

# Capstone Project – Author Analysis

# Publications

Author Analysis

**Valuable Insights:** The Power BI dashboard using the Sample Publication Database provides valuable insights into the publishing company's performance and operations. It presents data-driven analytics on book sales, popular genres, and author contributions. Stakeholders can gain a deeper understanding of customer preferences, bestselling titles, and effective marketing strategies.

Publishers Analysis

**Improvement Focus:** The dashboard helps the publishing company focus on areas that require improvement. By analyzing sales trends, store distribution, and discount effectiveness, the dashboard identifies opportunities to optimize sales and increase revenue. It enables the company to refine its marketing and distribution strategies to better cater to customer demands.

Title Analysis

**Evaluation of Effectiveness:** The dashboard facilitates the evaluation of various aspects of the publishing business. It assesses the effectiveness of discounts on sales, the impact of different bookstores on revenue, and the success of marketing campaigns. With this evaluation, the company can make data-driven decisions to enhance its overall effectiveness and profitability.

Sales Analysis

**Trend Identification:** Using historical sales data and author royalties, the dashboard identifies trends in book sales over time. It helps identify seasonal patterns, bestselling genres in specific periods, and the success of certain authors or book titles. This trend identification empowers the company to plan for future publications and marketing efforts more effectively.

Stores Analysis

**Comprehensive Understanding:** The Power BI dashboard offers a comprehensive understanding of the publishing company's operations. By presenting data on book sales, author royalties, and store distribution in one centralized platform, stakeholders can have a holistic view of the business. This comprehensive understanding enables better decision-making and a more cohesive strategy across all aspects of the publishing process.



**Objective:** The objective of this project is to create a comprehensive Power BI dashboard utilizing the Sample Publication Database. The dashboard aims to provide valuable insights into the publishing company's book sales performance, author royalties, and store distribution, enabling data-driven decision-making and strategic planning.



**Analysis Scope:** The analysis will focus on various aspects of the publication process, including book sales, author contributions, store performance, and the impact of discounts. It will encompass historical sales data, author royalties based on royalty schedules, and distribution data from multiple bookstores.



**Goal:** The primary goal of this Power BI dashboard is to offer a holistic view of the publishing company's operations. It will provide actionable insights to optimize book sales, enhance author collaboration, improve store distribution strategies, and identify opportunities for growth and efficiency.



**Insights & Recommendations:** The Power BI dashboard will generate valuable insights into the top-selling book titles, bestselling genres, and sales trends over time. It will analyze the performance of different bookstores, identify bestselling authors, and calculate author royalties based on royalty schedules. Additionally, it will recommend effective discount strategies to boost book sales and customer engagement.



**Report & Presentation:** The final deliverable will consist of a detailed report describing the data sources, data modeling methodologies, and data cleansing processes used in creating the Power BI dashboard. The report will also include a step-by-step guide on how to interpret the insights and use the dashboard for decision-making. The presentation will showcase the key findings, visualizations, and actionable recommendations derived from the dashboard's analysis.



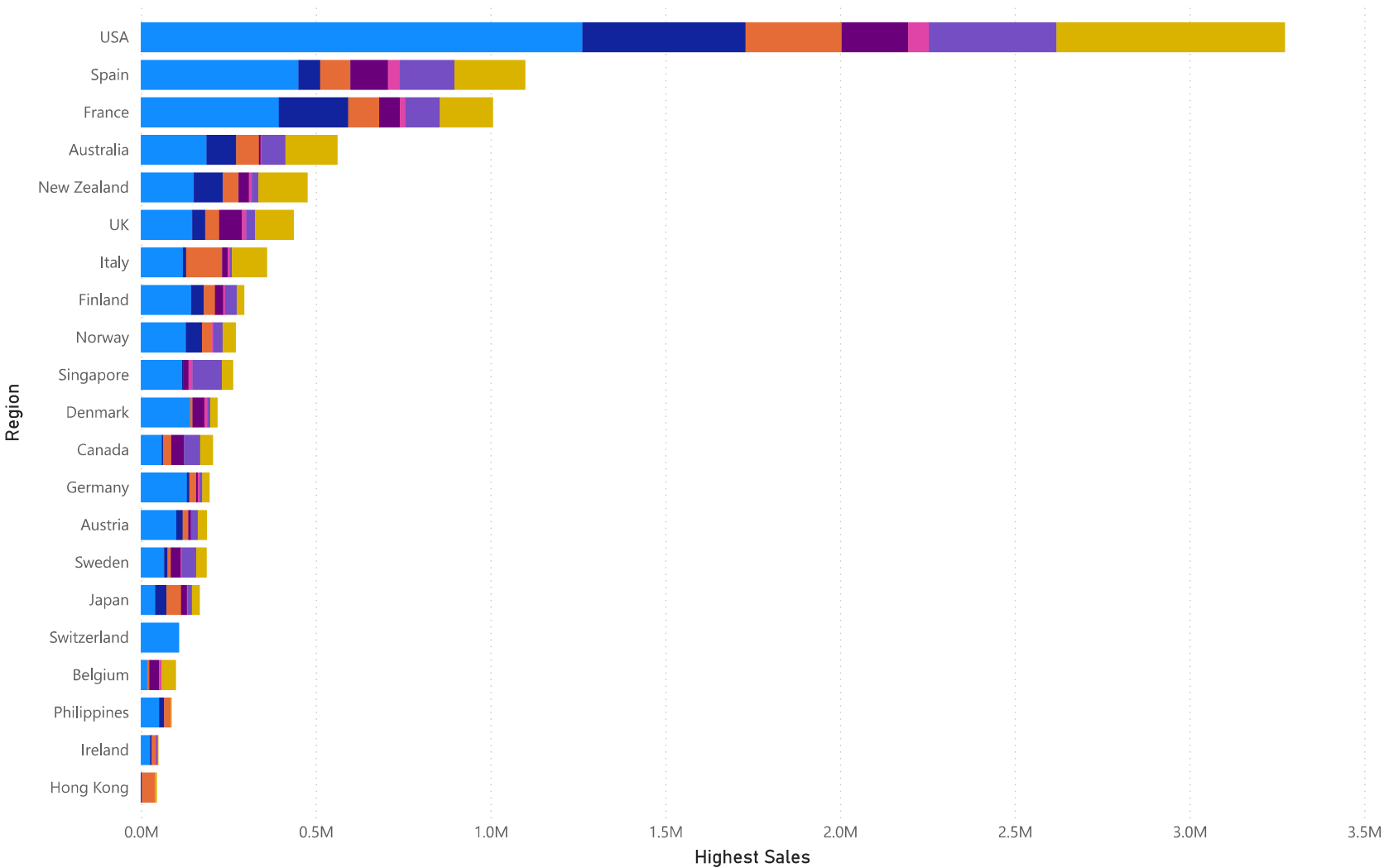
The Power BI dashboard, along with the report and presentation, will serve as a powerful tool for the publishing company's stakeholders. It will empower them to make informed decisions, optimize book sales strategies, foster author collaborations, and enhance the overall business performance in the competitive publishing landscape.



