

Case Study: Analyzing Customer Service Data

Analyzing customer service data to gain insights into the customer journey and uncover opportunities to enhance the overall customer experience

Errands Dataset

Focusing on the errand dataset, following key insights are worth highlighting:

- A total of 2 885 296 unique customer contacts were recorded during 2024
- These contacts correspond to 1 025 139 orders in total.
- On average, there are 2.8 customers contact per order.
- Number of orders with one contact = 457 594 (44.6% of the total orders).
- Number of orders with two contacts = 220 452 (21.5% of the total orders).
- Number of orders with contacts > 2 = 347 093 (33.9% of the total orders).
- The **chat channel** is the most commonly used communication method, accounting for 42.8% of all customer contacts.
- The most frequent topic of contact is **cancellation/ Refund**

```
with tab1 as
(select order_number, count(*) as Freq
from ab_testing.errands
group by order_number
),

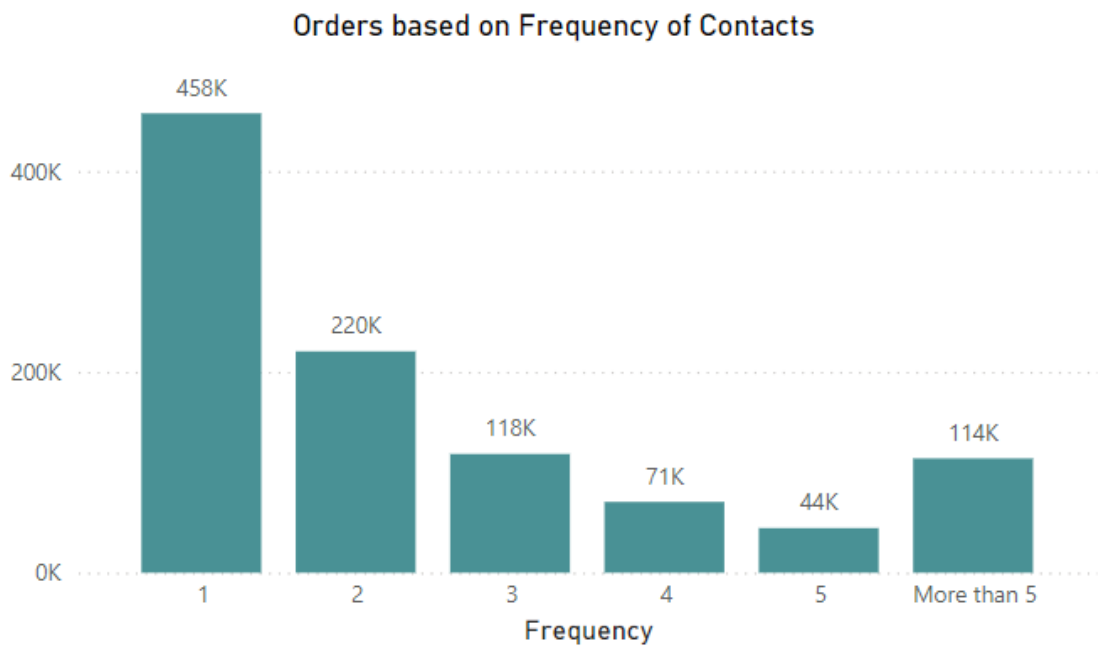
tab2 as
(select count(*) as Total,
round(avg(freq),2) as AVG,
COUNT(CASE WHEN Freq = 1 THEN 1 ELSE NULL END) AS count_1,
COUNT(CASE WHEN Freq = 2 THEN 1 ELSE NULL END) AS count_2,
COUNT(CASE WHEN Freq > 2 THEN 1 ELSE NULL END) AS count_gt_2
from tab1
)
select *,
round((count_1/Total) * 100, 2) as pct_1,
round((count_2/Total) * 100, 2) as pct_2,
round((count_gt_2/Total) * 100, 2) as pct_gt_2
```

Output:

	1.2 Total	1.2 AVG	1.2 count_1	1.2 count_2	1.2 count_gt_2	1.2 pct_1	1.2 pct_2	1.2 pct_gt_2
1	1025139	2.81	457594	220452	347093	44.64	21.5	33.86

