Avinash Bunga

Information Systems and Business Analytics, Park University

CIS611HOS1P2024 - Introduction to Business Analytics

Professor: Timur Rakhimov

January 25, 2024

Unit 3: Discussion

Practical Insights into Data Governance: Decision-Making Authority and Quality Enhancement

Introduction

Exploring Data Governance

Data Governance is much more than just establishing rules and policies. It is about skillfully handling an organization's data to maximize its potential and value. This process includes following specific guidelines and using data to impact the organization's objectives positively. Effective Data Governance is crucial for maintaining data precision, streamlining its management, and ensuring adherence to legal requirements (Knight, 2023).

Role in Business Analytics

In business analytics, the critical importance of Data Governance stands out. It is about ensuring data is dependable and accessible when needed, laying the groundwork for intelligent and well-planned business strategies. By managing data effectively, businesses can reduce potential risks and stay in line with regulatory requirements. This allows businesses to stand out by making well-informed decisions based on insightful data analysis (Knight, 2023).

Uber: An Illustrative Example

I will be using Uber as an example. As a company that heavily relies on data for its services and strategic decisions, understanding how Uber might approach Data Governance can provide practical insights into these abstract concepts.

Scope of the Discussion

In this discussion, I will focus on two aspects of Data Governance. Decision Rights & Accountabilities Framework, and Data Quality Improvement. These concepts are critical for understanding how effective data management can drive business success and operational efficiency.

Section 1: Decision Rights & Accountabilities Framework

This framework focuses on establishing distinct roles and responsibilities for decision-making related to data within an organization. It clearly delineates who holds the authority to make these critical data decisions and who bears responsibility for the following consequences.

Important in the Context of Business Analytics Goals

It provides precise definitions of who should make decisions about data and who should be held accountable for those decisions. This clear demarcation is crucial for several key reasons:

- **Streamlining the Decision Process:** With well-established decision rights, organizations can achieve quicker and more effective outcomes from data-driven decisions. In the area of business analytics, where quick and precise decisions are essential, knowing who manages different data aspects can significantly improve how decisions are made.
- **Responsible Data Management:** Setting solid accountabilities ensures data is handled responsibly and ethically. In analytics, the trustworthiness of the insights depends heavily on how data is treated and maintained.

- **Reducing Risks:** Clearly defining who is responsible for data management helps to reduce the risks of data misuse or inaccuracies. For business analytics, this means relying on data sets and analyses that are more dependable and credible.
- **Alignment with Business Objectives:** Ensuring data-related decisions support overall business goals is vital. In business analytics, this alignment guarantees that analytics efforts contribute directly to the company's strategic objectives (Knight, 2023; Olavsrud, 2023).

Examples for Uber

Uber's Dynamic Pricing Algorithm:

Imagine Uber implementing the Decision Rights and Accountabilities Framework to manage their dynamic pricing algorithm. This algorithm adjusts ride prices in real time based on factors like demand and supply, traffic conditions, and special events. In this scenario:

- **Decision Rights:** A specific team of data scientists and economists at Uber holds the decision rights to modify and update the pricing algorithm. They have the authority to integrate new data sources, like local event schedules or weather forecasts, to refine the algorithm's accuracy.
- **Accountability:** The Chief Data Officer (CDO) is accountable for the outcomes of these decisions. Suppose a change in the algorithm leads to a significant dip in customer satisfaction or driver earnings. In that case, the CDO is responsible for addressing these issues and guiding the team towards a solution.

Impact on Business Analytics Goals:

- **Efficient Decision Processes**: With well-defined responsibilities, the team can swiftly modify the algorithm, enabling rapid responses to changing real-world conditions.

- **Ethical and Privacy-Conscious Data Handling**: The established framework guarantees that the data used in the algorithm adheres to privacy norms and ethical standards.
- **Minimizing Risk**: By assigning specific roles, the likelihood of errors in the pricing model is reduced, protecting the company from potential revenue losses or customer satisfaction drops.
- **Goals Aligned with Business Strategy**: The decisions made under this framework align with Uber's aims to enhance efficiency and profitability while keeping customer and driver contentment focused (Knight, 2023; Olavsrud, 2023).

Section 2: Data Quality Improvement

Quality data serves as the foundation of informed decision-making. It ensures the data is accurate, consistent across various platforms, and updated in real-time or as needed.

