

SUPPLY CHAIN RISK MANAGEMENT AND ORGANIZATIONAL PERFORMANCE OF MICRO ENTERPRISES

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ABSTRACT

In any country, micro enterprises are vital to the success of the economy as they serve very critical roles as a key engine to economic growth and development. However, with the global economic systems getting more susceptible to difficulty and the supply chain of micro enterprises businesses in Nigeria is further threatened by the harsh economic conditions, poor infrastructures and high insecurity currently prevalent in the country. This research work is an attempt to assess the effect of the management of supply chain risk on micro-enterprise business performance. The study employed primary data gathered from randomly selected micro-enterprise business owners' response to questionnaires. The data gathered from the respondents were analyzed using the descriptive statistics and the linear regression on statistical package for social science (SPSS). The study found that supply chain risk management has effect on the performance of micro-enterprise business, this research also revealed that micro enterprise owners agrees that they are generally exposed to risks listed on the supply chain risk items and lastly, it also revealed that the respondents agrees that they generally employed the various strategies and techniques listed on the supply chain risk management strategies and techniques items. And the study recommends that micro enterprise businesses should ensure they put up a formal risk management policy in place so that supply chain risk can be properly identified, assessed and dealt with pro-actively, they should also prioritise the use insurance protection against insurable risk especially for supply chain risk arising from natural or man-made disaster.

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Keywords:

*Risk, micro enterprises,
supply chain, supply chain
risk management,
organization performance.*

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1.0 INTRODUCTION

While the global economic systems are getting more susceptible to difficulty and uncertainty and thus requires businesses to make informed decisions regarding risk assessment, control and reduction (Iriani, Agustianti, Suciati, Rahman, & Putera, 2024).. Nigeria business place today is especially being characterized by a lot of unstable and uncertain conditions. This is occasioned by factors such as harsh economic conditions which often result to production constraint and demand uncertainty, poor infrastructures such as electricity and good road network as well as high insecurity which creates threat to lives, property and business economic activities (Uchechukwu, Amechi, Okoye, & Okeke, 2023; Schatz, 2024; Solomon & Harold 2022). These factors if not effectively and efficiently managed usually result in the disruption of organization supply chain.

Supply chain is the bending of distinct processes, which when performed together enhances the planning, production and distribution activities of goods and services while also providing after sale activities and facilities to ensure consumers satisfaction Helo & Hao (2022); Wagner & Sweeney, 2010). Blackhurst and Wu (2009) also define supply chain to be a web of institutions such as producers, suppliers and distributors working together to convert goods from raw material to final product and moving them to the final consumers. For every organisation, the effective management of its supply chain processes is an important feature of an organization capability to meet customers order as supply chain performance can be negatively impacted by disturbing incidents taking place in the supply chain processes. These supply chain disruptive events otherwise known as supply chain risks will always be part of an organisation operations. Katsaliaki, Galetsi & Kumar (2022) and Peck (2006) described supply chain risk as any incident capable of disrupting or impeding the flow of data, materials or goods from the initial suppliers to the distribution of the end product to the consumers and the common supply chain risks encountered by businesses in Nigeria always includes supply failure, logistic failure, regulatory risk etc. It is therefore necessary for organisations to find suitable strategies to manage and mitigate the risks associated with their supply chain. Supply chain risk management has been described as an organised and staged process of identifying, assessing, grading, reduction, and tracking of likely disturbance in supply chains (Aqlan & Lam, 2016). Hariharan and Nagarajan, (2018) also define supply chain risk management as the risk control efforts of all organisation supply chain cooperation among all staffs or employees so as to ensure the organisation sustainability and profitability. It entails both big and small organisation (MSMEs) managing risks that can hinder the performance of supply chains which will in turn affect their performance by way of lower profitability, operational dis-efficiency and loss of competitive advantage.

