### ****HIGH LEVEL****

### ****Executive Summary Dashboard (CEO View)****

**Objective:** Present a high-level overview of the company’s performance, including the key financial statements (Income Statement, Balance Sheet, Cash Flow), major taxonomies, and compliance metrics.

**Key Metrics:**

* + Latest SEC Filing Status
  + Taxonomy compliance and updates (e.g., version control of financial tags)
  + Fiscal Year End and Period Focus trends
  + Overview of Well-Known Seasoned Issuers (WKSI)
  + Financial Statement (e.g., Cash Flow, Balance Sheet) for specific quarters

**Storyboarding:**

* + High-level KPIs: Net Income, Cash Flow, Total Assets, and Liabilities.
  + Financial Statement Trends over the last 5 years.
  + Risk indicators based on report amendments (prevrpt).
  + Top 10 filings for the current fiscal year.

### 2. ****Financial Performance Dashboard (CFO/Accountant View)****

* **Objective:** Provide deep insights into the company’s financial performance, segment-wise and at the granular level, such as tags associated with financial statements.
* **Key Metrics:**
  + **Value Analysis:** Compare financial values for key tags (Revenue, Net Income, Earnings per Share).
  + **Quarterly Trends:** Show changes in revenue, profit margins, and operational expenses.
  + **Fiscal Year Comparison:** Analyze data across fiscal years (fy) and fiscal periods (fp).
  + **Tag Data:** Identify custom tags and compare with standard taxonomy tags.
  + **Data Integrity Analysis:** Investigate filings with footnotes and missing or incomplete data.
* **Statistical Analysis:**
  + Time Series Forecasting: Predict future financial values for balance sheet and income statement items using statistical forecasting.
  + Variance Analysis: Compare actual data against expected data, including deviations and anomalies in reporting.
  + Risk Analysis: Highlight significant changes in reported data, especially in filings flagged as "amended" or having large footnotes.

### 3. ****Compliance and Regulation Dashboard (Legal/Regulatory View)****

**Objective:** Track the company’s compliance with SEC filing requirements and monitor taxonomy usage in filings.

**Key Metrics:**

* + **Filing Status and Compliance:** Number of filings per period, how many are “Well Known Seasoned Issuer (WKSI)”.
  + **Change Analysis:** Track any changes in company name, country of incorporation, and co-registrants.
  + **Risk Indicators:** Report amendments (prevrpt) and filings that might not comply with standard taxonomy (e.g., non-standard tags).
  + **Taxonomy Usage:** Monitor which tags are used the most and least, flagging any deviations or potential issues with XBRL tags.

**Storyboarding:**

* + Track major company name changes and incorporation data (former names, changed names).
  + Track filings with large discrepancies in segment data (coreg, segments).
  + Show reports indicating amended filings and analyze trends in amendments.

### 4. ****Investor Analysis Dashboard (Investor Relations View)****

* **Objective:** Provide detailed insights into filings and performance data for investors to assess the company’s performance and potential risks.
* **Key Metrics:**
  + **Earnings Overview:** Quarterly and yearly earnings, including Net Income, EPS, Revenue growth.
  + **Risk Metrics:** Analyze filings with the largest footnotes (footnote) or changes in financials that could indicate risk.
  + **Fiscal Performance by Quarter:** Breakdown of quarterly performance over the years (qtrs, period).
  + **Growth Trends:** Analyze revenue growth or decrease over multiple periods and fiscal years (fy).
* **Storyboarding:**
  + Revenue/Profit Growth: Show how the company is performing compared to previous years and industry standards.
  + Segment-wise Performance: Visualize how different business segments (coreg) are performing, including comparisons.
  + Forecast: Provide forward-looking projections for the next 4 quarters based on historical filings data.

