute questionnaire, frequencies, descriptive statistics, correlation and regression were used to analyses the data from respondents. Finding from the study indicated that Culture, Risk Assessment, Risk review and revision, and risk communication have significant and positive effect on the performance of MSMEs in Madrid.

Muttanachai et al. (2018) examined The Influence of Enterprise Risk Management on Firm Performance. Measured by the Balanced Scorecard: Evidence from SMEs in Southern Thailand the main objectives of the study reported were to (1) investigate the extent and level of ERM among SMEs in southern Thailand, and (2) test for the influence of ERM on firm performance measured by the balanced scorecard (BSC) of SMEs. Using a mailed questionnaire, a sample of 385 (out of 394) SMEs from southern Thailand were analyzed. Descriptive analysis, a correlation matrix, and multiple regression were used to analyze the data obtained. From the results, the most common element of ERM employed was information and communication followed by control activities, monitoring, risk response, internal environment, event identification, objective setting, and risk assessment. Moreover, objective setting, risk assessment, control activities, and monitoring were found to significantly and positively influence SMEs' performance measured by BSC while event identification had a negative influence on SMEs' performance. The study demonstrates that SMEs in developing countries can benefit from the adoption of ERM in the same way as large firms in developed countries.

Chairani and Sylvia (2021) aimed to examine the effect of enterprise risk management (ERM) on financial performance and firm value, as well as the moderating role of environmental, social and governance (ESG) performance. The samples in this study are listed companies in the ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore and Thailand) during the years 2014–2018, with total observations of 680 firm-years. Fixed effect panel data regressions were used to test the hypotheses. The data was collected from Financial Report, Annual Reports and Thomson Reuters. The results show that ERM has a positive significant effect on financial performance and firm value. This paper also finds that ESG has a significant moderating role in increasing the effect of ERM on firm value.

Mariana and Fiany (2020) examined the influential factors of potential adoption of Enterprise Risk Management (ERM) and the impact of ERM adoption on the public listed banking firms' performances in Indonesia during 2009 to 2017. This research uses logistic regression to test four potential factors as the driving forces behind the potential adoption of ERM and linear regression to test the impact of ERM on firms' performances. The result suggests that firms with greater size, having more institutional ownership, and being part of Multinational companies are more likely to adopt ERM, while the implementation of ERM has no significant impact on the firms' performance.

Adebanji (2019) examined the effect of ERM on the performance of food processing companies in Ogun State. ERM was measured using the components of the 2017 ERM model and growth was used as a measure for performance. A total of 386 responses were obtained through questionnaire distributed to staff and management of the organizations. The study employed descriptive statistics frequencies and tables. Hypotheses were tested using multiple regression on SPSS v25. Findings from the study revealed that Risk culture, strategy and objective setting, risk assessment, risk review, risk communication and information all have significant and positive effect on the performance of food processing companies in Ogun State.

Theoretical Framework

This study is anchored on Legitimacy Theory

Legitimacy theory

This theory was propounded by Suchman, in 1995. Like the relationship between the agent and the principal in agency theory, so there is a relationship between the enterprise and the society in legitimacy theory. Legitimacy theory is recognized on the ground that the activity of an organization is appropriate, right and good in line with the socially build system of norms, values, and beliefs of the society (Suchman, 1995). In a different view, Deegan, Rankin and Voght (2000) posit that legitimacy theory is a social contract between a firm and the larger society. Notably, legitimacy theory targets to managing the relationships among the stakeholders that are of critical importance to the existence and continuity of the enterprise. It is worthy to mention that legitimacy is assumed problematic because the societies' expectations change over time and are uncertain (Ashforth & Gibbs, 1990). Therefore, the organization must in compliance with the societal change of expectations, change so as to be aware current happenings. Sequel to the world financial crises of 2008, COSO (2004) came up with ERM framework as a way to handle the risk of organization holistically on a wide-array enterprise base. Subsequently, rating agencies started incorporating adoption of ERM as one of the bases for scaling. Therefore, most of the companies that implemented this ERM in their policies did that not because it is convenient and profitable to them, but due to the need and or attempt to influence the stakeholders about the legitimacy of their operations. That bring us to the stand point of Dowling and Peffer (1975), that legitimacy theory is a condition in which a firm's value system is congruent with the value system of the larger society. It therefore becomes paramount that every entity, in order to align with the expectation of the society now, ought to adopt the ERM to boast their legitimacy stand. When the desirable and proper actions are not taken, Sethi (1979) maintains that actual or potential disparity exists between the organization and social value, and organizational legitimacy will be at jeopardy, giving rise to legitimacy gap.

