UTILIZATION OF BUSINESS INTELLIGENCE IN BUSINESS DECISION MAKING

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Abstract: *Making wise and well-informed company decisions at a time where data is the most valuable resource requires the application of business intelligence (BI). Big Data is handled by modern BI, which also benefits from more processing power, fast data access, opportunity detection, and risk mitigation. In order to correctly represent the facts, this research employs a qualitative technique and gathers data from several sources. The study's findings demonstrate the importance of business intelligence in corporate decision-making. In order to assist educated decision-making, plan development plans, and offer insight into internal and external performance, business intelligence (BI) gathers data from a variety of sources. Implementing BI necessitates a business and technological expertise, but it also makes difficult data analysis easier, boosts productivity, and helps identify possibilities and resolve issues. Business Intelligence (BI) is critical to success in the current day because it gives reliable information, increases operational efficiency, and assists management in making decisions that are responsive to changes in the market. The study's findings also demonstrate how BI gathers information from a variety of sources to offer perception into the market, consumer behavior, and internal business performance.*

INTRODUCTION

Business Intelligence (BI) has become indispensable for making astute and well-informed business decisions in a time when data is turning becoming a company's most valuable asset. For a number of years, business intelligence (BI) has been a top priority

system for enterprise IT directors, and its growth is only expected to accelerate. Modern BI systems vary from its predecessors in that they manage massive volumes of data (known as Big Data) and depend on data processing capability that is growing rapidly. This will open up new avenues for the advancement of technological knowledge.

To make wise business decisions, one must have a thorough awareness of customer behavior, market trends, and internal corporate performance. BI facilitates prompt, organized access to the data required for well-informed, timely decision-making. Careful BI analysis may help businesses find new possibilities, increase operational effectiveness, and reduce risk.

This study is to investigate the potential and challenges related to the application of business intelligence, as well as how crucial it is to altering the way corporations make choices. Businesses may obtain a competitive edge in a market that is becoming more dynamic and complicated by having a solid knowledge of BI.

THEORETICAL STUDIES
Business Intelligence

First developed in 1996, business intelligence (BI) is a technology that helps business users manage large amounts of data and transform it into information that can be used for certain goals. It is used for data analysis, reporting, and information retrieval. (Rudiawan, 2021)

corporate Intelligence (BI) is a framework of corporate processes, technology, and tools that transform data into information and information into knowledge, increasing a company's value.

A combination of mathematical models and analytical techniques is known as business intelligence (BI), and it produces knowledge and data that are helpful for difficult decision-making processes.

Quality of Business Intelligence Management

The ability to correctly develop, execute, and manage business intelligence (BI) to guarantee that the information provided is relevant, accurate, and valuable for corporate decision-making is one component of BI management quality.

preliminary research on the crucial elements of big data project success that highlight the significance of effective BI management. One way to characterize BI management skills is as a subset of the tools used to guarantee the accomplishment of continuous goals associated with BI procedures. If the correct BI application is used to adapt IT resources and business requirements, organizations may reap the benefits of employing business intelligence.

Business Intelligence Decision Making

This decision-making in business intelligence (BI) encompasses factors such as information restrictions, personal preferences, cognitive biases, and risk perception. The way executives and managers use the data supplied by the BI system is influenced by these aspects. Information gives decision makers more confidence by assisting them in identifying options and forecasting choice outcomes.

Making choices on how to organize and run a firm is the core of management. Business success or failure is determined by the decisions taken by management.

RESEARCH METHODS

A qualitative technique was applied in this investigation. Using information data as a theoretical foundation for methodically, factually, and properly summarizing facts, researchers can draw conclusions with this strategy. Research and information from other literary sources, such journals, can be combined to achieve this.

No	Researcher Name	Heading	Research Methods	Research Results
1	(Munawar et al., 2021)	Impact of Business Intelligence on Retrieval Quality Results	Cross-sectional research design using surveys given to a number of companies.	This research reveals the determinants of the benefits of business intelligence solutions directly and indirectly, by separating the quality of data and information, and analyzing how business intelligence affects the quality of managerial decisions. In addition, this study advances the methodology of path modeling and mediation analysis, showing that rejection of hypotheses based on insignificant mediation pathways can be false if those pathways are fully mediated or suppressed.

| 2 | (Salman et al., 2022) | Application of the Business Intelligence (BI) System as a Support for Recruitment and Selection of New Student Candidates during the Covid-19 Pandemic (Case Study: Mataram University of Technology) | The research method describes the literature review that underlies the process of making a business intelligence system with the development of a business intelligence system. Using the Cario Vercellis design method. | The development of a business intelligence system in the Mataram University of Technology study program includes: 1) Development of a business intelligence system design that will be used as a reference for decision making regarding prospective new students so that the study program executives can make decisions about the next steps. 2) Evaluation only applies to some assessment values whose assessment is only in numerical form. 3) With this dashboard, it can overcome the difficulty in conducting analysis that provides information about the calculation of the number of prospective new students related to the number because the dashboard designed provides |

				reports in visualization of these information.
3	(Nugroho et al., 2021)	Application of Business Intelligence Applications On Report Management to Support Decision Making	The method used is data warehouse design using NineStep Methodology according to Ralph Kimball	The application of BI can help overcome existing problems, namely to see the level of goods that are in demand and less desirable that will be used as a benchmark in adding goods, The process carried out in this activity is to announce historical data, then the data is processed into Power BI so as to produce a report in the form of a graph that is needed and easily understood by the company and can help leaders in made a decision.
4	(Fauzi, Nugroho, et al., 2023)	Utilization of Business Intelligence in Strategy Making and Business Decision Making	In this study using qualitative research methods where the data collected comes from books, journals, articles and other sources.	Companies are required to change the way they work to keep it balanced properly because competition in the business world is increasing. In addition, companies must be fast in decision making, companies must also get accurate data

