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The Role Of Data And Analytics In The Strategic Decision-Making Process In Modern Organizations

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Abstract: In the modern digital era, the abundance of data has transformed strategic decision-making in organizations. This article examines the pivotal role of data and analytics in enhancing the strategic decision-making process. Empirical evidence demonstrates that the use of analytics positively influences both financial and operational performance, providing organizations with a sustainable competitive advantage. This study highlights the benefits, tools, and methodologies associated with data-driven strategic management and underscores the necessity of integrating analytical practices into modern organizational decision-making.

Keywords: Data analytics, strategic decision-making, big data, organizational performance, business intelligence, operational efficiency, real-time decision-making, competitive advantage.

Introduction: Our world of science and technology is characterized by an abundance of data, and one of the most important skills for business leaders is the ability to transform information into actionable insights for strategic decision-making. Data and its analytical processing play a key role in the strategic decision-making process.

"A strategic decision-making process based on accurate information and data analysis has become an absolute necessity in the digital era. This brings up the important role of data analytics in supporting the success of the process".

Primary responsibility for strategy planning involves senior management. Their job is to make key strategic decisions in a timely manner, based on information about the external environment and current legislation. The strategic choice process is central to management's

work, as the quality of their decisions determines the company's successful transition to market goals.

Using data and analytics in strategic management helps companies optimize business processes, improve efficiency, strengthen their competitive position, and anticipate future trends and market changes. “The use of data analytics also helps multinational companies to identify new opportunities and strategize more effectively based on measurable and valid information” .

Below, we will explore the key benefits of using data and analytics in strategic decision-making.

Identifying key challenges and growth opportunities.

Data analysis helps identify key challenges that company faces and determine promising areas for future development. It includes identifying new market segments, improving its efficiency, reducing costs, and other important aspects.

Forecasting trends and changes of market. Analytics provide the ability to predict trends and changes of market for future, enabling companies and organizations to make suitable decisions and prepare for upcoming changes in advance.

Optimize production processes. Data analysis identifies problem areas in the production process that can be improved to rise overall efficiency, reduce production lead times, and enrich product value.

Evaluating the efficiency of marketing creativities. Using data in the strategic decision-making process consents you to define which marketing canals are operational and helps share your promotion budget for concentrated influence.

Creating well-versed controlling decisions. Neutral material about your organization's performance lets you to make choices centered on facts and analysis, not just intuitive expectations.

Improving customer relationships. Data analysis helps companies better understand the needs and preferences of their audience, enabling them to develop more personalized goods and facilities, improve customer service, and enhance customer satisfaction.

Increasing employee productivity. Using data and analytics tools allows organizations to improve employee performance: identify best practices, identify problem areas, propose solutions, and assess employee performance.

Using data and analytics in strategic decision-making, it is important to organize the collection, storage, and processing of data, as well as utilize appropriate tools and technologies. Depending on the specific goals and objectives, companies may employ various data analysis methods. These may include business intelligence and statistical methods, machine-learning algorithms, and other modern approaches. The use of data and analytical tools in strategic decision-making process has become a necessary element of modern business. Organizations that effectively utilize analytics enjoy significant competitive advantages and are able to ensure sustainable development and growth, even in a rapidly changing market and dynamic business environment. “There are studies which have could demonstrate that BDA adoption can have a direct influence on firm's financial as well as operational performance”.

Big data and analytics can significantly accelerate decision-making processes in organizations, allowing them to rely on real-time data and improve the effectiveness of management decisions. They also help mitigate risks. The use of big data and analytics in organizations is explained by the following advantages:

Responsive decision-making: The use of analytics allows for rapid response to changes and prompt, effective decision-making.

Data-driven decisions: Analytical tools help formulate management decisions based on objective facts and data.

Automated decision-making: The implementation of analytics helps automate certain management processes, improve efficiency, and reduce risks for the organization.

Modern organizations can use big data and analytics to forecast demand. Analytics allows them to predict the need for goods and services, which helps optimize production and distribution.

“Big data analytics enabled business activities could help the firms develop various business processes through making accurate decision in real time resulting in lowering operating costs, improving product quality, as well as product availability” . This prevents shortages or excesses of goods. Using data to optimize business processes also helps increase efficiency, reduce costs, and improve the quality of products and services. When developing new products and services, analytics helps organizations remain competitive and create products and services that customers demand, satisfying market needs. Modern organizations can also use big data and analytics to improve customer service. Using big data allows them to better understand customer needs and provide more personalized and high-quality service.

CONCLUSION

In the contemporary business landscape, data and analytics have become key tools for strategic decision-

making. It has been established that organizations that actively utilize analytics are able to make more accurate, timely, and effective decisions. This contributes to increased operational efficiency, cost reduction, and improved product and service quality. Big data analysis enables the identification of new development opportunities, forecasting market trends, optimizing production processes, and strengthening customer relationships. Empirical evidence confirms that the implementation of analytical approaches positively impacts financial and operational performance and enhances the strategic significance of analysis. As markets become increasingly dynamic, it is becoming clear that organizations that effectively utilize analytics have greater opportunities for sustainable growth, innovation, and competitiveness. As a result, the use of data analytics in strategic decision-making has become a necessity for modern organizations striving for success.

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