

VENDOR REPORT FOR ASPIRE USING POWER BI

MIS 446 - Data Visualization

Lecturer: Ms. Nguyen Thi Quynh Nhu



ASPIRE INDUSTRIES

HUYNH THUY BAO TRAM

2132300228

NGUYEN NGOC MINH THU

2232300163

NGUYEN THI HOAI THUONG

2232300040



OUR
TEAM

NGUYEN QUANG TRUONG

2132309001

REPORT OUTLINE

TOPIC HIGHLIGHTS



- 1 Objective**
- 2 Data Preparation & Modeling**
- 3 Report Build Overview**
- 4 Usage & Handover**
- 5 Final Report**

1. Project Objective

WHAT IS THE REPORT DESIGNED FOR?

VALUE FOR ASPIRE

Help the leadership and Sourcing team make **fast, data-informed sourcing decisions** aligned with Aspire's service strategy and risk management.

PURPOSE:

Visual, interactive tool to support vendor evaluation and supply chain management for Aspire.

CORE FUNCTION:

Compare vendors using weighted criteria:

- Quality
- Production Capacity
- Reputation
- Customer Support
- Proximity

KEY CAPABILITY:

Enable shortlisting by:

- Component / Material
- Tier (1, 2, 3)
- Location (country / region)

WHO ARE THE END USERS?

ASPIRE

SOURCING / PROCUREMENT TEAM

Daily users: search, compare, and build vendor shortlists for real projects.

ASPIRE MANAGEMENT

High-level view of supplier portfolio, performance, and potential risks.

OTHER STAKEHOLDERS (QA, FINANCE, COMPLIANCE)

Use the report for compliance checks, performance reviews, and partner selection discussions.

LOGIC PLANNING (HIGH-LEVEL STRUCTURE)

VALUE FOR ASPIRE

KPIS (WHAT WE SHOW):

- Total of suppliers, distribution by Tier / Location / Component
- Average scores by Quality, Capacity, Reputation, Support, Proximity
- Top vendors by overall weighted score

PAGE LOGIC (HOW PAGES ARE ORGANIZED):

- Page 1: Supplier Overview & Location
- Page 2: Evaluation & Ranking
- Page 3: Capability / Radar Comparison & Component Analysis

USER WORKFLOW (HOW USERS USE IT):

- Select Component / Tier / Region using slicers
- Review shortlisted vendors and KPI cards
- Drill down into vendor details (scores, customers, capability)
- Export or note final recommended shortlist

RANKING LOGIC:

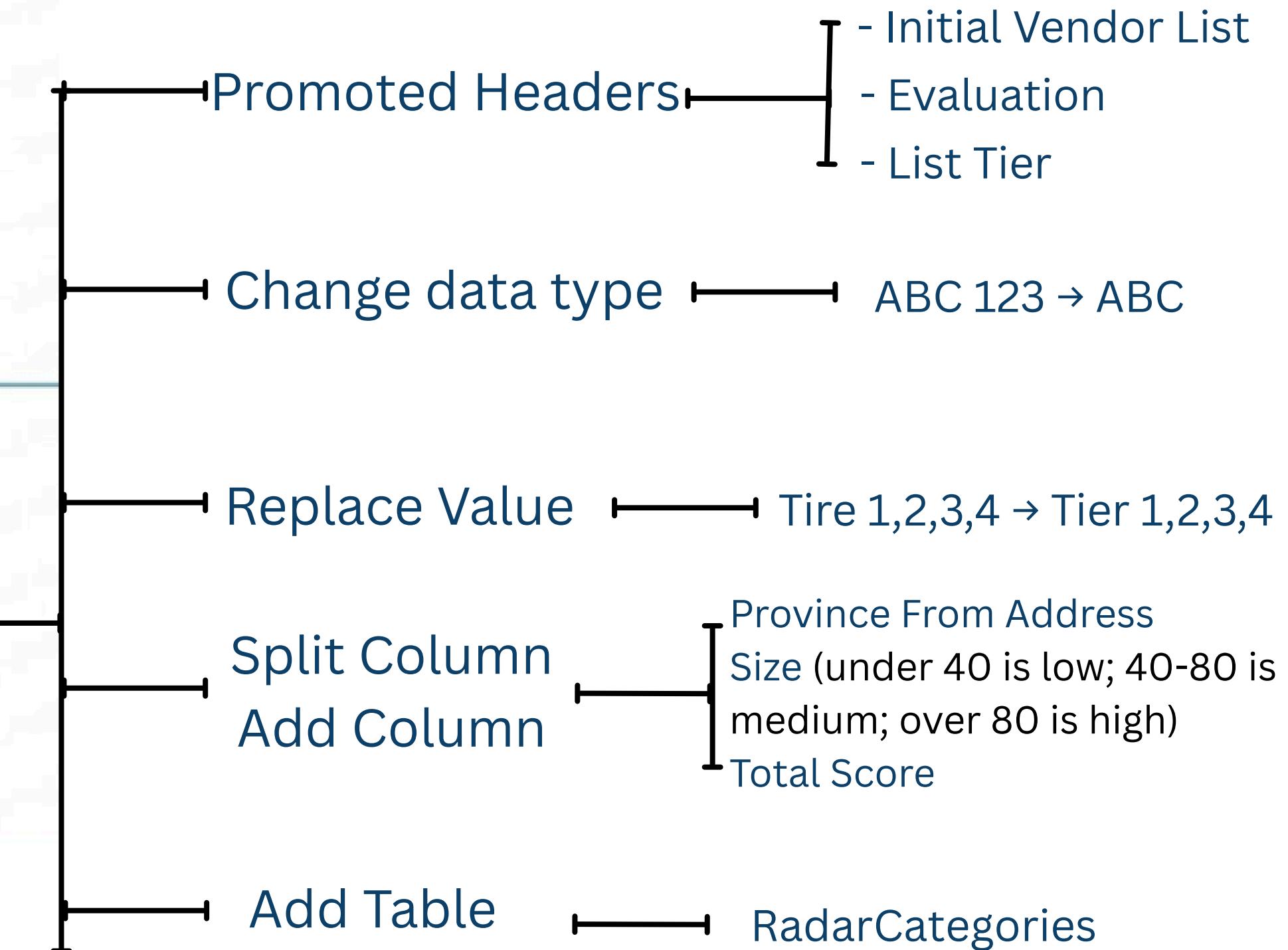
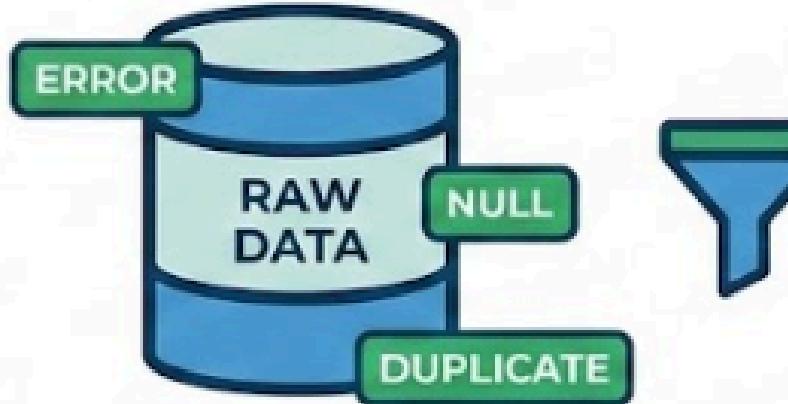
- Overall vendor score = weighted sum of criteria
- Vendors are sorted descending by total score, with filters applied (Tier, Component, Location).