Moreover, MSMEs do not usually have an established risk management policy; MSMEs are usually faced with many concealed and obvious risks within their supply chain such as poor raw materials quality, unstable materials price, failure of supplier, inadequate production arrangement and unstable demand

(Hariharan & Nagarajan, 2018). More so, previous researchers such as (Safari, Balicevac Al Ismail, Parast, Gölgeci & Pokharel 2024; Gurbuz, Yurt, Ozdemir, Sena & Yu 2023; Thun, Druke & Hoenig, 2011) have found out that SMEs' supply chains is more susceptible when compared with large organizations supply chains and Vaaland and Heide, (2007) suggested that this vulnerability may be as a result of insufficient coordination, monetary and human resources. Thus MSMEs must strive to manage the many obstacles that can impact it supply chain negatively so that it can be able to achieve optimized customer value and a unceasing competitive advantage and subsequently serves its role as an important element in the economic development of the country by providing jobs, enhancing income, and improving economic growth.

Present literatures on supply chain and its associated risk management are centered on big organization while small and medium-sized enterprises are been overlooked notwithstanding the immense importance of MSMEs to any nation's economy. Of particular importance is the micro enterprise which serves as a source of livelihood for huge number of job applicants, sacked workers, and even retirees perhaps due to the small amount of start-up funds needed to set up such businesses. Micro enterprises serve very critical roles as an important cog to the process of economic growth and development, and these roles comprises huge input of the sector to the nation's GDP, highest source of employment, high source of foreign exchange through export etc. Thun et al. (2011), opined that the supply chains of SMEs' is more susceptible when compared with large organizations supply chains. Safar et al. (2024); Vaaland and Heide, (2007) had suggested that this vulnerability may be as a result of insufficient coordination, monetary and human resources. In addition to this vulnerability, the supply chain of small businesses in Nigeria is further threatened by the harsh economic conditions, poor infrastructures and high insecurity currently prevalent in the country. And considering that micro enterprise does not usually have an established risk management practices to militate against supply chain vulnerabilities, it impacts their supply chain negatively thus affecting the organisation sustainability and profitability which may ultimately result in the folding up of such businesses.

This purpose of this study is to identify the major supply chain risks that micro enterprise business in Nigeria are exposed to and to identify the feasible strategies and techniques to manage such supply chain risk, this research also seeks to examine the impact of supply chain risk management and mitigation strategies on the performance of micro-enterprise business. The result of this study will assist micro enterprise business owners to have clearer understanding of supply chain risk and how to efficiently manage such risk, it will also assist policymakers in coming up with policies and programs that will steer the micro business enterprises into contributing significantly to the nation's economic growth and development.

The main objective of this study is to assess the effect of supply chain risk on micro-enterprise business performance while the specific objectives are to;

- i. identify the supply chain risks that micro-enterprise business usually exposed to.
- ii. identify the major supply chain risk management and mitigation strategies employed by micro-enterprise business.
- iii. assess the effect of supply chain risk management and mitigation strategies on the performance of micro-enterprise business.

Research Questions

This research work is an attempt to examine the effect of the management of supply chain risk on micro-enterprise business performance. In order to address adequately the problems of the research, the following questions were developed.

- i. What are the major supply chain risks that micro enterprise business is exposed to?
- ii. What are the major strategies and techniques to manage the supply chain risks been exposed to by micro enterprise business?
- iii. What effect does supply chain risk management and mitigation strategies have on the performance of micro-enterprise business?

Research Hypothesis

This research hypothesis was formulated in order to achieve the objective of the study.

H₀: Supply chain risk management and mitigation strategies have no significant effect on the performance of micro-enterprise business.

H₁: Supply chain risk management and mitigation strategies have a significant effect on the performance of micro-enterprise business.

2.1 CONCEPTUAL REVIEW

Concept of Supply chain

Supply chain is the bending of distinct processes, which when performed together enhances the planning, producing or distribution activities of goods and services while also providing after sale facilities to ensure consumers satisfaction (Helo, & Hao, 2022; Wagner & Sweeney, 2010). Christopher (2022), Chopra and Meindel (2001) posited that supply chain is made up of the totality of steps taken either directly or indirectly, in the discharge of customer request. The supply chain is made up of not only the producers and their suppliers, but also the carriers, storehouse, reseller and the final consumers. Thus, supply chain consists of the entire important logistics networks which consist of suppliers, production centers, warehouse, delivery centers, resellers market, unprocessed materials, work-in-progress stocks and the end products (ZandHessami & Savoji, 2011).

