

D.E.A.D Dataset - Data Exploration

1. Customers characteristics

There are 2497 customers recorded in D.E.A.D database to date. The regions with the most customers are Amnian Empire (439 customers) and Calim Empire (305 customers). The nations with the most customers are Amn (156 customers) and Baldur's Gate (123 customers) (Figure 1).

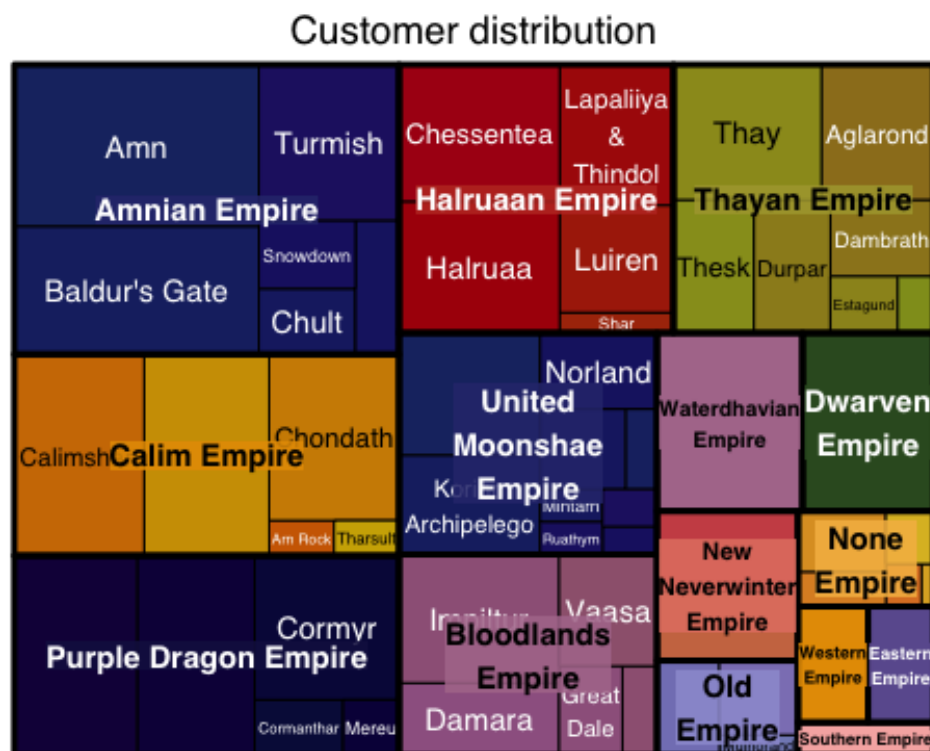


Figure 1. Distribution of customers per Nation and Region

Among 2497 customers, 54.3% of them (1256 customers) do not have key account, and 12.3% registered as private buyer (Figure 2).

