

**BUSINFO 703**

# **Global Market Opportunities**

Insights from Manufacturing, Trade & ML Segmentation

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# Introduction Summary

We combine global economic data and machine learning segmentation to identify where companies can compete, scale, and mitigate their expansion risk.

Our analysis highlights three structural differences across countries — manufacturing capability, trade position, and demand strength — and translates them into clear strategic pathways for market entry and growth.





# Content

- Macro Trends
- Manufacturing Capabilities across Regions
- Trade Flows & Demand Hotspots
- Market Segmentation
- Strategic Implications





# Macro Trends

- Global demand is highly concentrated in a few large economies
- Trade is more fluctuating than GDP, signaling external risks
- Regions follow different growth paths — East Asia shows strong performance, while other regions grow more slowly

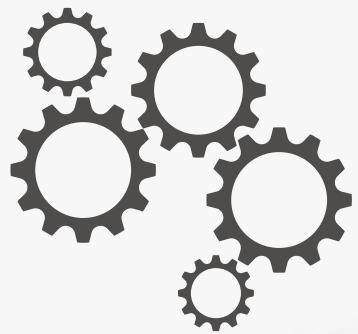
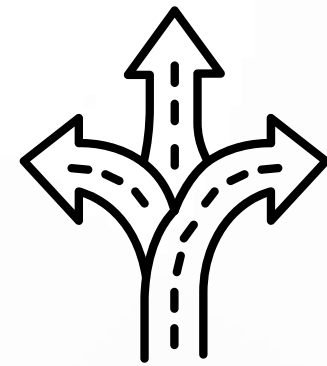


# Manufacturing Capability

## Across Regions



- The manufacturing capacity is concentrated in a few countries, which brings about economies of scale and risks of concentration
- Manufacturing output varies significantly across various regions. The East Asia and Pacific region, as well as North America, dominate global output



- Market attractiveness cannot be determined solely based on the scale of output

# Trade Flows & Demand Hotspots

- The countries where exports exceed imports are the strong suppliers in the global market
- The countries where imports exceed exports are markets with strong demand
- The upward trend indicates an increase in supply, while the long-term downward trend indicates a sustained demand

