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Information Systems and Business Analytics, Park University

CIS611HOS1P2024 - Introduction to Business Analytics

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Unit 1: Discussion

Hello, Class and Professor,

I am Avinash Bunga. My journey into business analytics began at Uber and Goldman Sachs, where I engaged in fraud and risk analysis. There, I learned to navigate vast datasets, uncovering insights to explain past events and inform future decisions. Below are three critical analytical concepts I have encountered and look forward to mastering.

Predictive Analytics

Detailed Definition: Predictive Analytics involves analyzing past business data to

make informed estimations about future outcomes. It uses historical information and

statistical algorithms to identify potential trends and behaviors affecting a business in

upcoming scenarios (Raghupathi & Raghupathi, 2021).

• Importance in Business Analytics: Essential for proactive planning and risk

management.

My Familiarity: At Uber, while I gained foundational knowledge, my role centered

on manual investigation and understanding patterns from raw data, rather than

hands-on predictive modeling.

Learning Goals: To gain practical experience in predictive modeling and apply it in

automated decision-making processes.

• Example Implementation: At Uber, predictive analytics could be employed to analyze trip data from previous holiday seasons. This analysis would enable us to project demand for the upcoming season. By understanding these trends, we can strategically plan driver incentive schemes, ensuring a sufficient number of drivers are available to meet the expected increase in passenger requests. This method not only optimizes driver allocation but also enhances overall service efficiency during the busy holiday period.

Regression

- **Detailed Definition**: Regression analysis determines how a main variable changes when other variables vary. It is a statistical approach to find out the influence of different factors on a specific outcome (Bennett, 2023).
- Importance in Business Analytics: Vital for identifying factors influencing business outcomes and decision-making.
- My Familiarity: I have not had the opportunity to engage in regression analysis in
 my career. Therefore, learning and excelling in regression analysis is my significant
 goal.
- **Learning Goals**: To explore various types of regression analysis and their application in broader business contexts.
- to examine the relationship between trip frequency and various factors like weather conditions, local events, or time of day. For instance, by analyzing how rain impacts the number of ride requests in a specific area, Uber can better understand and predict demand patterns. This information could then be used to adjust pricing dynamically or to ensure adequate drivers are available during such conditions, optimizing both service availability and customer satisfaction.

Tableau

- Detailed Definition: Tableau is a tool designed for visual analytics, enabling users to
 create interactive and shareable dashboards. It transforms raw data into an
 understandable format, using visualization techniques to present information in a
 more graphic and intuitive way (Biswal, 2023).
- Importance in Business Analytics: Simplifies data interpretation, aiding in quick and informed decision-making.
- My Familiarity: Proficient in a professional setting, but seeking to expand my skills, especially in handling large-scale data.
- Learning Goals: To master advanced visualization techniques for comprehensive data analysis. I want to master my skills, especially with Tableau Server or Tableau Cloud.
- Example Implementation: During my tenure at Uber, I utilized Tableau to track and analyze fraud losses on a monthly basis. By creating detailed visual dashboards, I could depict trends and patterns in fraudulent activities over time. This visual analysis was instrumental in identifying high-risk periods and patterns, enabling us to take proactive measures. It also helped communicate these insights effectively to the management team, aiding in strategic decision-making to mitigate future fraud risks.

In conclusion, as I embark on this educational journey, I am enthusiastic about blending my practical experiences at Uber with this program's theoretical and technical knowledge. Predictive Analytics, Regression, and Tableau are not just academic subjects for me; they are tools that have real-world applications in my past and future roles. By deepening my understanding and expanding my skill set in these areas, I aim to contribute more

effectively to data-driven decision-making processes and continue to grow as a business analytics professional.

I look forward to sharing my experiences with and learning from all of you in this course.

All The Best!

References:

- Bennett, H. (2023). What Type of Data Is Required for Regression Analysis?

 ServerLogic3.https://serverlogic3.com/what-type-of-data-is-required-for-regression-analysis/
- Biswal, A. (2023). *What is Tableau: Power-packed Tutorial For Beginners*. Simplilearn. https://www.simplilearn.com/tutorials/tableau-tutorial/what-is-tableau
- Raghupathi, W., & Raghupathi, V. (2021). *Contemporary Business Analytics: An Overview*.

 DOAJ. https://doaj.org/article/9c0447f62cd94682a2b7d227d49cd16f