2. Data preparation & Modeling

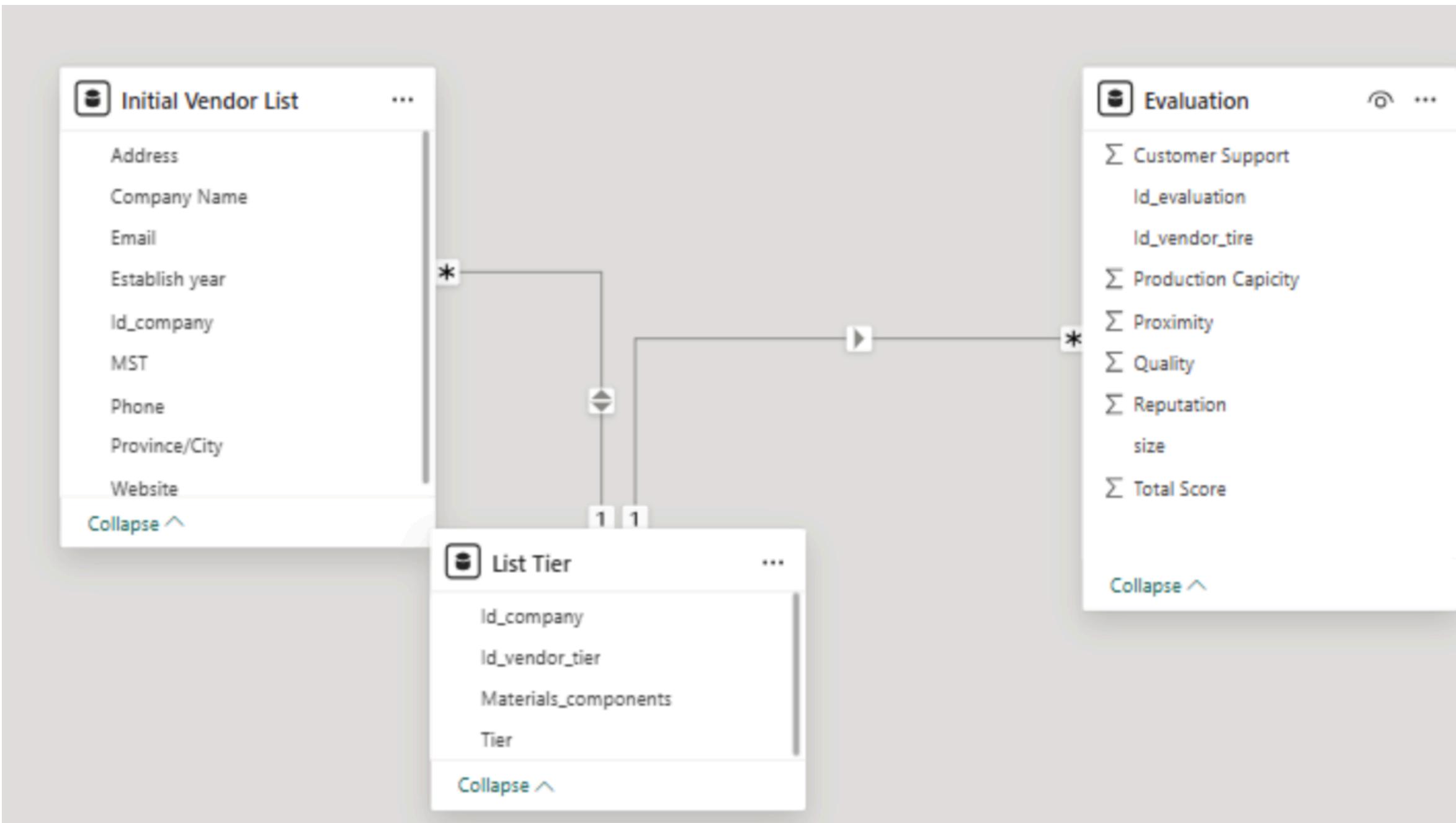
STEP 1: LOADING DATA FROM CSV



STEP 2: CLEANING DATA



Step 3: Data Modeling



Relationship

- List Tier Vs. Initial Vendor List
 - 1 to many
- List Tier Vs. Evaluation
 - 1 to many

STEP 4: WRITING DAX

fx

```
Total Sales = SUM(Sales[Amount])
Total Sales = SUM(Sales[Amount])
Total Sales = SUM(Product[Amount])
Mata Sales = SUM(Sales[Amount])
Mata Sales = SUM(Sales[Amount])
Total Sales = SUM(Product[Amount])
```



Total Suppliers

DISTINCTCOUNT()

Total Tier 1 Suppliers

CALCULATE()

Dynamic Weighted Score

SUM(Evaluation Score) * weight value

Radar Value

Total parameter value

Top Suppliers Name

TOPN()

Creating Parameter:

- w_Capacity
- w_Quality
- w_Reputation
- w_Support

3. Report Build Overview

3.1. PAGE STRUCTURE RATIONALE

STRUCTURE REASONING OVERVIEW



PAGE 1: OVERVIEW DASHBOARD

Serves as a starting point for quick situational awareness.

PAGE 2: VENDOR COMPARISON & SHORTLISTING

Directly addresses the core objective of shortlisting and comparing vendor performance.

PAGE 3: SIMULATION

Supports in-depth review using the Drill-through feature.

