# **Global Population Trends Report (1970–2022)**

#### 1. Overview

This dashboard provides a comprehensive analysis of population trends across 50 countries from 1970 to 2022. It includes visual breakdowns by continent, population rankings, area coverage, and density. The dashboard allows drill-through exploration for deeper insights into specific countries.

Key focus areas include historical population growth, country-wise comparisons, and density analysis to help understand demographic pressure and distribution across regions.

### 2. Key Global Insights

- Total Countries Covered: 50
- Population Growth:
- 1970: 2 billion
- 1980: 3 billion
- 1990: 3 billion
- 2000: 4 billion
- 2010: 4 billion
- 2015: 4 billion
- 2020: 5 billion
- 2022: 5 billion

The world population has doubled in just over 50 years, with the most substantial growth observed in Asia.

## 3. Population by Country (2022)

Top 5 countries by population:

- 1. China 1.43 billion
- 2. India 1.42 billion
- 3. Indonesia 0.28 billion
- 4. Pakistan 0.24 billion
- 5. Bangladesh 0.17 billion

These five countries together account for a large portion of the global population, highlighting the demographic dominance of Asia.

#### 4. Top 5 Countries by Area

- 1. China 9.7M sq.km
- 2. India 3.3M sq.km
- 3. Kazakhstan 2.7M sq.km
- 4. Saudi Arabia 2.1M sq.km
- 5. Indonesia 1.9M sq.km

Insight: While China leads in both population and area, countries like India and Indonesia face high population pressure relative to their land size.

## 5. Population Density

Top 10 countries by population density (people per sq.km):

- 1. Macau 23,172
- 2. Singapore 8,416
- 3. Hong Kong 6,783
- 4. Bahrain 1,924
- 5. Maldives 1,746
- 6. Bangladesh 1,160
- 7. Palestine 844
- 8. Taiwan 660
- 9. Lebanon 525
- 10. South Korea 517

Insight: Smaller countries and city-states like Macau and Singapore face extreme pressure on infrastructure and resources due to high density.

#### 6. Continent-Level Filtering

The dashboard allows continent-based filtering to isolate regional trends. This enables stakeholders to examine how continents like Asia, Europe, or Africa compare in population trends, growth rates, and density metrics. It adds flexibility in analysis by enabling side-by-side comparisons between regions.

# 7. Drill-Through Functionality

The dashboard includes a drill-through feature that allows users to click on any country and explore a detailed view with:

- Decade-wise population growth from 1970–2022
- Urban vs. rural distribution trends
- Land usage and density metrics
- Comparison with regional and global averages

#### Use Case Example:

Clicking on India opens a detailed view showing its population grew from approximately 555 million in 1970 to over 1.42 billion in 2022. Users can observe how urbanization and density evolved, aiding policy decisions or research.

#### 8. Conclusion

This dashboard serves as a powerful tool for analyzing historical and current population dynamics across countries and regions. It helps understand demographic pressure points and supports strategic planning for urban development, healthcare, education, and infrastructure.

The interactive drill-through and filtering features provide deep and focused insight for decision-makers, analysts, and researchers.

# US Tech Stocks Dashboard Report (Feb 2023 – May 2023)

#### **Executive Summary**

This report presents a consolidated performance analysis of four major US tech stocks — **Apple Inc.**, **Google Inc.**, **Microsoft Corp.**, **and Netflix Inc.** The dashboard spans from **February to May 2023** and provides insights into **price trends**, **volume dynamics**, **and weekday performance**, helping drive smarter investment decisions.

#### 1. Apple Inc. (AAPL) Analysis

Open: \$9,782 | Low: \$9,714 | High: \$9,887 | Close: \$9,811

• Total Volume: 3.74 billion

• Trend: Steady price rise with a peak of \$174 in May.

• Weekday Close:

Highest on Thursday (\$2,059)

Lowest on Friday (\$1,903)

**Insight**: Apple displayed consistent upward momentum with strong mid-week performance.

#### 2. Google Inc. (GOOG) Analysis

- Price Range:
  - Low: \$89 (Mar)  $\rightarrow$  \$105 (May)
  - High: \$109 (Feb)  $\rightarrow$  \$106 (May)
- Volume:
  - Highest on Thursday (461M)
  - o Lowest on Monday (289M)
- Closing Trends:
  - Thursday recorded the strongest close (\$1,313)

**Insight**: Google stock dipped in March but recovered steadily, showing strength by late April and May.

#### 3. Microsoft Corp. (MSFT) Analysis

- Stable Highs: Around \$286, with closes averaging near \$275
- Volume:
  - o Peak on **Thursday** (416M)
  - Lowest on Monday (275M)
- Strongest Close: Wednesday (\$1,366)

**Insight**: Microsoft demonstrated low volatility and consistent performance, signaling strong investor confidence.

#### 4. Netflix Inc. (NFLX) Analysis

• Open: \$15,347 | Low: \$15,229 | High: \$15,508 | Close: \$15,370

• Total Volume: 2.43 billion

Monthly Trend: Price rose from \$345 (Mar) to over \$410 (May)

- Weekday Breakdown:
  - o Thursday led in both volume (357M) and open price (\$3,196)
  - o Monday and Friday showed weaker performance

**Insight**: Netflix saw the strongest growth among the four, with Thursday emerging as the most active and profitable day.

