# Optimizing Business Intelligence for Nigerian Small and Medium Scale Enterprises: The Influence of Economics Education and Guidance Counseling on Decision-Making and Growth


## Abstract

*The problem of SMEstoday is compounded by the rapid pace of technological advancements in Nigeria.Addressing the challenge is essential for maximizing the potential of Business Intelligence as a strategic tool for enhancing decision-making and driving organizational success. The study examined optimizing business intelligence for nigerian small and medium scale enterprises: the influence of economics education and guidance counseling on decision-making and growth. The study applied cross-sectional survey research design. The population of the study comprised selected 1331SMEs in Nigeria. The sample size of 302 was obtained using Krejcie and Morgan (1970) formula. The research adopted stratified random sampling techniques. Data were collected using structured questionnaire.The descriptive statistics, such as mean and standard deviation were used to analyze the data and the hypotheses were tested using t-test.The finding has it that data sources, data warehousing and reporting tools have effect on performance of SMEs in Nigeria. The research concluded that if the wrong Business Intelligence is implemented without good research and planning, it could be a failure initiative. The study recommended thatGovernment should Partner with local business schools, financial institutions, and government agencies to provide subsidized or free workshops on economic principles relevant to SMEs and create counseling centers or platforms where SME owners can receive personalized advice on decision-making, growth strategies, and overcoming operational challenges.*



***Keywords:*** Business Intelligence, Economics Education, Guidance Counseling, Optimizing & Small and Medium Scale Enterprises


## Introduction

In recent years, SMEs in Nigeria face various unforeseen events that normally have a detrimental impact on their progress and performance. Business intelligence systems are currently perceived as a solution to such disruptive events that hit the businesses unexpectedly, irrespective of whether it is a large or small business enterprises (Fourati-Jamoussi&Niamba, 2016). These systems offer technological solutions that provide analytical capabilities as well as data integration services that can provide valuable information for business stakeholders. However, assessing the success of business intelligence systems is a problem as they cover entire organizations and their benefits can only be long-term (Nduji& Oriaku,2020). Additionally, small and medium enterprises (SMEs) are perceived as laggards when it comes to implementation of technological systems. This is because they lack the financial capacity as well as the required expertise to implement and manage big data systems.

As SMEsbegan to recognize the potential of data-driven decision-making, the adoption of BI systems increased dramatically. A study by Nduji et al (2023) found that by 2050, 50% of SMEs would be actively using analytics to drive business outcomes. This widespread adoption has led

to a growing body of research examining the relationship between BI implementation and organizational performance. One of the key areas where BI has shown significant impact is in improving decision-making processes. By providing timely and accurate information, BI systems enable managers to make more informed decisions, leading to improved operational efficiency and strategic planning (Popovič et al., 2012). For example, a study by Elbashir et al. (2008) found that organizations using BI systems reported improvements in both internal and customer-facing processes, resulting in enhanced overall performance. The effect of BI on organizational performance can be observed across various dimensions, including financial performance, operational efficiency, customer satisfaction, and innovation capacity.

At the core of any BI system are the data sources that feed into it. These sources can be internal (e.g., transaction systems, operational databases) or external (e.g., market research data, social media feeds). The quality and diversity of data sources significantly influence the effectiveness of BI in improving organizational performance (Ramakrishnan et al., 2012). Organizations that successfully leverage a wide range of data sources tend to gain more comprehensive insights into their operations and market environment. For instance, a study by Chaudhuri et al. (2011) found that companies integrating both structured and unstructured data sources into their BI systems were better positioned to identify emerging trends and respond to market changes more effectively.However, the proliferation of data sources also presents challenges in terms of data integration and quality management. Yeoh and Koronios (2010) identified data quality as one of the critical success factors for BI implementation, highlighting the need for robust data governance frameworks to ensure the reliability and consistency of information used in decision-making processes.

Another Backbone of Business Intelligence is the Data warehousing which plays a crucial role in the BI ecosystem by serving as centralized repositories for data collected from various sources. It provides a foundation for analytical processing and reporting, enabling organizations to consolidate and standardize their data assets (Kimball & Ross, 2013). The impact of data warehouses on organizational performance is multifaceted. First, they facilitate faster and more efficient data retrieval, allowing decision-makers to access relevant information quickly. A study by Watson et al. (2006) found that organizations with well-designed data warehouses reported significant improvements in decision-making speed and accuracy. Moreover, data warehouses enable historical analysis and trend identification, which are crucial for strategic planning and forecasting. Wixom and Watson (2001) demonstrated that organizations leveraging data warehouses for long-term trend analysis were better equipped to anticipate market changes and adjust their strategies accordingly, leading to improved financial performance. However, the effectiveness of data warehouses in enhancing organizational performance depends on several factors, including data quality, system design, and user adoption. Hwang and Xu (2008) identified critical success factors for data warehouse implementation, emphasizing the importance of aligning warehouse design with business objectives and ensuring user involvement throughout the development process.

Reporting tools are essential components of BI systems, as they transform raw data into meaningful and actionable insights(Nduji et al,2024). These tools range from simple tabular reports to sophisticated interactive dashboards and data visualization platforms. The impact of reporting tools on organizational performance is primarily through their ability to communicate complex information effectively to decision-makers at all levels of the organization (Few, 2006).Studies have shown that organizations using advanced reporting and visualization tools tend to exhibit improved decision-making processes and overall performance. For instance,

Eckerson (2010) found that companies leveraging performance dashboards reported higher levels of operational efficiency and strategic alignment. The effectiveness of reporting tools in enhancing organizational performance is closely tied to their usability and relevance to specific business needs. Yigitbasioglu and Velcu (2012) emphasized the importance of customizing dashboards and reports to align with users' cognitive styles and information requirements, leading to more effective decision-making and improved performance outcomes.

The integration of BI, data sources data warehousing and reporting tools, has been shown to have a positive impact on organizational performance. Studies have found that organizations that effectively implement BI strategies and leverage these technologies tend to experience improved financial performance, enhanced operational efficiency, and better decision-making capabilities. For example, a study by Elbashir et al. (2008) found that the use of BI systems in organizations was positively associated with improved organizational performance, as measured by financial and non-financial metrics. Similarly, a study by Popovič et al. (2012) examined the impact of BI maturity on organizational performance and found that organizations with more mature BI capabilities, including data warehousing and data mining, exhibited higher levels of operational and strategic performance. These findings highlight the importance of integrating BI technologies and processes to drive organizational success

By using BI systems, SMEs are supported in making their business-critical data and processes transparent and intelligent. Also, employees will be able to make better decisions, achieve the required results faster, and continuously develop them. Another advantage of BI systems is that companies can make their customer and supplier relationships even more profitable, reduce costs, minimize risks and increase added value. Without the use of BI systems, enormous amounts of data are available, but then they spread confusion and ultimately complicate business.Business intelligence systems provide essential tools that help in effective reporting and analyzing business information so as to understand the organizational internal and external environments (Fourati-Jamoussi and Niamba, 2016: Søilen, 2015). This gives the managers essential data that is used in decision-making processes.