PAGE 1: OVERVIEW DASHBOARD



Reset

Total Suppliers

276

Avg Score

62.17

Select all

Thành Phố Hà
Nội

Tỉnh Đồng Nai

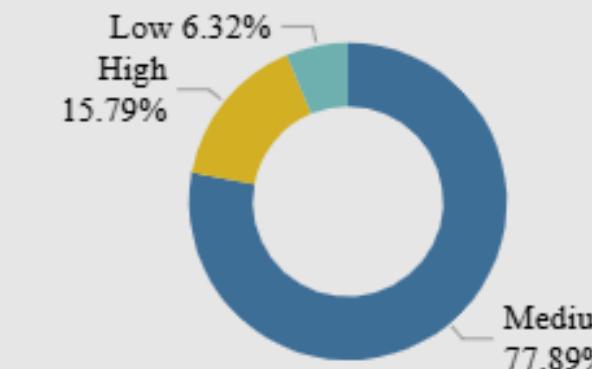
Thành Phố Hồ Chí
Minh

Tier ● Tier 1 ● Tier 2 ● Tier 3 ● Tier 4

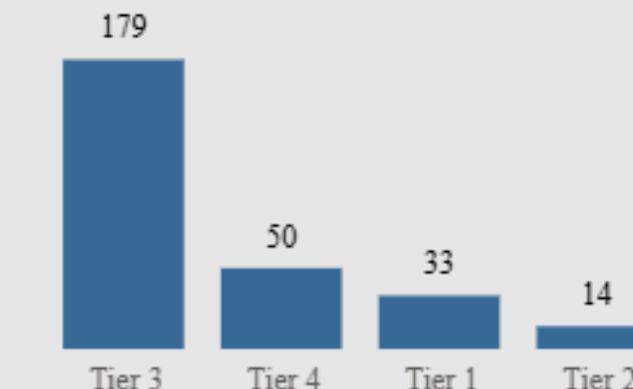


Supplier Management Overview

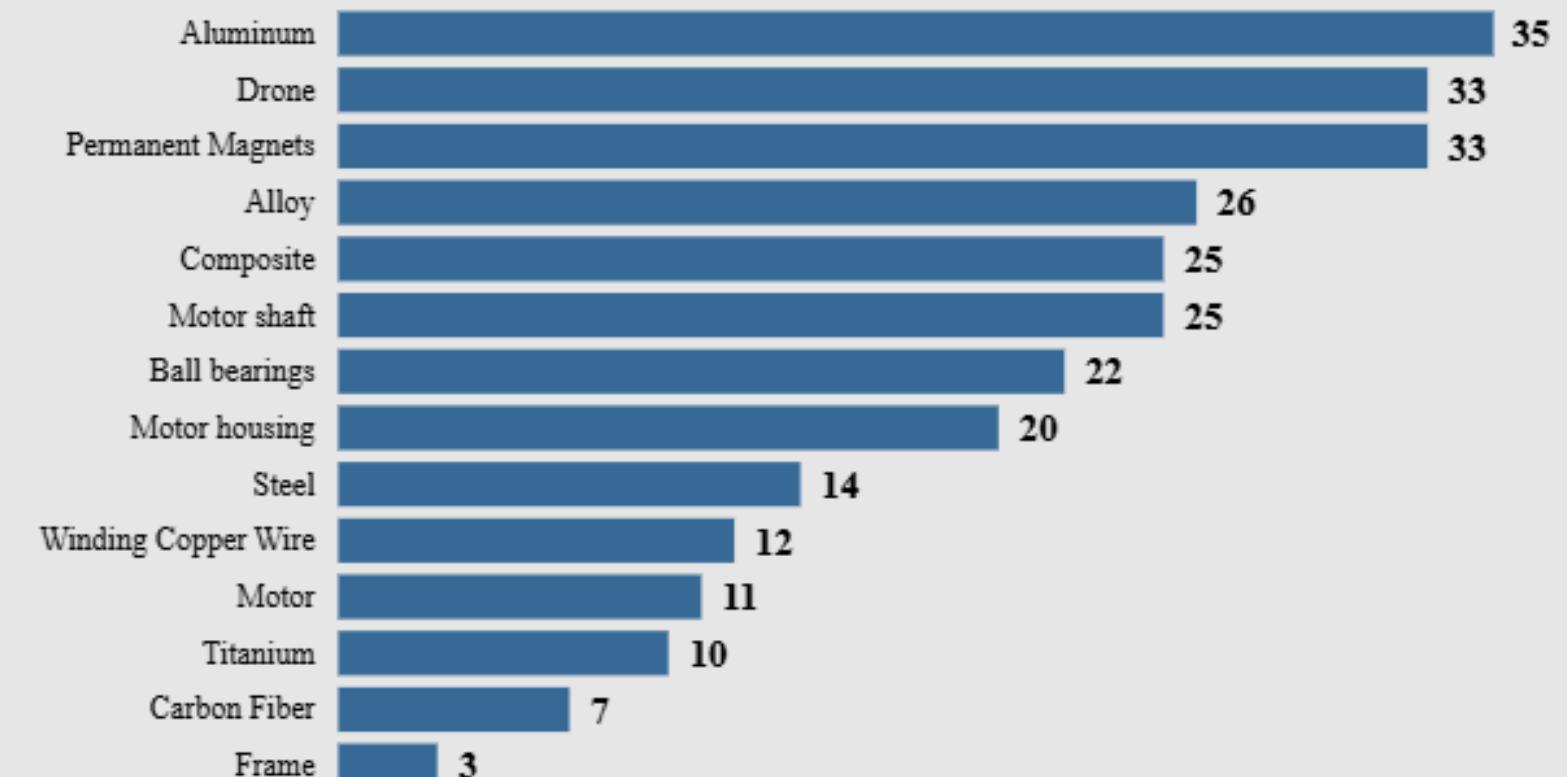
Company Size Distribution

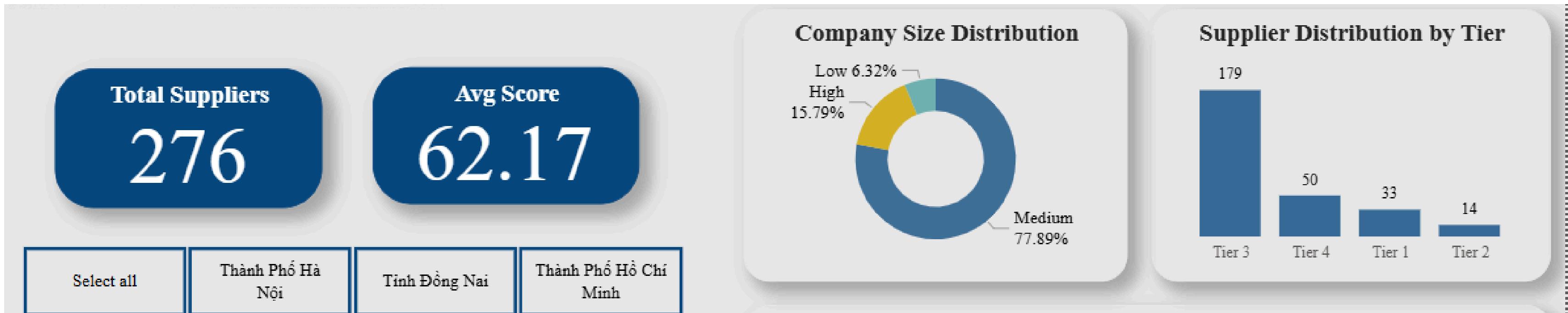


Supplier Distribution by Tier

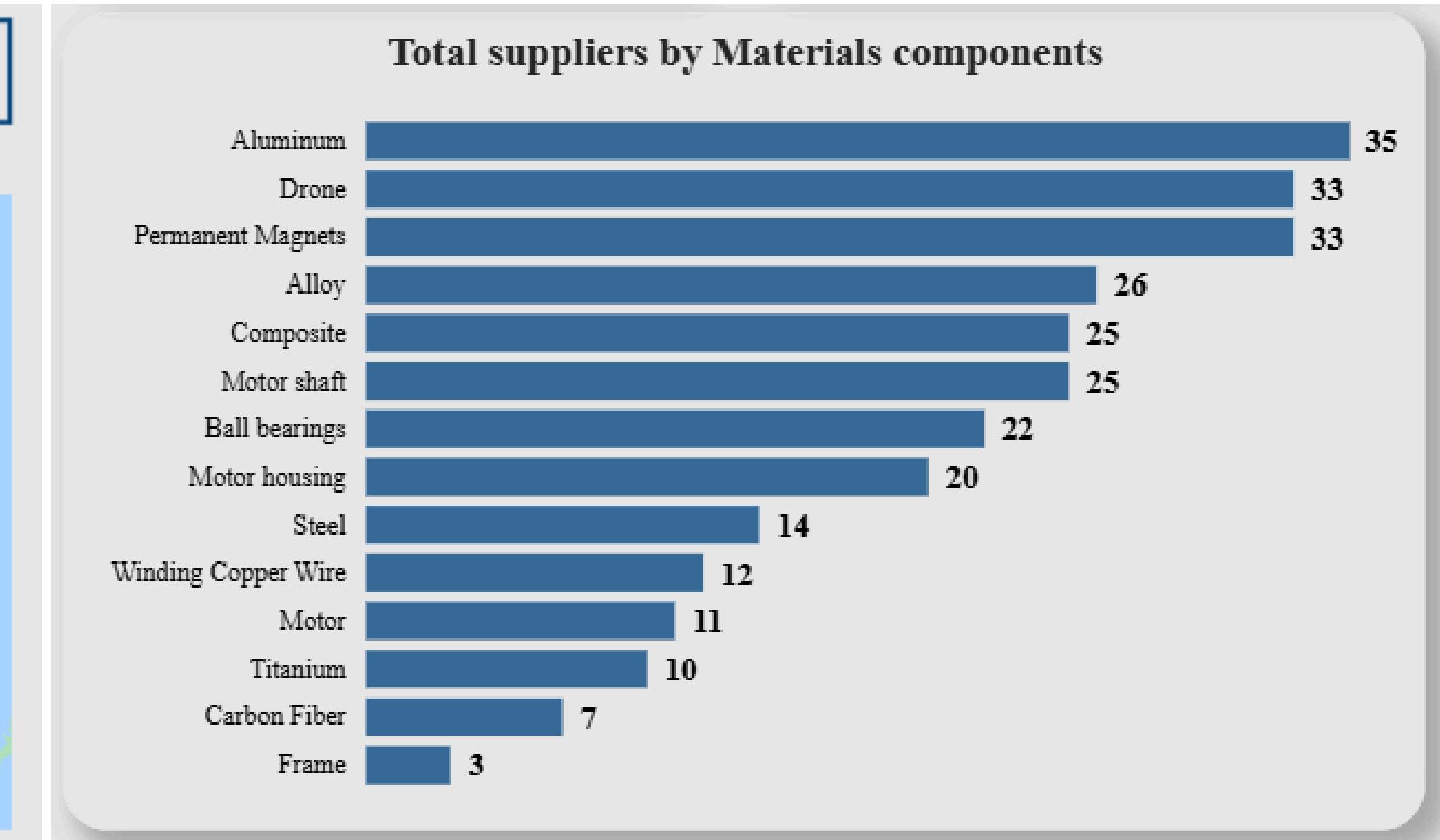
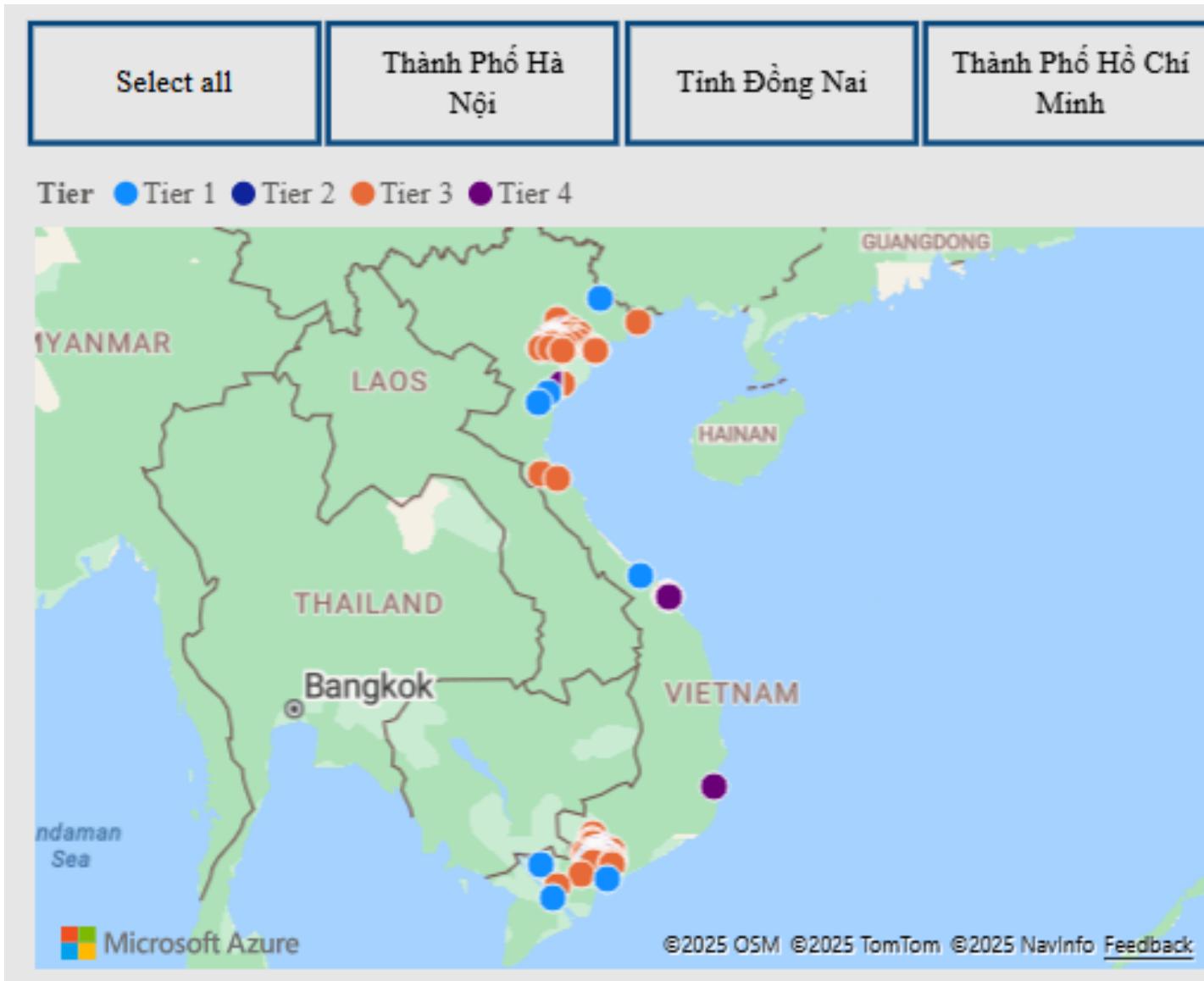


Total suppliers by Materials components





- An **executive overview**, giving a complete supplier snapshot before moving into deeper analysis.
- The top section, featuring KPIs and filters → **quickly understand supplier performance and immediately refine their view.**