1. Number of orders based on frequency of contacts

Customers who reached out for support only once make up 458k (~45%)

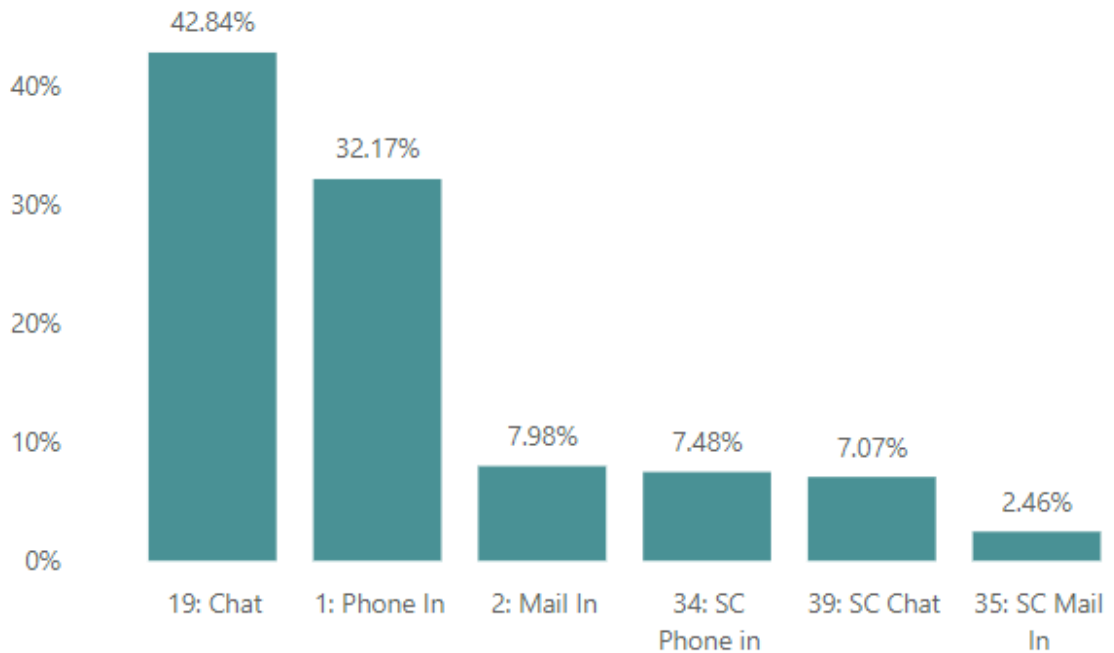


2. Communication Channel Analysis

Nearly 43% of customers who contacted support used chat, followed by phone, which is used by 32%

Errand Channel	# of Errands	% of Errands
19: Chat	1236012	42.84%
1: Phone In	928232	32.17%
2: Mail In	230267	7.98%
34: SC Phone in	215957	7.48%
39: SC Chat	203926	7.07%
35: SC Mail In	70902	2.46%
Total	2885296	100.00%