From various definitions of supply chain, it can be deduced that there are three features that can depict what a supply chain is. Firstly, a supply chain only exists when more than one interdependent organisation is involved. Secondly, the interdependent organisations should not be owned by the same business entity to ensure that there is dependency among them. Thirdly, those interdependent organisations have similar dedication to enhance the material flow running through the supply chain (Lu, 2011). According to Kamalahmadi and Parast (2016) another major features of supply chain is the relatedness it affords partners within the supply chain which allow them work together to offer better goods and services to customers.

Though supply chain has been defined differently and in various literatures, virtually all the definitions are applicable to for large-scale industries. it is a bit difficult to defining supply chain in MSMEs due to the fact that most MSMEs are being managed by their owns and do not have a formal structure (Okon, 2018). And many literatures have established the fact MSMEs supply chain are being mostly by super customers rather than themselves (Trung & Belihu, 2010). However, Bargouthi, (2023); hakkar and Deshmukh (2008), describe the supply chain of MSMEs as a set of business processes comprising of open/spot market purchases, production and processing of materials and transporting them to big organization while enhancing the end product value to and ensuring customers continuous.

Supply chain risk

Risk is an ever-prevalent challenge to individuals, businesses and society, as it is present in every activity. It is a term regularly used by individual in both their personal and professional life, but defining risk is usually very difficult because the word risk has various meaning to different people. Risk has been defined as an uncertain event or set of events in which its occurrence will impact negatively the fulfilment of an objective. Concina (2014) also define risk as the possibility of an activity leading to a loss or an unwanted result. One major form of risk faced by all businesses whether large or small is disruption to its supply chain processes known as supply chain risk. Peck (2006) described supply chain risk as any incident capable of disrupting or impeding the flow of data, material or goods from the initial suppliers to the distribution of the end product to the consumers. Supply chain have been classified in several forms, however Christopher and Peck (2004) classification is the most popular classification, and they classified supply chain risks into five sources according to their origin: supply risk, demand risk, process risk, control risk and environmental risk.

Supply chain risk management and mitigation

Supply chain risk management has been described as an organised and staged process of identifying, assessing, grading, reduction, and tracking of likely disturbance in supply chains (Aqlan & Lam, 2016). Hariharan and Nagarajan, (2018) also define supply chain risk management as the risk management effort of all organisation supply chain coordination and cooperation among all staffs or employees so as to ensure

the organisation sustainability and profitability. Organisation supply chain risk management capability is an organization’s ability to face supply chain disruptions due to either internal or external causes and maintain its normal activities in uncertain times by identification, evaluation, and mitigation of such risks (Ghosh & Sar, 2022).

Many SCRM studies have addressed mitigation strategies to handle the supply chain risks and all these mitigation approaches involves the use of management of supply, demand, product and information such as collaboration with key suppliers (Nel, 2024; Um & Han 2021; Kannan, & Tan 2010, Mikkola, & Skjøtt-Larsen, 2006), sharing knowledge and resources (Eyaa, Ntayi, & Namagembe, 2010) and finding universal source of suppliers and faith and integration among the partners(Concina 2014; Christopher, Mena, Khan, & Yurt, 2011, Faizal, Banwet, & Shankar, 2006). Supply chain risk mitigation strategies can be of two types; Proactive and Reactive. The proactive as preventive measures mean taking appropriate action before the risk occur, while reactive measures mean taking action after the event have occurred.