# EDA Problem Statements

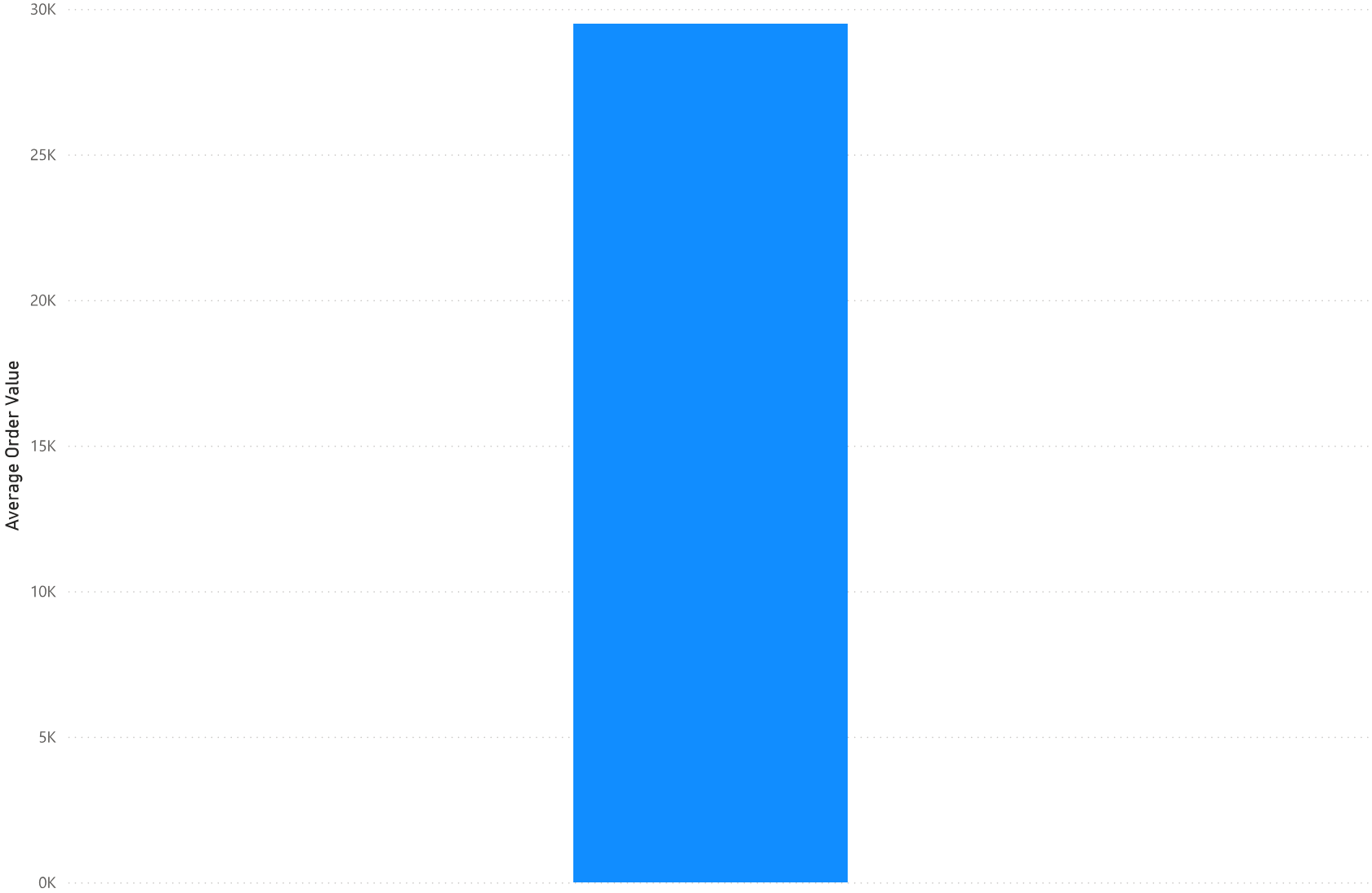
Highest Sales by Region and product

product Classic Cars Motorcycles Planes Ships Trains Trucks and Buses Vintage Cars



