

State Agency Amazon Spend

Nov 20, 2023

Overview

The DES is actively releasing detailed insights into the Amazon expenditures of state agencies gathered from the Washington State Amazon Business account. The dataset exclusively comprises closed orders, omitting those still in process or canceled. This information spans Fiscal Year 22, covering the period from July 1, 2021, to June 30, 2022, ensuring a comprehensive overview of financial activities during this timeframe. With an expansive compilation of over 486,000 records, the dataset provides an intricate glimpse into the diverse purchases made by various departments across Washington State.

Data Source

[Data.Gov - State Agency Amazon Spend Fiscal Year 2022](#)

Significance and Relevance

This dataset serves as a crucial asset for elevating transparency and financial governance. It empowers stakeholders to examine the spending patterns of various departments and the allocation of public funds. Providing insights into spending amounts, discounts, items, and quantities purchased, the dataset ensures robust compliance monitoring and informs data-driven decision-making. Its richness makes it an appealing and valuable resource, presenting opportunities for thorough analysis, trend identification, and strategic decision support.

Preliminary Questions

1. What notable time series trends characterize purchases from Amazon by Washington Agencies?
 - a. In which months do Washington Agencies exhibit higher spending patterns on Amazon purchases?
 - b. During peak spending months, which Washington Agencies demonstrate the highest expenditures on Amazon orders?
 - c. How do the Net Purchase Totals from all Washington Agencies fluctuate quarterly, and what factors contribute to these trends?
2. What trends emerge in recurring orders, bulk orders, and customer attrition among Washington Agencies utilizing Amazon?
 - a. Which Washington Agencies have recorded the highest order volumes on Amazon during the Fiscal Year?
 - b. Among Washington Agencies, which ones are placing Bulk Orders (orders with item quantities exceeding 100) on Amazon?
 - c. Which Washington Agencies previously ordered from Amazon but have since discontinued their purchases?
3. Who are the primary competitor sellers to Amazon's own products on Amazon.com, and what are their sales offerings and magnitudes?
 - a. Identify the top 5 competitor sellers that Agencies are sourcing from on Amazon.com and quantify their net totals.
 - b. Among the top 5 competitor sellers on Amazon.com, what product categories do they predominantly sell?
4. What is the impact of promotional discounts on Washington Agencies' overall spending behavior on Amazon?
 - a. How do promotional discounts influence the quantity and value of orders placed by Washington Agencies?
 - b. Are there specific months or product categories where promotional discounts have a more significant impact?

Preliminary Concerns

1. Missing Data:
 - a. In our data analysis, we focus on evaluating spending trends across various agencies in Washington. It's worth noting that the agency name is not consistently provided in every order, presenting a challenge of dealing with missing values in the agency name during our analysis. We will implement strategies to handle these gaps responsibly and ensure the robustness of our insights.
2. Causation vs. Correlation:
 - a. A critical principle guiding our analysis is the distinction between causation and correlation. We commit to refraining from making assumptions about causation without conducting thorough analyses and gaining a comprehensive understanding of the underlying factors. Recognizing and avoiding misinterpretations in these relationships is crucial, as erroneous conclusions could lead to misguided decisions.