This study is based on two theories which are the agency theory and the legitimacy theory. Both theories emphasize on the objectives of the organization to maximize stakeholder's wealth. Every activity in the organization especially in taking or avoiding risk in the enterprise is directed towards the maximization of stakeholder's wealth.

Research Design

The study adopted a survey research design. However, the reason for using survey research design is that, the study aims at identifying variables and their relationships to one another.

Method of Data Analysis

The study adopted the use of descriptive statistics such as mean and standard deviation as well as frequencies and percentages. The adoption of descriptive, frequencies and percentages are pre-test. Also, the study will also use regression and correlation. The multiple regression was used to estimate the cause and effect relationship between the dependent and independent. The regression indicate how the model fits and has the capacity to include the t-test and f-test.

Model Specifications

The study uses ERM indicants such as Risk communication. The dependent variable is performance which is non-financial and measured using growth. simple regression models, the regression model is stated as:

$Y = a + bx$ - - - - - - 1

Where y is the dependent variable

a is constant or intercept

b is the coefficient

x is the independent variable

However, the above model is expanded to:

$Y = \alpha + \beta_1 X + \mu$ - - - - - 2

The formula is substituted with the variables and presented as follows;

$PFM = \alpha + \beta_1 RCO + \mu$ - - - 3

Where:

PFM = Performance (Growth)

RCO = Risk Communication

α =Intercept or Constant

β = Slope of the regression line with respect to the independent variables

μ = error term

Data Presentation

The data gotten from the respondents are presented in tabular form to summarize and compare.

Table 1. Demographic Distribution of the respondents based on gender.

OPTIONS	NUMBER	PERCENTAGE %
MALE	219	65.2
FEMALE	117	34.8
TOTAL	**336**	**100**

Source: Researcher's survey

Table 1. describes the gender of the respondents used to carry out the research from all the eight (8) companies. The result shows that out of three hundred and thirty-six (336) respondents, two hundred and nineteen (219) representing (65.2%) were male. It also shows that one hundred and seventeen (117) of the total respondents representing (34.8%) were female. This implies that male respondents constitute the highest responses.

Table 2. Demographic Distribution of the respondents based on period of employment and service.

OPTIONS	NUMBER	PERCENTAGE %
Less than a year	78	23.2
1 to 5 years	134	39.9
Over 5 years	124	36.9
Total	**336**	**100**

Source: Researcher's survey

Table 2 presents data from the respondents as regards to their period of employment or service in their various organizations. The data shows that; out of a total of three hundred and thirty six (338), seventy eight (78) respondents, representing (23.2%) have spent less than a year in their organizations. One hundred and thirty four (134) representing (39.9%) have spent from one to five (1-5) years. A total of one hundred and twenty four (124) respondents, representing (36.9%) have spent over five (5) years in their organizations. This implies that the larger part of the respondents have spent over a year and some, over five years in the organizations. Hence, responses are from experienced employees and employers.

Table 3. Demographic Distribution of the respondents based on staff category

OPTIONS	NUMBER	PERCENTAGE %
Management Staff	46	13.7
Senior Staff	178	53
Junior Staff	112	33.3
Total	**336**	**100**

Source: Researcher's survey

Table 3. describes the staff category of the respondents. Out of the total number of three hundred and thirty six (336), forty six (46) respondents, representing (13%) were management staff. One hundred and seventy eight (178) respondents, making up (53%) were senior staff. The junior staff among the respondents were up to one hundred and twelve, which constituted (33.3%) of the entire sampled respondents. This implies that the responses come largely from the senior staff in the various organizations.

