

Report 1

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Overview

SAS Viya Report Overview

Report Title Sales, Gross Margin and Customer Satisfaction Analysis.

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Date: 2025/11/03

Overview

This report on SAS Viya gives an in-depth review of sales, gross margin, and customer satisfaction statistics of facilities worldwide. It has data preparation, visualization, and interactive dashboards to help managers make decisions.

Every page of this report is associated with a particular task of analysis, as it is listed below.

Task Summaries

Task 1 - Create Data Items

The task is concerned with SAS Viya data preparation.

Task 1.1: Calculated Gross Margin and Average Gross Margin of computed items.

Task 1.2 and 1.3: Drew up hierarchical models Product Hierarchy (Brand - Line - Make - Style) and Facility Geo-Hierarchy (Continent - Country - Region - city).

Task 1.4: Created a Drillable Bar Chart that represents the visualization of the Average Gross Margin by hierarchy, which is going to be explored dynamically with the help of drill down and highlighting.

Task 2 - Gross Margin and Sales summary Visualizations.

created numerous visualizations to bring to the table the profitability and sales performance.

The table presents a crosstab of the Product Sales and Gross Margin by country and continent, in a detailed way (2.1).

2.2: Sorted Bar Chart at the country level of the highest and the lowest average gross margins.

2.3: Line Chart that shows how Sales of Products have increased or decreased over the years in the various continents.

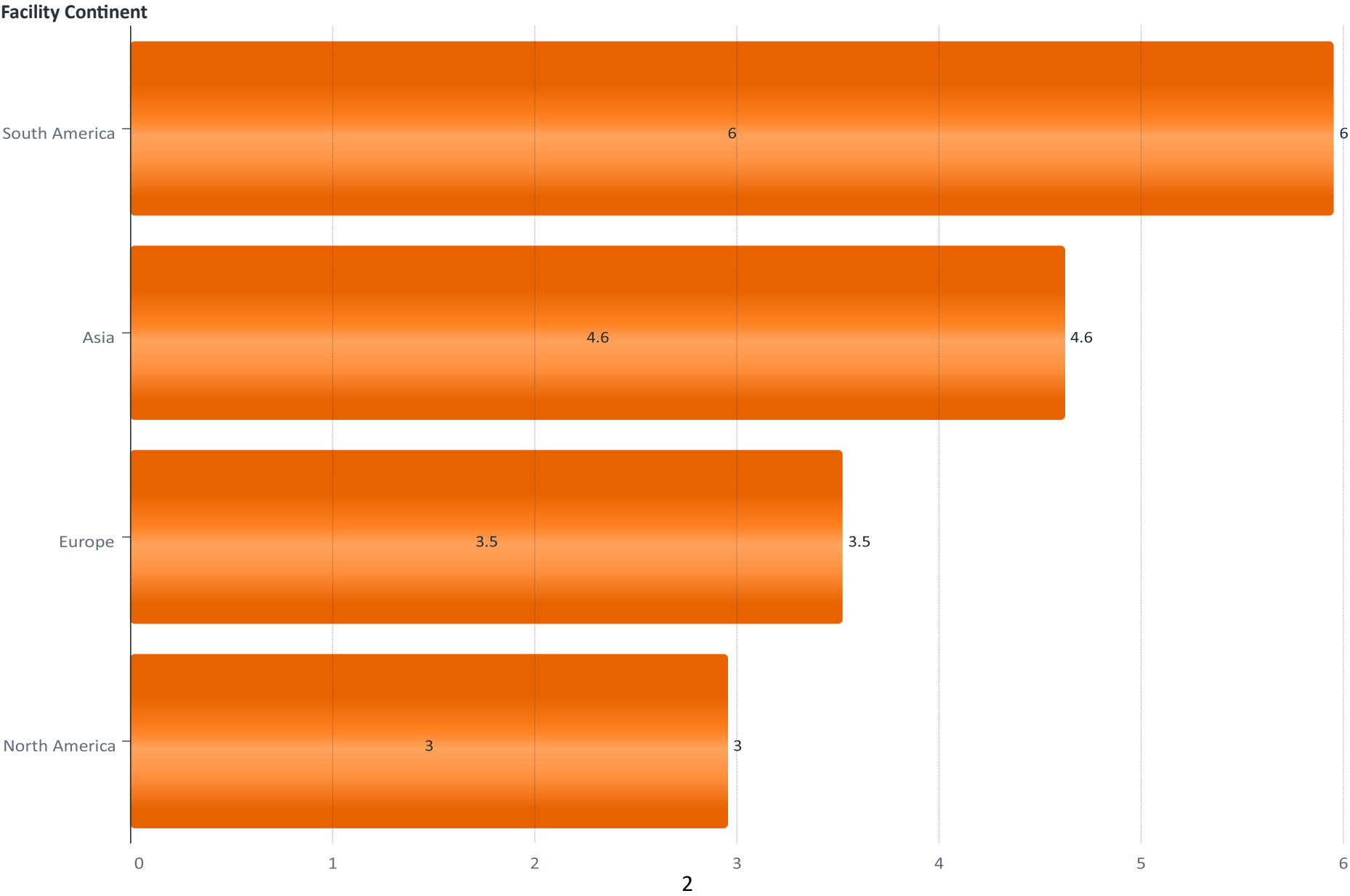
2.4: Trellis Chart of the Total Gross Margin by Product Brands and Continents.