Against this background, the aim of this study is to Fine-tune the efficacy of Business Intelligence on Nigerian small and medium scale enterprises (SMEs).

**Statement of the Problem**

The problem of SMEs today is compounded by the rapid pace of technological advancements in the field of Business Intelligence, including the emergence of artificial intelligence (AI) and machine learning (ML) techniques. While these technologies offer the potential for more sophisticated and automated data analysis, they also introduce new challenges in terms of implementation, integration with existing BI systems, and ethical considerations (Davenport &Ronanki, 2018). Furthermore, the problem lies in understanding how these various facets of BI—data sourcing, warehousing, and reporting tools—interact to influence organizational performance. Without a comprehensive understanding of these relationships, organizations risk underutilizing their BI investments and failing to achieve desired performance improvements. Addressing these challenges is essential for maximizing the potential of BI as a strategic tool for enhancing decision-making and driving organizational success (García et al., 2022).

In today’s data-driven environment, SMEs are increasingly reliant on Business Intelligence (BI) systems to enhance their performance and competitiveness. This enables SMEs to make informed decisions that ultimately lead to improved operational efficiency and strategic

advantages (Turban et al., 2011). Additionally, the complexity of data integration and the need for specialized technical expertise can make the implementation of a data warehouse a significant investment for many SMEs (Popovič et al., 2018).Without a well-designed approach to data integration, SMEs may struggle to obtain a comprehensive and accurate view of their operations, leading to suboptimal decision-making and missed opportunities for performance improvement.Once SMEs have established a comprehensive BI infrastructure, including effective data sources, a well-designed data warehouse andreporting tools, performance increases (Elbashir et al., 2013).

However, despite the promising potential of BI, many SMEs struggle to fully leverage its capabilities, resulting in suboptimal performance outcomes.The integration of diverse data sources into a centralized data warehouse as well as reporting tools is a complex process that SMEs often find challenging.There have been various studies onFine-tuning the efficacy of Business Intelligence on Small and Medium Scale Enterprises, however, most of them focused on Business analytics and Reportingtools, User interface andData Mining ,neglecting the other crucial independent proxies, which include Data sources, Data warehousing, Reporting tools and Collaborative tools. For instance, Agwu &Emeti (2014) focused onBusiness analytics, Reporting tools andUser interface neglecting the other independent proxies of business intelligence,Baškarada et al (2016)ignored Data Mining, Collaborative tools, Data sources and User interface.Also, Bertini et al (2020)focused on Data sources, collaborative tools and organizational performance only. Thus, this creates a gap for this study to fill by considering Data sources, Data warehousing and Reporting tools.

**Questions of the Study**

The main objective of the study is fine-tuning the efficacy of Business Intelligence on Nigerian small and medium scale enterprises,. The Sub - objectives are:

i. To determine the effect of Data Sources on performance of Nigerian small and medium scale enterprises
ii. To identify the effect of Data Warehousing on performance of Nigerian small and medium scale enterprises
iii. Toinvestigate the effect of Reporting Tools on performance of Nigerian small and medium scale enterprises

**Research Hypothesis**

1. Data Sources do not have any significant effect on performance of Nigerian small and medium scale enterprises.
2. Data warehousing does not have any significant effect on performance of Nigerian small and medium scale enterprises
3. Reporting tools do not have any significant effect on performance of Nigerian small and medium scale enterprises.

**Conceptual Framework**

**Business Intelligence**

BI is essentially a set of technologies, architectures, and processes that help transform raw data into actionable intelligence, which can help businesses in making informed decisions.BI directly impacts the organizational decisions of businesses. BI supports decision-making based on facts using highly calculated historical data. BI tools help in analyzing data and creating reports, dashboards, graphs, charts, and summaries.Business intelligence (BI) is a technology-driven

process for analyzing data and delivering actionable information that helps executives, managers and workers make informed business decisions. As part of the BI process, organizations collect data from internal IT systems and external sources, prepare it for analysis, run queries against the data and create data visualizations, BI dashboards and reports to make the analytics results available to business users for operational decision-making and strategic planning.The ultimate goal of BI initiatives is to drive better business decisions that enable organizations to increase revenue, improve operational efficiency and gain competitive advantages over business rivals. To achieve that goal, BI incorporates a combination of analytics, data management and reporting tools, plus various methodologies for managing and analyzing data.

Business intelligence data is typically stored in a data warehouse built for an entire organization or in smaller data marts that hold subsets of business information for individual departments and business units, often with ties to an enterprise data warehouse. In addition, data lakes based on Hadoop clusters or other big data systems are increasingly used as repositories or landing pads for BI and analytics data, especially for log files, sensor data, text and other types of unstructured or semi-structured data.BI data can include historical information and real-time data gathered from source systems as it's generated, enabling BI tools to support both strategic and tactical decision-making processes. Before it's used in BI applications, raw data from different source systems generally must be integrated, consolidated and cleansed using data integration and data quality management tools to ensure that BI teams and business users are analyzing accurate and consistent information.

**Data Sources**

Data sources in the context of business intelligence (BI) refer to the various origins from which data is collected, stored, and analyzed to support decision-making processes within an organization. These sources can include databases, data warehouses, cloud storage, external datasets, and more (sNduji et al,2024). The quality, accessibility, and relevance of these data sources significantly influence the effectiveness of BI initiatives. The choice and quality of data sources are critical for successful BI implementation. Reliable and relevant data sources enhance the accuracy of analytics, enabling organizations to make informed decisions. Poor quality data can lead to misguided strategies and lost opportunities (Fosso Wamba et al., 2020).To leverage various data sources effectively, organizations often employ data integration techniques. This involves consolidating data from different sources into a unified view, often using data warehousing solutions or ETL (Extract, Transform, Load) processes. Integrating data allows for comprehensive analysis and reporting, which is essential for informed decision-making (Tzeng et al., 2021). Data governance is also a key aspect of managing data sources. It ensures that data is accurate, consistent, and secure. Establishing clear policies regarding data quality, access, and privacy helps organizations maximize the value of their data sources while minimizing risks (Khatri & Brown, 2010). Advancements in technology have transformed how organizations source and analyze data. Cloud computing, for instance, allows for scalable data storage and processing capabilities, enabling organizations to handle large volumes of data from various sources. Additionally, tools like machine learning and artificial intelligence can automate data integration and analysis, further enhancing BI efforts (Davenport &Ronanki, 2018).