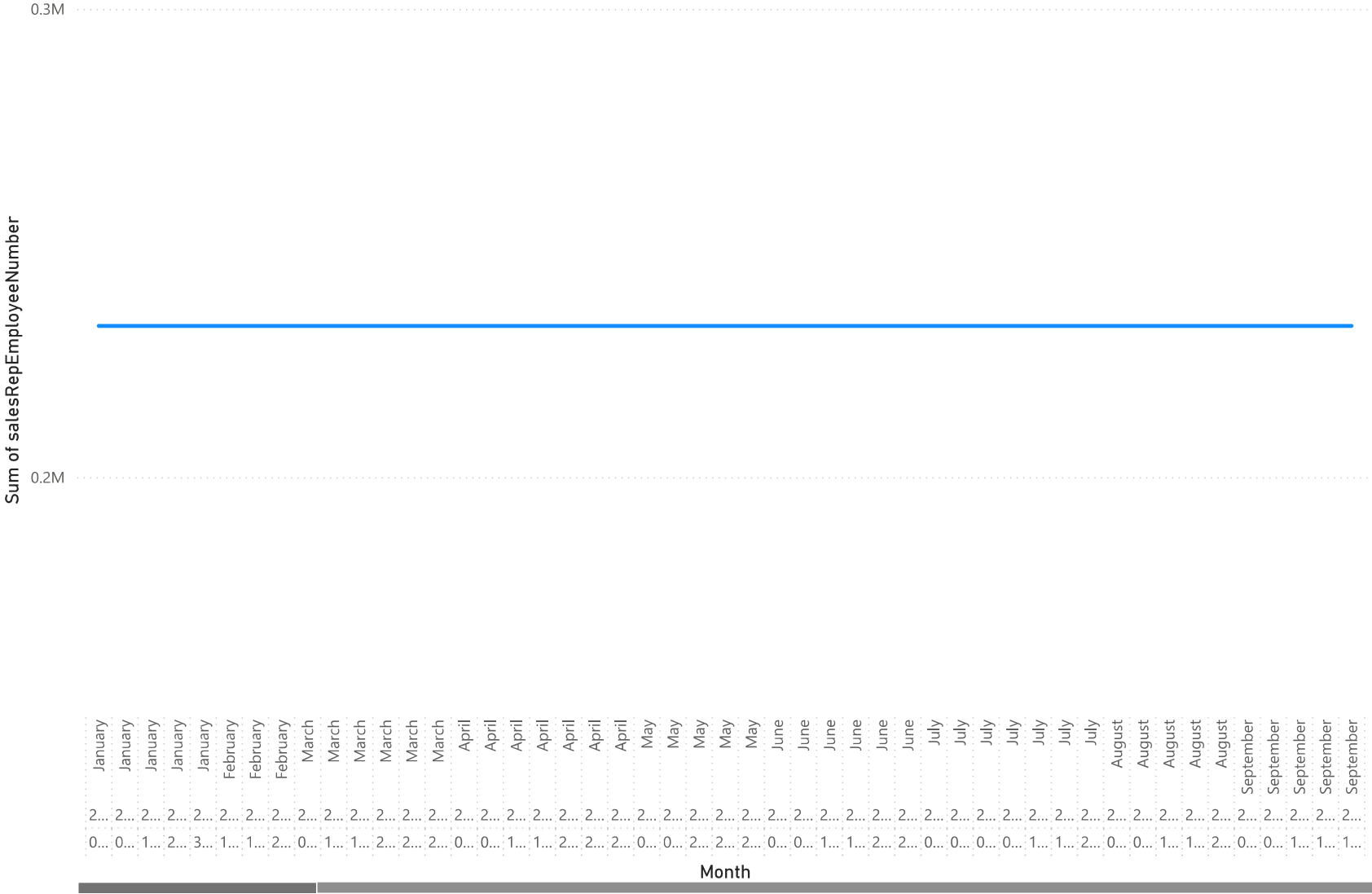
**Which factors contribute to the highest sales in a particular region?**