Interactive Sales and Satisfaction Exploration Task 3.

Developed a dashboard that can be interacted with to find out about sales and customer satisfaction all over the world.

1.1.Average Gross Margin by Facility Continent

Average Gross Margin by Facility Continent

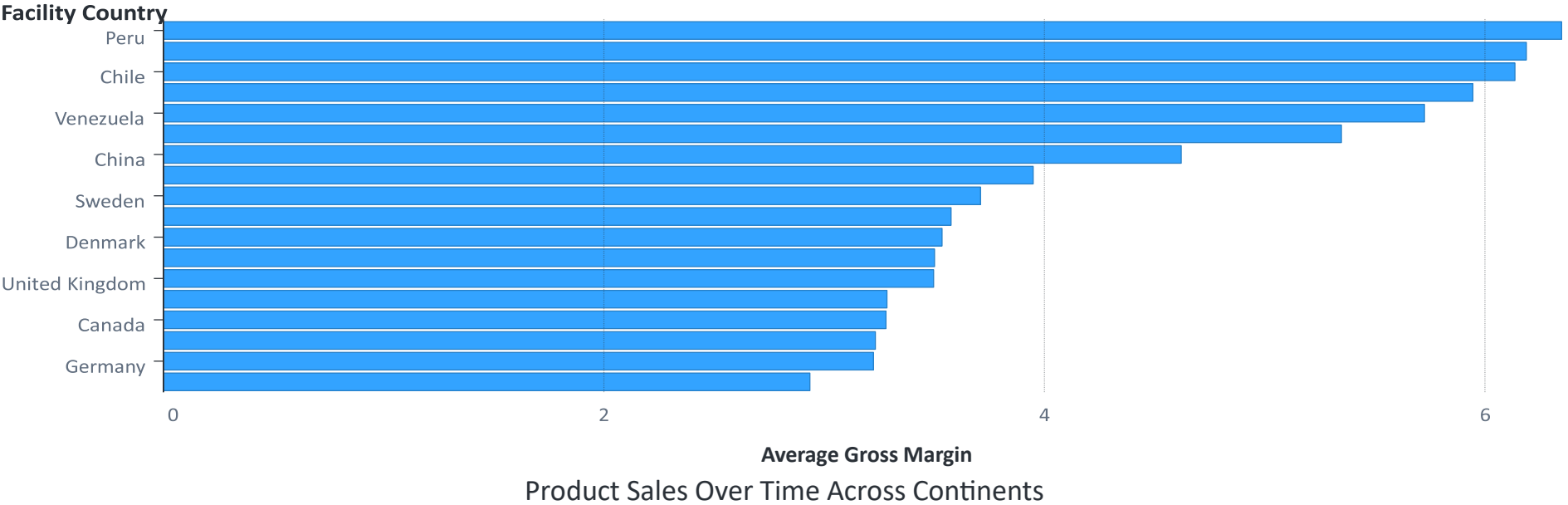


Average Gross Margin

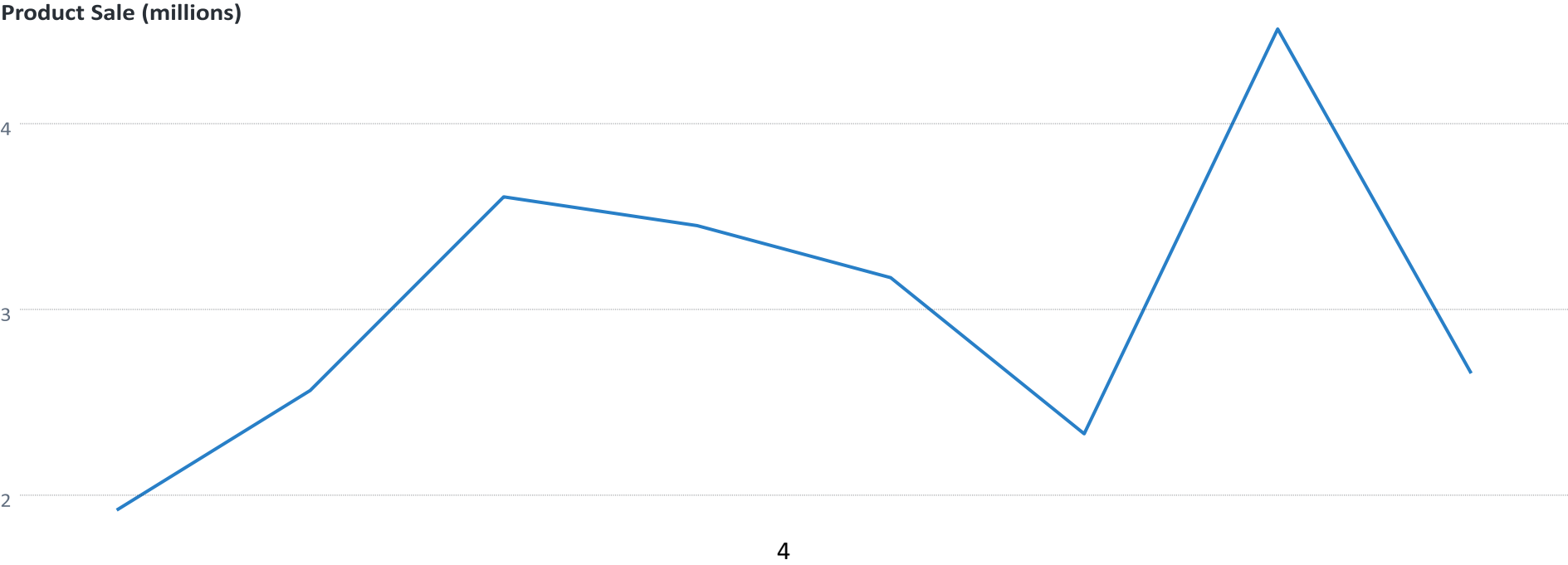
2.Country with Highest/Lowest Average Gross Margin