Data sources refer to the various internal and external sources from which an organization collects, extracts, and aggregates data to support its BI initiatives (Popovič et al., 2018). These data sources can include structured data from enterprise systems, semi-structured data from web interactions, and unstructured data from social media and other external sources. The quality, relevance, and accessibility of data sources are crucial determinants of the effectiveness of BI

initiatives. Without access to comprehensive and accurate data, organizations are unable to generate the insights necessary to support informed decision-making and drive performance improvements (Işık et al., 2013). As such, the identification, integration, and management of data sources are critical components of successful BI implementation.

**Data Warehousing**

Data warehousing is a fundamental component of effective business intelligence (BI) implementation. A data warehouse is a centralized, integrated, and subject-oriented repository of data that is specifically designed to support an organization's decision-making processes (Turban et al., 2017). Unlike operational databases, which are optimized for transactional processing, data warehouses are structured to facilitate the analysis and reporting of data from multiple sources. The importance of data warehousing in BI cannot be overstated. By consolidating and organizing data from disparate sources, data warehouses provide a single, unified view of an organization's information, enabling more comprehensive and accurate analysis (Popovič et al., 2018). Furthermore, the design and architecture of data warehouses are optimized for analytical processing, ensuring that decision-makers can access and analyze data quickly and efficiently (Elbashir et al., 2013).

Data housing refers to the systematic storage and management of data in a manner that supports efficient retrieval, analysis, and reporting, particularly in the context of business intelligence (BI). It encompasses various technologies and methodologies used to consolidate, organize, and maintain data from multiple sources, ensuring that it is accessible for decision-making processes. Effective data housing is critical for organizations seeking to leverage data as a strategic asset (Bertini et al., 2020). Data housing serves as the backbone of business intelligence initiatives. It provides a structured environment where data can be stored, accessed, and analyzed, allowing organizations to derive actionable insights from their data. Data warehousing is a centralized repository that stores large volumes of structured data from multiple sources. It is designed for query and analysis, providing a historical perspective on business operations. Data warehouses often utilize Online Analytical Processing (OLAP) capabilities to enable complex queries and reporting (Inmon, 2021). Recent advancements in data warehousing include cloud-based solutions, which offer scalability and flexibility. These solutions allow organizations to store and process data without the constraints of traditional on-premises systems, making them increasingly popular among businesses of all sizes (Meyer et al., 2021).

**Reporting tools**

Reporting tools in business intelligence (BI) are software applications designed to gather, analyze, and present data in a structured format, facilitating informed decision-making. These tools enable organizations to transform raw data into meaningful insights through visualizations, dashboards, and reports. Reporting tools play a crucial role in the BI ecosystem, as they help stakeholders understand complex data sets and track performance metrics effectively (Meyer et al., 2021). Reporting tools are a critical component of effective business intelligence (BI) systems, enabling organizations to transform data into meaningful and actionable insights. Reporting tools are software applications that provide users with the ability to create, generate, and distribute reports based on the data stored in an organization's BI infrastructure (Elbashir et al., 2013). These tools play a pivotal role in BI by facilitating the presentation and communication of data-driven insights to decision-makers, allowing them to make more informed and strategic decisions (Vukšić et al., 2013). Effective reporting tools can help organizations overcome the challenge of data overload by presenting complex information in a

clear, concise, and visually appealing manner, making it easier for users to interpret and act upon the insights derived from their BI initiatives.

Reporting tools in the context of BI typically offer a range of features and capabilities that support the effective presentation and dissemination of data-driven insights. These include:Data Integration and Connectivity: Reporting tools must be able to seamlessly integrate with various data sources, including databases, data warehouses, and other BI components, to ensure that users have access to the most up-to-date and relevant information (Popovič et al., 2018). Report Design and Customization: Reporting tools should provide users with the ability to design and customize reports, allowing them to present data in a format that best suits their specific needs and preferences. This may include the use of charts, graphs, tables, and other visual elements (Vukšić et al., 2013).Interactive and Intuitive Dashboards: Many reporting tools offer the ability to create interactive dashboards, which provide users with a consolidated view of key performance indicators (KPIs) and metrics, enabling them to quickly identify trends, patterns, and anomalies (Mikalef et al., 2019).

**Small and Medium-Scale Enterprises (SMEs)**

Small and medium-scale enterprises (SMEs) play a vital role in the global economy, accounting for the majority of businesses and contributing significantly to employment, innovation, and economic growth (Baškarada et al., 2016). According to Agwu &Emeti (2014), SMEs are defined as enterprises that employ fewer than 250 persons and have an annual turnover not exceeding €50 million, or an annual balance sheet total not exceeding €43 million.Business intelligence, which encompasses the technologies, processes, and strategies that enable organizations to collect, analyze, and transform data into actionable insights, has traditionally been viewed as a domain primarily accessible to large enterprises with significant resources and technical capabilities (Olszak, 2016). However, the proliferation of cloud-based and user-friendly BI solutions, as well as the increasing availability of affordable data sources, has made BI more accessible and relevant for SMEs.

**Business Intelligence andSmall and Medium-Scale Enterprises (SMEs)**

Business intelligence plays a pivotal role in enhancing the performance of SMEs by enabling them to make data-driven decisions. By utilizing BI tools and techniques, SMEs can analyze market trends, customer preferences, and operational efficiencies. This data-driven approach allows SMEs to identify opportunities for growth, optimize resource allocation, and improve customer satisfaction (Chaudhuri et al., 2020). For instance, SMEs can use BI to track sales patterns, enabling them to adjust their marketing strategies accordingly and enhance their market reach.Moreover, BI facilitates better financial management for SMEs. By analyzing financial data, organizations can identify cost-saving opportunities and improve budgeting processes. BI tools help SMEs to monitor cash flow, manage expenses, and forecast financial trends, which is vital for sustainability and growth (Meyer et al., 2021). In a competitive market like Nigeria, where financial resources are often limited, leveraging BI for effective financial management can provide SMEs with a significant advantage.