- The central map and structural charts visually display supplier distribution and composition for **comparison and informed decision-making**.
- The bottom material breakdown chart provides the most detailed insight, placed last for **deeper evaluation** after the overview.

PAGE 2: VENDOR COMPARISON & SHORTLISTING



EIU
EASTERN
INTERNATIONAL
UNIVERSITY | ASPIRE

Reset

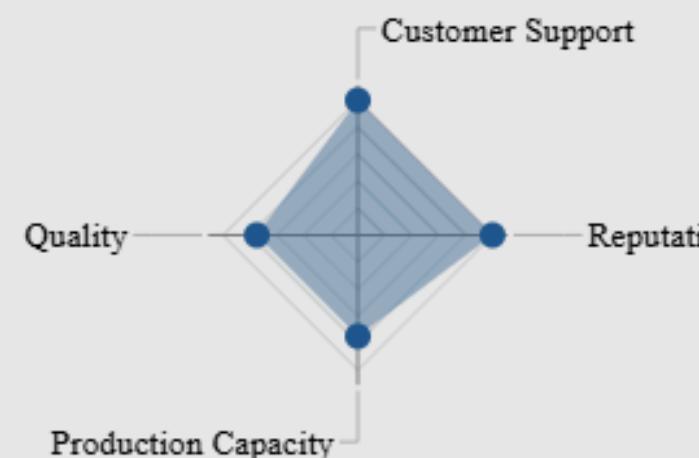
Company Name

Công Ty TNHH Thương Mại Xuất Nhập Khẩu Hà Khánh

Detailed Vendor Evaluation

Select all Tier 1 Tier 2 Tier 3 Tier 4

Radar Value by Attribute



The radar chart displays the performance of Công Ty TNHH Thương Mại Xuất Nhập Khẩu Hà Khánh across four key attributes. The axes are Customer Support (top), Quality (left), Reputation (right), and Production Capacity (bottom). The vendor's position is plotted relative to these axes.