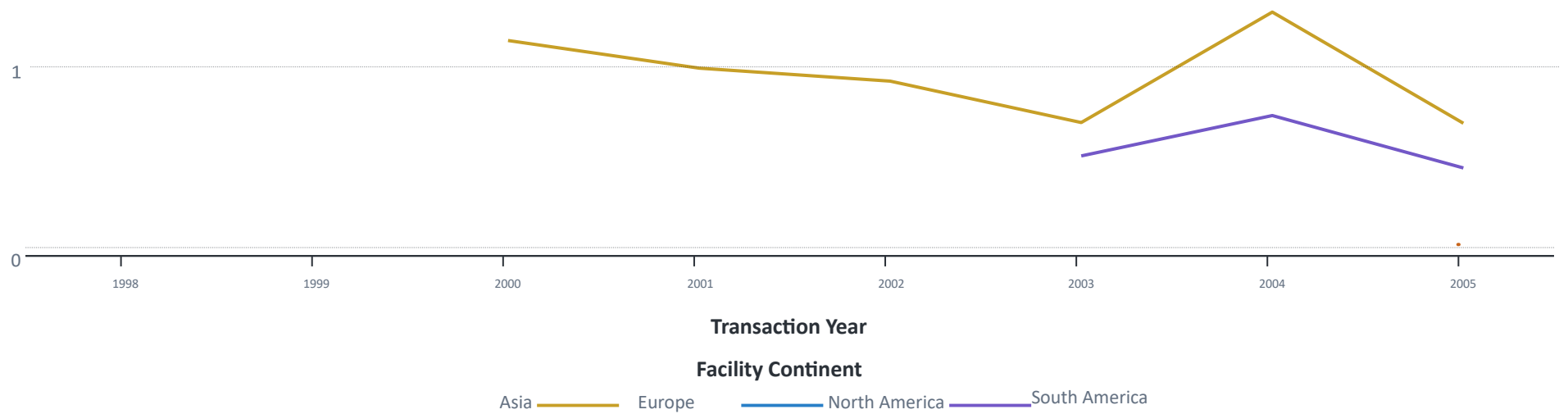
Facility Continent ▲	Facility Country ▲	Gross Margin ▼	Product Sale
North America	United States	3,573,662.29	22832243
	Canada	152,225.58	969520
	Mexico	66,993.46	406205
Europe	Spain	248,249.25	1560412
	United Kingdom	239,321.36	1501642
	Germany	109,878.64	689530
	Sweden	98,597.90	607665
	Italy	72,336.90	445738
	Norway	70,504.22	409697
	France	45,132.89	296303
	Denmark	37,455.65	234614