### 5. ****Taxonomy and Tag Usage Report (Data Analyst View)****

**Objective:** Provide an in-depth analysis of the taxonomy tags, custom vs standard tags, and their usage trends.

**Key Metrics:**

* + **Taxonomy Tag Usage:** Which tags are most commonly used for financial reporting.
  + **Custom vs Standard Tags:** Display the use of custom tags (custom flag) compared to standard tags.
  + **Data Quality:** Track any tags with missing values or footnotes that need further investigation.
  + **Top Tags:** Identify the top 5 tags being used in SEC filings over a specified period.

**Statistical Analysis:**

* + Frequency Analysis: Identify how often specific tags are used across multiple filings.
  + Gap Analysis: Show which tags are underutilized or not aligned with industry standards.

### 6. ****Amendments and Historical Filings Analysis (Audit/Compliance View)****

**Objective:** Provide a clear view of the company’s historical filings and amendments.

**Key Metrics:**

* + **Amendment Count:** Track the frequency of amendments (prevrpt) in filings.
  + **Filing History:** Explore historical filings by fiscal year, period, and taxonomies.
  + **Late Filings:** Identify filings that were submitted late and any penalties or compliance issues.

**Statistical Analysis:**

* + **Amendment Patterns:** Perform a time series analysis to check for amendment patterns, whether some quarters or fiscal years have more amended filings.
  + **Risk Analysis:** Perform a trend analysis to see if filing errors or amendments increase in certain periods, suggesting issues with the company’s reporting process.

### 7. ****Scenario-based Financial Analysis (Senior Management View)****

**Objective:** Present financial outcomes based on different assumptions or scenarios, such as changes in taxonomies, filings, and financial data.

**Key Metrics:**

* + **Scenario Planning:** Build models showing the impact of different financial or operational scenarios on the business.
  + **Taxonomy Impact Analysis:** Evaluate the effect of changes to taxonomies or reporting standards on the financial data.

**Statistical Analysis:**

* + **What-If Analysis:** Simulate different filing scenarios (e.g., amendments, new filings) to predict potential business impact.
  + **Impact of Taxonomy Changes:** Quantify the impact on financial statements and reporting quality when tags or taxonomies are updated.

### ****Project Workflow and Recommendations for Power BI Implementation:****

* **Data Connection:** Use the SEC EDGAR Filings dataset as a central data source in Power BI, ensuring that it is updated regularly.
* **Data Modeling:** Create relationships between tables such as filings, tags, periods, and financial statements for seamless analysis.
* **Dashboard Design:** Use Power BI's advanced features like drill-throughs, filters, and dynamic visuals to help users easily navigate between high-level insights and detailed data.
* **Statistical Forecasting:** Incorporate Power BI’s built-in forecasting tools or integrate with Python/R scripts for advanced predictive analytics.
* **Interactivity:** Provide interactive features, such as slicers for fiscal years, segments, and report types, allowing users to explore the data based on different business needs.

This set of requirements should give you a comprehensive and detailed project that will allow you to demonstrate your Power BI skills in various domains, from executive reporting to detailed data analysis. Let me know if you'd like to dive deeper into any specific section!

**Detailed**

1. **CEO VIEW**

**1.1) Latest SEC Filing Status – Business Requirements**

As the CEO, I want a quick glance at our latest SEC filing to ensure timely compliance and track submission status. The card visual should display the most recent filing details with a clear status indicator.

Key Information to Display in the Card:

Latest Filing Status → (Accepted, Pending, Amended, Rejected)

Latest Filing Date → (When was it submitted?)

Company Identifier → (CIK or Company Name)

Additional Business Insights (If space allows)

Filing Type → (10-K, 10-Q, 8-K, etc.)

Submission Timestamp → (Time of day when it was processed)

Any Amendments? → (Highlight if the latest filing was an amendment)

Priority & Business Relevance:

Compliance Tracking: Ensure filings are submitted on time to avoid penalties.

Risk Awareness: Identify amended filings as potential red flags.

Operational Efficiency: Quickly see the latest status to make informed decisions.

1.2)