Conceptual Framework

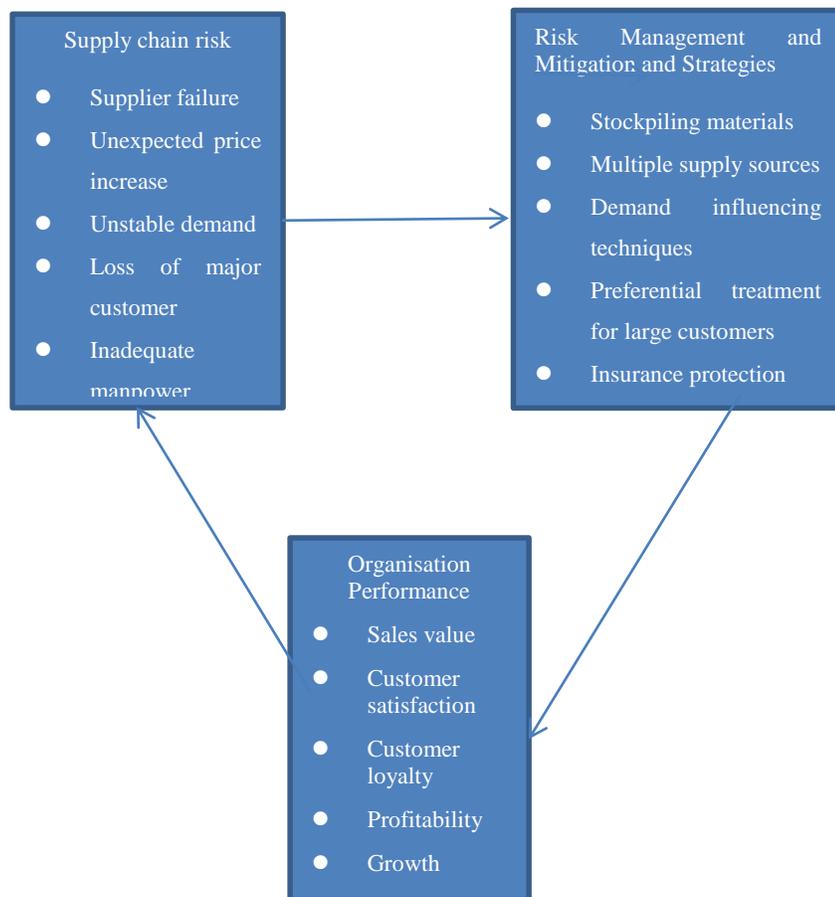


Figure 1: Framework for Supply Chain Risk Management and Organisation performance
Source: Author 2025

Organisational performance

Jaber (2020) define performance as the attainment of the target set by employers: the provision of goods and services and their acceptance by the final consumers to ensure the continuity, advancement, growth, and profit of the company. Organizational performance is the measuring of actual results or outcomes against intended outcomes or outputs (or goals and indicators). Organizational performance is important in the determining of business success or failure as it gives an organization the sense of direction as to where there are issues improves accordingly. Research on an organization's performance is important because it not only identifies the key financial and non-financial factors of success or failure but also evaluates other departments, performance management, performance processes and employees' welfare (Gutterman, 2023; Ling & Hung, 2010).

According to Richard et al. (2009); Munteanu, Ionescu-Feleagă, Ionescu, BSpânu, & Rus, (2025). organizational performance encompasses three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product market performance (sales, market share, etc.); and (c) shareholder return (total shareholder return, economic value added, etc.). Many researchers have found out a strong correlation between organizational performances and the implementation and application of risk management (Moussa, Elmarzouky and Shohaieb, 2024; Jaber 2020). Therefore, if risk management practices are implemented and implemented effectively, the overall performance of the organization will be improved.

Micro enterprise

Micro enterprises can be defined as a small business that employs a small number of employees and with a small start-up capital. SMEDAN (2023) defined a micro enterprise as a small business that employs less than ten people and with asset of less than five million excluding land and building.

Micro enterprises serve very critical roles as an important cog to the process of economic growth and development, and these roles comprises huge input of the sector to the nation's GDP, highest source of employment, high source of foreign exchange through export (Marcel,2024). Selejio & Mduma (2005) discover that in many developing countries, a substantial number of new job seekers, retrenched workers, and even pensioners, have turned to small and micro-enterprises (MEs) as a source of livelihood. This is possible because of the low level of capital required in the establishment of the enterprises as evident by SMEDAN survey in 2013, the initial start-up capital of micro enterprises was predominantly less than fifty thousand Naira.