Average Gross Margin by Facility Country



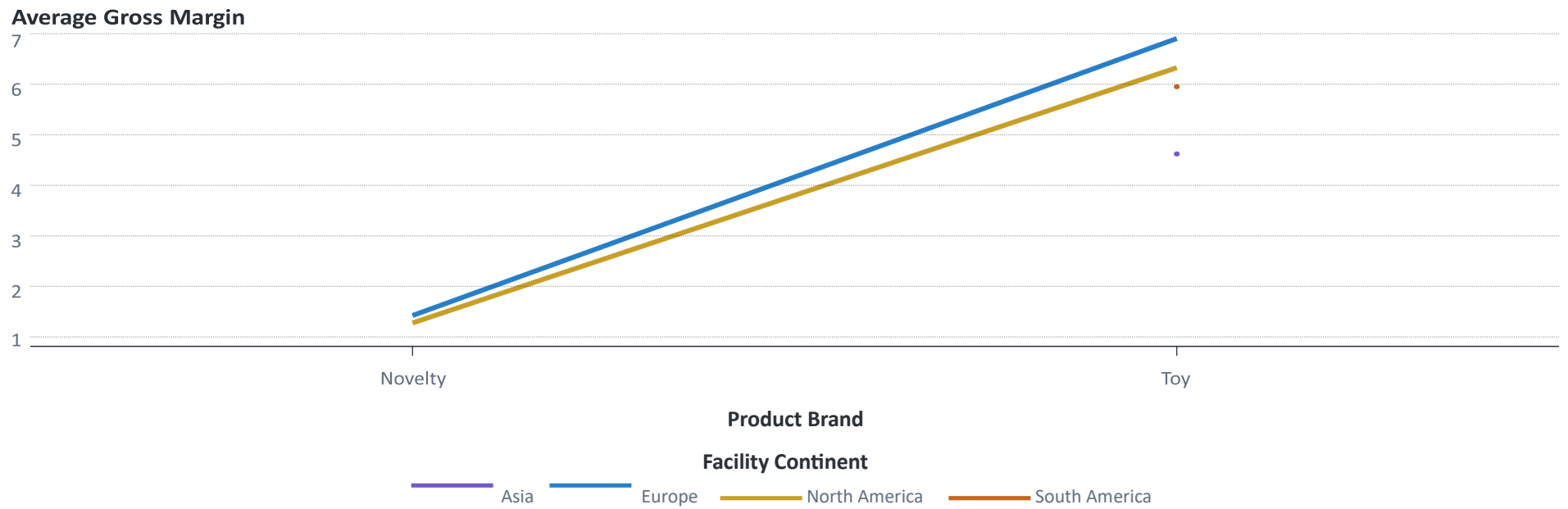
Product Sale by Transaction Year grouped by Facility Continent