The adoption of BI presents numerous opportunities for SMEs in Nigeria. The growing availability of cloud-based BI solutions has made it more accessible for SMEs to implement BI without the need for significant upfront investments in infrastructure (Chaudhuri et al., 2020). These cloud solutions offer flexibility, scalability, and cost-effectiveness, allowing SMEs to pay for only the resources they need.Furthermore, the increasing digitization of business processes in Nigeria provides SMEs with more avenues to gather and analyze data. With the rise of e-commerce and digital marketing, SMEs can leverage online data sources to gain insights into

consumer behavior and market trends. This capability allows them to tailor their products and services to meet the evolving needs of their customers (Meyer et al., 2021).Additionally, BI can foster innovation within SMEs by providing insights that guide product development and service enhancements. By analyzing customer feedback and market trends, SMEs can identify gaps in the market and develop innovative solutions that meet customer demands. This adaptability is essential in a dynamic business environment where consumer preferences are constantly changing (García et al., 2022).

The strategic importance of BI for SMEs in Nigeria cannot be overstated. In an increasingly competitive market, the ability to make informed decisions based on accurate data is crucial for survival and growth. SMEs that effectively leverage BI are better positioned to respond to market changes, identify new opportunities, and mitigate risks (Bertini et al., 2020).Moreover, BI can enhance collaboration and communication within SMEs. By providing a centralized platform for data sharing, BI tools encourage teamwork and knowledge sharing among employees. This collaborative approach fosters a culture of innovation and continuous improvement, which is vital for long-term success (Zhang et al., 2021).

Despite the potential benefits, SMEs in Nigeria face several challenges in adopting and implementing BI solutions. One major obstacle is the lack of technical expertise and resources. Many SMEs operate with limited budgets and may not have the necessary infrastructure to implement sophisticated BI systems effectively. This limitation can hinder their ability to collect, analyze, and interpret data efficiently (Bertini et al., 2020).Additionally, the quality of data available to SMEs is often subpar. Inconsistent data collection methods and inadequate data management practices can result in unreliable insights, which may lead to poor decision-making. As noted by García et al. (2022), data governance is essential for ensuring data quality and integrity, yet many SMEs lack the necessary frameworks to implement effective data governance.

**Empirical Studies**

Côrte-Real et al. (2017) conducted a research on effect of data sources on performance of SMEs in Spain. The population was 654 selected firms and Sample Size of 325 firms was determined using Taro Yamani formula. The study employed descriptive research design. Data were obtained using interviews and sampling technique was a stratified sampling. Data were analyzed using descriptive statistics, while hypotheses were tested using chi-square. The finding has it that data sources have effect on performance of SMEs in Spain. The study focused on Spanish firms, which may limit the generalizability of the findings to other regions.

Gupta and George (2016) carried out a study on data warehousing and firm performance in Argentina. The Population of the study was 428 service SMEs in Argentina. The Sample Size of 206 service SMEs was obtained using Taro Yamani formula of 1964. The study employed survey research design. Data were obtained using structured questionnaire and sampling technique was a stratified sampling. Data were analyzed using frequency tables, while hypotheses were tested using Correlation analysis. According to the findings, data warehousing has effect on service SMEs in Argentina The study was conducted in the Argentina context, and the finding may not be directly applicable to other countries or regions with different business environments.

Elbashir et al. (2013) had a study on effect of Reporting tools on SMEs in the United States. The population of the study was 486 selected SMEs in the United States. The Sample Size of 223 selected SMEs was determined using Taro Yamani formula. The study employed cross-sectional research design. Data were obtained using structured questionnaire and interviews and sampling

technique was a stratified sampling. Data were analyzed using mean, standard deviation and percentages. while hypotheses were tested using regression analysis. According to the findings, reporting tools have effect on SMEs in United States. The study's generalizability may be limited to the U.S. context

## Theoretical Framework

### The Resource-Based View (RBV) Theory

The Resource-Based View (RBV) theory was initially developed in the 1980s and 1990s by strategic management scholars, including Birger Wernerfelt, Jay Barney, and Edith Penrose, among others (Wernerfelt, 1984; Barney, 1991; Penrose, 1959). The core premise of RBV is that firms can achieve sustainable competitive advantage by acquiring and deploying valuable, rare, inimitable, and non-substitutable (VRIN) resources and capabilities. The RBV theory has been extensively applied and validated in the context of business intelligence and information systems research. Several studies have demonstrated the positive relationship between BI capabilities and firm performance, supporting the RBV perspective. For example, a study by Popovič et al. (2018) found that big data analytics (a key component of BI) can contribute to firms' high-value business performance by enabling the development of VRIN resources and capabilities. Similarly, Mikalef et al. (2019) showed that big data analytics capabilities can positively impact firm performance through the lens of the RBV theory. While the RBV theory has been widely accepted, it has also faced some criticism. One of the main criticisms is the difficulty in clearly identifying and measuring VRIN resources, as they can be context-dependent and subjective (Priem & Butler, 2001). Additionally, some scholars have argued that the RBV theory lacks specificity in explaining the mechanisms through which resources and capabilities lead to competitive advantage (Foss & Knudsen, 2003).

The RBV theory is highly relevant to the study of business intelligence, as it provides a robust theoretical framework for understanding how BI can contribute to the development of VRIN resources and capabilities, which in turn can lead to improved organizational performance and competitive advantage. In the context of SMEs in Nigeria, the RBV theory suggests that the effective implementation and utilization of BI can help these organizations develop unique and valuable resources, such as data-driven decision-making capabilities, enhanced market intelligence, and optimized resource allocation. These VRIN resources can then be leveraged by Nigerian SMEs to gain a competitive edge and overcome the various challenges they face, such as limited access to financing, inadequate infrastructure, and a lack of technical expertise.

The RBV theory has several important implications for the study and application of business intelligence in the context of Nigerian SMEs asit highlights the strategic importance of BI as a source of sustainable competitive advantage for these organizations, and also underscores the need for Nigerian SMEs to invest in developing and nurturing BI-related resources and capabilities, such as data management, analytics, and organizational learning.

## Research Methodology

The study applied cross-sectional survey research design. Cross-sectional research design is used to survey the views and opinion of a large population over a particular issue of a population that possess diverse characteristics.The research design is chosen for this study because the population of the study possess different characteristics,which makes them diverse in nature.

