**Straw Model for BI Consulting Project: Cash Flow Automation and Prediction**

**Project Overview**

The project aims to enhance the client's financial management capabilities by automating cash flow reporting and developing a predictive model. The project will be executed in two phases:

**Phase 1: Dashboard Development** This phase focuses on replacing the existing P&L reporting with interactive dashboards. The objective is to provide real-time insights into financial performance.

**Phase 2: Predictive Analytics Model Deployment** This phase involves building a predictive model to forecast cash flow based on various data points. The model will be integrated into the dashboard for proactive financial planning.

**Project Methodology: Build, Operate, Transfer**

The project will follow a Build, Operate, Transfer (BOT) model, emphasizing knowledge transfer to the client's team.

**Phase 1: Dashboard Development**

**1. Project Initiation**

* **Project Charter:** Define project scope, objectives, deliverables, timelines, and resources.
* **Stakeholder Identification:** Identify key stakeholders and their roles.
* **Project Team Formation:** Assemble a cross-functional project team with necessary expertise.

**2. Business Requirements Gathering**

* **Business Understanding:** Conduct workshops to understand client's business processes, financial reporting needs, and desired dashboard functionalities.
* **Data Identification:** Identify relevant data sources and required data points for dashboard development.
* **KPI Definition:** Define key performance indicators (KPIs) aligned with business objectives.

**3. Data Analysis and Preparation**

* **Data Assessment:** Evaluate data quality, completeness, and consistency.
* **Data Cleaning:** Cleanse and transform data to ensure accuracy and reliability.
* **Data Modeling:** Create a logical and physical data model to support dashboard requirements.

**4. Dashboard Design and Development**

* **Dashboard Layout:** Design intuitive and visually appealing dashboard layouts.
* **Visualization Selection:** Choose appropriate visualizations to represent data effectively.
* **Dashboard Development:** Build interactive dashboards using BI tools (e.g., Power BI, Tableau).
* **Data Connectivity:** Establish secure connections to data sources.

**5. User Acceptance Testing (UAT)**

* **Test Case Development:** Create test cases to validate dashboard functionality and performance.
* **UAT Execution:** Conduct UAT with end-users to gather feedback and identify issues.
* **Issue Resolution:** Address identified issues and refine dashboards.

**6. Deployment and Training**

* **Dashboard Deployment:** Deploy dashboards to a production environment.
* **User Training:** Provide comprehensive training to end-users on dashboard usage and interpretation.
* **Documentation:** Create user manuals and reference guides.

**7. Support and Maintenance**

* **Support Structure:** Establish a support process to address user queries and issues.
* **Monitoring and Optimization:** Monitor dashboard performance and identify optimization opportunities.
* **Change Management:** Manage changes to dashboard requirements and design.

**Phase 2: Predictive Analytics Model Deployment**

**1. Data Preparation and Exploration**

* **Data Preprocessing:** Prepare data for modeling, including cleaning, transformation, and feature engineering.
* **Exploratory Data Analysis (EDA):** Analyze data patterns, relationships, and trends.

**2. Model Development**

* **Algorithm Selection:** Choose appropriate machine learning algorithms based on data characteristics and prediction goals.
* **Model Training:** Train the model using historical data.
* **Model Evaluation:** Evaluate model performance using relevant metrics (e.g., accuracy, precision, recall).

**3. Model Integration and Deployment**

* **Model Integration:** Integrate the predictive model into the dashboard.
* **Deployment:** Deploy the model to a production environment.

**4. Model Monitoring and Refinement**

* **Model Monitoring:** Continuously monitor model performance and identify potential issues.
* **Model Retraining:** Retrain the model with new data as needed to maintain accuracy.

**5. Knowledge Transfer and Empowerment**

* **Team Training:** Provide training to the client's team on model interpretation and usage.
* **Documentation:** Create detailed documentation on model development, deployment, and maintenance.
* **Knowledge Sharing:** Facilitate knowledge transfer through workshops and mentoring.

**Note:** Throughout the project, emphasize collaboration with the client to ensure alignment with their business objectives and to facilitate knowledge transfer. Regular communication and progress updates are essential for project success.