2.4 Total Gross Margin Trends Across Brands & Continents Average

Gross Margin by Product Brand grouped by Facility Continent



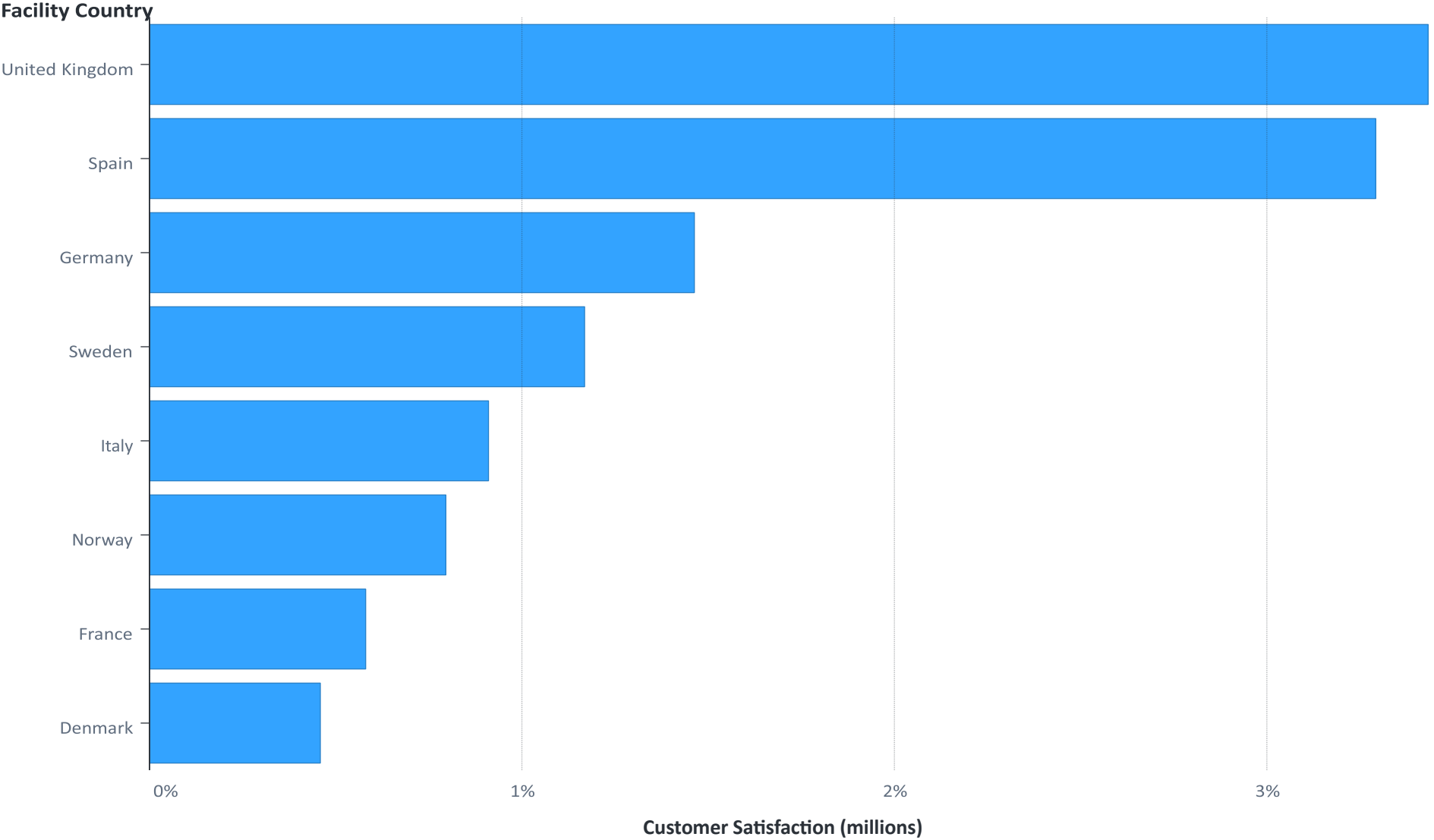
Facility Continent

Asia	Europe	North America	South America
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4.1. Customer Satisfaction by Facility Country

Asia	Europe	North America	South America
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Customer Satisfaction by Facility Country