Top 5 Avg Quality Suppliers by Materials & Components

Titanium	85.00
Alloy	74.55
Steel	63.33
Permanent Magnets	62.00
Frame	60.00
Motor	60.00

Materials _ components

- Alloy
- Aluminum
- Ball bearings
- Carbon Fiber

Avg Quality

58.2

Avg Capacity

64.9

Avg Support

68.1

Avg Reputation

61.2

Top 5 Company	Total Score
Công ty Cổ phần Dây và Cáp SACOM	96
CÔNG TY CỔ PHẦN THIẾT BỊ BAY AGRIDRONE VIỆT NAM	91
CÔNG TY CỔ PHẦN THIẾT BỊ BAY CÁNH ĐIỀU VIỆT	91
Công Ty TNHH Cơ Khí Mai Hoàng	94
Công Ty TNHH Kim Loại G7	91
CÔNG TY TNHH LONG VÂN NTV	93

18

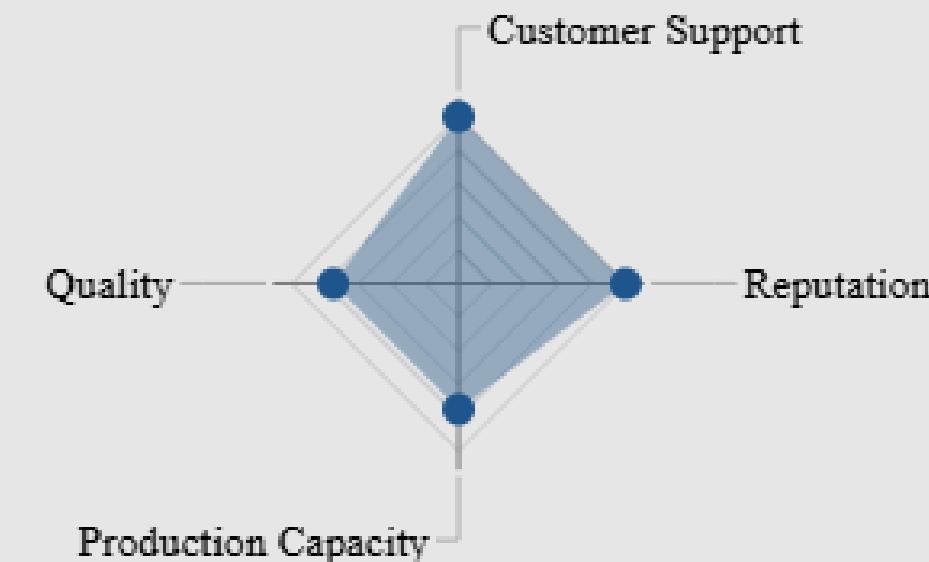
- The radar chart centered on the page provides **a clear visual comparison**, paired with KPI cards for numerical clarity.
- The ranking tables show top performers by quality and overall score, placed together.

→ **Compare material-based leaders with the overall best suppliers.**

Company Name

Công Ty TNHH Thương Mại Xuất Nhập Khẩu Hà Khánh

Radar Value by Attribute



Top 5 Avg Quality Suppliers by Materials & Components



- In-depth supplier and category performance analysis.
- The top section with Company, Tier, and Material filters enables users to drill down instantly and compare suppliers from different dimensions.

Select all Tier 1 Tier 2 Tier 3 Tier 4

Materials_components ▾

- Alloy
- Aluminum
- Ball bearings
- Carbon Fiber

Avg Quality
58.2

Avg Capacity
64.9

Avg Support
68.1

Avg Reputation
61.2

Top 5 Company	Total Score
Công ty Cổ phần Dây và Cáp SACOM	96
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Công Ty TNHH Cơ Khí Mai Hoàng	94
Công Ty TNHH Kim Loại G7	91
CÔNG TY TNHH LONG VÂN NTV	93

PAGE 3: SIMULATION / RISK

Strategic Sourcing & Simulation

Strategy Simulator

Tier: All

Materials components: All

Total Suppliers: 276

Average Capacity Score: 64.9

Avg Reputation: 61.2

Suggestion Company: Strategic Partners

Weighted Score: 0 to 100

Strategic Partner: Công ty cổ phần Chima Việt Nam, CÔNG TY CỔ PHẦN THƯƠNG MẠI VÀ CÔNG NGHỆ TST VIỆT NAM

Simulator Weighted: 0% to 100%

Reset

- Page 3 is designed as a **decision-making and simulation page**, enabling management to test sourcing strategies by adjusting evaluation weights.
- Strategy controls for Quality, Reputation, Capacity, and Support are placed on the left panel → **set priorities before viewing results**, while Tier and Material filters at the top **refine supplier selection**.

Tier

All

Select all

Tier 1

Tier 2

Tier 3

Tier 4

Materials components

All

Search

Select all

Alloy

Aluminum

Ball bearings

Carbon Fiber

Strategy Simulator

Quality Weight

0.00

Reputation Weight

0.00

Capacity Weight

0.00

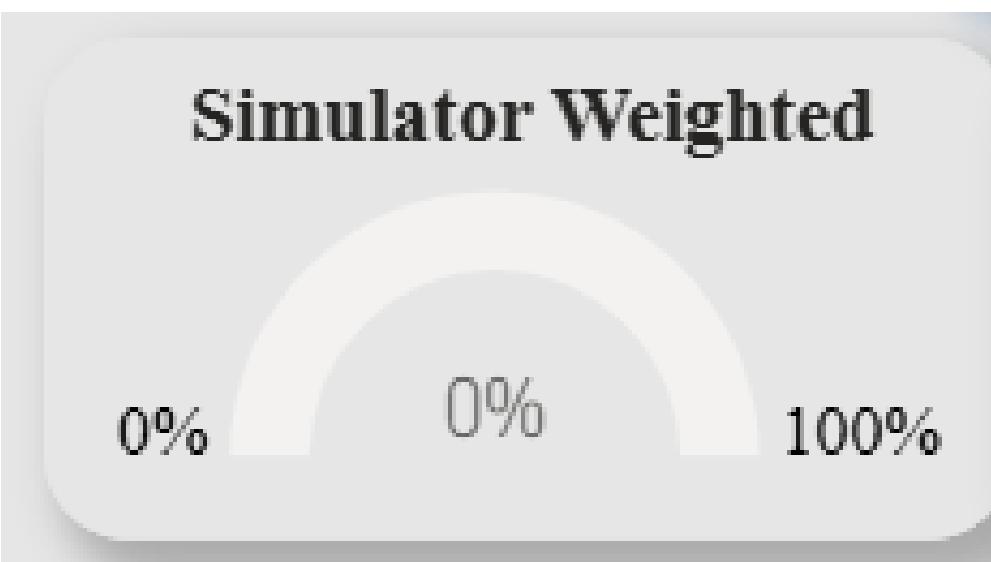
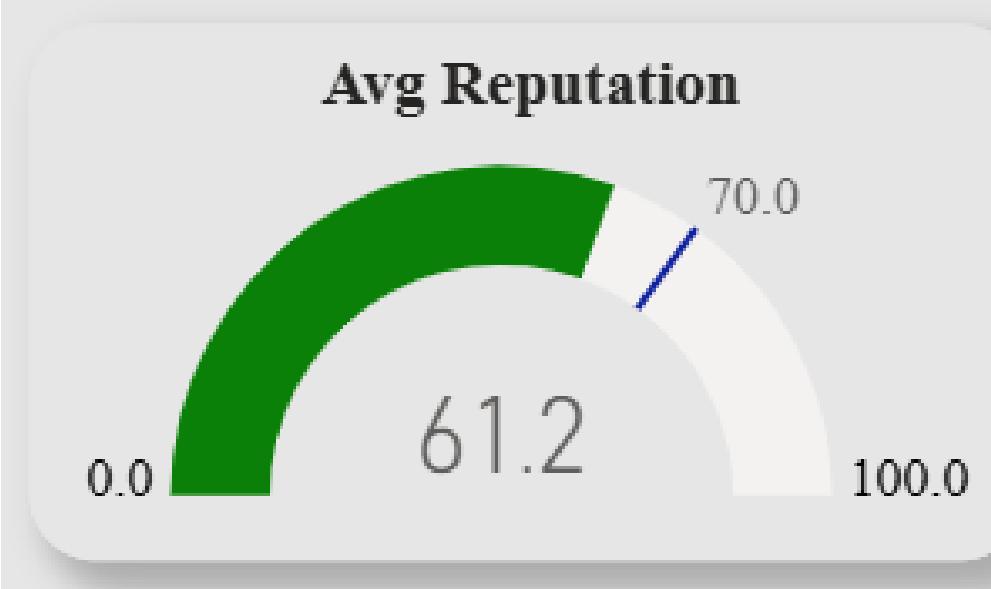
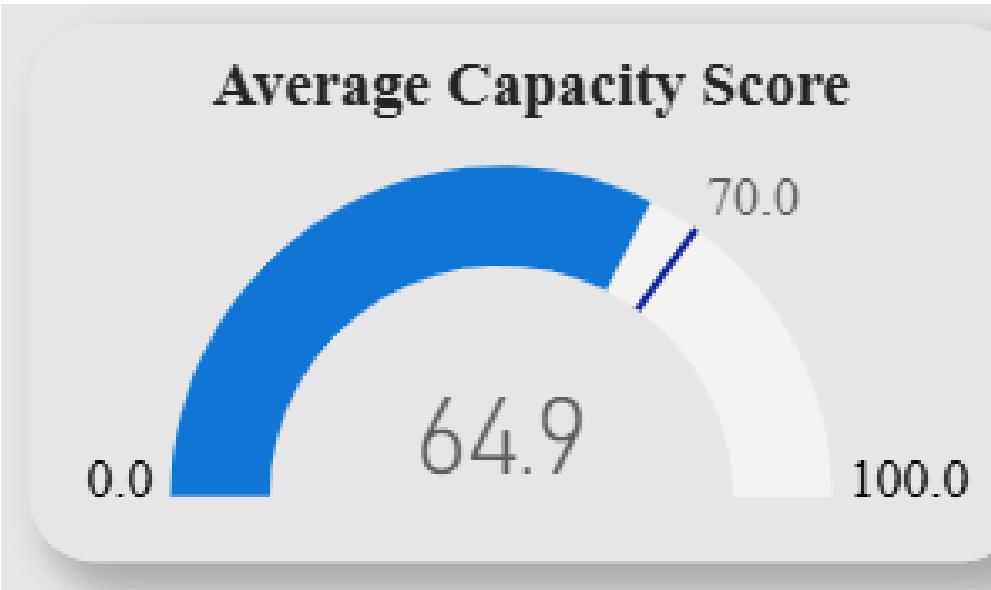
Support Weight

