Solution Architecture:

DATA COLLECTION:

At the core of the architecture is the data collection layer, responsible for gathering data from various sources

We use kaggle dataset to collect and gather our required data for analysis

DATA MANAGEMENT:

Technological advancements in data management, processing power, and analytics tools have significantly enhanced the feasibility of our solution. Modern data storage systems and cloud computing infrastructure allow for the efficient storage and processing of large volumes of data

We use IBM DB2 which support various data-driven applications and is available on Linux, UNIX and Windows operating systems It provides a wide range of features such as data security, scalability, high availability, and performance. It also supports various programming languages such as SQL, Java, C++, and others

DATA PROCESSING:

We use IBM COGNOS tools which provide a wide range of capabilities, including data cleansing, feature engineering, predictive modeling, and visualization. By utilizing these technologies, we can efficiently process and analyze complex Olympic sports datasets, thereby enhancing the feasibility of our solution**.**

DATA VISUALIZATION:

Visualization techniques help identify patterns and trends that might be hidden in raw data. By visually representing data over time or across different variables, stakeholders can identify correlations, outliers, and anomalies that might not be apparent in tabular or numerical form. This allows for the identification of factors that contribute to Olympic sports participation, performance improvement, or other relevant insights.

REPORTS, DASHBOARD AND STORIES:

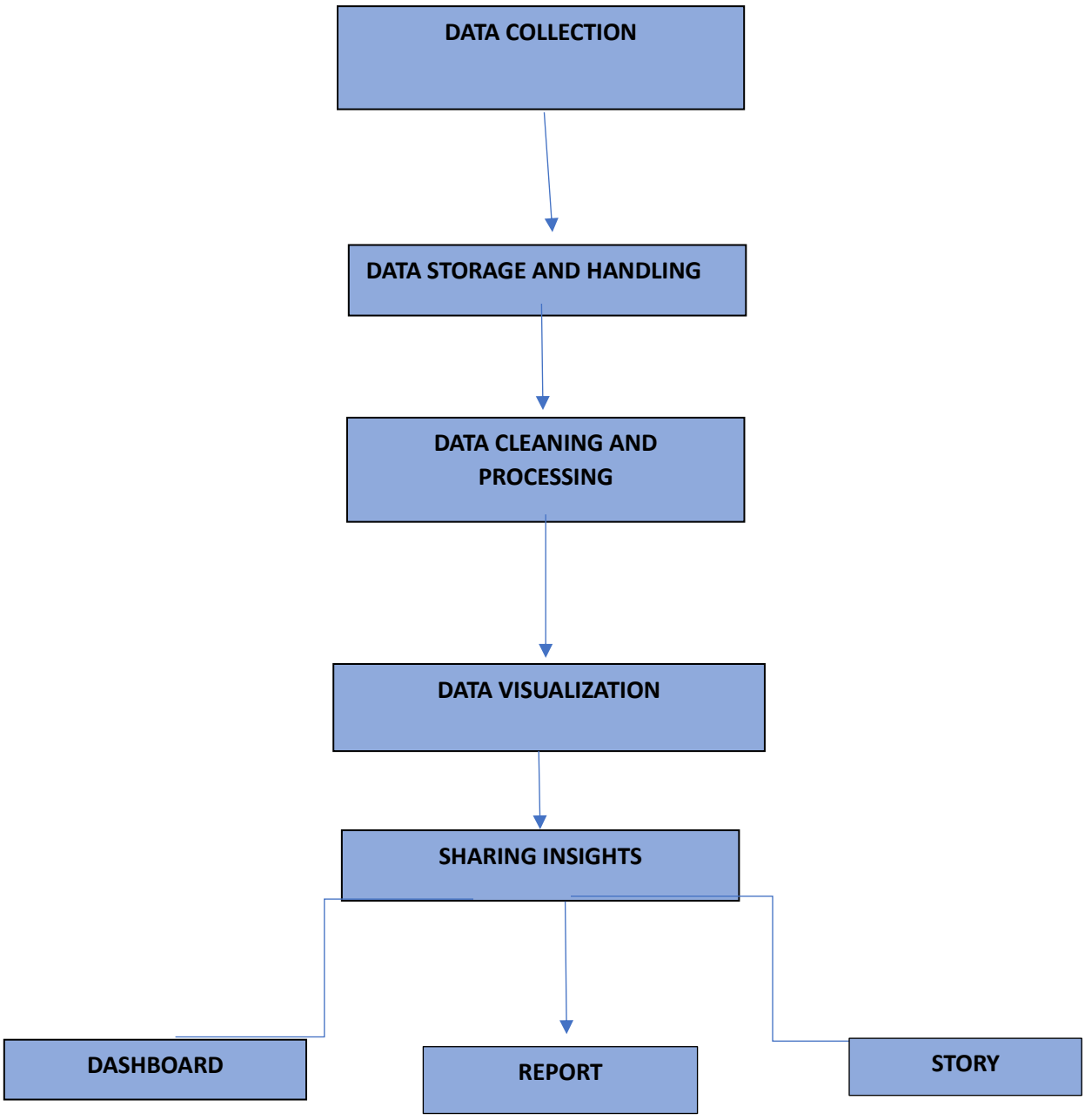
Visualization tools can support real-time monitoring of performance metrics, training progress, and other key indicators. By providing live dashboards that update with new data, stakeholders can monitor performance trends, track training effectiveness, and make timely adjustments to training programs.

Real-time monitoring allows for proactive decision-making and quick responses to emerging trends or issues.

Data visualization helps in telling compelling stories with data. By combining visual elements with narrative techniques, stakeholders can create data-driven stories that engage and captivate the audience.

This storytelling approach enables stakeholders to communicate the impact of their insights, drive behavioural change, and inspire athletes and coaches to strive for better performance

Overall, the solution architecture combines data collection, storage, processing, analytics, visualization to enable comprehensive data-driven insights on Olympic sports participation and performance. This architecture facilitates the efficient and effective generation of valuable insights that empower stakeholders to make informed decisions and drive improvements in the Olympic sports ecosystem


DATA COLLECTION
DATA STORAGE AND HANDLING
DATA CLEANING AND PROCESSING
DATA VISUALIZATION
SHARING INSIGHTS
DASHBOARD
REPORT
STORY