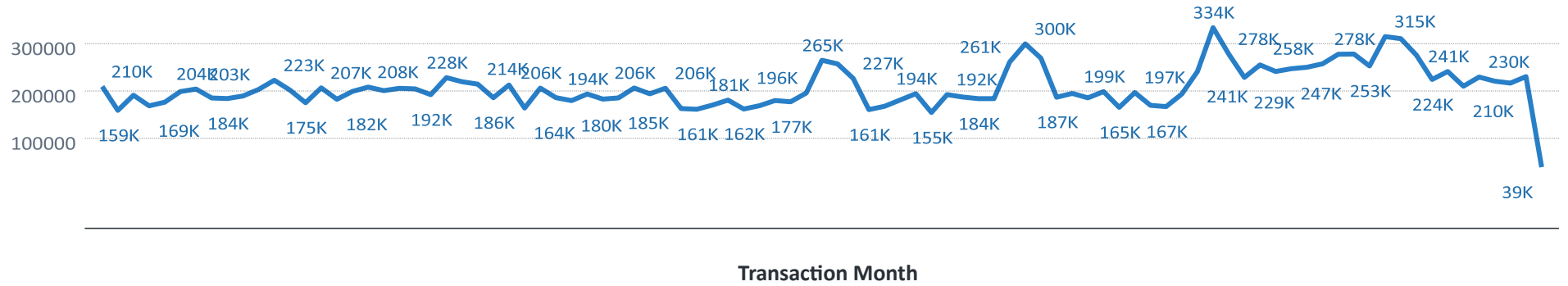


b A1.1

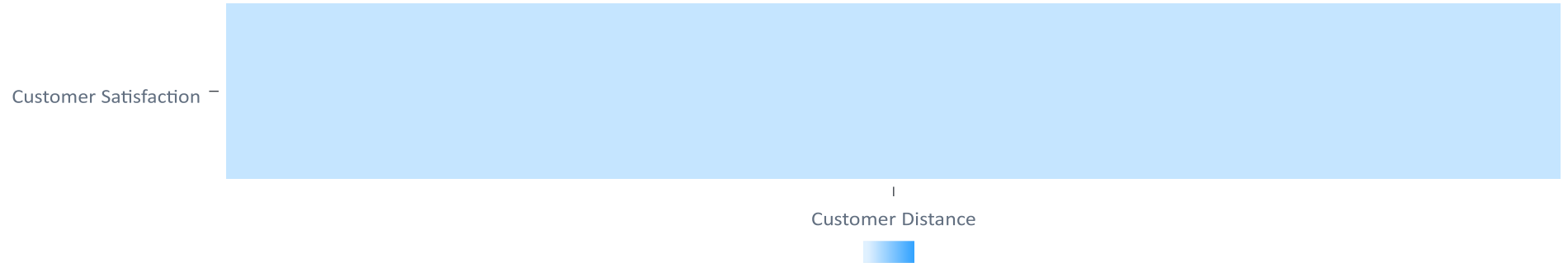
4.2.Distribution of Customer Distance

Customer Distance by Transaction Month

Customer Distance

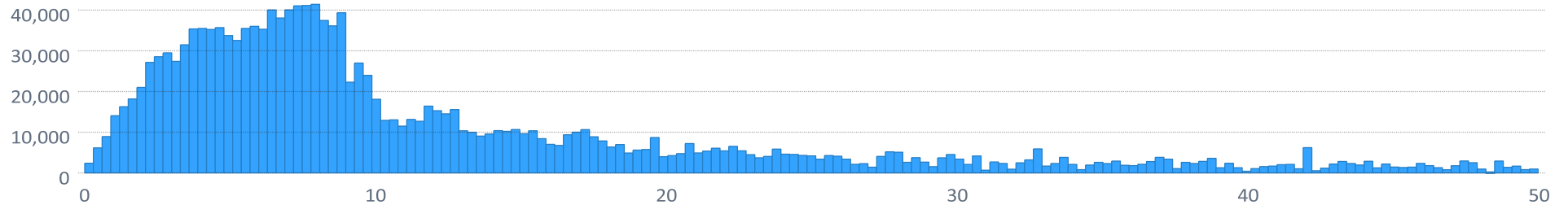


Correlation of Selected Measures



Frequency of Customer Distance

Frequency



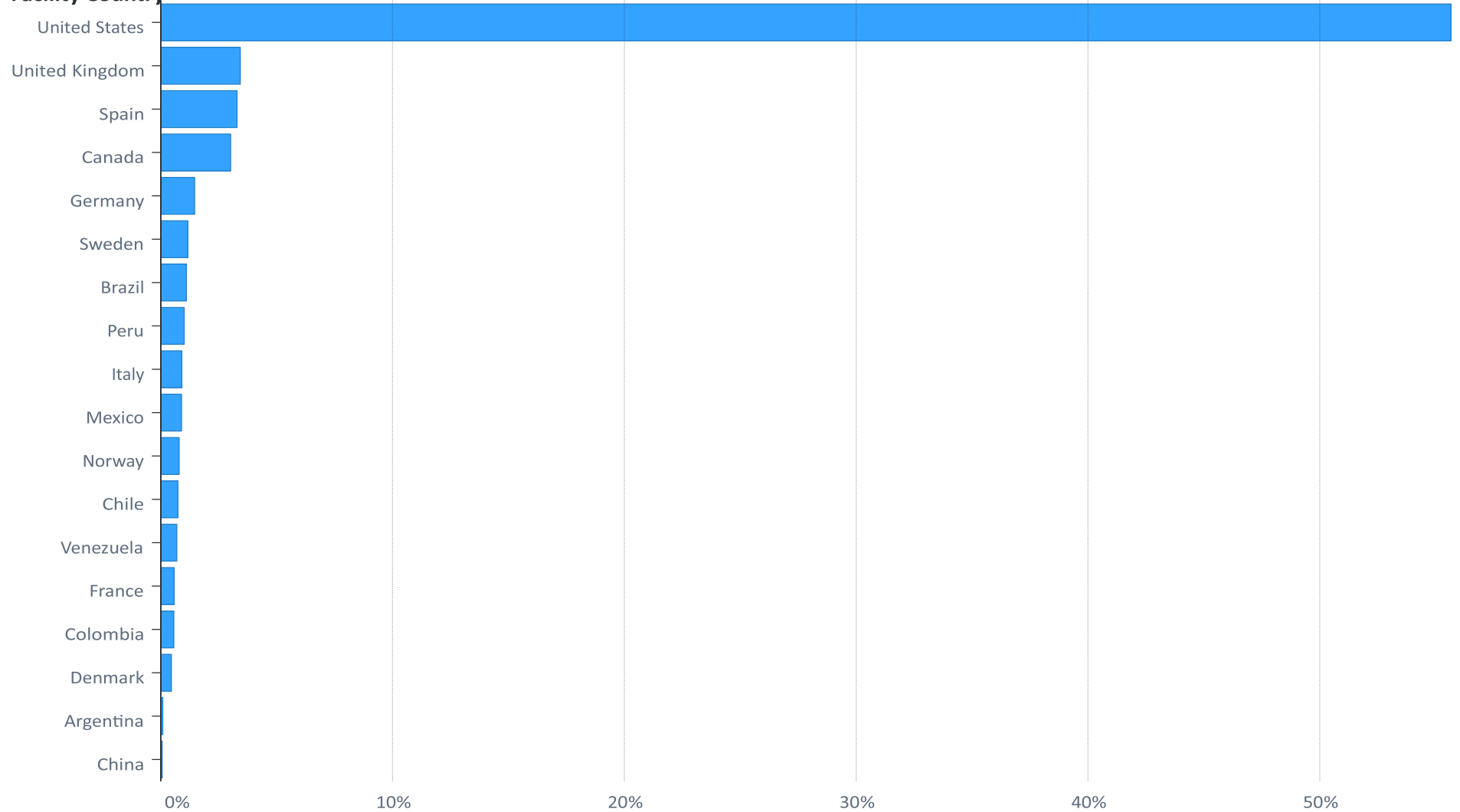
Customer Distance

4.3 Interactive Filtering from Bar Chart

Asia	Europe	North America	South America
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Customer Satisfaction by Facility Country

