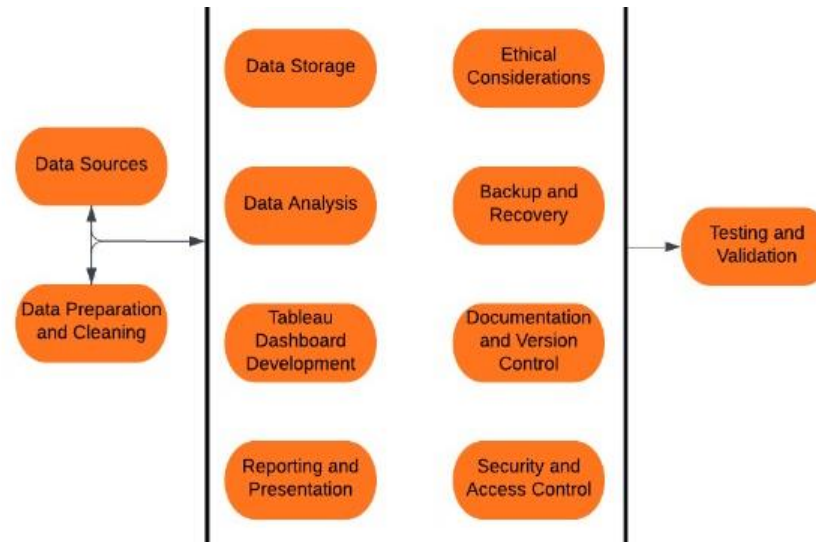


## Project Design Phase-II

### Technology Stack (Architecture & Stack)

Date	26 October 2023
Project Name	The Tableau HR Scorecard: Measuring Success in Talent Management
Maximum Marks	4 Marks

#### Technical Architecture:



**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	Data Sources	Data sources will provide the raw data needed for your analysis. These sources may include HR databases, employee surveys, and external benchmarking data.	SQL for database querying, data extraction tools (e.g., ETL tools) for data preparation.
2.	Data Preparation and Cleaning	This component involves cleaning, transforming, and structuring the raw data to make it suitable for analysis.	Tools like Python (with libraries such as Pandas) or R for data cleaning and transformation.
3.	Data Storage	Store the cleaned and transformed data for efficient retrieval during analysis.	Relational database management system (SQL) or a data warehouse if dealing with large datasets.
4.	Data Analysis	This is where you perform the actual data analysis to derive insights and metrics related to talent management.	Tableau for data visualization and analysis, and statistical analysis tools for advanced analytics.
5.	Tableau Dashboard Development	Create interactive and informative dashboards to present your HR Scorecard.	Tableau for dashboard design and visualization.
6.	Reporting and Presentation	Prepare reports and presentations to communicate your findings to stakeholders.	Microsoft Office Suite (e.g., PowerPoint, Word) for creating reports and presentations.
7.	Security and Access Control	Ensure that only authorized users have access to sensitive HR data.	Role-based access control, encryption, and authentication mechanisms.

8.	Documentation and Version Control	Maintain documentation of your project, code, and data sources for future reference.	Version control systems like Git for code and documentation management.
9.	Backup and Recovery	Implement backup and recovery procedures to protect against data loss.	Automated backup solutions, regular database snapshots.
10.	Ethical Considerations	Ensure that your project complies with privacy and data protection regulations.	Compliance management tools and practices.
11.	Testing and Validation	Before finalizing your analysis and reports, thoroughly test and validate your findings.	Statistical validation methods, peer review, testing frameworks.

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	User-Friendly Interface	Create an intuitive and user-friendly interface using Tableau to ensure that users can easily interact with the HR Scorecard.	Tableau for creating interactive and user-friendly dashboards.
2.	Data Security	Implement strong data security measures to protect sensitive HR data from unauthorized access.	Role-based access control, encryption, and secure authentication mechanisms.
3.	Scalability	Design the application to handle an increasing volume of HR data and growing user demands.	Cloud hosting platforms (e.g., AWS, Azure), load balancing, and scaling for Tableau Server/Online.
4.	Collaboration and Sharing	Enable users to collaborate and share HR data and insights with colleagues and stakeholders.	Utilize Tableau's collaboration and sharing features, and integrate with communication tools (e.g., Slack, Microsoft Teams).