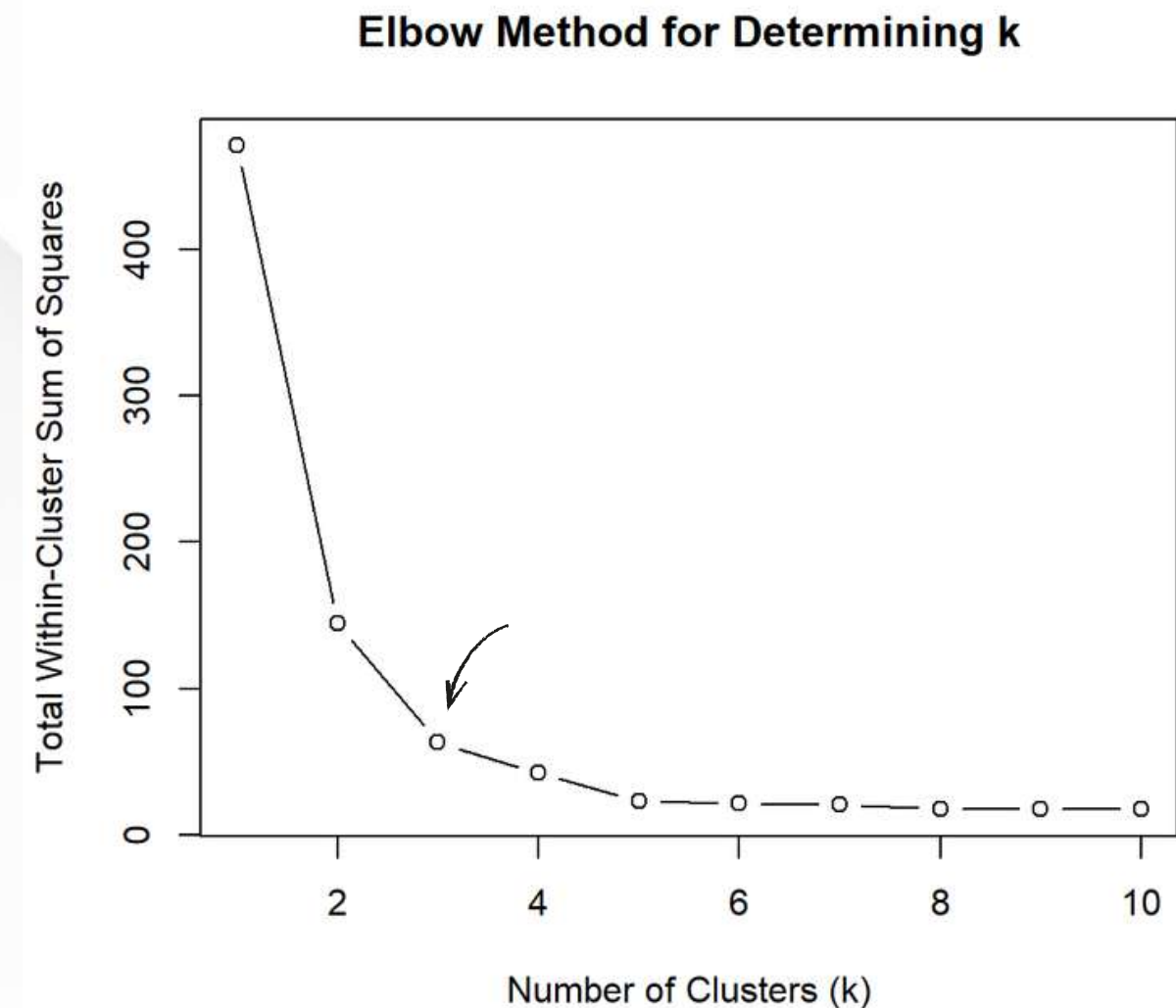




# Market Segmentation

## K-Means Clustering

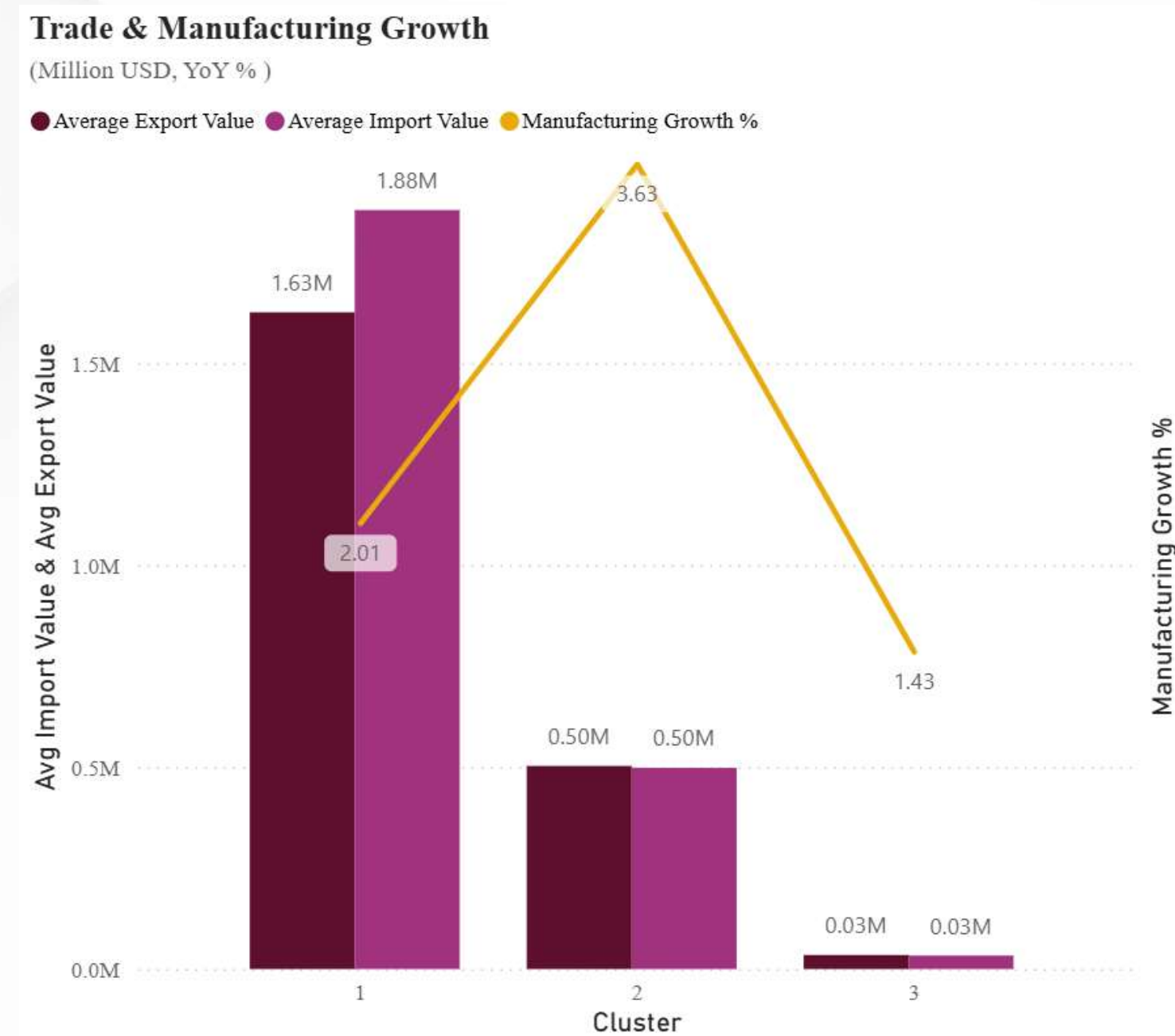
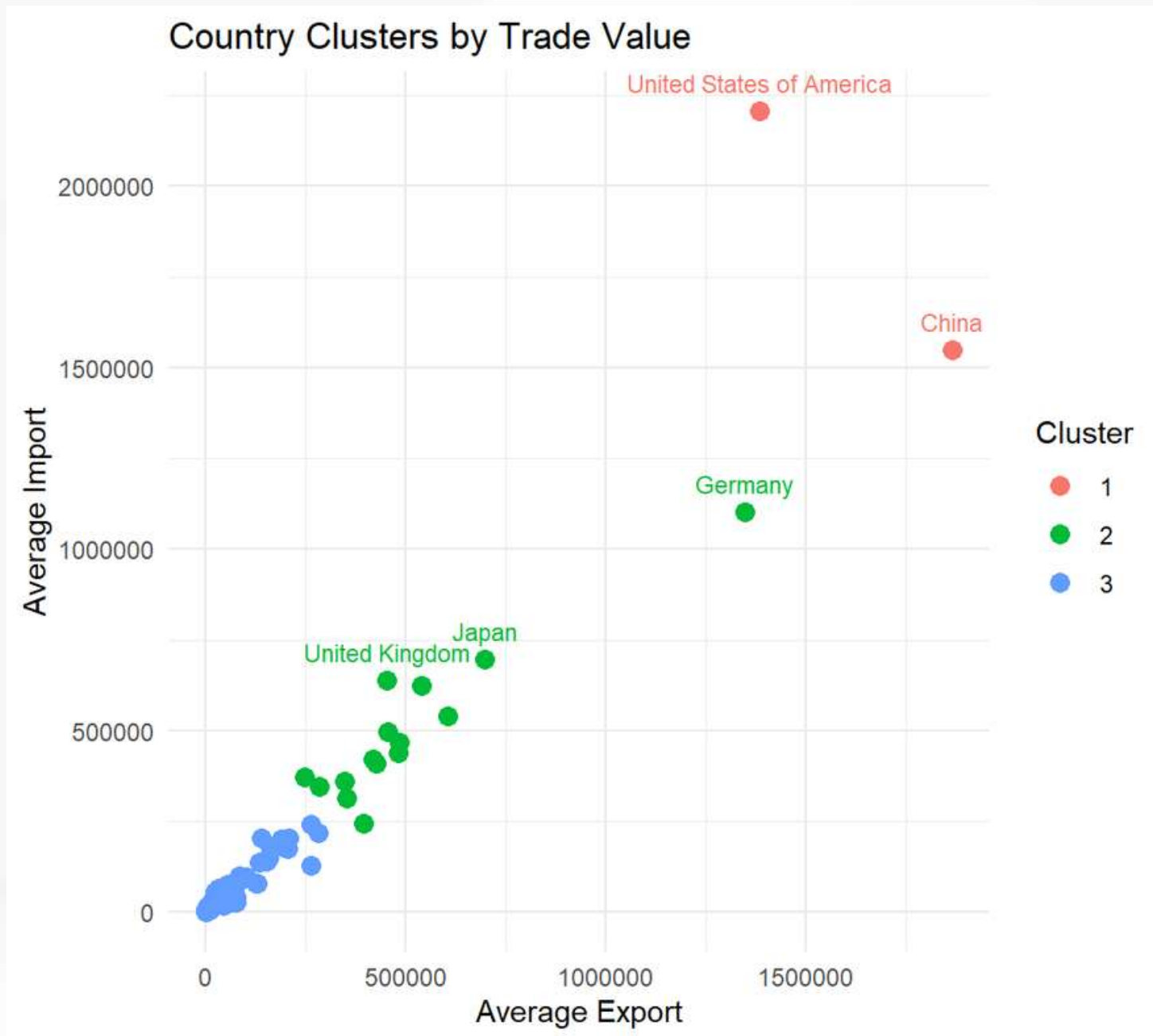
- **Objective**
  - Segment over 150 countries based on trade and manufacturing indicators.
- **Data Used**
  - Average Export
  - Average Import
  - Average Manufacturing
  - All variables standardized.
- **Method**
  - Elbow method