Facility Country



Customer Satisfaction (millions)

4.4 Analytics: Key Factors Impacting Satisfaction

Tree

Fit:

Tree

Percentile

Decision
of

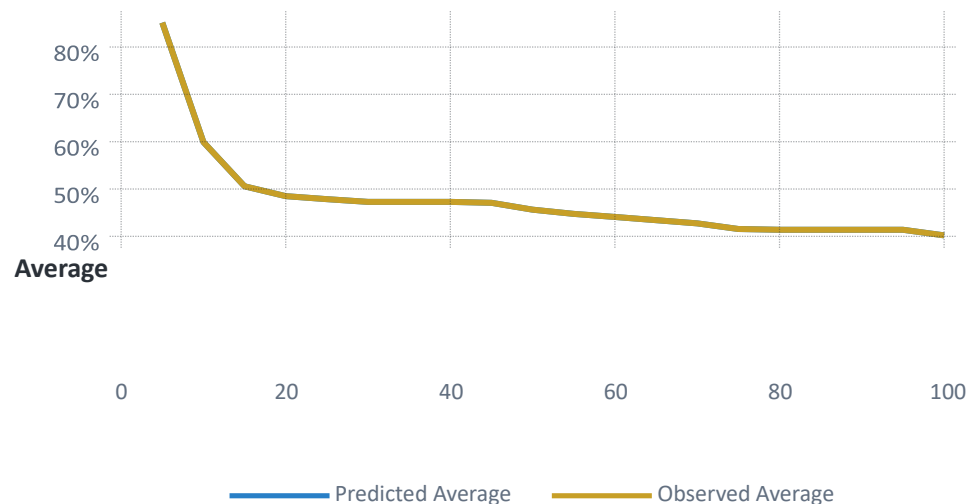
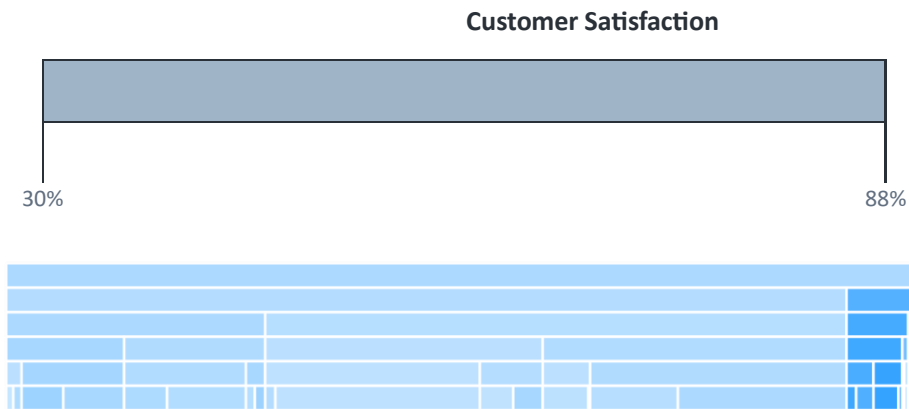
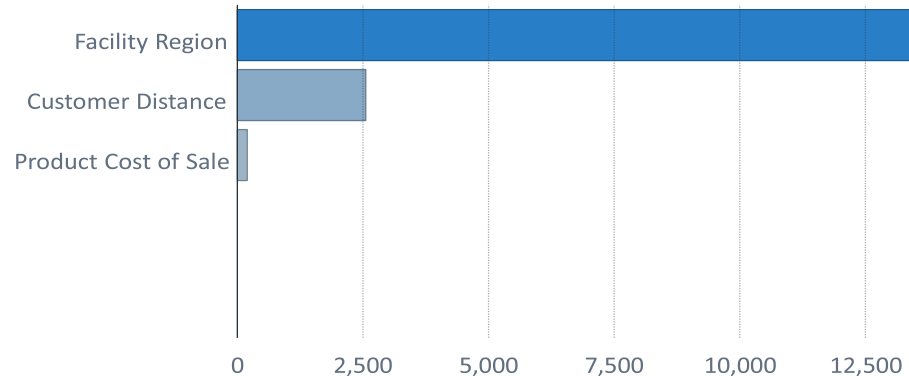
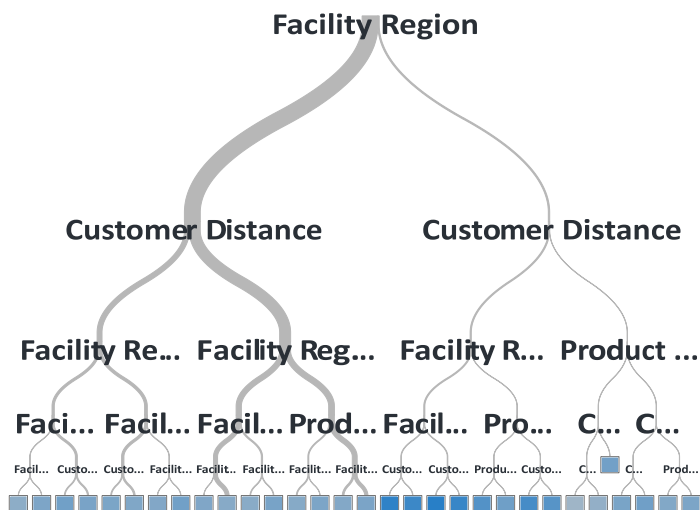
Customer Satisfaction