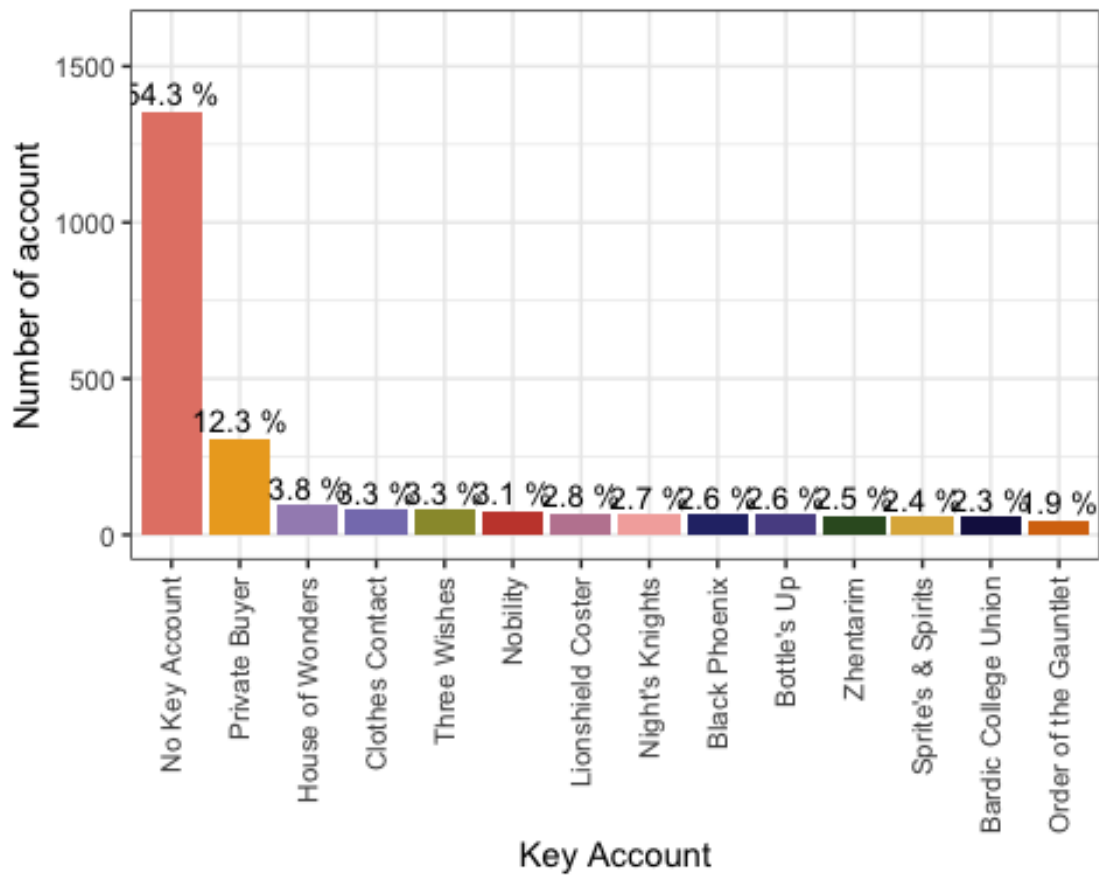
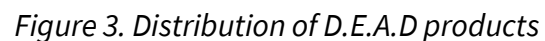


Figure 2. Number of key accounts

There are 2100 products of D.E.A.D on the market to date, grouped into 8 types and 58 subtypes. The product type and subtype with largest number of product are adventuring equipment (670 products) and subtype magic utility of adventuring equipment (230 products) (Figure 3).



3. Orders characteristics

Within the last 5 years (2019 – 2023), 280043 orders were placed with D.E.A.D. The number of orders per month ranges between 4200 and 4900 orders (Figure 4). The highest sale was recorded in January 2022 (4957 orders) and lowest was in February 2019 (4219 orders). There is seasonal trend in the number of monthly order, with the trough in February and the peak around October every year.