# Market Segmentation

- Outcome

- 3 distinct clusters based on trade and manufacturing profiles.
- Reveal differences in economic scale and trade intensity.





# Strategic Implications

## Cluster 1 — Mature Markets

- Build strong brands while keeping costs low.
- Example: Sell flagship products in the US; source components from China.

## Cluster 2 — Emerging Growth Markets

- Use local assembly to reduce tariffs and enter markets faster.
- Example: Finish packaging in India; sell on Shopee/Lazada.

## Cluster 3 — Low-Risk Exploratory Markets

- Test demand online before making heavy investments.
- Example: List basic products on AliExpress/Amazon; expand only if sales grow.

A stylized world map with a light blue background. The map features several orange location pins scattered across the continents. Overlaid on the map are various transportation icons: a brown truck with 'FAST DELIVERY' written on its side in the upper left, a green truck with 'FAST DELIVERY' written on its side in the upper right, a cargo ship with stacked containers in the lower left, and a yellow airplane in the lower center. Thin, curved lines connect some of the location pins, suggesting a network or route. The text 'Thank You!' is centered over the map in a large, bold, black serif font.

# Thank You!

Group 6



# Appendix

International\_Trade. <https://stats.wto.org/inventory/en>

Manufacturing, value added (annual % growth). <https://data.worldbank.org/indicator/NV.IND.MANF.KD.ZG>

World GDP(GDP, GDP per capita, and annual growths). <https://www.kaggle.com/datasets/zgrcemta/world-gdp-gdp-gdp-per-capita-and-annual-growths>