**Final Report: Google’s Business Performance and Strategic Insights**

**1. Introduction**

This report presents a comprehensive overview of Google’s business performance using both **descriptive** and **prescriptive analytics**. The visual dashboards provide insights into revenue trends, employee growth, product contributions, CEO impacts, and service-type profitability.

**2. Descriptive Analysis: Business Performance Overview**

**Yearly Revenue Growth**

* Google has shown a consistent increase in revenue over time, with a peak at **$380 billion** in recent years.
* Early-stage revenue was significantly lower (e.g., ~$220k), reflecting Google's exponential financial growth.

**Employee Headcount Over Time**

* The employee count has grown steadily, reaching nearly **190,000 employees**.
* The largest hiring spikes align with significant revenue increases, showing expansion during growth phases.

**Net Income Contribution**

* The net income shows strong improvement over time, with key contributions of **$161.86 billion**, **$110.9 billion**, and **$282.8 billion**.
* This indicates high operational efficiency and profitability.

**Revenue by Google Products**

* Products like **Google Search**, **YouTube**, **Android**, and **Google Ads** dominate the revenue charts.
* Google Search contributes the most, reflecting its core strength in the advertising domain.

**3. Prescriptive Analysis: Strategic Insights Dashboard**

**Revenue by Service Type**

* The highest revenues are derived from **Search Services**, **Cloud**, **Advertising**, and **Video Content**.
* This indicates that future investments in search-based and video platforms can maximize profits.

**CEO Timeline and Tenure Impact**

* Leadership changes from **Eric Schmidt** to **Larry Page** and later to **Sundar Pichai** correlate with spikes in revenue.
* Sundar Pichai’s tenure shows the most significant growth, suggesting successful strategic direction.

**Top Product-wise Revenue Breakdown**

* **Google Search** stands out as the largest revenue-generating product with **over $300 billion**.
* **AdSense** and **Android** also contribute considerably, but at a lower scale.

**Revenue Trend Over Years**

* A dip in the mid-2010s followed by a massive surge post-2018 highlights strategic realignments that paid off.
* Continuous growth from 2020 onwards shows resilience and strong market adaptability.

**4. Conclusion & Recommendations**

**Conclusion:**

Google's business model, centered around search, ads, and technology platforms, has scaled massively over the past two decades. Employee and leadership data validate that organizational decisions strongly align with business outcomes.

**Recommendations:**

* **Invest in AI and Cloud services**, given the scalable revenue potential.
* **Continue product innovation** under strong leadership to sustain competitive advantage.
* **Strengthen YouTube and Android ecosystems**, which show emerging contribution potential.
* **Monitor CEO impacts and align strategy** with leadership strengths for optimal performance.