Average Order Value and First productLine



**How can purchasing patterns be influenced to increase average order value?**

Sum of salesRepEmployeeNumber by orderDate, Year and Month



Key  
drivers of  
sales  
growth

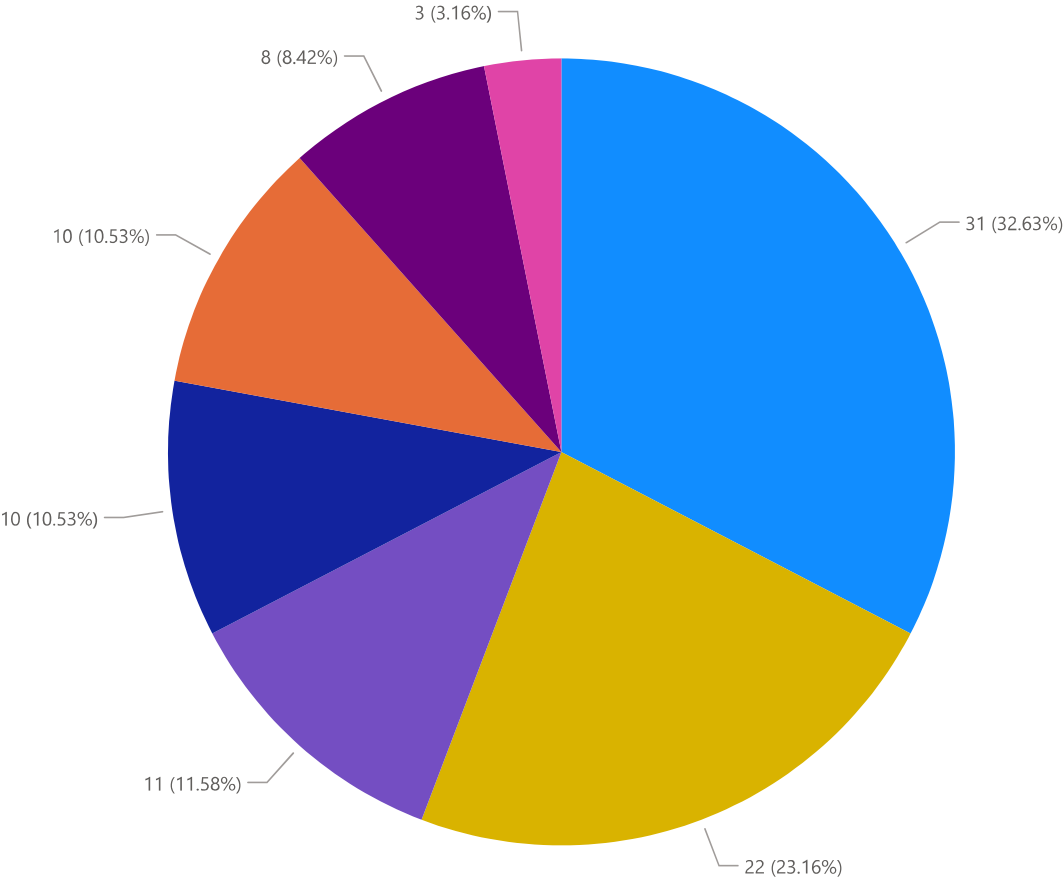


Count of productScale by productVendor



**Most  
appealing  
product  
attributes**

Count of productDescription by productLine

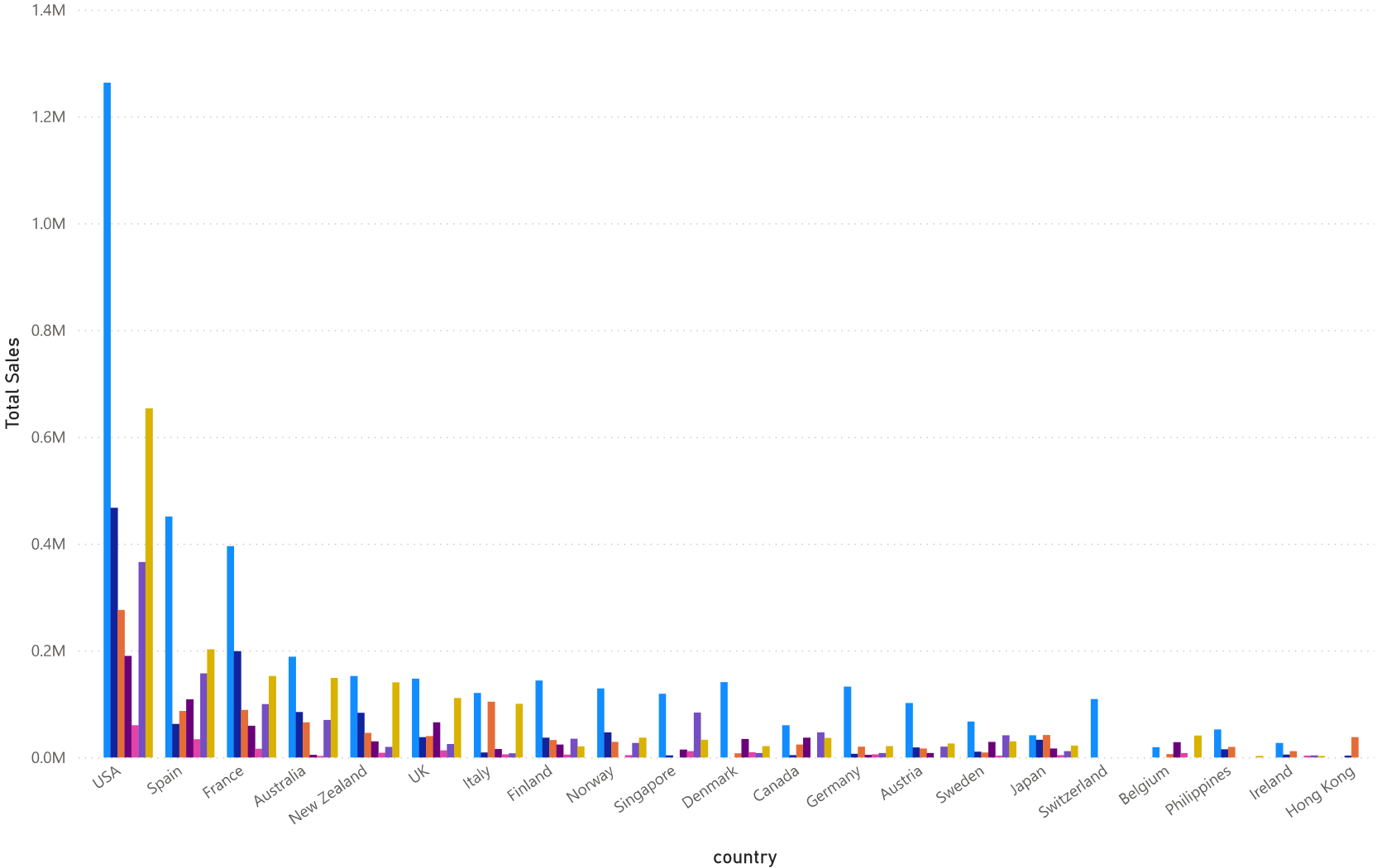


# Optimized product mix

- productLine
- Classic Cars
  - Vintage Cars
  - Trucks and Buses
  - Motorcycles
  - Planes
  - Ships
  - Trains

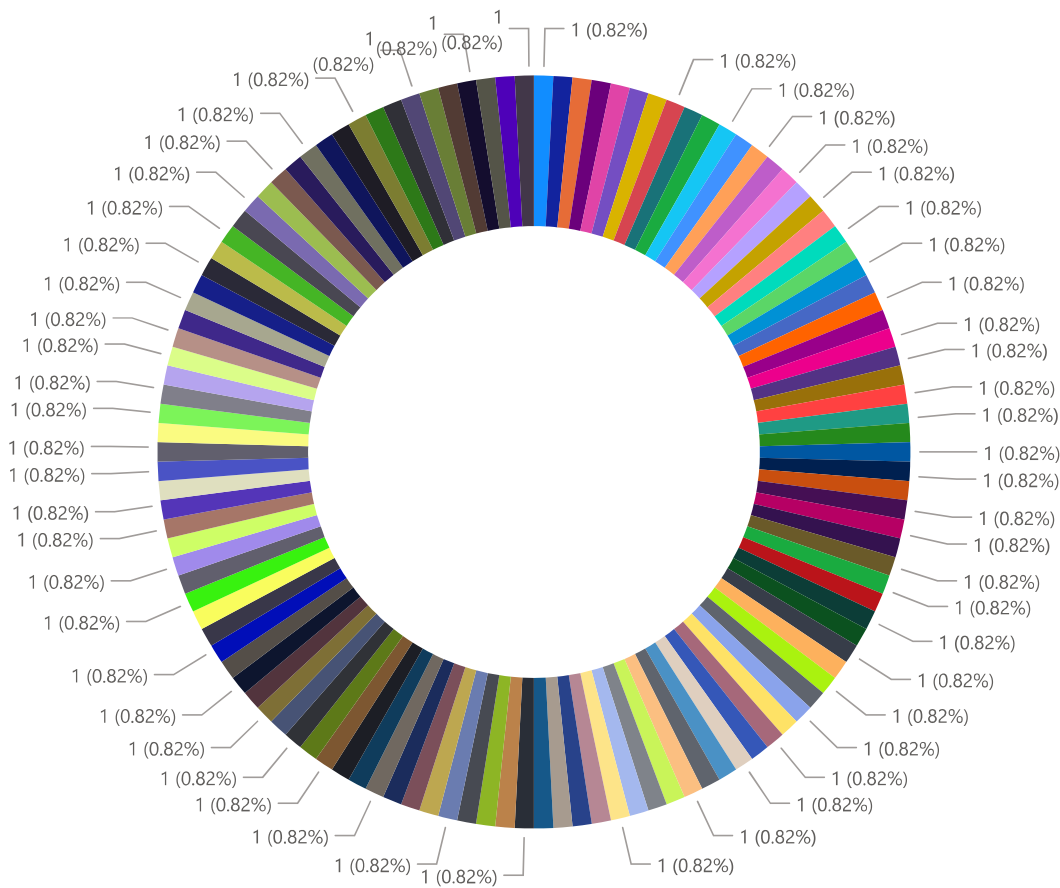
Total Sales by country and productLine

productLine Classic Cars Motorcycles Planes Ships Trains Trucks and Buses Vintage Cars



Underperforming product segments

Count of customerNumber by customerName



customerName

- Alpha Cognac
- American Souvenirs Inc
- Amica Models & Co.
- ANG Resellers
- Anna's Decorations, Ltd
- Anton Designs, Ltd.
- Asian Shopping Network, Co
- Asian Treasures, Inc.
- Atelier graphique
- Australian Collectables, Ltd
- Australian Collectors, Co.
- Australian Gift Network, Co
- Auto AssociÃ©s & Cie.
- Auto Canal+ Petit
- Auto-Moto Classics Inc.
- AV Stores, Co.
- Baane Mini Imports
- Bavarian Collectables Imports, Co.
- BG&E Collectables
- Blauer See Auto, Co.
- Boards & Toys Co.
- CAF Imports
- Cambridge Collectables Co.
- Canadian Gift Exchange Network
- Classic Gift Ideas, Inc