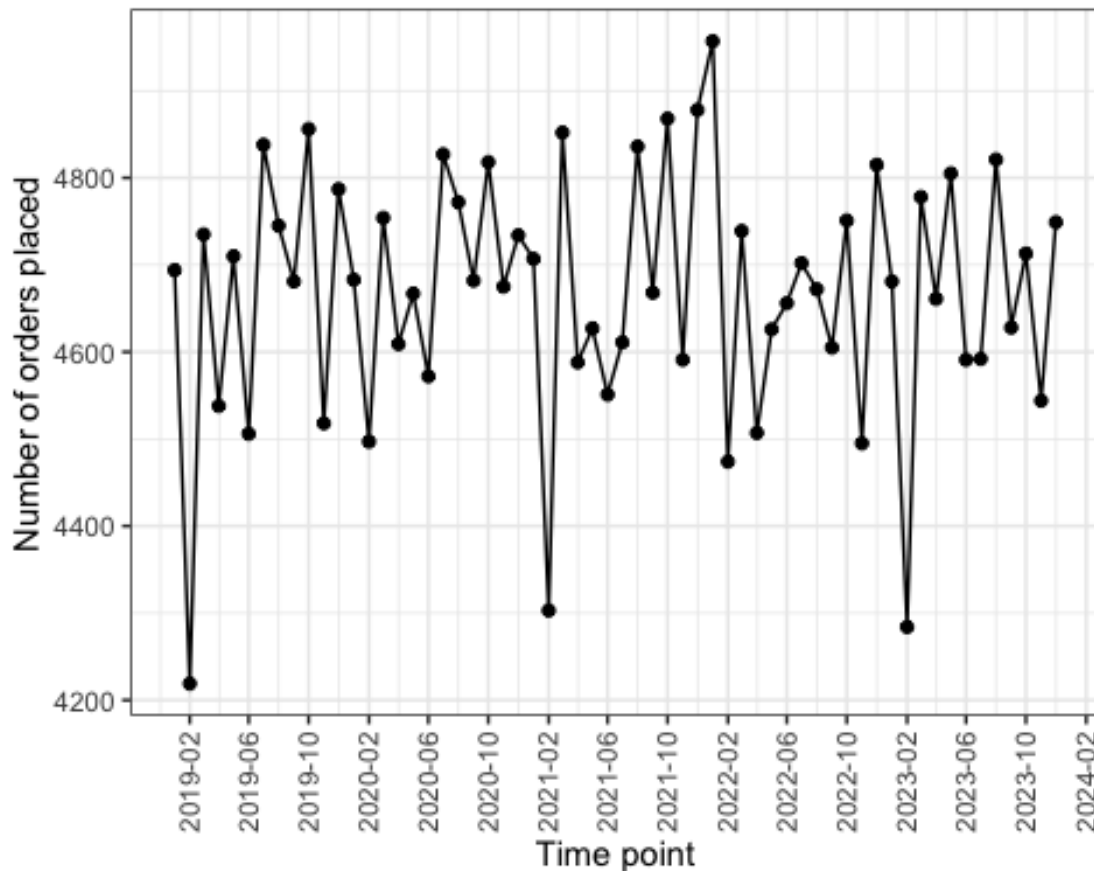


Figure 4. Total number of orders over time

The delivery time is mostly stable over time with median of 7 days (Figure 5). There was an exceptional prolonged delivery time between June 2021 and October 2021 (median ranges between 11 and 14 days, 75% quantile ranges between 20 and 132 days).