Table 4 Responses as regards to Risk Communication

ITEMS	SA	SA%	A	A%	U	U%	D	D%	SD	SD%	
The organization communicates risk information	55	16.4	78	23.2	89	26.5	56	16.7	58	17.3	336
The organization reports on risk culture and performance	67	19.9	56	16.7	78	23.2	68	20.2	67	19.9	336
The organization leverages information and technology	40	11.9	50	14.9	92	27.4	65	19.3	89	26.5	336
Your organization requires feedback from the employees on enterprise risk	88	26.2	136	40.5	54	16.1	34	10.1	24	7.1	336

Source: Researcher's survey

Table 4 presents responses as regards to questions on the concept of risk communication. Responses were graded based on their opinion on each question as to whether they strongly agree (SA), agree (A), undecided (U), disagree (D) or strongly disagree (SD).

The first question enquired opinion on whether the organization communicates risk information. Fifty five (55) respondents representing (16.4%) strongly agreed and seventy eight (78), making up (23.2%) agreed. Out of a total of three hundred and thirty six (336) respondents, eighty nine (89), which made up (26.5%) were undecided. Fifty six (56) respondents, representing (16.7%) disagreed, while fifty eight (58) strongly disagreed, making up (17.3%). This implies that more of the respondents either disagreed or strongly disagreed that the organization communicates risk information.

The next question summarized respondents' opinion on whether the organization reports on risk culture and performance. Sixty seven (67) respondents, making up (19.9%) of the total respondents strongly agreed and fifty six (56), making up (16.7%) agreed. Seventy eight (78) of the respondents, constituting (23.2%) were undecided. Sixty eight respondents (68) representing (20.2%), disagreed, while sixty seven (67) respondents, constituting (19.9%) strongly disagreed. This implies that a larger portion of the respondents either disagreed or strongly disagreed that the organization reports on risk culture and performance.

The third question enquired opinion from respondents on whether the organization leverages information and technology. Forty (40) respondents, representing (11.9%) of the total respondents strongly agreed, and fifty (50) respondents, constituting (14.9%) agreed. Ninety two (92) of the respondents were undecided, representing (27.4%). Summary shows that sixty five (65) of the respondents, making up (19.3%) disagreed, and eighty nine (89) respondents, representing (26.5%) strongly disagreed. This infers that a larger portion of the respondents disagreed or strongly disagreed.

The last question on table 4. showed respondent opinion on the question of whether their organization requires feedback from the employees on enterprise risk. Eighty eight of (88) of the respondents which represents (26.2%) strongly agreed, while one hundred and thirty six (136%) agreed, represented by (40.5%). Fifty four (54) respondents, making up (16.1%) were undecided. Thirty four (34) of the respondents, making up (10.1%) disagreed, and twenty four (24), making up (7.1%) strongly disagreed. The result implies that more of the respondents either agreed or strongly agreed that whether their organization requires feedback from the employees on enterprise risk.

Test of hypothesis

Table 5 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691[a]	.682	.682	.17025

a. Dependent Variable: PFM

b. Predictors: (Constant), RCO

Table 6. Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.229	.032		.917	.360
RCO	.534	.058	-.532	-9.263	.000

a. Dependent Variable: PFM

Risk communication has no effect on the performance of manufacturing companies in North-Central Nigeria.

The regression line PFM = 0. 229 + (- 0.534)RCO indicates that a unit increase or change in risk communication (RCO) will lead to a - 0.534 decrease in performance (PFM) significantly. The result indicated that, risk communication has negative but significant effect on the performance of selected manufacturing companies in North-central Nigeria. The decision was reached based on the t-value and p-value of (p = 0.000, t-value = -9.263). Thus, this implies a rejection of the null hypothesis which stated that, risk review has no significant effect on the performance of selected manufacturing companies in North-central Nigeria.