Customer  
loyalty and  
repeat  
purchases

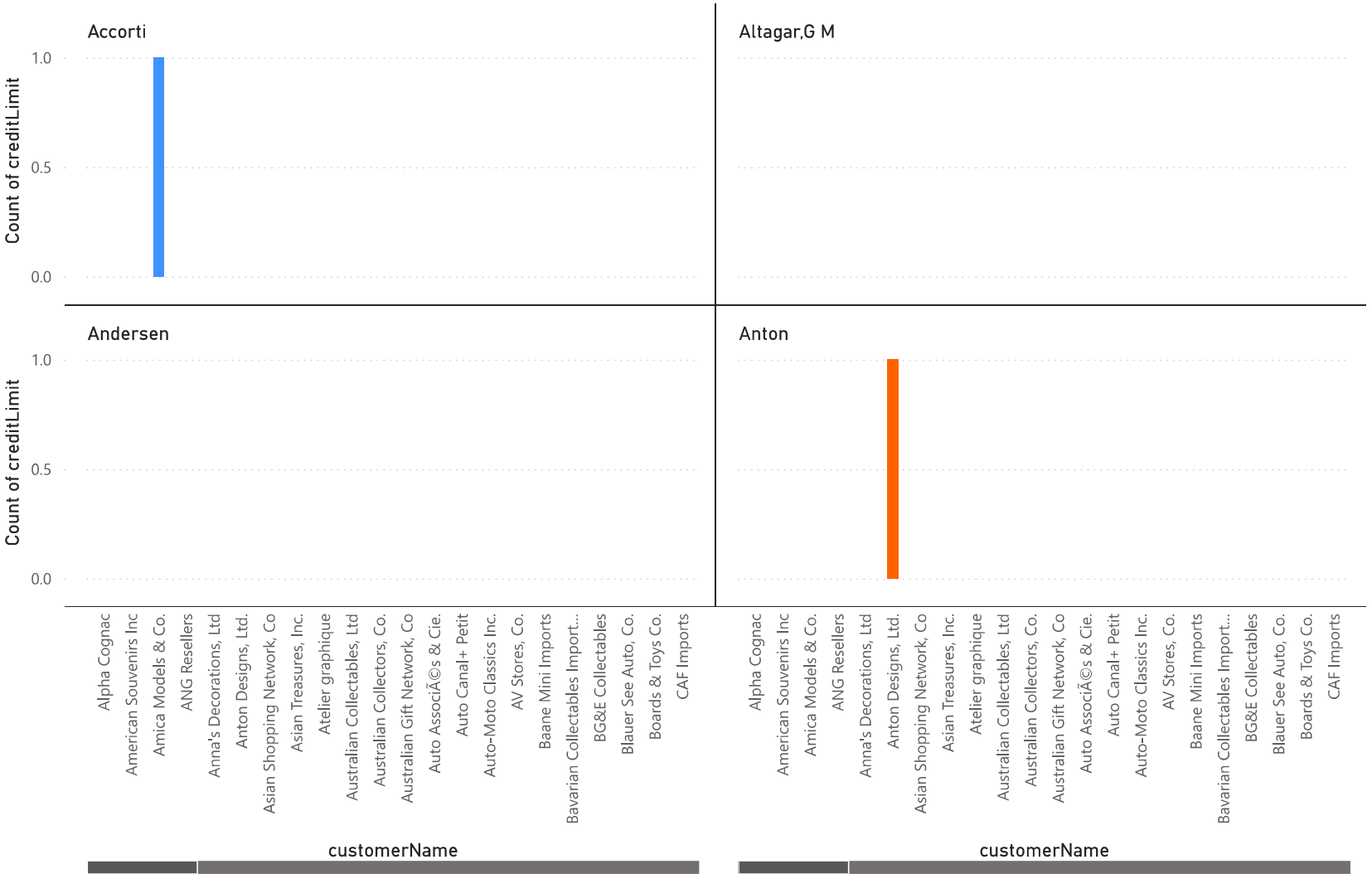


country	Classic Cars	Motorcycles	Planes	Ships	Trains	Trucks and Buses	Vintage Cars	Total
Australia	1,87,965.47	84,583.19	65,268.04	4,410.00	1,886.61	69,844.98	1,48,624.30	<b>5,62,582.59</b>
Austria	1,01,526.38	18,039.49	16,063.72	7,712.17		19,562.53	25,635.77	<b>1,88,540.06</b>
Belgium	18,459.90		5,624.79	27,855.06	7,815.12		40,313.89	<b>1,00,068.76</b>
Canada	59,659.68	3,726.90	23,540.47	36,605.16		46,365.71	36,013.94	<b>2,05,911.86</b>
Denmark	1,40,725.84		7,208.80	33,847.54	9,240.86	7,560.55	20,411.33	<b>2,18,994.92</b>
Finland	1,43,593.36	36,586.86	31,961.61	23,744.78	4,862.35	34,482.66	19,917.73	<b>2,95,149.35</b>
France	3,94,961.42	1,98,701.84	88,434.03	58,768.59	15,497.03	99,355.19	1,51,655.92	<b>10,07,374.02</b>
Germany	1,32,046.93	6,490.83	19,600.79	4,510.02	5,184.01	7,976.22	20,662.19	<b>1,96,470.99</b>
Hong Kong		2,831.85	37,358.56				5,290.38	<b>45,480.79</b>
Ireland	26,413.74	4,553.96	11,033.45		2,698.80	3,426.20	1,772.12	<b>49,898.27</b>
Italy	1,20,419.99	8,762.16	1,03,732.88	15,199.51	5,367.12	7,311.20	99,823.95	<b>3,60,616.81</b>