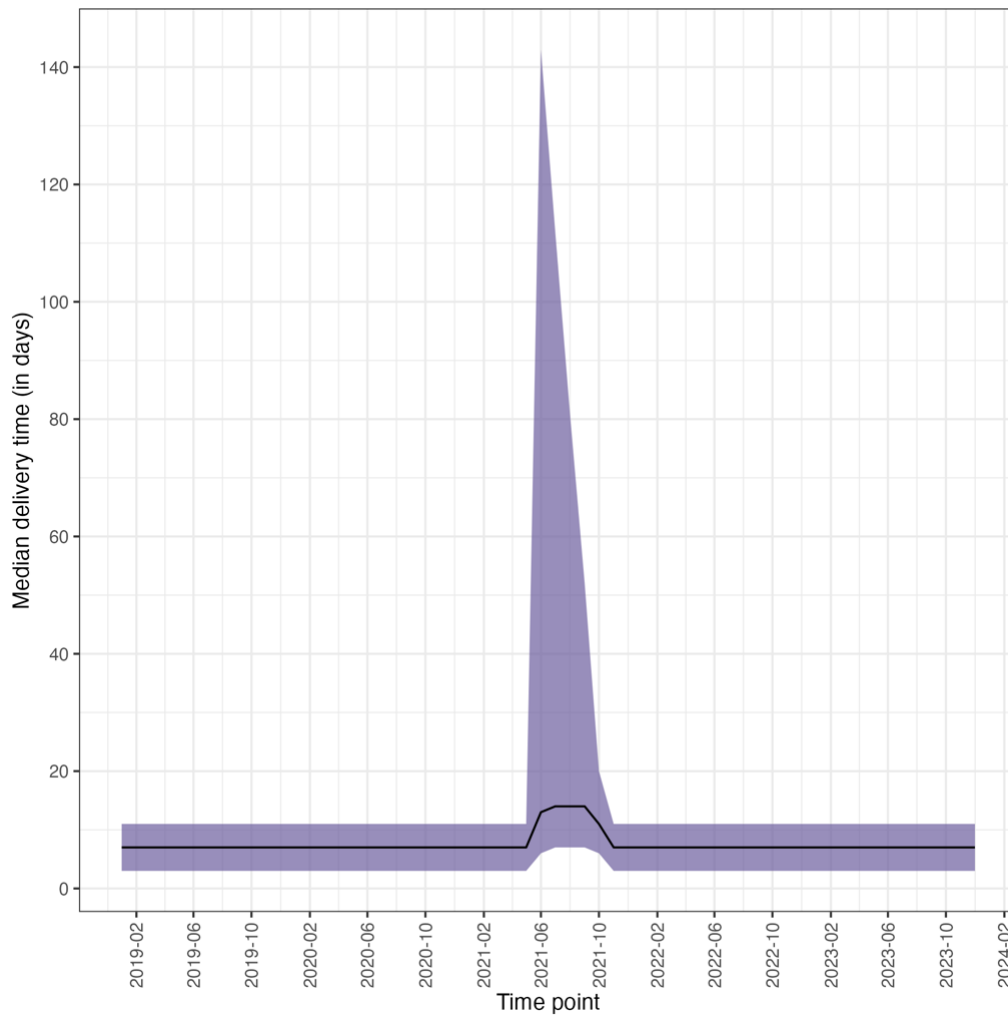


Figure 5. Delivery time over time. Black line indicates median number of days, purple ribbons indicate interquartile range

The customer ID with highest total order values is 26431806 (2.75 million CP), followed by 90701823 (2.27 million CP) (Figure 6).