0.00



- The central scatter plot visualizes **recommended group of suppliers** based on their weighted scores and , acting as **the main decision output that updates as priorities shift.**





- Supporting gauges and KPIs on the right, along with the recommendation panel at the bottom, **provide context and final guidance**, showing **the most suitable supplier after adjustments**.

3.2. VISUAL SELECTION RATIONALE

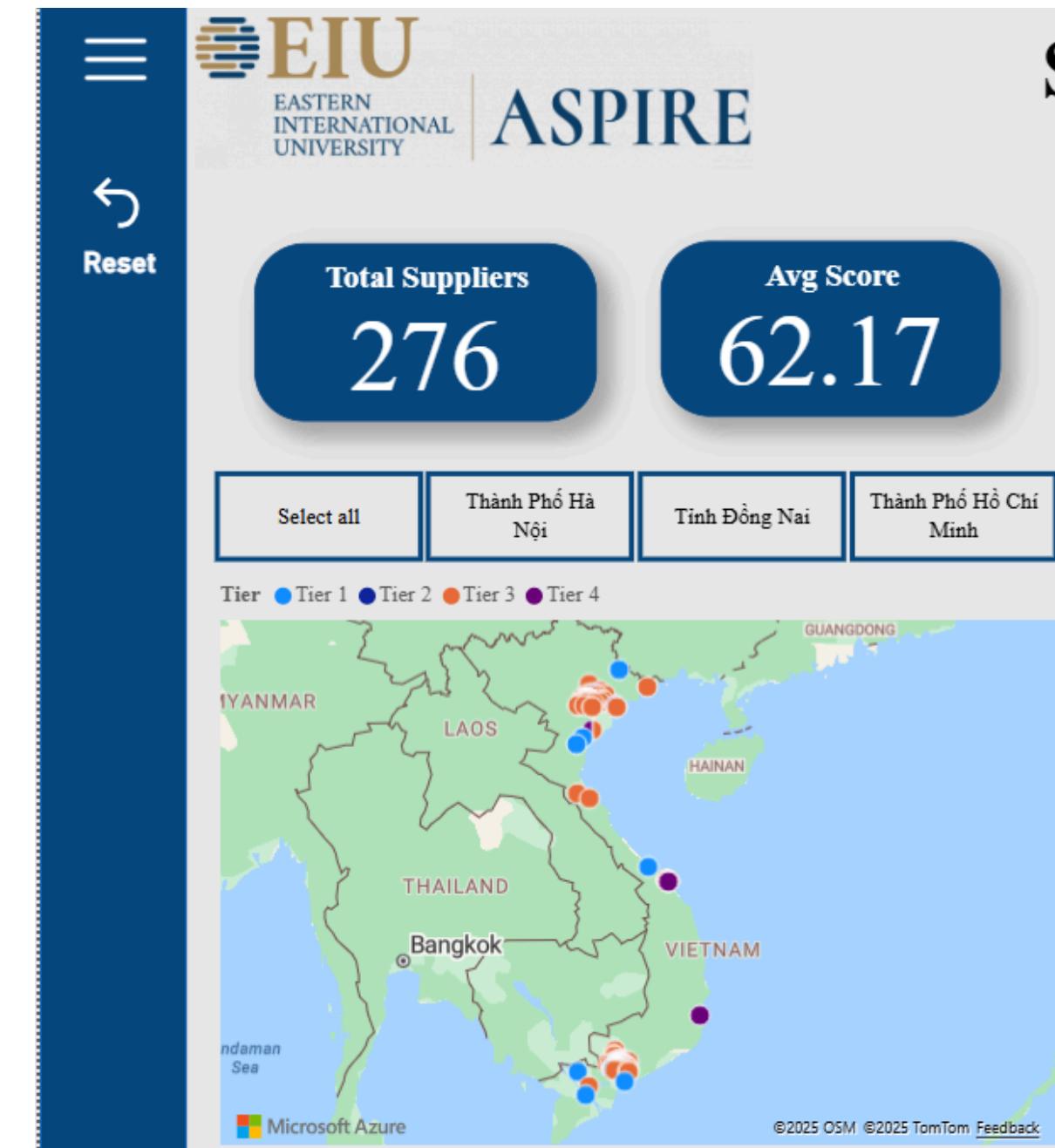
PAGE 1

VISUALS CHOSEN

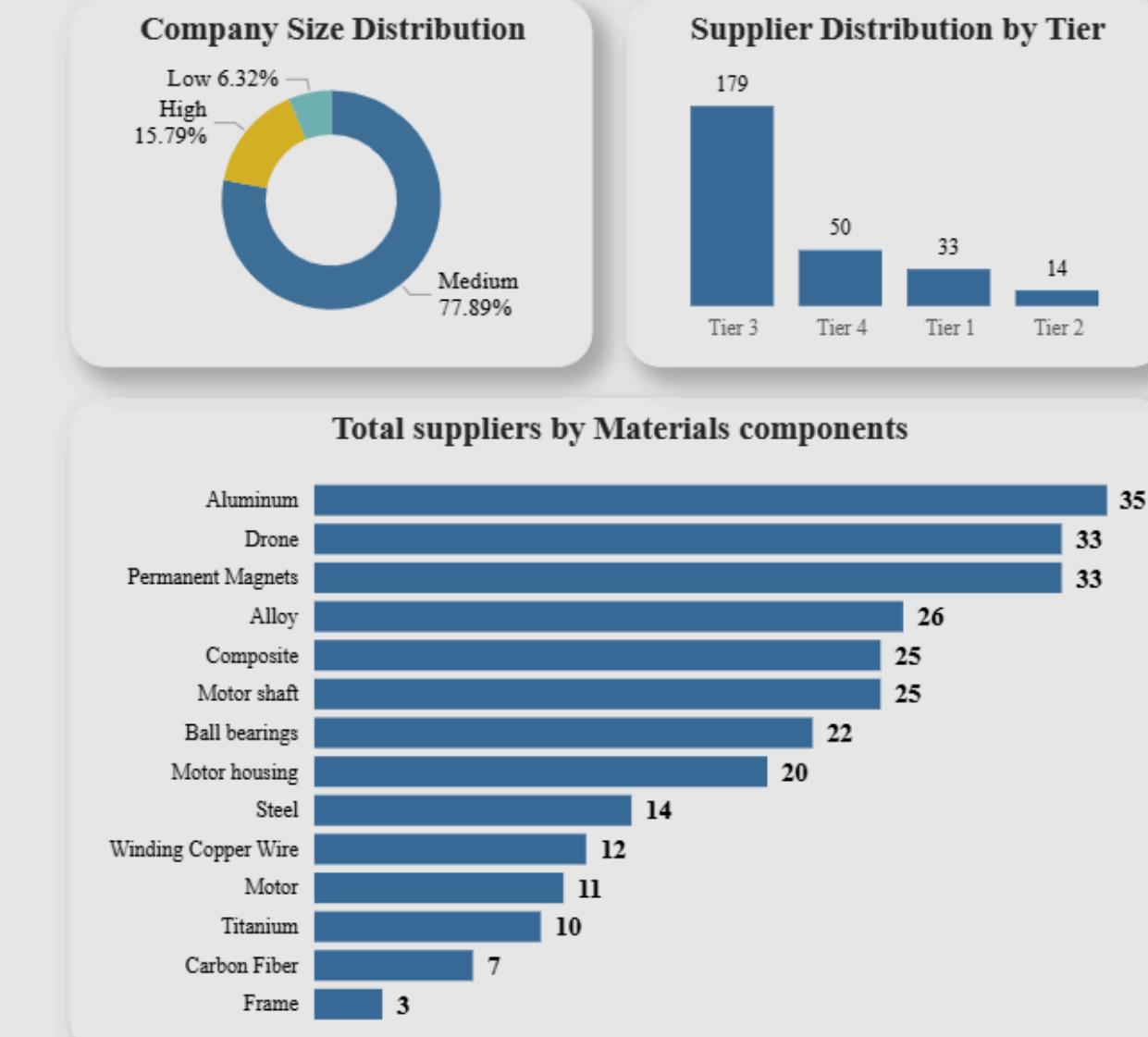
- Cards → Highlight key metrics instantly
