BEACON CONSULTING GROUP
WHITE PAPER
DATAWAREHOUSE

Building a data warehouse involves several steps, including designing, developing, and deploying fact and dimension tables. The time required to build five Dimension, and two Fact tables can vary significantly based on several factors. Here's a detailed breakdown:

Factors Influencing Time

I. **Requirements Gathering:**
   a. Complexity of Business Requirements: Understanding the business requirements is crucial. Complex requirements may take longer to gather and analyze.
   b. Stakeholder Availability: The availability of stakeholders for interviews and feedback can impact the timeline.

II. **Design Phase:**
   a. Data Modeling: Designing the schema for the fact and dimension tables. This includes defining relationships, keys, and attributes.
   b. Tool Selection: Choosing the right tools (e.g., IBM Cognos, Power BI) can affect the design time.

III. **Development Phase:**
   a. ETL Processes: Extract, Transform, Load (ETL) processes need to be developed to populate the tables. The complexity of data transformations can impact the time.
   b. Data Quality: Ensuring data quality and consistency can add to the development time.

IV. **Testing Phase:**
   a. Unit Testing: Testing individual components to ensure they work correctly.
   b. Integration Testing: Ensuring that the fact and dimension tables integrate well with the rest of the data warehouse.

V. **User Acceptance Testing (UAT):**
   a. Involving end-users to validate the tables against business requirements.

VI. **Deployment Phase:**
   a. Environment Setup: Setting up the production environment can take time, especially if there are infrastructure constraints.
   b. Data Migration: Migrating existing data to the new tables can be time-consuming.

VII. **Estimated Development Timeframe and Cost:**

Step Description	Min Weeks	Min Hours	Max Weeks	Max Hours
Requirements Gathering	1	40	2	80
Design Phase	2	80	3	120
Development Phase	3	120	6	240
Testing Phase	2	80	4	160
Deployment Phase	1	40	2	80
Hosting (Anually)				
Total Estimated Time	**9**	**360**	**17**	**680**

Conclusion

The time required to build two Fact tables and five Dimension tables for a data warehouse can range from approximately 9 to 17 weeks. This estimate can vary based on the complexity of the requirements, the tools used, and the efficiency of the team. Effective project management and clear communication with stakeholders are essential to ensure the project stays on track.