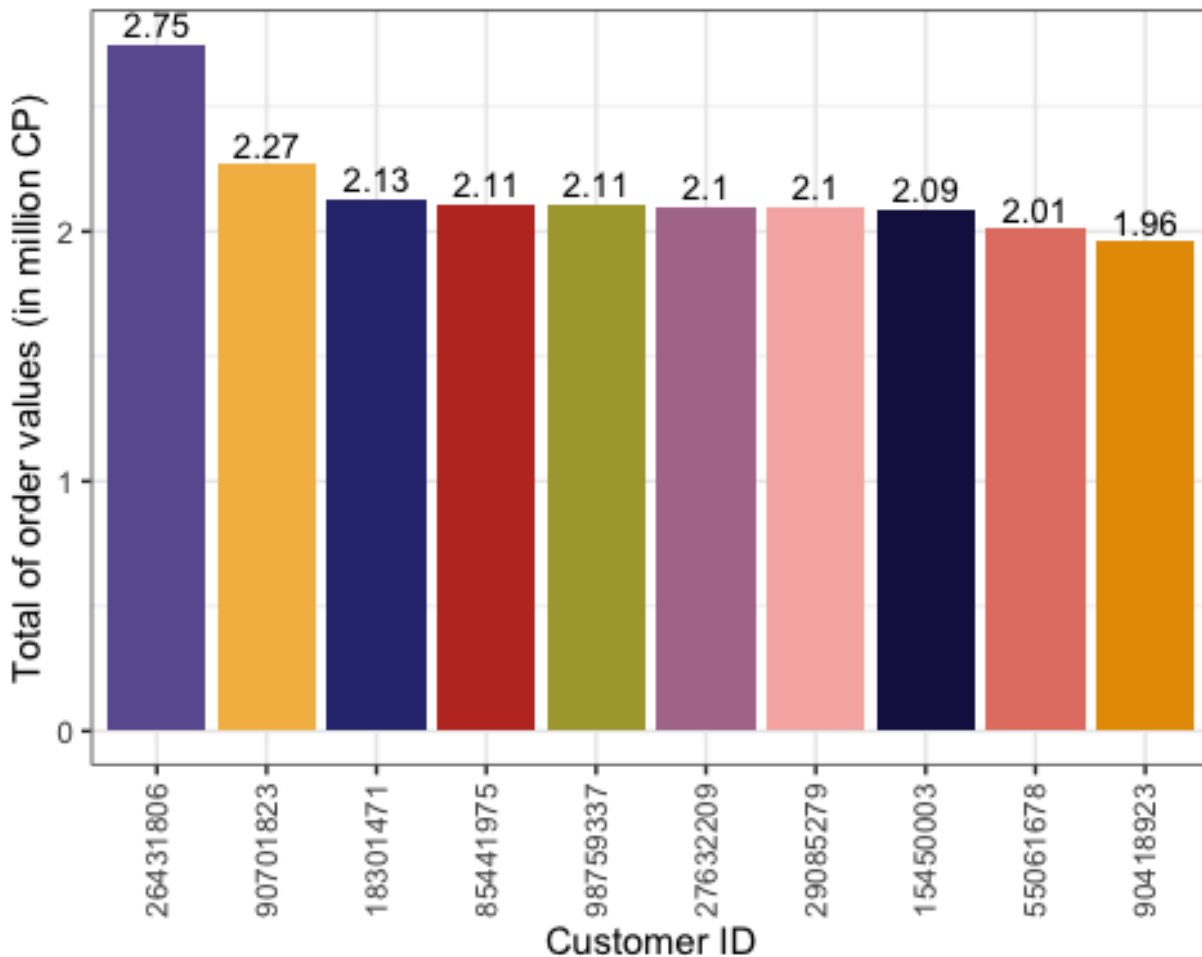


Figure 6. Ten customers with highest order values

The territory with highest total order values is Athkatla (32.11 million CP), followed by Telos City (24.27 million CP) (Figure 7).