- Donut Chart
→ Show proportion for quick comparison
- Column Chart
→ Compare tiers at a glance
- Horizontal Bar Chart
→ Easily see highest-lowest categories
- Map
→ Reveal geographic supplier patterns

INTERACTION ELEMENTS

- Reset Button
- Navigation Menu
- Region Filter Buttons



Supplier Management Overview



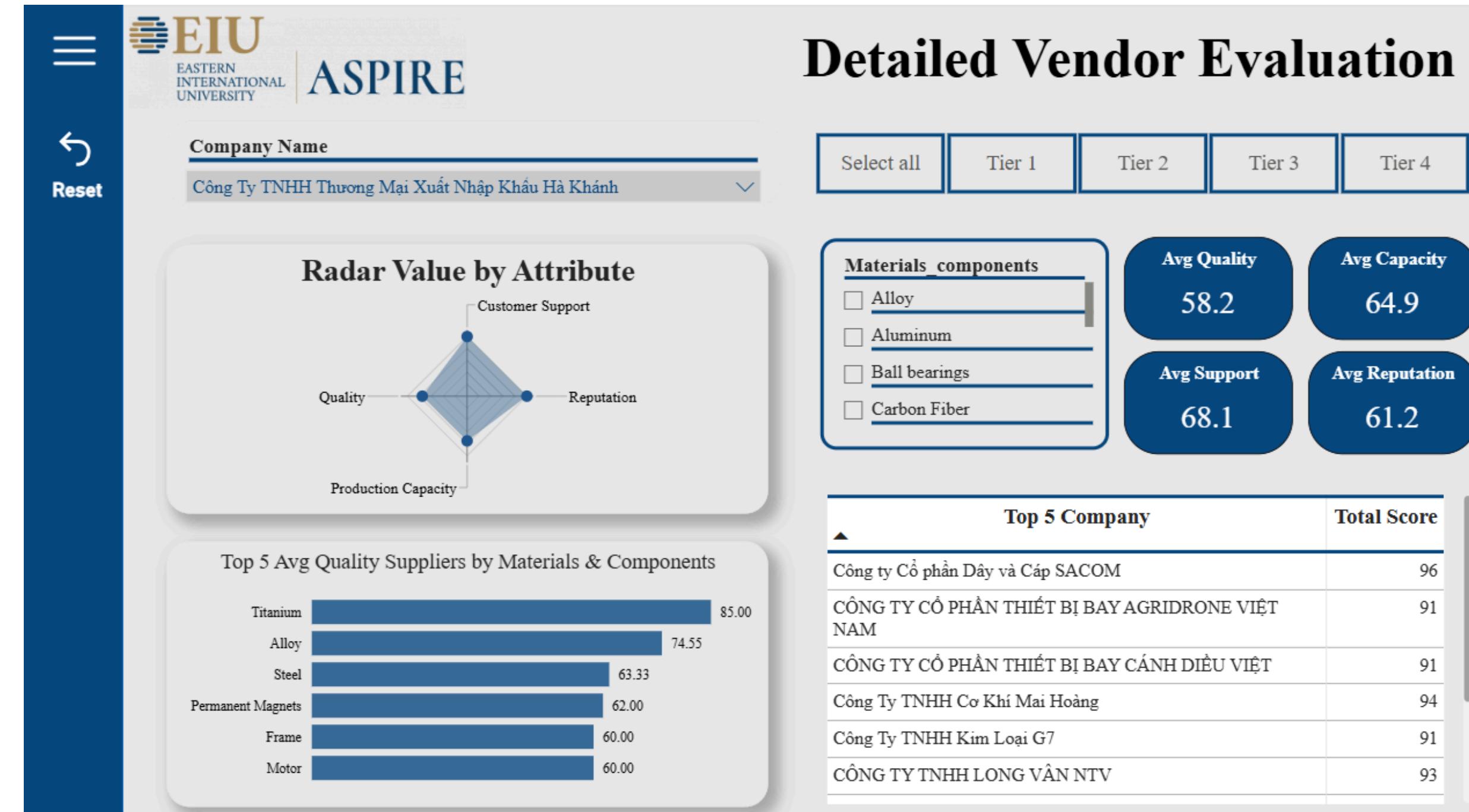
PAGE 2

VISUALS CHOSEN

- Radar Chart
- Compare all attributes in one view
- Horizontal Bar Chart
- Identify top components by supplier quality
- Table Visual
- View top performers with tier context