#### Conclusion

- All four stocks show **peak performance mid-week**, especially on **Thursdays**.
- **Netflix** showed the **most significant growth** in value.
- Microsoft offered the most stability, appealing to conservative investors.
- These insights can guide **smarter entry/exit decisions** for investors, especially those focusing on short-term trading or sector allocation.

# **Financial Dashboard Analysis Report**

Analysis Period: 2013 - 2014

#### 1. Dashboard Overview

This interactive dashboard provides a two-year financial analysis (2013–2014) across various business dimensions. It includes dynamic buttons for Product, Segment, Revenue, and Trend Analysis which allow users to drill down into detailed views affecting financial performance.

#### **Key Findings:**

- October shows the highest sales and profit.
- Most profit comes from non-discounted or low-discounted products.
- Paseo, VTT, and Amarilla are top products by profit.
- Government and Small Business segments drive the majority of revenue and profit.

## 2. Product Analysis

This section highlights the performance of products in terms of sales, profit, and units sold.

Top Product by Sales: Paseo (\$14.88M)Top Product by Profit: Paseo (\$3.06M)

- Top Manufacturing Product: VTT

- Bottom Product by Sales: Carretera

Insight: Paseo dominates in both revenue and profit. Carretera and Velo need review for performance and pricing strategy.

#### 3. Segment Analysis

Segment-wise performance shows significant variance.

- Government: \$53M in Sales, \$11.4M in Profit, 32K units

- Small Business: \$42M in Sales, \$4.1M in Profit

- Enterprise: \$20M Sales but (\$0.6M) loss

Insight: Government is the most valuable segment. Enterprise segment is loss-making despite high sales volume and needs deeper review.

## 4. Revenue Analysis

- Total Sales: \$119M | COGS: \$102M | Profit: \$17M | Units Sold: 59K

- Monthly High: October (\$22.7M), December (\$17.4M)

- Country-wise Profit Leaders: France (\$3.8M), Germany (\$3.7M)

- Best Margin Products: VTT, Amarilla

- Breakeven Product: Velo

Insight: Focus on top performing countries and products. Review cost structure for Velo.

# **5. Time Trend Analysis**

- Total Sales: \$118.7M | COGS: \$101.8M | Profit: \$16.89M | Units Sold: 59K

- Highest Profit Month: October (\$3.44M)

- Strongest Q4: Oct-Dec

- Weakest Profit Months: Feb-Mar-Aug

Insight: Profit and sales are highly seasonal with Q4 leading. Mid-year strategy improvements can help balance performance.

# EV Vehicle Sales Analysis – Summary Report

#### 1. Overall Sales Performance

Total EV Sales: 1,01,087 units

- 2-Wheelers: 13,121 units (13%) - 3-Wheelers: 11,491 units (11%) - 4-Wheelers: 8,691 units (9%)

- Buses: 9,119 units (9%)

- Other Vehicles: 54,423 units (54%) - major contributor to total sales

#### 2. State-Wise Sales Overview

Top 5 States by Total EV Sales:

- 1. Uttar Pradesh 732K units
- 2. Maharashtra 402K units
- 3. Karnataka 315K units
- 4. Delhi 269K units
- 5. Rajasthan 229K units

#### Insights:

- Uttar Pradesh leads with a significant margin, accounting for the highest EV adoption.
- Northern and Western states dominate EV sales distribution.

## 3. Vehicle Type Analysis by State

- 2-Wheelers: Highest sales in top 5 states: 602 units in one state (22%)
- 3-Wheelers: 520 units in a leading state (21%)
- 4-Wheelers: Spread evenly with top state contributing 284 units (22%)
- Buses: Top state accounts for 443 units (23%)
- Other Vehicles: Strongest category; top state reports 3K units (~22%)

## 4. Vehicle Class – 'Other' Category Breakdown

The top 10 vehicle classes under "Others" show:

- Tractors and Trailers lead, contributing ~2.3K and 1.9K units respectively
- Declining trend observed across other classes, e.g., X-RAY and TREE-TYPE contribute <100 units

## **5. Monthly Trends**

- Consistent Performance: Average monthly sales hold steady at around 8K-9K units
- Peak Month: November (9K units)
- Slight Dip: Seen in mid-year months like June-August

## 6. Geographical Distribution

Bubble Map Insight:

- Larger sales volumes are concentrated in Uttar Pradesh, Maharashtra, Delhi NCR, and Southern states like Karnataka and Tamil Nadu.
- Lesser sales volumes are seen in Northeast and central regions.

## **Key Takeaways for Management**

- Focus marketing and support in top-performing states like Uttar Pradesh and Maharashtra to maintain leadership.
- Explore opportunities in underperforming regions for market expansion.
- Monitor "Other" vehicle classes as they constitute over 50% of total EV sales scope for deeper analysis.
- Maintain momentum through consistent monthly performance; investigate slight mid-year dips for corrective action.