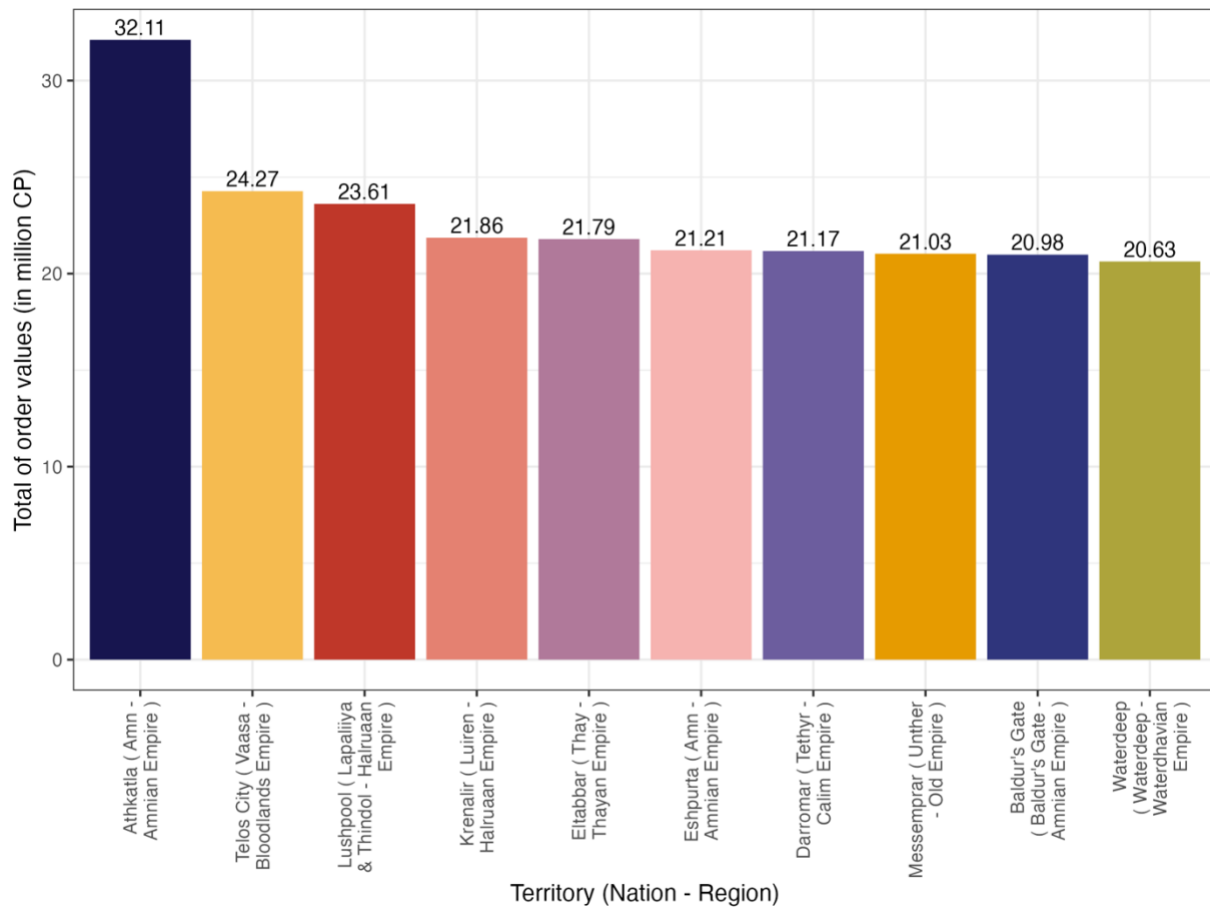


Figure 7. Ten territory with highest order values

Within the last five years, the product that was sold the most was Quarterstall (24855 products sold), followed by Hazirawn (20720 products sold). Meanwhile, Broom of Flying was sold the least (1836 product sold).