INTERACTION ELEMENTS

- Tier Slicer
- Quick Filtering by Supplier Tier
- Materials Component Slicer



PAGE 3

VISUALS CHOSEN

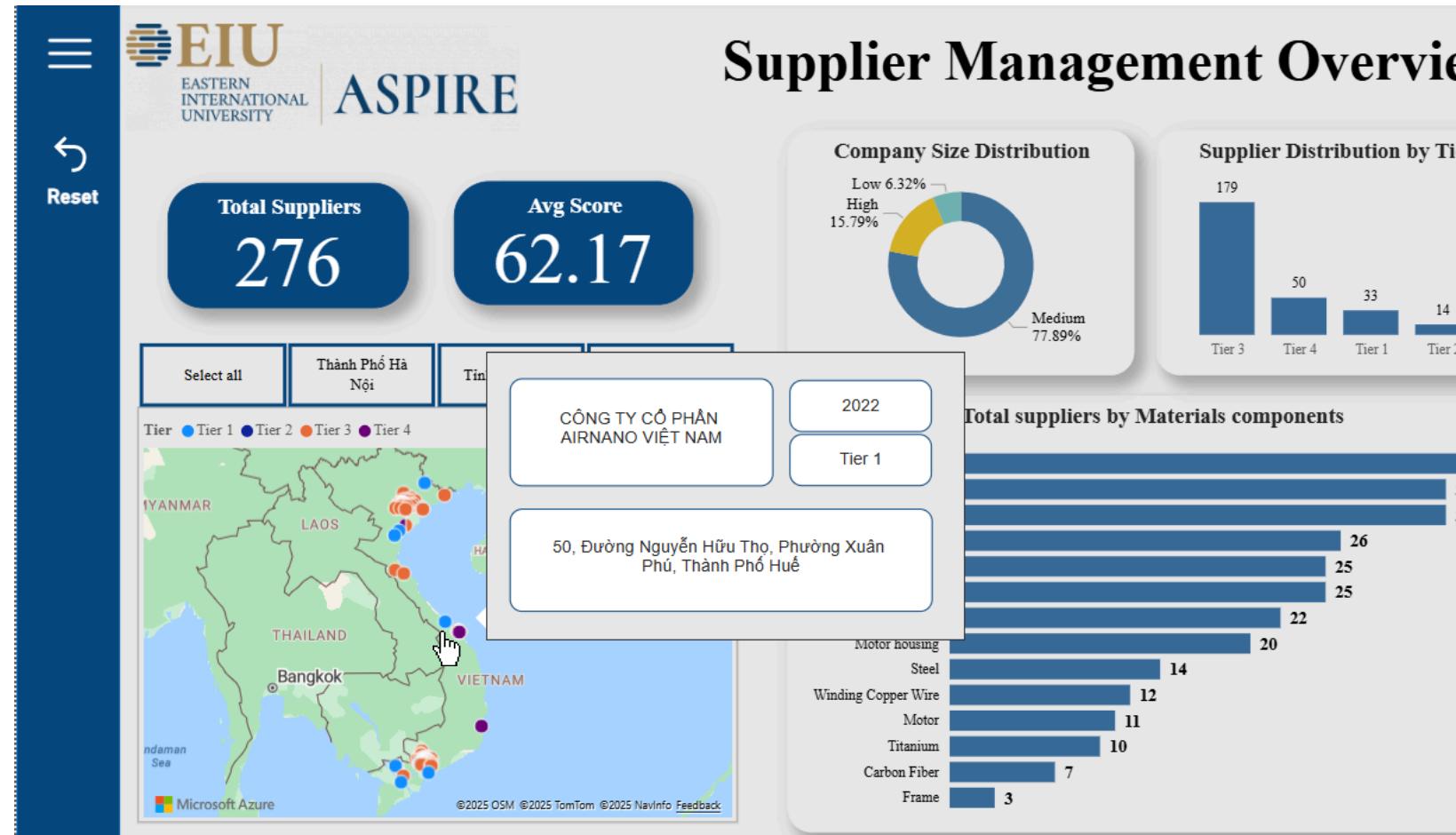
- Donut Chart
- Simulator Weighted Distribution
- Scatter Chart
- Average Weighted Scores

INTERACTION ELEMENTS

- Weight Sliders
- Adjusting Attribute Importance

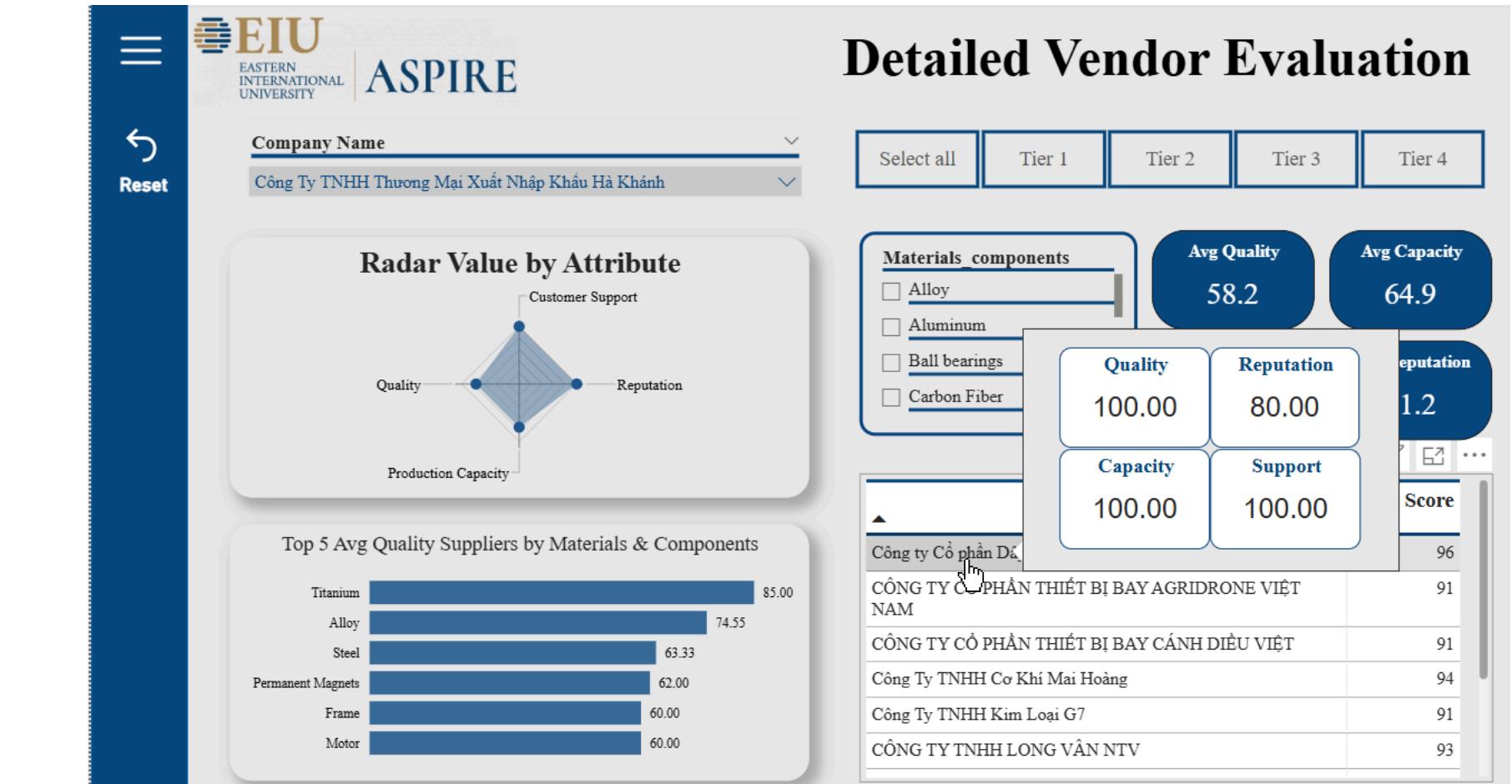


TOOLTIPS



TOOLTIP 1

key background information about the selected supplier



TOOLTIP 2

detailed performance attributes of the selected supplier

4. Usage & Handover

THANK YOU