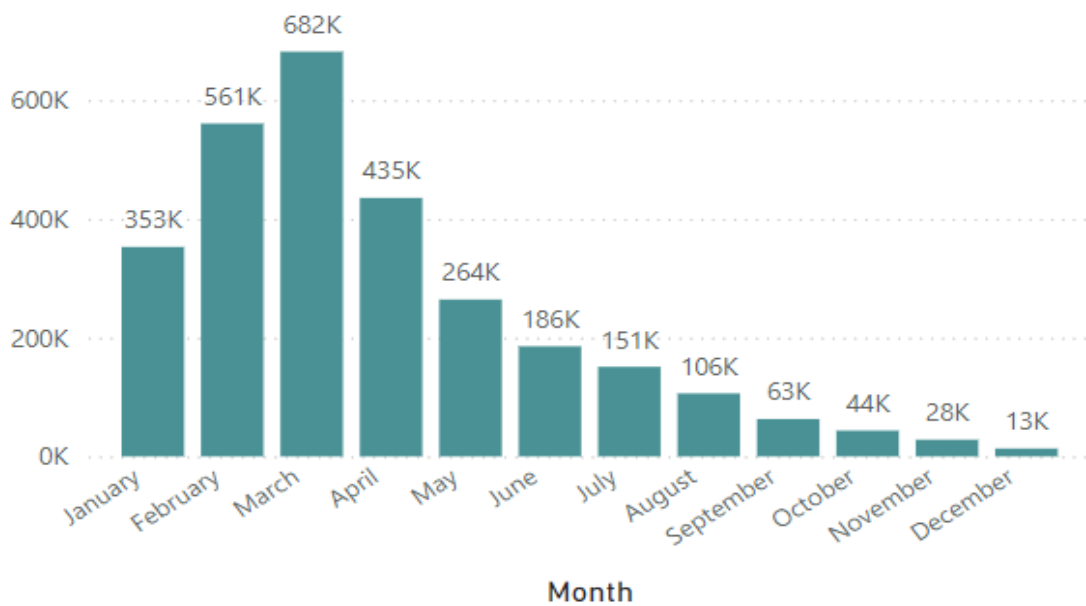
Break down by Errand Channel

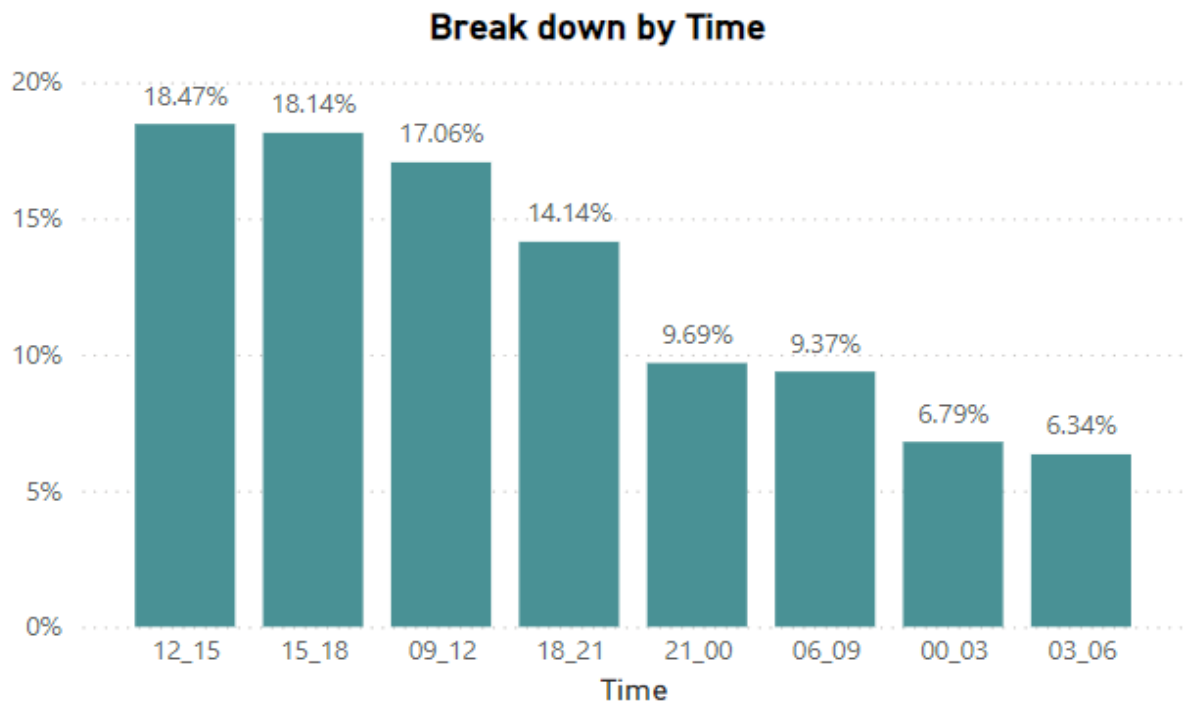


3. Time – based Analysis

In 2024, the majority of customer service contacts occurred in March, followed by February and April. Additionally, the time of day was also analyzed, with the second chart indicating that the highest volume of customer contacts took place between 12:00 PM and 6:00 PM, making up almost 36.6%