The population of the study comprised selected SMEs in Nigeria.The total population as obtained from the Nigerian Small and Medium Enterprises Brochure 2023was 1331. The sample size of 302 was obtained using Krejcie and Morgan (1970)formula.The research adopted stratified random sampling techniques. The stratified sampling technique is important in social

science research for several reasons. Firstly, It allows the researcher to target specific groups of individuals in a location that were most relevant to research questions, which can help to ensure that the study provides useful and actionable insights. Stratified random sampling can help to increase the efficiency of the research process by allowing researchers to selected a small sample size without the compromising the validity of the study . This is because stratified sampling allows researchers to select participant which can help to ensure that the study is generalizable to similar population.

Data were collected using structured questionnaire.A five-point Likert scale was used. A Likert scale is more useful when a behavior needs to be evaluated in a continuum (Thompson et al,2017). The descriptive statistics,such as mean and standard deviation were used to analyze the data and the hypotheses were tested using t-test.

**Descriptive Analysis of Research Objectives**

**Table 1: Effect of Data Sources on performance of Nigerian (SMEs)**

| S/N | Effect of Data Sources | X | STD | DECISION |
|---|---|---|---|---|
| 1 | Integrating data allows for comprehensive analysis and reporting, which is essential for informed decision-making | 4.00 | 0.00 | Agreed |
| 2 | Data governance is also a key aspect of managing data sources. It ensures that data is accurate, consistent, and secure. | 2.67 | 1.12 | Agreed |
| 3 | Without access to comprehensive data, organizations are unable to generate the insights necessary to support informed decision-making | 3.44 | 0.53 | Agreed |
| 4 | Small and medium enterprises (SMEs) are perceived as laggards when it comes to implementation of technological systems. | 3.89 | 0.33 | Agreed |
| 5 | Advancements in technology have transformed how organizations source and analyze data. | 3.67 | 0.50 | Agreed |
| 6 | Data sources in the context of business intelligence (BI) helps to support decision-making processes within an organization | 3.44 | 0.53 | Agreed |
| 7 | The identification, integration, and management of data sources are critical components of successful BI implementation | 2.44 | 1.13 | Disagreed |
| 8. | Reliable and relevant data sources enhance the accuracy of analytics, enabling organizations to make informed decisions | 2.56 | 0.88 | Agreed |
| | **Sectional Mean** | **3.26** | **0.63** | **Agreed** |

**Scale mean 2.50,n= 1.96**

Table above showed the effect of Data Sources on performance of Nigerian small and medium scale enterprises. From the table, it could be observed that the mean value of 4.00,2.67,3.44,1.89,3.67,3.44 and 2.56 were in agreement with items 1,2,3,4,5,6 and 8 respectively while the mean value of 2.44 was in disagreement with item 7. The sectional mean of 3.26 was greater than the scale mean of 2.50which showed that some of the respondents agreed that Integrating data allows for comprehensive analysis and reporting, which is essential for informed decision-making, Data governance is also a key aspect of managing data sources. It ensures that data is accurate, consistent, and secure, Without access to comprehensive data, organizations are unable to generate the insights necessary to support informed decision-making, Small and medium enterprises (SMEs) are perceived as laggards when it comes to implementation of technological systems, Advancements in technology have transformed how organizations source and analyze data, Data sources in the context of business intelligence (BI) helps to support decision-making processes within an organization and Reliable and relevant data sources enhance the accuracy of analytics, enabling organizations to make informed decisions. However, the remaining respondent disagreed that the identification, integration and management of data sources are critical components of successful BI implementation

**Table 2: Effect of Data Warehousing on performance of Nigerian (SMEs)**

| S/N | Effect of Data Warehousing | X | STD | DECISION |
|---|---|---|---|---|
| 1 | Data warehouses provide a single, unified view of an organization's information, enabling more comprehensive and accurate analysis | 3.34 | 2.26 | Agreed |
| 2 | The design of data warehouses are optimized for analytical processing, ensuring that decision-makers can access and analyze data quickly and efficiently | 3.25 | 0.98 | Agreed |
| 3 | Data housing serves as the backbone of business intelligence initiatives | 3.40 | 0.80 | Agreed |
| 4 | Data warehousing is a centralized repository that stores large volumes of structured data from multiple sources | 3.19 | 1.00 | Agreed |
| 5 | Data warehouses often utilize Online Analytical Processing (OLAP) capabilities to enable complex queries and reporting | 3.09 | 1.11 | Agreed |
| 6 | Recent advancements in data warehousing include cloud-based solutions, which offer scalability and flexibility. | 2.81 | 0.86 | Agreed |
| 7 | Data warehousing promotes SMEs in Nigeria with a great speed | 3.00 | 1.08 | Agreed |
| 8 | It encompasses various technologies used to organize and maintain data from multiple sources, ensuring that it is accessible for decision-making processes | 2.89 | 0.96 | Agreed |
| | **Sectional Mean** | **3.12** | **1.13** | **Agreed** |

**Scale mean 2.50,n= 1.96**

Table 2 showed the effect of Data Warehousing on performance of Nigerian (SMEs). The above table observed that the mean values of 3.34,3.25,3.40,3.19,3.09,2.81,3.00 and 2.89 were in agreement with items 1,2,3,4,5,6,7 and 8 respectively. The sectional mean of 3.12 was greater the scale mean of 2.50 which shows that all the respondents agreed that Data warehouses provide a single, unified view of an organization's information, enabling more comprehensive and accurate analysis, The design of data warehouses are optimized for analytical processing, ensuring that decision-makers can access and analyze data quickly and efficiently, Data housing serves as the backbone of business intelligence initiatives, Data warehousing is a centralized repository that stores large volumes of structured data from multiple sources, Data warehouses often utilize Online Analytical Processing (OLAP) capabilities to enable complex queries and reporting, Recent advancements in data warehousing include cloud-based solutions, which offer scalability and flexibility, Data warehousing promotes SMEs in Nigeria with a great speed and It encompasses various technologies and methodologies used to consolidate, organize, and maintain data from multiple sources, ensuring that it is accessible for decision-making processes.

