Business Case Outline

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Data Analytics 415-02 – Professor Nick Buly

Company/Business/Entity Description
- *Entity:* NCAA (National Collegiate Athletic Association)

Three Questions/Problems to Solve with Data
- *Question 1:* How do academic scores and eligibility rates vary across NCAA divisions, conferences, schools, sport and gender?

- *Question 2:* How do different schools four-year scores, eligibility rates vary across different NCAA divisions, conferences, schools, sport and gender?

- *Question 3:* How do the historical retention rates of each college influence the current retention rates of four-year students at NCAA schools?

Tool for Visualization and Data Analysis
- *Tool*: QlikSense.
- *Description*: QlikSense will be used to create an interactive dashboard that allows users to explore the data, visualize correlations, and derive insights related to academic performance among student-athletes.

Summary of the End Goal
- *End Goal:* The primary objective is to develop a data-driven visualization tool that provides insights into the academic performance of NCAA student-athletes categorized by various metrics influencing retention, eligibility and graduation rates. This tool will allow prospective and current students to make informed decisions about potential colleges based on academic performance data. In addition, the tool can assist NCAA and athletic departments to identify trends and areas for improvement, ultimately leading to overall improvements in academic outcomes for all student-athletes.

Dataset Description

- *Dataset:* The NCAA Academic Scores dataset from Kaggle.
- *Collected Data:*

SCHOOL_ID: A ID assigned to each school or institution in the dataset.

SCHOOL_NAME: The name of the school or institution.

SCHOOL_TYPE: Indicates the type of institution (e.g., public, private, or other classifications).

ACADEMIC_YEAR: The academic year for which the data is reported (e.g., 2014-2015).

SPORT_CODE: A code representing the specific sport (e.g., basketball, football) associated with the data.

SPORT_NAME: The full name of the sport corresponding to the sport code.

NCAA_DIVISION: Indicates the NCAA division (e.g., Division I, Division II, Division III)

NCAA_SUBDIVISION: Further classification within the NCAA divisions (FBS) or (FCS).

NCAA_CONFERENCE: The conference to which the school belongs (e.g., ACC, Big Ten).

FOURYEAR_ATHLETES: Number of student-athletes who completed their four-year eligibility.

FOURYEAR_SCORE: The average academic score of the four-year athletes.

FOURYEAR_ELIGIBILITY: The percentage of four-year athletes who remained eligible.

FOURYEAR_RETENTION: The percentage of four-year athletes who continued their education and remained enrolled at the institution.

[YEAR]_ATHLETES: The number of athletes participating in that specific year.

[YEAR]_SCORE: The average academic score for athletes in that year.

[YEAR]_ELIGIBILITY: The percentage of athletes who were eligible to compete in that year.

[YEAR]_RETENTION: Percentage of athletes who remained enrolled in that year.