Break down by Date

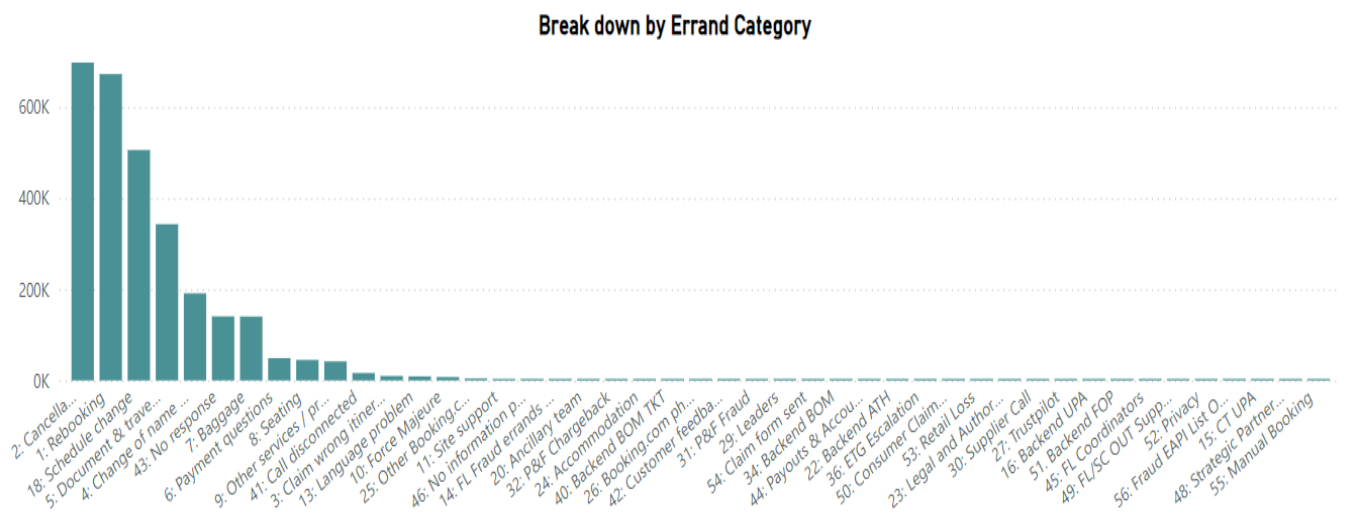




4. Category Analysis

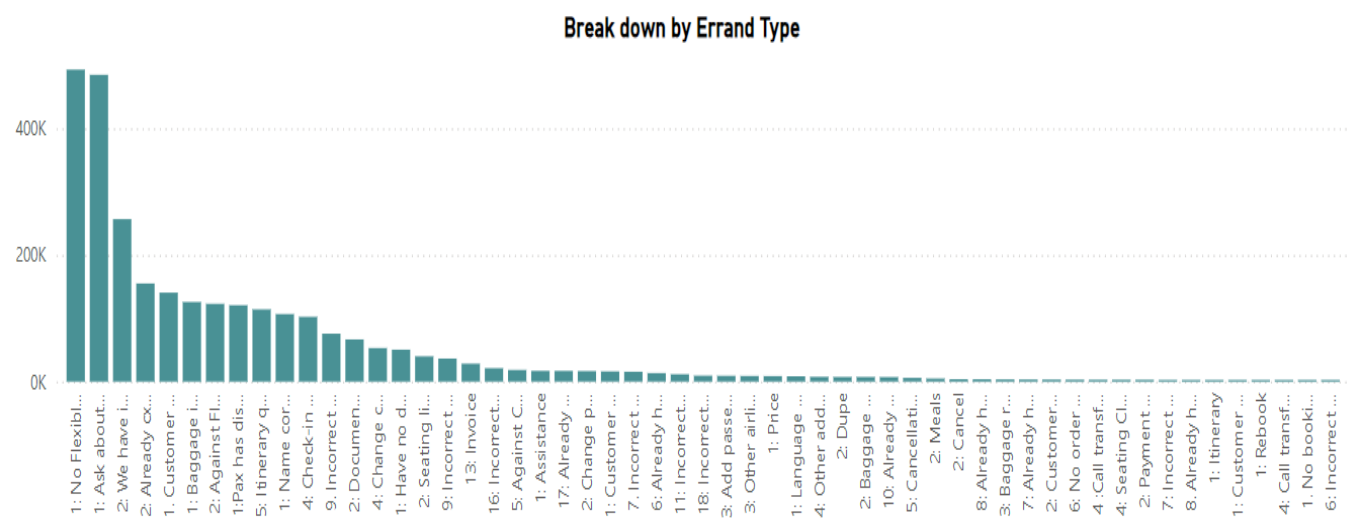
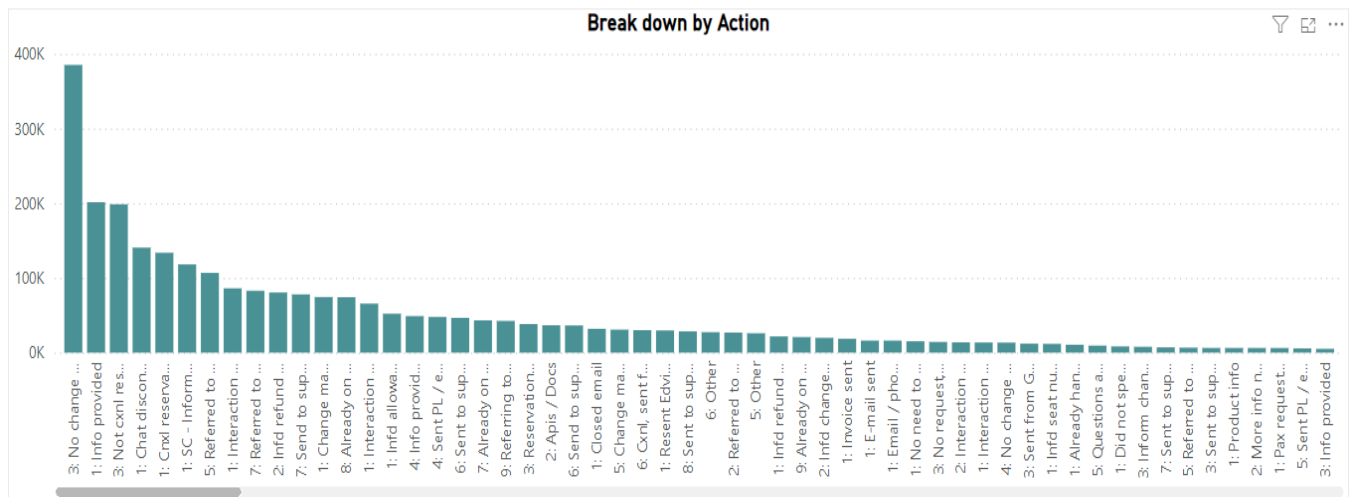
The top 5 most common topics customers reached out for support are:

- Cancellation/ Refund
- Rebooking
- Schedule Change
- Document & Travel Info
- Change of name & passenger Info



5. Action Analysis

The most frequent action taken is "No change made," which warrants further investigation, as it may explain why some customers reach out for support multiple times. When analyzing the errand types, we see that the most common types are "No Flexible Ticket" and "Ask About Cancellation Rules." This aligns with the frequent occurrence of the "No change made" action, as the primary topics for customer contact are "Cancellation/Refund" and "Rebooking." Customers with non-flexible tickets are reaching out for support the most, likely due to the limitations of these ticket types or lack of info regarding the cancellation and refund.