Discussion of Findings

Risk communication and performance

Findings from the study revealed that risk communication has negative, but significant effect on the performance of selected manufacturing companies in North-central Nigeria. This means that an increase in the organization's risk communication will lead to a decrease in its performance. Hence, communicating risk information; reporting on risk culture and performance; leveraging information and technology and requiring feedback from the employees on enterprise risk can affect performance negatively. This could be that the organization receives negative news that strikes fear and potential failure or enterprise activities as a result of risk. This could be the cause of low performance from staff and the organization in general.

This finding is contrary to that of (Kofi 2020), who found in his study, that risk communication has a significant and positive effect on the performance of MSMEs in Accra, Ghana.

Conclusion and Recommendation

Based on the findings of the research, the study hence, concludes the following;

Risk communication has negative, but significant effect on the performance of selected manufacturing companies in North-central Nigeria. This means that an increase in the organization's risk communication will lead to a decrease in its performance. Hence, communicating risk information; reporting on risk culture and performance; leveraging information and technology and requiring feedback from the employees on enterprise risk can affect performance negatively. Generally, the study concludes that enterprise risk management has an effect on the performance of selected manufacturing companies in north central Nigeria.

Manufacturing companies in north central Nigeria should identify and pursue the right means and method of communicating risk in the organization. Risk communication, though significant; has negative effect on performance of the organizations. It was suggested by the study that, given the unstable situation of the region as regards to insecurity, poor government facilities and so on, perhaps the report or information on risk is rather negative and demotivating. This could cause a negative effect on the overall performance or growth of the organizations. Hence, the study recommends that only necessary information which could lead to positive results should be communicated and emphasized.

References

Abolo, E. M. (2020). *Corporate governance principles and business sustainability*. Institute for Governance, Risk Management and Compliance Professional and the Risk Management Academy. Retrieved from https://www.business.amlive.com/corporate-governance-principles-and-business-sustainability.

Accenture Consulting, 2012, Long-term growth, Short-term differentiation and Profits from Sustainable Products and Services: A global survey of business executives.

Achinas, S., Achinas, V., & Euverink, G. W. (2021). A relook on biofuels: How can industrial processes underpin the drive for sustainable development? In R. C. Ray (Ed.), *Sustainable biofuels: Opportunities and challenges* (pp. 381–397). https://doi.org/10.1016/B978-0-12-820297-5.00006-2.

Adedeji, B. S., Ong, T. S., Uzir, M. U. H., & Abdul Hamid, A. B. (2020). Corporate governance and performance of medium-sized firms in Nigeria: Does sustainability initiative matter? *Corporate Governance, 20*(3), 401–427. https://doi.org/10.1108/CG-09-2019-0291.

Arguden, Y. (2010). A corporate governance model: building responsible boards and sustainable businesses (17 No. 53891). Washington.

Babalola, A., & Adedipe, O. A. (2014). Corporate governance and sustainable banking sector : Evidence from Nigeria. Research Journal of Finance and Accounting, 5(12), 32–44.

Bebbington, J. Thomson, I., 1996. Chartered Association of Certified Accountant, Certified Accountants Educational Trusts, London

Bish, J. (2021, February 4). Economic sustainability examples that inspire change. *Population Media Center*. Retrieved from https://www.populationmedia.org/blog/economic-sustainability-examples-that-inspire-change.

Chartered Governance Institute UK & Ireland. (2022). *What is corporate governance?* Retrieved from https://www.cgi.org.uk/about-us/policy/what-is-corporate-governance.

Chen, J. (2022, August 18). Corporate governance: How it works, principles, and examples. *Investopedia*. Retrieved from https://www.investopedia.com/terms/c/corporategovernance.asp.