Micro-enterprise sector is also accountable for many modern developments in products and process, provides much more employment opportunities than other sector and is also a key indicator of the overall performance of an economy.

Theoretical Framework

Resource based view (RBV)

This study is anchored on the Resource-based view (RBV) theory which evolved from the work of **Birger Wernerfelt** in 1984 which posited that a sustainable advantage is achieved when a firm possesses resources that are **Valuable, Rare, Inimitable** (difficult to imitate), and **Organized** to capture value, a framework often referred to as RBV which emphasizes an internal focus on a company's specific strengths, contrasting with external-focused competitive analysis. Resource-based view (RBV) theory is a strategic management framework suggesting that a firm's competitive advantage comes from its unique internal resources and capabilities. It examined and described internal resources of organizations and emphasizes organization resources and capabilities in formulating strategy to achieve sustainable competitive advantages. Resource based view clarifies that the recognition and control of critical internal resources contribute to a firm's ability to create and maintain a competitive advantage and improve performance (Sund, Bogers, Villarroel, & Foss, 2016). According to the theory, the resources owned by an organization are the main determinants of its performance and contribute to a sustainable competitive advantage of the firm (Ranjan & Read, 2016).

Resources comprises of assets, capabilities, organizational processes, firm attributes, information, knowledge within the organization control, and resources is considered critical if it meets certain criteria valuable non-substitutable, rare or specific, and inimitable to contribute to improving the performance of the firm (Turber & Gassmann, 2015). However, within the competitive market structure participants in the supply chain do make conscious effort to have influence and dominate the elements of production that can afford competitive edge over their (Ahuja, 2000). Relating this to this research work shows that individual organization based on their unique internal resources and capabilities can manage appropriately the SC risks or respond proactively to it in other to mitigate it impact on their business in other to have a competitive advantages.

Empirical review

Helo, and Hao, (2022) in their work titled Artificial intelligence in operations management and supply chain management: an exploratory case study emphasizes that with the development and evolution of information technology, competition has become more and more intensive on a global scale. Many companies have forecast that the future of operation and supply chain management (SCM)

may change dramatically, from planning, scheduling, optimisation, to transportation, with the presence of artificial intelligence (AI). People will be more and more interested in machine learning, AI, and other intelligent technologies, in terms of SCM. Within this context, this particular research study provides an overview of the concept of AI and SCM. It then focuses on timely and critical analysis of AI-driven supply chain research and applications. In this exploratory research, the emerging AI-based business models of different case companies are analyzed. Their relevant AI solutions and related values to companies are also evaluated. As a result, this research identifies several areas of value creation for the application of AI in the supply chain. It also proposes an approach to designing business models for AI supply chain applications.

Okon (2020) stated in his work *Historical* and philosophical issues, amidst modern approaches continue to play-out fundamentally and at the same time pose serious challenge to the development of business education in Nigeria. This study determined: the extent of relationship between historical issues and philosophical issues and how modern approaches to business education predicts the development of the programme. The study answered three research questions and tested three null hypotheses. This study adopted the descriptive survey research design. The study was carried out in Nigeria. The population of the study was 540 comprising 400 professional business educators and 140 other professionals in the larger society. The simple random sampling technique was used to select the sample size of 299 comprising 196 business educators and 103 professionals from the larger society. The researcher-made questionnaire duly validated and reliability-tested, tagged, “Historical-Philosophical Issues and the Development of Business Education Questionnaire (HPIDBEQ)” generated data for the study. Data was analysed using Linear Regression Analysis (LRA). Findings are that: Historical and philosophical issues significantly relate to the development of business education in Nigeria; and modern approaches significantly predict the development of business education with a high predictive value.

3.0 METHODOLOGY

Research Design

This study adopted descriptive research using quantitative data so as to enabled the researcher become more familiar with the situation, acquire a new understanding about the situation, and formulate specific research problem and hypothesis.