**Table 3: Effect of Reporting Tools on performance of Nigerian (SMEs)**

| S/N | Effect of Reporting Tools | X | STD | DECISION |
|---|---|---|---|---|
| 1 | Effective reporting tools can help organizations overcome the challenge of data overload. | 3.12 | 0.99 | Agreed |
| 2 | Many reporting tools offer the ability to create interactive dashboards. | 3.22 | 0.89 | Agreed |
| 3 | Reporting tools should provide users with the ability to design and customize reports. | 2.91 | 1.05 | Agreed |
| 4 | Reporting tools must be able to seamlessly integrate with various data sources. | 2.53 | 1.13 | Agreed |
| 5 | Reporting tools are a critical component of effective business intelligence (BI) systems, enabling organizations to transform data into meaningful and actionable insights. | 2.43 | 1.13 | Disagreed |
| 6 | Reporting tools are software applications that provide users with the ability to create, generate, and distribute reports based on the data stored in an organization's BI infrastructure. | 2.80 | 0.83 | Agreed |
| 7 | Reporting tools play a pivotal role in BI by facilitating the presentation and communication of data-driven insights to decision-makers | 3.04 | 1.05 | Agreed |
| 8 | Reporting tools gather, analyze, and present data in a structured format, facilitating informed decision-making processes | 2.42 | 0.94 | Disagreed |

| | | | |
|---|---|---|---|
| **Sectional Mean** | **2.81** | **1.00** | **Agreed** |

**Scale mean 2.50,n= 89**

Table3 showed the effect of Reporting Tools on performance of Nigerian small and medium scale enterprises. From the above table, the mean value of 3.12,3.22,2.91,2.53,2.80 and 3.04 were in agreement with items 1,2,3,4,6 and 7 respectively. As the mean values of 2.43 and 2.42 was in disagreement with items 5 and 8 respectively. The sectional mean of 2.81 was greater than the scaler mean of 2.50 which indicated that Effective reporting tools can help organizations overcome the challenge of data overload, Many reporting tools offer the ability to create interactive dashboards, Reporting tools are software applications that provide users with the ability to create, generate, and distribute reports based on the data stored in an organization's BI infrastructure and Reporting tools play a pivotal role in BI by facilitating the presentation and communication of data-driven insights to decision-makers. Wheras the remaining respondents disagreed with the fact that Reporting tools should provide users with the ability to design and customize reports, Reporting tools must be able to seamlessly integrate with various data sources and also Reporting tools gather, analyze, and present data in a structured format, facilitating informed decision-making.

**4.2 Hypothesis Testing**

**The three hypotheses were tested at 0.05 level of significance.**

**Hypothesis one:** Data Sources do not have any significant effect on performance of Nigerian small and medium scale enterprises (SMEs)

**Table 4: ANOVA Test on the Effect of Data Sources on performance of Nigerian (SMEs)**

| Source of Variation | Sum of Square | df | Mean Square | F-cal | F-tab | P-cal | P-set | Decision |
|---|---|---|---|---|---|---|---|---|
| Between Groups | 2009.482 | 30 | 66.983 | | | | | |
| Within Groups | 1818.371 | 263 | 6.914 | 9.688 | 1.459 | 0.000 | 0.05 | Reject |
| Total | 3827.854 | 293 | | | | | | |

Significant at df – 293;p<o.o5, F calculated> F tabulated

The table above showed ANOVA test of the effect of Data Sources on performance of Nigerian small and medium scale enterprises (SMEs). The F calculated is 9.688 was found to be greater than the F tabulated of 1.459 given 293 degrees of freedom at 0.05 level of significance. The F calculated value was significant since it was greater than F tabulated value; therefore, the null hypothesis was rejected . In addition,P calculated of 0.000 was less than the P-set of 0.05.It implied that Data Sources have a significant effect on performance of Nigerian small and medium scale enterprises

**Hypothesis two:** Data Warehousing does not have any significant effect on performance of Nigerian small and medium scale enterprises (SMEs

**Table 5: ANOVA Test on Effect of Data Warehousing on performance of Nigerian (SMEs)**

| Source of Variation | Sum of Square | df | Mean Square | F-cal | F-tab | P-cal | P-set | Decision |
|---|---|---|---|---|---|---|---|---|
| Between Groups | 1053.295 | 30 | 35.110 | | | | | |
| Within Groups | 1378.245 | 263 | 5.2440 | 6.700 | 1.459 | 0.000 | 0.05 | Reject |
| Total | 2431.541 | 293 | | | | | | |

Significant at df – 293;p<o.o5, F calculated> F tabulated

The table above showed ANOVA test of the effect of Data warehousing on performance of Nigerian small and medium scale enterprises (SMEs). The F calculated is 6.700 was found to be greater than the F tabulated of 1.459 given 293 degrees of freedom at 0.05 level of significance.

The F calculated value was significant since it was greater than F tabulated value; therefore, the null hypothesis was rejected. In addition ,P calculated of 0.000 was less than the P-set of 0.05.It implied that Data warehousing has a significant effect on performance of Nigerian small and medium scale enterprises.

**Hypothesis three:** Reporting tools do not have any significant effect on performance of Nigerian small and medium scale enterprises (SMEs)

**Table 6: ANOVA Test onEffect of Reporting Tools on performance of Nigerian (SMEs)**

| Source of Variation | Sum of Square | Df | Mean Square | F-cal | F-tab | P-cal | P-set | Decision |
|---|---|---|---|---|---|---|---|---|
| Between Groups | 1350.361 | 30 | 45.012 | | | | | |
| Within Groups | 1545.639 | 263 | 5.877 | 7.659 | 1.459 | 0.000 | 0.05 | Reject |
| Total | 2896.000 | 293 | | | | | | |

Significant at df – 293;p<o.o5, F calculated> F tabulated

The table above showed ANOVA test of the effect of Reporting Tools on performance of Nigerian small and medium scale enterprises (SMEs). The F calculated is 7.659 was found to be greater than the F tabulated of 1.459 given 293 degrees of freedom at 0.05 level of significance. The F calculated value was significant since it was greater than F tabulated value;therefore, the null hypothesis was rejected . In addition,P calculated of 0.000 was less than the P-set of 0.05.It implied that Reporting tools have a significant effect on performance of Nigerian small and medium scale enterprises

**Discussion of Findings**

The findings of the research hypothesis one revealed that there is a high significant effect of Data Sources on performance of Nigerian small and medium scale enterprises. The findings of the study agreed with Côrte-Real et al. (2017) who conducted a research on effect of data sources on performance of SMEs in Spain. The population was 654 selected firms and Sample Size of 325 firms was determined using Taro Yamani formula. The study employed descriptive research design. Data were obtained using interviews and sampling technique was a stratified sampling. Data were analyzed using descriptive statistics, while hypotheses were tested using chi-square. The finding has it that data sources have effect on performance of SMEs in Spain. The study focused on Spanish firms, which may limit the generalizability of the findings to other regions.