Important in the Context of Business Analytics Goals

Enhancing the quality of data is essential for meeting the objectives of business analytics. The cornerstone of precise analytical outcomes is high-quality data, and elevating data quality standards directly influences the success and effectiveness of business analytics industries.

- **Reliable Insights from Quality Data**: The caliber of data plays a pivotal role in the trustworthiness of analytical outcomes. When data is accurate, complete, and up-to-date, it leads to more valid and reliable insights, essential for making well-informed business choices.
- **More intelligent Decision-Making with Quality Data**: Enhanced data quality ensures that analytics are grounded in the most accurate and recent information. This facilitates more intelligent decision-making, significantly impacting a company's strategic direction and operational processes.

- **Boosting Efficiency in Operations**: Maintaining high data quality helps reduce the time and effort spent rectifying data inaccuracies. This shift allows teams in business analytics to concentrate more on extracting valuable insights rather than addressing data quality concerns.
- **Securing a Competitive Advantage**: In business analytics, superior data quality can be a game-changer. Companies that make strategic decisions based on high-quality data often gain an edge over competitors who may rely on less reliable data sources (Au & Murray, 2021; Wang & Strong, 2015).

Examples for Uber

UberEATS Restaurant Recommendations:

Consider how Uber might focus on Data Quality Improvement for UberEATS, specifically in its restaurant recommendation system. This system suggests eateries to users based on their past orders, preferences, and local trends. Here is how data quality plays a role:

- **Accuracy:** Ensuring user preference data and restaurant ratings are accurately recorded and updated. For instance, if a user starts preferring vegan restaurants, this change should be promptly reflected in the recommendations.
- **Consistency:** Maintaining uniform data across various platforms. The user's preferences should align whether they are accessing UberEATS through the app or a web browser.
- **Timeliness:** Regularly updating the restaurant database with new openings, closings, menu changes, and customer reviews to provide the most current and relevant recommendations.

Impact on Business Analytics Goals:

- **Trustworthy Analysis:** High-quality data ensures the recommendations are reliable and personalized, enhancing user experience.
- **Making Well-Informed Choices**: When UberEATS works with precise and current data, it empowers them to make well-grounded decisions about adding new restaurant partners or advocating specific food trends.
- **Enhancing Productivity and Innovation**: By reducing the need for constant data corrections, UberEATS can allocate more resources and time to improve its recommendation system and to innovate with new functionalities.
- **Competitive Edge:** Superior data quality in recommendations could set UberEATS apart from competitors, attracting more users and increasing order volume (Au & Murray, 2021; Wang & Strong, 2015).

Conclusion

This exploration emphasized the significance of Data Governance for modern businesses, honing in on two crucial aspects: decision-making authority over data and ensuring data's accuracy and trustworthiness. Through the lens of Uber's operations, we observed the necessity of established protocols for data-related decisions and maintaining high-quality data. Such practices are not just administrative but are vital for companies deeply integrated with data in their operations. They enable more informed decisions and provide a competitive advantage in today's rapidly evolving digital environment. Proficient Data Governance equates to strategically adept data management, which is pivotal for achieving superior business performance.

References:

Au, S., & Murray, E. (2021, June 15). *Data Management for Quality Improvement: How to Collect and Manage Data*. AACN Advanced Critical Care. https://aacnjournals.org/aacnacconline/article-abstract/32/2/213/31470/Data-Management-for-Quality-Improvement-How-to?redirectedFrom=fulltext

Knight, M. (2023, June 20). *What Is Data Governance? Definition, Types, Uses*. Dataversity. https://www.dataversity.net/what-is-data-governance/

Olavsrud, T. (2023, March 24). *What is data governance? Best practices for managing data assets*. CIO. https://www.cio.com/article/202183/what-is-data-governance-a-best-practices-framework-for-managing-data-assets.html#:~:text=The%20Data%20Governance%20Institute%20defines,circumstances%2C%20using%20what%20methods.%E2%80%9D

Wang, R. Y., & Strong, D. M. (2015, December 11). *Beyond Accuracy: What Data Quality Means to Data Consumers*. Taylor & Francis Online. https://www.tandfonline.com/doi/abs/10.1080/07421222.1996.11518099