ASE 0.02 Observations: 1.6M of 1.6M

Variable Importance

Assessment

Visualize Factor Effects

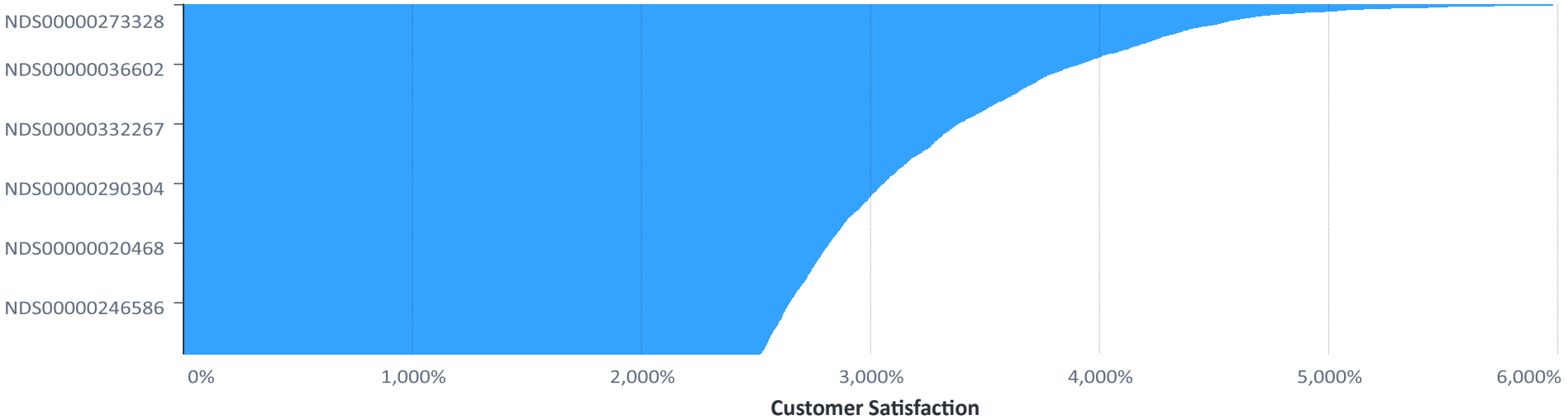


Customer Satisfaction by Distance Category



Order

Customer Satisfaction by Order



a A2.1

3.1.compare the Product Sales from facilities across Continents, Countries, Regions, and Cities.

Product Sale by COuntry



a A3.1

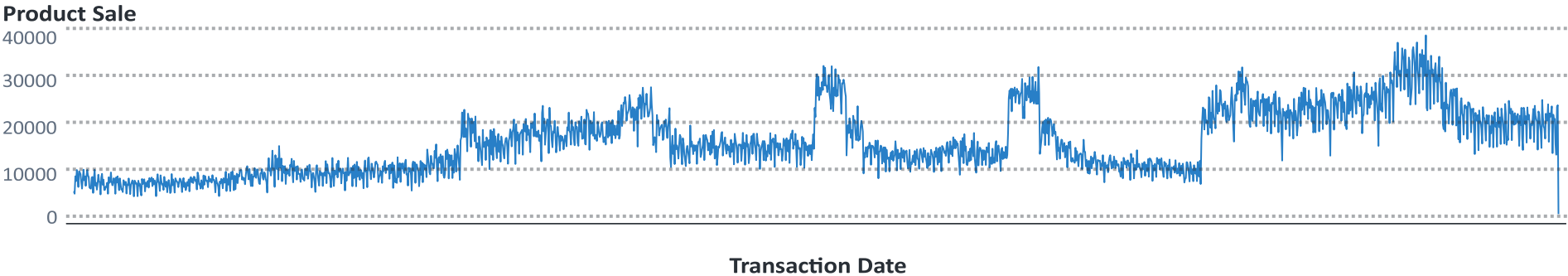
Average Customer Satisfication by COuntry



Average Customer Satisfaction

a [A3.2](#)

Product Sale by Transaction Date



Appendix

[A1.1](#) Customer Satisfaction by Facility Country

Filters: Facility Continent = 'Europe'

[A2.1](#) Customer Satisfaction by Order

Warnings: Only 3,000 rows of the data appear.

[A3.1](#) Product Sale by COUNTRY

Warnings: Some regions in the map have multiple classification values. Only the first value is displayed.

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