The findings of the research hypothesis two revealed that Data warehousing has a significant effect on performance of Nigerian small and medium scale enterprises. The findings of the study confirmed the position of Gupta and George (2016) who carried out a study on data warehousing and firm performance in Argentina. The Population of the study was 428 service SMEs in Argentina. The Sample Size of 206 service SMEs was obtained using Taro Yamani formula of 1964. The study employed survey research design. Data were obtained using structured questionnaire and sampling technique was a stratified sampling. Data were analyzed using frequency tables, while hypotheses were tested using Correlation analysis. According to the findings, data warehousing has effect on service SMEs in Argentina The study was conducted in the Argentina context, and the finding may not be directly applicable to other countries or regions with different business environments.

The findings of the research hypothesis three revealed that Reporting tools have a significant effect on performance of Nigerian small and medium scale enterprises. The findings of the study confirmed the position of Elbashir et al. (2013) who had a study on effect of Reporting tools on SMEs in the United States. The population of the study was 486 selected SMEs in the United States. The Sample Size of 223 selected SMEs was determined using Taro Yamani formula. The

study employed cross-sectional research design. Data were obtained using structured questionnaire and interviews and sampling technique was a stratified sampling. Data were analyzed using mean, standard deviation and percentages. while hypotheses were tested using regression analysis. According to the findings, reporting tools have effect on SMEs in United States. The study's generalizability may be limited to the U.S. context.

**The Role of Economics Education in Enhancing Decision-Making and Growthof Small and Medium Enterprises (SMEs) in Nigeria**

Economics education can play a crucial role in enhancing decision-making and fostering the overall growth of Small and Medium Enterprises (SMEs) in Nigeria, particularly when these businesses integrate Business Intelligence (BI) tools:

**1. Improved Data Interpretation and Analysis:** Economics education equips entrepreneurs and managers with the ability to understand and interpret key economic indicators like inflation rates, exchange rates, and GDP growth. By understanding these factors, they can make more informed decisions that align with macroeconomic trends, minimizing risks and maximizing opportunities.Business Intelligence tools rely on data to guide decisions. Economics education can help SMEs better understand the context of this data. For example, it helps them differentiate between short-term fluctuations and long-term trends, enabling more accurate forecasting and planning.

**2. Enhanced Cost-Benefit Analysis:** Economics education provides the tools to assess the costs and benefits of different business strategies. SMEs can use BI tools to gather relevant data and apply economic principles to assess whether an investment or expansion is financially viable.Economics education helps SMEs understand the concepts of opportunity cost and efficiency. With this knowledge, SMEs can use BI tools to identify areas where resources can be allocated more effectively, improving profitability and productivity.

**3. Market Understanding and Strategy Formulation:** A solid understanding of market forces—supply and demand—is central to economics education. This helps SMEs use Business Intelligence tools to predict market shifts and adapt their strategies. For instance, understanding consumer preferences and market trends can help businesses adjust their offerings and pricing strategies.Economics education can guide SMEs in applying dynamic pricing models that adjust based on factors like competitor pricing, consumer demand elasticity, and production costs. Business Intelligence tools can provide real-time data to inform these models, optimizing pricing strategies for higher profit margins.

**4. Risk Management and Forecasting:** Economics education introduces concepts such as risk analysis and scenario planning, enabling business owners to evaluate different potential future scenarios. With BI tools, they can access data that supports more accurate forecasting and risk assessment.An understanding of economic theories such as market cycles, inflation, and liquidity can help SMEs use Business Intelligence tools to spot financial risks, like cash flow problems or potential recessions, before they occur. This proactive approach helps businesses mitigate financial losses.

**5. Strategic Decision-Making:** Economics education teaches businesses how to evaluate long-term sustainability and growth, considering factors like industry dynamics, technological changes, and environmental factors. Using Business Intelligence tools, SMEs can track both internal performance and external trends to make decisions that support long-term growth.SMEs can use Business Intelligence tools to analyze competitors' strategies, market share, and pricing models. Economics education provides the framework to assess this data in terms of competitive advantage, market positioning, and industry trends, leading to better strategic decision-making.

**6. Financial Management and Investment:** Economics education teaches concepts such as capital budgeting, net present value (NPV), and internal rate of return (IRR). SME managers can use BI tools to gather financial data and apply these principles to evaluate investment opportunities, ensuring that decisions lead to profitable outcomes.Economics education helps SMEs understand the principles of cost minimization and profit maximization. With the support of BI tools, businesses can track their financials in real-time and identify inefficiencies, enabling them to control costs and improve margins.

**7. Policy Advocacy and Business Environment Navigation:** Economics education equips business owners with the knowledge to understand the impact of government policies, taxation, and regulations on their operations. This insight helps them adapt their business strategies to align with economic policies, especially when using BI tools to evaluate external factors like changes in tax rates or subsidies.Nigeria's SMEs are influenced by global economic trends. Economics education helps entrepreneurs understand international market conditions, trade agreements, and economic sanctions. With the help of BI tools, SMEs can access global market data, allowing them to make decisions that align with both local and international business climates.

**8. Behavioral Economics for Consumer Insight:** Economics education introduces behavioral economics, which focuses on understanding how consumers make decisions. This knowledge can help SMEs utilize BI tools to analyze consumer preferences, identify patterns, and customize products or services to meet demand.By understanding economic drivers behind consumer behavior, SMEs can use BI tools to segment their customer base and personalize their marketing efforts, which can increase customer loyalty and revenue.

**9. Improved Communication and Leadership Skills:** Business leaders with economics education are more likely to make rational, well-informed decisions. They can use BI tools to communicate the rationale behind decisions effectively to stakeholders, whether internal teams, investors, or partners, fostering trust and transparency.Economics education allows SME owners to engage more effectively with stakeholders by making decisions that balance profit maximization with social and economic responsibility, helping them manage their brand and reputation.

**10. Adaptation to Technological Changes:** Economics education includes understanding the role of innovation and technological change in business. SMEs can use BI tools not just for traditional data analysis, but also to explore emerging markets, new product ideas, and the latest technological advancements, enhancing their ability to stay competitive and grow sustainably.

