Project Design Phase-II
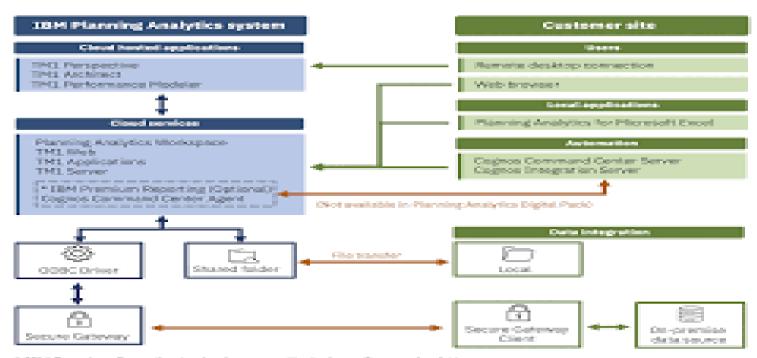**Technology Stack (Architecture & Stack)**

Date	03 October 2023
Team ID	D2BEB57988D6DB7A0644CD0E321AD05B
Project Name	GlobeTrek Insights: Navigating Global Country Data with IBM Cognos
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram.

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Data Sources	Use data warehouses to store and manage large volumes of structured data from different sources	AWS, Azure, or Google Cloud.
2.	Data Integration	IBM Cognos can integrate with ETL tools like IBM InfoSphere DataStage to extract and transform data from different sources.	IBM/JAVA
3.	Data Modeling	Implement star schema data modeling for efficient querying and reporting.	IBM Cognos Framework Manager.
4.	Master Data Management (MDM)	: Implement MDM to manage reference data across the organization.	Python/html
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	IBM Cognos Analytics	Users can explore and analyze global country data with ease, creating their reports and dashboards without heavy IT involvement.	Technology of ibm cognos
2.	Report Studio	Build reports that allow users to select different countries or regions dynamically.	Html/python/java
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Technology used

S.No	Characteristics	Description	Technology
4.	Data Exploration and Visualization	Utilize maps to visually represent global country data, including location-based insights and regional comparisons.	Technology used
5.	Performance Optimization	Fine-tune queries to handle large global datasets efficiently, ensuring responsive performance.	Technology used