			because BI technology helps companies compete with other companies.
5	(Rico Rizal Budidarmo, Marimin, Rina Oktaviani, 2010)	Intelligence Business System Model in Banking Information Technology Competition Decision Making	Expert systems and artificial neural networks are used to process data.	In conclusion, competition, threat, and customer inputs positively affect differentiation strategies and cost leadership, but negatively impact focus strategies. The competitive strategy for the middle to upper retail customer segment prioritizes differentiation and cost leadership, in contrast to the strategy for small or micro customers who are more focused. The key factors for the success of determining the Bank's technology competitive strategy are customer variables, competition, and threats.
6	(Fauzi, Noor, et al., 2023)	Study of the Application of Data Warehouse Architecture in Business Intelligence in	This scientific article uses qualitative research methods, where the results of research can be known	Implementing Data Warehouse Architecture is an Effective Solution in support of such intelligence

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		Business Decision Making	about data warehouse architecture and its influence on the decision-making process in business.	business processes. With a data warehouse architecture, businesses can integrate data from multiple sources, store data centrally, and ease data access for business users for analysis and decision making.
7	(Fauzi et al., 2022)	Business Intelligence: Its Role and Function in Helping Decision Makers Make Decisions	The writing of this scientific journal uses qualitative methods and also literature review.	Fierce and fast-paced business competition forces business people to change the way they work, demanding quick and precise decisions based on accurate data. Business Intelligence (BI) technology was developed to help companies stay competitive, support efficient decision making, avoid excess costs, and reduce errors. BI enables more effective and less risky decisions. Many companies have used BI and are experiencing its benefits.
8	(Fauzi, Hutapea, et al., 2023)	The Importance of Business	Qualitative research methods	Business Intelligence (BI) is the process of

		Intelligence (BI) for Management in Making Decisions for Business Success	as a reference in this study.	collecting and transforming big data in an organization into useful information. In conclusion, companies need to implement BI to achieve sustainable benefits and competitive advantages, both for companies and employees in comprehensive decision making.
9	(Mafda Khoirotul Fatha et al., 2023)	The Role of Big Data in Business Intelligence as a Decision Support System (Systematic Literature Review)	This research uses the SLR (Systematic Literature Review) method, which aims to collect and evaluate research related to a particular topic.	Good big data analysis in business intelligence involves processing big data by considering the volume, speed, variety, trust, and value of data. Big data is very helpful for decision support systems like conventional systems in company performance analysis, customer footprint understanding, supply chain optimization, prediction of future expenses, and decision making in real time.
10	(Rudiawan, 2021)	Utilization of business	This paper specifically	The BI system is capable of

		intelligence (BI) systems in company management decision making	addresses the general potential of utilizing business intelligence (BI) in organizations.	transforming the ever-growing volume of data from each operating system into information that can be utilized to its fullest potential.

RESULTS AND DISCUSSION

The Role of Business Intelligence

BI assists businesses in gathering information from a variety of sources, including operational systems, internal databases, and external sources like social media and marketplaces. Better understanding of the company's business performance is possible thanks to BI. Businesses may make better choices faster by having a better grasp of internal performance, consumer behavior, and market trends. Business Intelligence (BI) assists firms in better planning their business plans by offering the information required to make choices regarding growth, product development, and market expansion for their company.

Business Intelligence Implementation

To adopt BI, one must have a thorough grasp of both business requirements and technology. BI has the potential to be a very effective tool for increasing company competitiveness and performance when used properly. An agency or organization often possesses thousands or even hundreds of data. Compared to employing business intelligence, manually checking and categorizing this data will take more time and have a greater mistake rate.

As data processing and analysis grow more structured and quick with the aid of data mining tools and apps, business intelligence makes it simpler for organizations and enterprises to locate data that is advantageous to themselves and society at large. (Akbar and others, 2017)

With thorough data analysis, BI assists management in identifying new business prospects and foreseeing issues down the road. Management can respond appropriately to seize opportunities or resolve issues by having a deeper awareness of the market and its rivals.

The role of Business Intelligence in influencing management decision making

corporate intelligence (BI) plays a significant part in modern corporate performance by offering pertinent and reliable information to increase operational efficiency, improved decision making, and support in better understanding and responding to market dynamics. Performance and competitiveness may be enhanced by a firm using BI effectively.

By offering pertinent data, thorough data analysis, and strategic insights into company situations, business intelligence as a whole affects management decision making. Management is able to make judgments that are more precise, knowledgeable, and

adaptable to changes in the market because to BI. In order to increase organizational performance and competitiveness in the business era, business intelligence (BI) deployment is crucial.

CONCLUSION

In order for businesses to gather, evaluate, and comprehend data and make more prompt and knowledgeable decisions, business intelligence (BI) is essential. Businesses may discover new possibilities, solve possible issues, and plan company plans more effectively with the help of BI. The proper deployment of business intelligence (BI) demands a thorough grasp of both technology and business, but when done correctly, BI can be a potent instrument for enhancing competitiveness and corporate performance. In order to assist management make more correct judgments and be sensitive to changes in the market, business intelligence (BI) offers pertinent information, in-depth data analysis, and strategic insights. In general, company success in the current day depends on BI.

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