Population and Sampling Design

The population of this study includes every micro enterprise operator in Nigeria, which was put at 38,413,420 as at 2023 SMEDAN survey, and the Cochran (1963) formula for determining sample size was

adopted. Applying this formula at 95% confidence level, with degree of variability at 50% and at 5% error margin resulted in a sample size of 384. Random sampling technique was then adopted. This is to ensure that every respondent in the target population have an equal chance of being selected as a study respondent.

A systematic random sampling technique was applied to select the sample size. Systematic random sampling was considered appropriate since it gave every respondent in the target population an equal chance of being selected as a study respondent and thus it had no bias and eased generalization of the gathered findings.

Data collection method

Data for the study was obtained through primary source, specifically through the use a structured questionnaire. The questionnaire survey included two parts; first, the study sought some demographic information from the micro-enterprise owners and secondly, the study sought information regarding the supply chain risk been encountered, supply chain risk management and mitigation strategies adopted and the effect of such strategies on the organisation performance.

Validity and Reliability

The validity of the questionnaire was checked by two methods content validity and face validity. Content validity was proved through previous literature such as books, articles, research papers, thesis and dissertations. Face validity was confirmed through experts who duly affirmed the validity of the questionnaire.

The Cronbach Alpha method was used to test the reliability of the response from participants. Results are expressed between 0-1, according to Sekaran 2003, if Cronbach's Alpha is more than 0.60 then reliability is confirmed. Table (1) shows that Cronbach's Alpha for independent variables ranging from value reached 0.734 and 0.832, and for dependent variable is 0.852, which indicate that reliability is accepted.

Table 1: The Result of Reliability (Cronbach Alpha)

No	Domain	Cronbach's Alpha	N of Items
1	Supply chain risks encountered	.734	8
2	Supply chain risk management and mitigation strategies	.832	9
3	Effect of management and mitigation strategies on organisation performance	.852	6

Source: Field survey, 2025

4.0 RESULTS AND FINDINGS

Data analysis was with the aid of both descriptive and inferential analysis. Descriptive analysis was done using the descriptive statistics on Statistical Package for Social Sciences (SPSS), and was used to generate frequency, tables, and percentages, it was also used to answer research questions one and two, while inferential analysis was used to answer research questions three and to test the research hypothesis specifically with the use of regression analysis. The results and analysis were discussed in the data interpretation and summary of findings.

Three hundred and eighty-four (384) questionnaires were administered but only Three hundred and forty-nine (349) were properly answered and returned. Hence the analyses of the respondent's responses to the questions were based on the questionnaires that were properly completed.

Descriptive Statistics:

The descriptive analysis is used to answer the first and second questions. The descriptive analysis includes the mean, standard deviation, rank and exposure/usage level. Exposure/usage level was based on the following criteria:

- Less than 2.33 is Low.
- From 2.34 to 3.66 is Medium.
- More than 3.67 is High.

Table 2: Mean and standard deviation for supply chain risk items

No	Items	Mean	S.D.	Rank	Level
1	Late delivery of supplies by organisation's supplier	3.85	0.93	1	High
2	Unexpected price increase by organisation's supplier	3.08	1.05	5	Medium
3	Unstable demand of organisation's products/ services	2.88	1.06	7	Medium
4	Loss of organisation's major customer(s)	2.29	0.85	8	Low
5	Presence/entry of creative competitors into the organisation's industry	3.80	0.98	2	High
6	Inadequate organisation's manpower or equipment	3.06	1.09	6	Medium
7	Lack of or inadequate planning and forecasts	3.17	1.03	4	Medium
8	Natural or man-made disaster such as flooding, fire or road accident	3.77	0.96	3	High

Source: Field survey, 2025

Table 2 shows that the mean value for supply chain risk items ranges between 3.85 and 2.29 with standard deviation ranges from 1.09 and 0.85, this indicates that the respondents agrees that they are generally exposed to the risks listed on the supply chain risk items. Specifically, with mean values of 3.85, 3.80 and 3.77 respectively, the respondents believes that late delivery of supplies by organisation’s supplier, presence/entry of creative competitors into the organisation’s industry and natural or man-made disaster are the top three supply chain risks that micro enterprise businesses are exposed to while with a mean value of 2.29, the respondents believe that loss of organisation’s major customer(s) is the least supply chain risk they are exposed to.

