

Analyzing the Role of Data Analytics in Business Decision Making in NEOM

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1. Chapter 1: Introduction

1.1. Research Background

The current business landscape is undergoing significant transformation driven by the rapid evolution of technology, especially in the field of data analytics. Organizations in many businesses and industries have been leveraging data-driven insights to enhance their decision making and improve their operational efficiency as well as strengthen their competitive position and gain a competitive advantage. Data analytics is a very effective tool in smart cities like NEOM.

NEOM is a smart city built at the northwest coast of Saudi Arabia. It was launched in 2017 to be a hub for innovation, artificial intelligence, and digital transformation where real-time data analytics is integrated into the business decision making process within renewable energy, tourism, healthcare, and logistics sectors.

According to McAfee and Brynjolfsson (2012) data-driven organizations exceed their competitors by making more informed strategic decisions. Furthermore, Davenport and Harris (2017) emphasize that organizations in rapidly evolving markets can enhance operational efficiency, improve customer engagement, and gain a competitive edge by leveraging data analytics. The significance of data analytics in smart cities was discussed by Kitchin (2014). Additionally, Wamba et al. (2017) analyzed the role of big data in enhancing business intelligence and predictive decision-making organizations to gain competitive advantage. However, despite these extensive studies, there is a need to address the role of data analytics applications in business decision making within smart cities like NEOM.

Therefore, this study aims to analyze the role of data-driven decision-making in NEOM's unique business environment. It seeks to contribute valuable insights to

businesses operating within NEOM that can leverage data-driven decision-making to achieve long-term success.

1.2. Research Problem

Data analytics is changing business decision-making, but its applications in smart cities like NEOM are still unclear. Current research focuses on existing markets which leaves a gap in understanding how businesses in smart cities leverage data analytics.

1.2.1. Theoretical Gaps

Most research examine data analytics in traditional business environments, but few focus on its role in smart cities like NEOM, where businesses operate within a new digital environment.

1.2.2. Practical Gaps

Although data analytics is essential tools for decision-making in smart cities like NEOM, a lack of historical data impacts the effectiveness of data-driven decision-making.

Therefore, the research question is how is data analytics utilized in business decision-making within NEOM?

1.3. Research Significance

This study is significant on both theoretical and practical levels, providing an understanding on how businesses in NEOM utilize data analytics for decision-making.

1.3.1. At the theoretical level

Current research focuses on data analytics in existing markets, but few are about its role in smart cities like NEOM. This study fills that gap by examining

how businesses in NEOM utilize data analytics in the decision-making process.

1.3.2. At the practical level

This study benefit stakeholder in businesses by gaining insights for best practices and challenges. Additionally, researchers can expand studies on data analytics in smart cities.

References

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