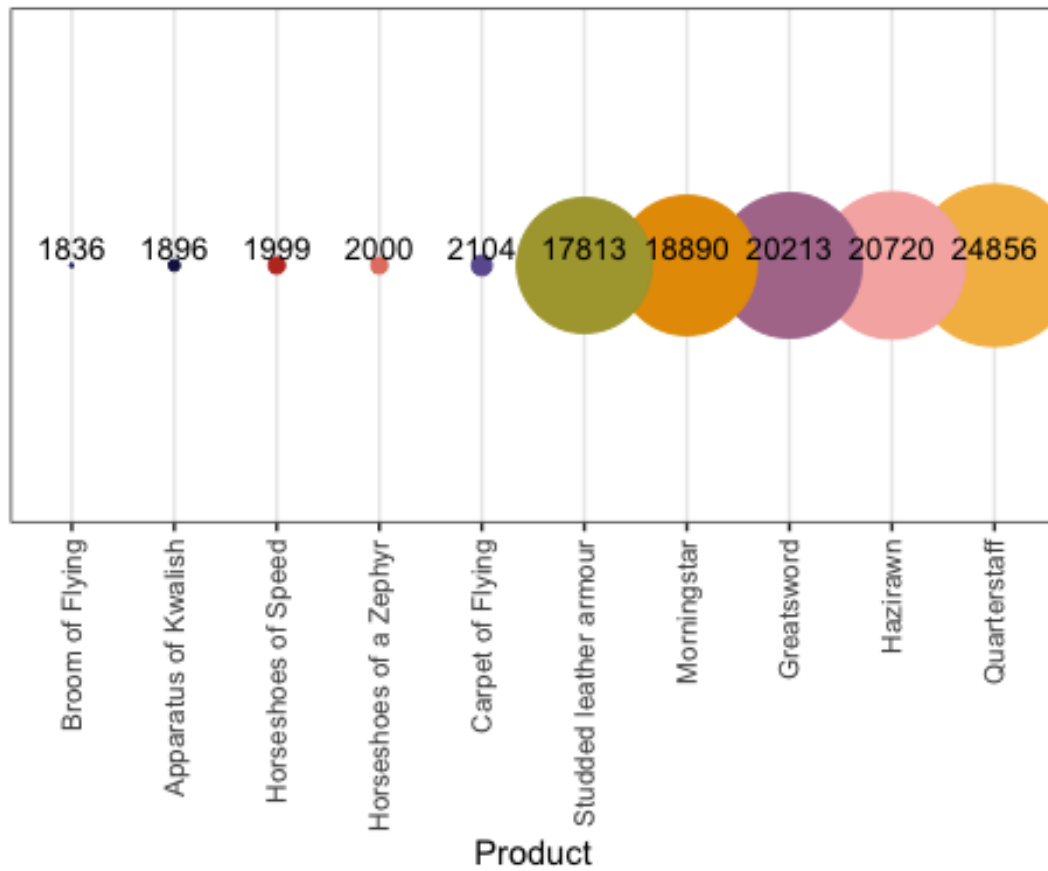


Figure 8. Top 5 most sold and least sold products

Figure 9 shows the top 3 sold products in each year. Hazirawn is the product with highest yearly sale (7685 product sold in 2022). Quaterstaff was in the top three from 2019 to 2021, and Studded leather amount was in the top 3 in 2022 and 2023.