Table 3: Mean and standard deviation for supply chain risk management strategies and techniques

No	Items	Mean	S.D.	Rank	Level
1	Stockpiling materials that can be used to meet customer demand in the event of supply interruption.	3.86	0.93	1	High
2	Sourcing materials from multiple suppliers such that failure of one supplier does not affect organisation operation	3.71	1.06	3	High
3	Having an emergency supplier not normally used but that can be activated in event of organisation supplier failure	2.89	1.14	9	Medium
4	Influencing demand by adjusting prices or giving incentives so that customer can buy products that are not supply constrained	3.03	1.21	6	Medium
5	Prioritizing the demand of existing customers as against new customers demand.	2.95	1.07	8	Medium
6	Offering price reduction, discount and incentives to organisation big account customers	3.25	1.13	5	Medium
7	Reviewing the organisation strengths and weaknesses as against its competitors and improving where and when necessary	3.78	1.07	2	High
8	Taking up insurance to protect the organisation from insurable risk and ensure business continuity	3.03	1.28	6	Medium
9	Sharing demand and supply data and forecast with supply chain partners to reduce risk of unforeseen demand swings and supply shortage	3.71	1.14	3	High

Source: Field survey, 2025

Table 3 shows that the mean value for supply chain risk management and strategies items ranges between 3.86 and 2.89 with standard deviation ranges from 1.28 and 0.93, this indicates that the respondents agrees that they generally employed the strategies and techniques listed on the supply chain risk management strategies and techniques items. Specifically, with mean values of 3.86 and 3.78 respectively, the respondents believe that stockpiling of materials and regular reviewing of the organisation strengths and

weaknesses are the top two supply chain risk management strategies and techniques usually employed by micro enterprise businesses.

Hypothesis Testing

H₀: Supply chain risk management and mitigation strategies has no effect on the performance of micro-enterprise business., at $\alpha \leq 0.05$.

Simple Regression of supply chain risk management and mitigation strategies on the performance of micro-enterprise business

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.486 ^a	.237	.234	.57100

a. Predictors: (Constant), Risk mmanagement and mmitigations strategies

Source: Field survey, 2025

Table 5: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	35.057	1	35.057	107.525	.000 ^b
	Residual	113.136	347	.326		
	Total	148.193	348			

a. Dependent Variable: Performance

b. Predictors: (Constant), Risk mitigation average

Source: Field survey, 2025

Table 6: Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.473	.161		15.331	.000
	Risk mitigation average	.489	.047	.486	10.369	.000

a. Dependent Variable: Performance of micro-enterprise business

Source: Field survey, 2025

Table 4, 5 and 6 shows that the relationship between risk management and mitigation strategies and the performance of micro-enterprise business is strong, where r equals 0.486, and the variation in risk management and mitigation strategies affect the variation of the performance of micro-enterprise business, where $R^2=0.237$, $f=107.525$, $\text{sig.}=0.000$. Therefore, the null hypothesis is rejected and the alternative is accepted, which states that supply chain risk management and mitigation strategies has effect on the performance of micro-enterprise business, at $\alpha \leq 0.05$.

Discussion of findings

The purpose of this research study was to assess the effect of the management of supply chain risk on micro-enterprise business performance. From the results, it was found that supply chain risk management has effect on the performance of micro-enterprise business, this could be due to the robust supply chain risk mitigation strategies adopted to curb supply chain internal risk, external risk as well as environmental risk. This is in line with the findings by Ngii (2017) which also establish a relationship between supply chain risk management and organization performance.