Japan	41,138.72	32,642.56	41,534.63	16,112.10	3,657.68	11,385.51	21,438.75	<b>1,67,909.95</b>
New Zealand	1,51,699.02	82,974.54	45,210.50	29,401.15	8,113.38	19,241.47	1,40,206.95	<b>4,76,847.01</b>
Norway	1,28,809.77	46,535.42	28,506.24		4,022.96	26,455.99	36,515.92	<b>2,70,846.30</b>
Philippines	51,985.52	14,838.54	18,975.37				1,668.87	<b>87,468.30</b>
Singapore	1,18,486.14	3,516.04		14,393.60	11,422.61	83,657.70	32,521.69	<b>2,63,997.78</b>
Spain	4,50,543.01	62,165.96	86,487.07	1,08,080.24	33,568.82	1,56,649.99	2,01,894.00	<b>10,99,389.09</b>
Sweden	66,590.19	10,126.31	8,961.97	28,441.36	3,033.28	40,833.57	29,651.67	<b>1,87,638.35</b>
Switzerland	1,08,777.92							<b>1,08,777.92</b>
UK	1,47,172.77	37,258.94	39,589.51	65,252.74	12,568.46	24,546.77	1,10,558.25	<b>4,36,947.44</b>
USA	12,62,946.72	4,67,090.73	2,75,545.11	1,89,664.32	59,593.83	3,65,457.33	6,52,982.01	<b>32,73,280.05</b>
<b>Total</b>	<b>38,53,922.49</b>	<b>11,21,426.12</b>	<b>9,54,637.54</b>	<b>6,63,998.34</b>	<b>1,88,532.92</b>	<b>10,24,113.57</b>	<b>17,97,559.63</b>	<b>96,04,190.61</b>

Preferences by location

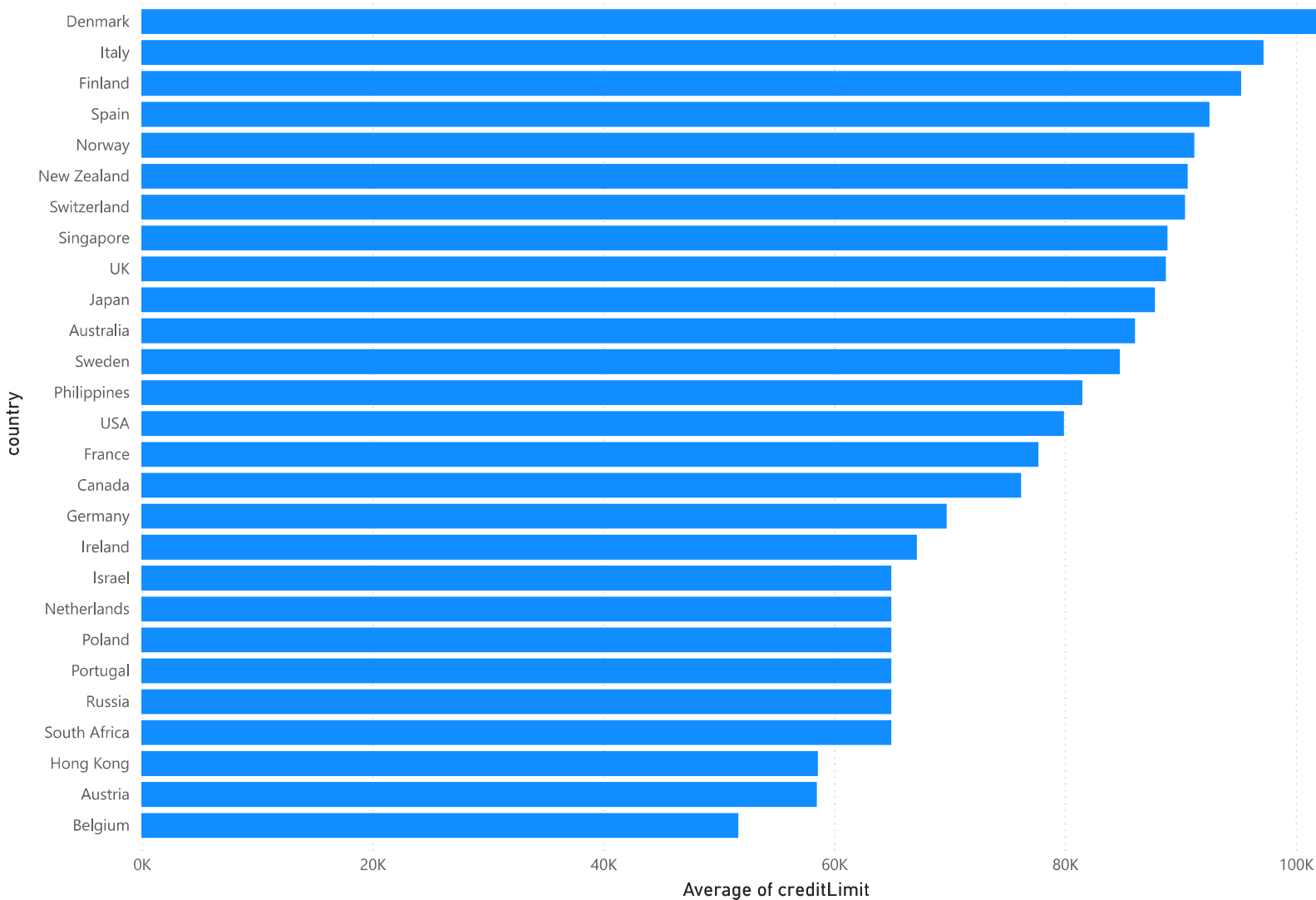
Count of creditLimit by customerName, country and contactLastName