Chukwuma, I. O., Alaefule, F. O., & Jideofor, N. H. (2021). Corporate governance: The sustainability quest. In O. L. Emeagwali & F. Bhatti (Eds.), *Corporate governance* (Chapter 147). https://doi.org/10.5772/intechopen.99306.

Corporate governance: Purpose, examples structure, and benefits. (2020, February 21). *Youmatter*. Retrieved from https://youmatter.world/en/definition/corporate-governance-definition-purpose-and-benefits/.

Crane, A. Matten, D., 2007. Business Ethics, 2nd ed. Oxford: Oxford University Press

Dembo, A. M., & Rasaratnam, S. (2015). Corporate governance and sustainability practices : Evidence from Nigeria. International Conference on Accounting Studies (pp. 1–13). Johor Bahru, MALAYSIA: ISSAD.

Dobson, A. 1996. “Environmental Sustainabilities: An Analysis and Typology”. Environmental Politics. 5(3), pp. 401-428

Elkington, J. (2006). “Governance for Sustainability”. Corporate Governance: An International Review, vol.14 (6), pp.522-529.

Farnhan, K. (2022, June 7). What is the relationship between corporate governance and sustainability? *Diligent*. Retrieved from https://www.diligent.com/insights/esg/what-is-the-relationship-between-corporate-governance-sustainability/.

Karayel, M., Sayli, H., & Gormus, A. S. (2009). Corporate governance and sustainable development, A comparative analysis on Turkey and Bosnia Herzegovina. In International Symposium on Sustainable Development, (pp. 74–80). Sarajevo: Afyon Kocatepe University.

KPMG. (2018). Sustainable business and corporate governance. Institute of Chartered Accountants of Nigeria Stakeholders Dialogue 1. Retrieved from https://icanig.org/ican/documents/Sustainable-Business-and-Corporate-Governance.pdf.

Micah, L. C., & Umobong, A. A. (2013). Corporate governance and sustainable development in Nigeria: A Study of oil companies in the Niger Delta Region. International Journal of Business and Management, 8(7), 127–132. http://doi.org/10.5539/ijbm.v8n7p127

Nwagu, K., Efanga, U. O., & Umoh, E. A. (2020). Modelling corporate governance for sustainable business practices in Nigeria. *IAR Journal of Business Management*, *1*(3), 148–155. Retrieved fromhttps://iarconsortium.org/article/188_Modelling_Corporate_Governance_Practices_for_Sustainable_Business_Practices_in_Nigeria/.

OECD (2004). OECD Principles of Corporate Governance 2004, OECD Publishing.

Okoye, L. U., Olokoyo, F., Okoh, J. I., Ezeji, F., & Uzohue, R. (2020). Effect of corporate governance on the financial performance of commercial banks in Nigeria. *Business Perspectives, 15*(3), 55–69. https://doi.org/10.21511/bbs.15(3).2020.06.

Olayinka, O. M. (2021). Corporate governance and economic sustainability reporting in Nigeria. *Journal of Accounting and Taxation, 13*(4), 243–254. https://doi.org/10.5897/JAT2021.0478.

Olayinka, O. M., & Owolabi, S. A. (2021). Corporate governance and environmental sustainability reporting: The Nigerian perspective. *International Journal of Scientific and Research Publications, 11*(4), 487–497. https://doi.org/10.29322/IJSRP.11.04.2021.p11266.

Onuora, J. K. J., Obiora, F., & Iloghalu, C. R. (2022). Corporate governance mechanism and sustainability of health care firms in Nigeria. *International Journal of Trend in Scientific Research and Development (IJTSRD), 6*(3), 187–196. Retrieved from https://www.ijtsrd.com/papers/ijtsrd49500.pdf.

Oyekale, P. J., Olaoye, S. A., & Nwobia, A. N. (2022). Corporate governance and environmental sustainability disclosure in non-financial companies quoted in Nigeria. *Journal of Finance and Accounting, 10*(2), 121–131. https://doi.org/10.11648/j.jfa.20221002.15