This research also revealed that micro enterprise owners agrees that they are generally exposed to risks listed on the supply chain risk items and that late delivery of supplies by organisation's supplier, presence/entry of creative competitors into the organisation's industry and natural or man-made disaster are the top three supply chain risks they are exposed to. This is in line with the study by Hillman & Keltz (2007). where respondents identified supply failure and natural disaster as the most potential threat to their organization

This research also revealed that the respondents agrees that they generally employed the various strategies and techniques listed on the supply chain risk management strategies and techniques items and that stockpiling of materials and regular reviewing of the organisation strengths and weaknesses are the top two supply chain risk management strategies and techniques usually employed by micro enterprise businesses. This could be due to the fact that micro enterprise owners having perceived the risk of supplier failure as the dominant supply chain risk placed more emphasis on stockpiling of materials to cushion the effect of the risk. More so, having identified the presence/entry of creative competitors into the organisation's industry as another dominant supply chain risk, it is no surprise that micro enterprise owners adopted he regular reviewing of their organisation strengths and weaknesses as the major supply chain risk mitigation strategies.

Conclusion and Recommendation

Micro enterprises serve very critical roles as a key engine to economic growth and development; thus, their survival is of importance to any nations. However, their survival depends on their ability to successfully manage their risk exposures including supply chain risk exposures. And with this study establishing that supply chain risk management has effect on the performance of micro-enterprise business, there is therefore the need for micro enterprise to have a formal risk management process to militate against disruption of its supply chain

The study recommended that micro enterprise businesses should ensure it put a formal risk management in place so that supply chain risk can be properly identified, assessed and dealt with pro-actively. In addition to stockpiling of materials and regular reviewing of the organisation strengths and weaknesses, they should also prioritise the use insurance protection against insurable risk especially for supply chain risk arising from natural or man-made disaster.

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Research Questionnaire

SECTION 1: DEMOGRAPHICS DATA

The questions in this section are about your organization. Please respond to these questions as accurately as possible by ticking the appropriate option (√) your choice below:

1. How many employees does your organization have?
 1 employee () 2-5 employees () 5-10 employees () Above 10 employees ()
2. How long has your organization been in operation (Years)?
 Below a year () 1-5 () 5-10 () Above 10 ()
3. What is of these sectors does your organization fall within?
 Education () Manufacturing () Wholesale/Retail Trade () Accommodation& Food Services ()
 Human Health and Social Works () others (please specify)

SECTION 2: SUPPLY CHAIN RISK AND ORGANISATION PERFORMANCE DATA

A) Indicate how often your organisation encounters the following supply chain risks ticking the appropriate option (√)

S/N		Always	Often	Sometimes	Rarely	Never
1	Late delivery of supplies by organisation's supplier					
2	Unexpected price increase by organisation's supplier					
3	Unstable demand of organisation's products/ services					
4	Loss of organisation's major customer(s)					
5	Presence/entry of creative competitors into the organisation's industry					

6	Inadequate organisation's manpower or equipment					
7	Lack of or inadequate planning and forecasts					
8	Natural or man-made disaster such as flooding, fire or road accident					

B) Indicate the extent in which your organisation uses the following supply chain risk management and mitigation strategies by ticking the appropriate option (√)

S/N		Always	Often	Sometimes	Rarely	Never
1	Stockpiling materials that can be used to meet customer demand in the event of supply interruption.					
2	Sourcing materials from multiple suppliers such that failure of one supplier does not affect organisation operation					
3	Having an emergency supplier not normally used but that can be activated in event of organisation supplier failure					
4	Influencing demand by adjusting prices or giving incentives so that customer can buy products that are not supply constrained					
5	Prioritizing the demand of existing customers as against new customers demand.					
6	Offering price reduction, discount and incentives to organisation big account customers					
7	Reviewing the organisation strengths and weaknesses as against its competitors and improving where and when necessary					
8	Taking up insurance to protect the organisation from insurable risk and ensure business continuity					
9	Sharing demand and supply data and forecast with supply chain partners to reduce risk of unforeseen demand swings and supply shortage					

C) Indicate how the use of the above supply chain risk management and mitigation strategies affects your organisation performance by ticking the appropriate option (√)

S/N		Always	Often	Sometimes	Rarely	Never
1	It improves the organisation operational performance					
2	It improves the sales value of the organisation					
3	It helps the organisation to increase customer satisfaction					
4	It improves the profitability of the organisation					
5	It helps the organisation to increase customer loyalty					
6	It helps the organisation to ensure organisation growth					