country ● Australia ● Austria ● Belgium ● Canada ● Denmark ● Finland ● France ● Germany ● Hong Kong ● Ireland ● Israel ● Italy ● Japan ● Netherla... ● New Ze...



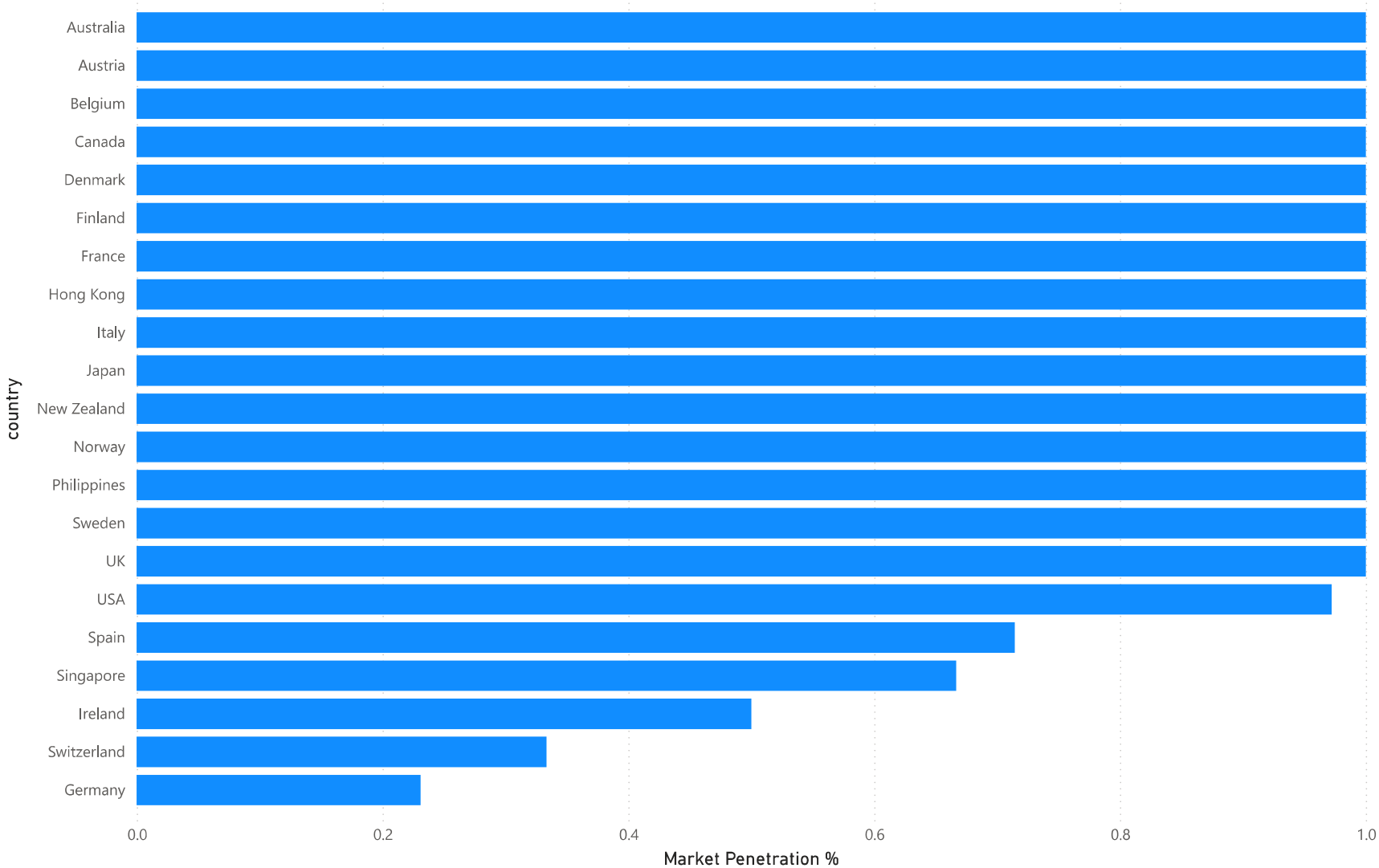
High-value customer characteristics

Average of creditLimit by country



**Tailored  
marketin  
g by  
demogra  
phics**

Market Penetration % by country



**Untapped  
markets**



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**Preferences  
by  
demographic  
factors**