**The Role of Guidance and Counselling in Enhancing Decision-Making and Growthof Small and Medium Enterprises (SMEs) in Nigeria**

Guidance and counseling can play a significant role in improving decision-making and driving the overall growth of Small and Medium Enterprises (SMEs) in Nigeria, especially when combined with the use of Business Intelligence (BI) tools.

**1. Improving Entrepreneurial Mindset and Decision-Making:** Running an SME can be highly stressful, with owners facing numerous challenges such as financial instability, competition, and market uncertainty. Guidance and counseling help business owners manage stress, build resilience, and maintain a positive mindset. With better mental health and emotional stability, entrepreneurs are more likely to make thoughtful, rational decisions, particularly when using BI tools to analyze data and predict trends.Counseling can help entrepreneurs develop greater self-awareness, which can lead to better decision-making. By addressing personal issues, fears, or limiting beliefs, counseling can boost their confidence in using BI tools to make critical

business decisions. A confident leader is more likely to adopt new technologies, interpret data accurately, and implement strategic decisions effectively.

**2. Enhancing Leadership and Communication Skills:** Guidance counseling helps business leaders enhance their leadership skills, including effective communication, conflict resolution, and team management. Strong leadership is crucial for SMEs, as it helps to inspire teams, foster innovation, and ensure the smooth implementation of data-driven decisions derived from BI tools.Counseling can help leaders learn how to communicate BI insights to their teams and other stakeholders in a way that is clear and actionable. This ability to convey complex data to a wider audience increases team collaboration and ensures that data-driven decisions are aligned with the organization's goals.

**3. Enhancing Decision-Making Under Pressure:** Counseling often involves cognitive behavioral techniques that help individuals develop better problem-solving skills. These techniques can help SME leaders stay calm under pressure, make sound decisions based on the data provided by BI tools, and avoid impulsive or emotional decision-making.Guidance counseling can help entrepreneurs assess risks more objectively. By using BI tools to gather and analyze data, SMEs can make informed decisions about potential risks and opportunities. A counselor can guide the entrepreneur through evaluating risk in a more calculated way, ensuring that they don't shy away from necessary risks but also avoid reckless decisions.

**4. Guiding Ethical and Responsible Business Practices:** Counselors can help business leaders develop a strong ethical framework. When making decisions using BI tools, it's easy to be swayed by short-term gains or unethical practices. Guidance counseling can support leaders in considering the long-term impact of their decisions on stakeholders, society, and the environment, leading to more sustainable growth.Counseling helps business owners understand their responsibility toward their employees, customers, and the community. This awareness can influence data-driven decisions made with BI tools to foster socially responsible business practices, which, in turn, can improve the business's reputation and long-term success.

**5. Personal and Professional Development:** Counseling aids in the development of soft skills such as emotional intelligence, empathy, and interpersonal skills. These attributes are critical for decision-makers in SMEs who need to lead diverse teams and interact with a variety of stakeholders. A well-rounded business leader can better use the insights from BI tools to make decisions that balance both business growth and team morale.Counseling can also provide entrepreneurs with tools for resolving conflicts, whether internal (within the business) or external (with suppliers, clients, or competitors). Effective conflict resolution is vital for maintaining smooth operations, and business owners who have been trained in these techniques are better able to navigate challenges, whether related to BI insights or other business dynamics.

**6. Strategic Career and Business Counseling:** Business owners often face the challenge of focusing on the immediate needs of their businesses while planning for the future. Guidance counseling can help them clarify their long-term goals and align them with the short-term data-driven decisions they make using BI tools. This alignment ensures that BI insights are used in a way that supports broader business objectives and personal aspirations.Guidance counseling can provide support during critical business transitions such as expansion, rebranding, or pivoting in response to market changes. Using BI tools to understand market trends and opportunities is vital during these transitions, and counseling can provide the mental and strategic support needed to make these changes smoothly.

**7. Improved Employee Well-being and Productivity:** The well-being of employees is directly tied to the performance of the business. Guidance counseling isn't just for entrepreneurs—it can

be extended to staff as well. Business owners who implement employee counseling programs can foster a supportive work environment, leading to higher morale and increased productivity. Happy, well-supported employees are more likely to contribute effectively to data collection, analysis, and the implementation of decisions derived from BI tools.Counseling can help foster a positive corporate culture by encouraging open communication, emotional support, and team-building. A positive work environment boosts morale, encourages creativity, and promotes better use of BI tools in decision-making processes.

**8. Coping with Change and Uncertainty:** Economic environments, especially in Nigeria, can be volatile, and SMEs must adapt quickly to survive. Counseling can help entrepreneurs develop a mindset of adaptability and flexibility, enabling them to pivot quickly based on BI data, whether it's related to market conditions, consumer behavior, or competitive pressures.Many SMEs are hesitant to adopt new technologies, including BI tools, due to fear or lack of knowledge. Guidance counseling can help overcome this barrier by providing emotional and practical support. Through counseling, entrepreneurs can gain the confidence and guidance they need to integrate BI tools into their operations successfully.

**9. Developing Problem-Solving and Critical Thinking:** Guidance counseling helps business leaders develop structured thinking and problem-solving strategies. Entrepreneurs are often faced with complex decisions, and BI tools provide a wealth of data. Counseling can teach them how to break down the data and make clear, structured decisions based on BI insights, increasing the likelihood of success and minimizing errors.Counseling can encourage business owners to focus on long-term strategic thinking rather than reactive decisions. While BI tools provide real-time data, guidance counseling can help SME owners align their immediate decisions with long-term growth strategies, ensuring that day-to-day operations support the broader vision of the business

## Conclusions

Business Intelligence applications should be based on SMEs functional requirements, budget, technical architecture, and overall user need. Selecting and implementing the right BI is a challenging job. Implementing BI is a costly and time consuming venture. The research concludes that if the wrong BI is implemented without good research and planning it could be a failure initiative. One very important point to be considered for selecting BI is there should be a close match between SMEs requirements and provided solutions.

## Recommendations

i. Government and private business companies should provide affordable and user-friendly business intelligence (BI) tools tailored to the needs of SMEs.
ii. Partner with local business schools, financial institutions, and government agencies to provide subsidized or free workshops on economic principles relevant to SMEs.
iii. Create counseling centers or platforms where SME owners can receive personalized advice on decision-making, growth strategies, and overcoming operational challenges.
iv. Encourage collaboration between government agencies, private sector organizations, and educational institutions to create a supportive ecosystem for SMEs.

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