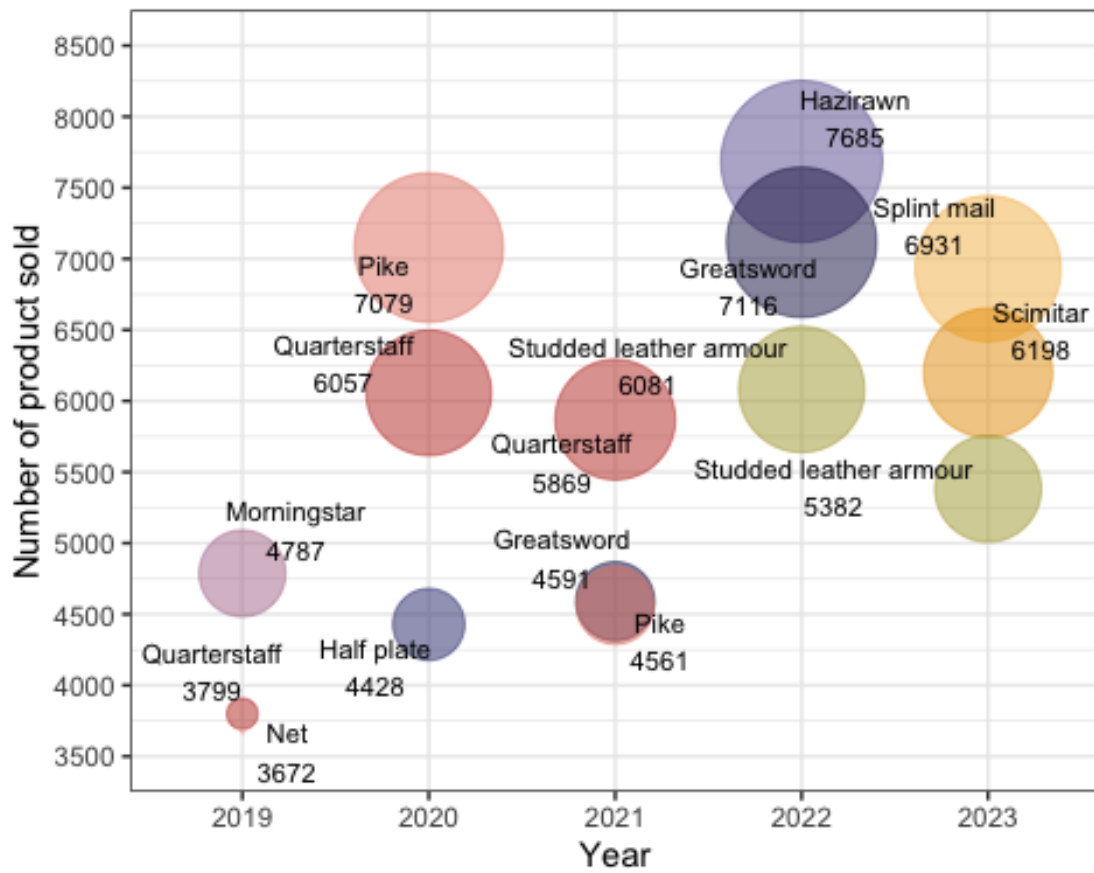


Figure 9. Top 3 products with highest sale per year

Product “Greatsword” brought the most yearly revenue (4.68 million CP, in 2022) (Figure 10). The top products that had the most revenue in 2019, 2020, 2021 and 2023 were “Morningstar”, “Hellsteel Martial Melee”, “Quarterstaaf”, and “Splint mail”, respectively.

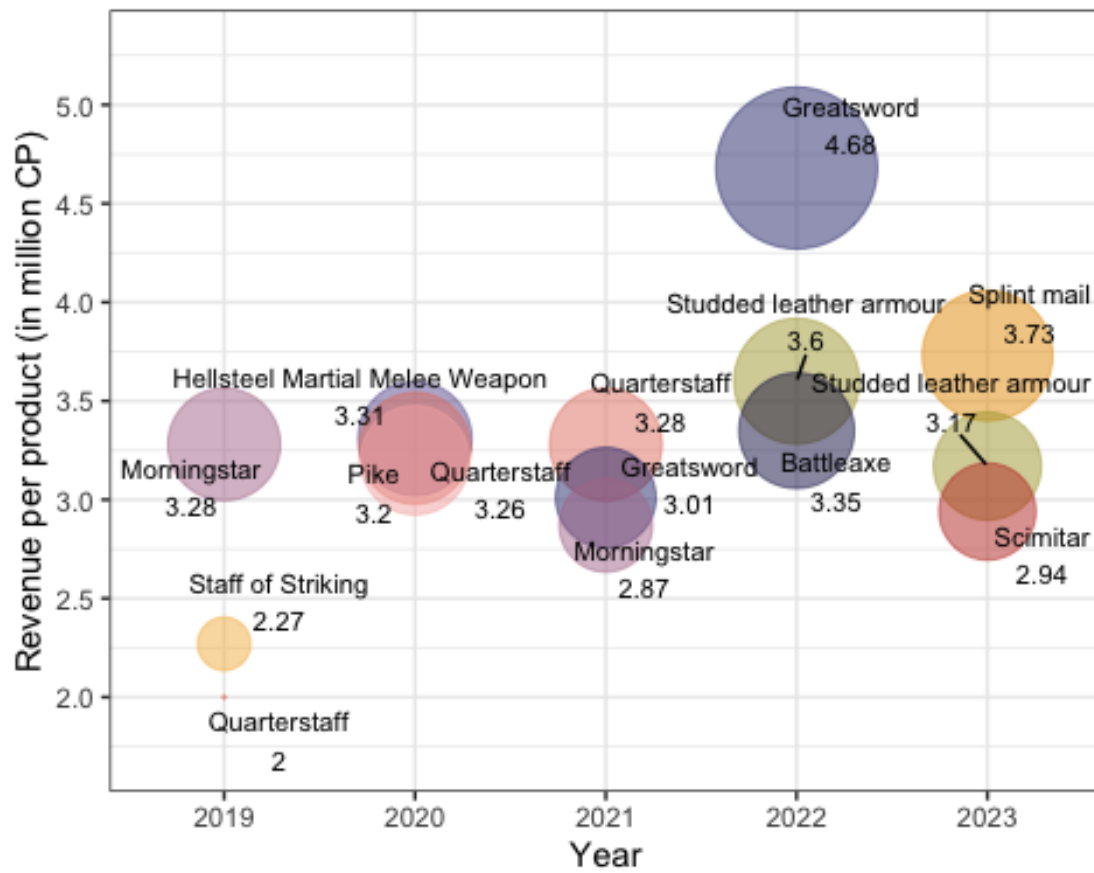


Figure 10. Top 3 products that brought highest revenue per year