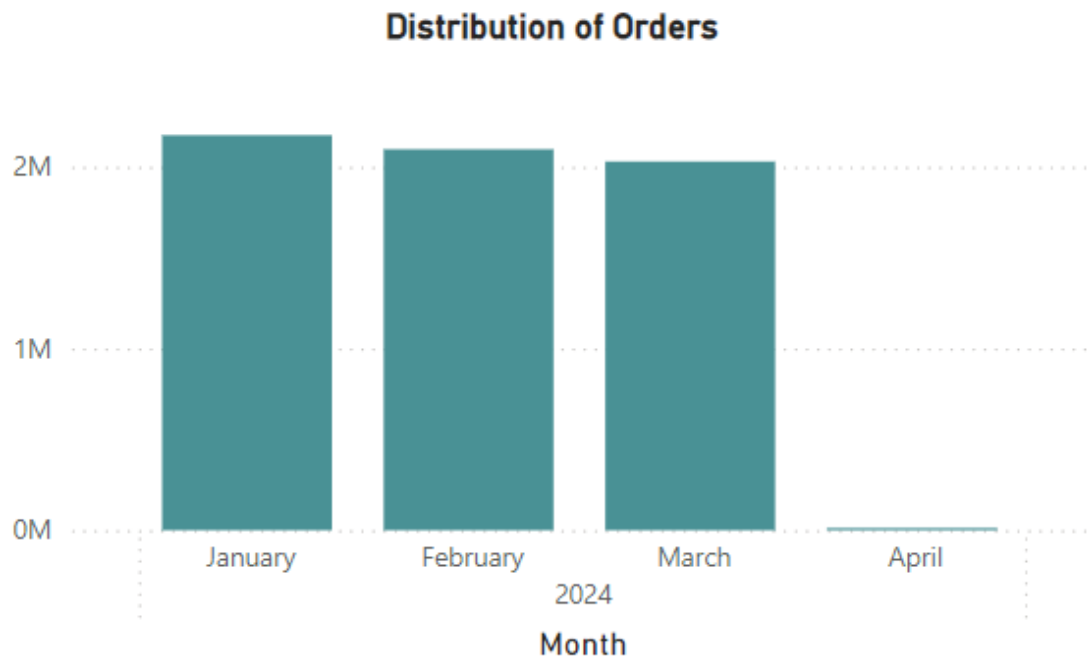


Orders Dataset

Key Insights from the Errand Dataset

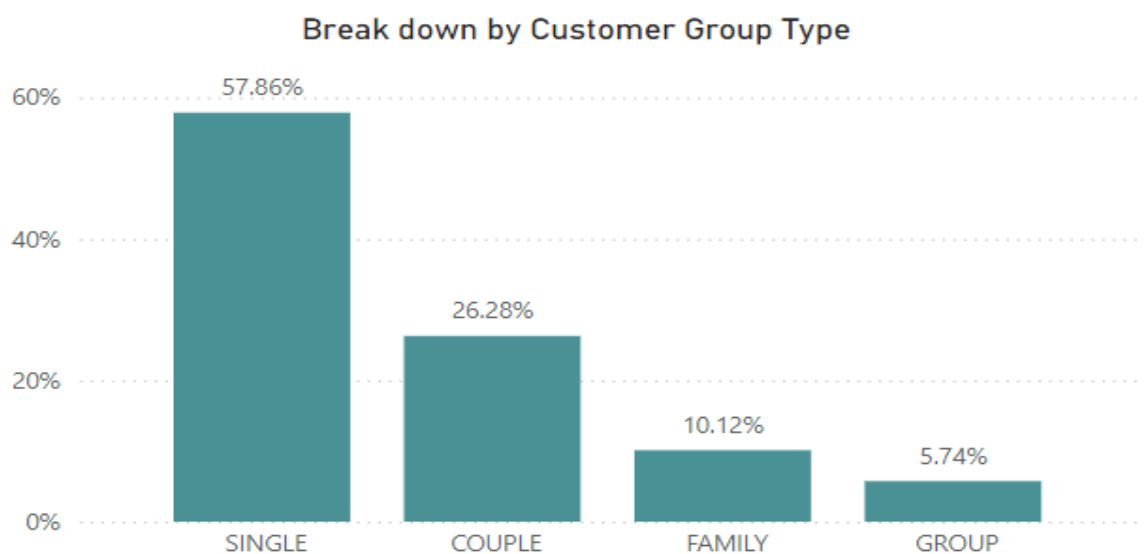
1. The distribution of the orders

The distribution of the orders during the first quarters of 2024 is stable



2. Customer Group Type

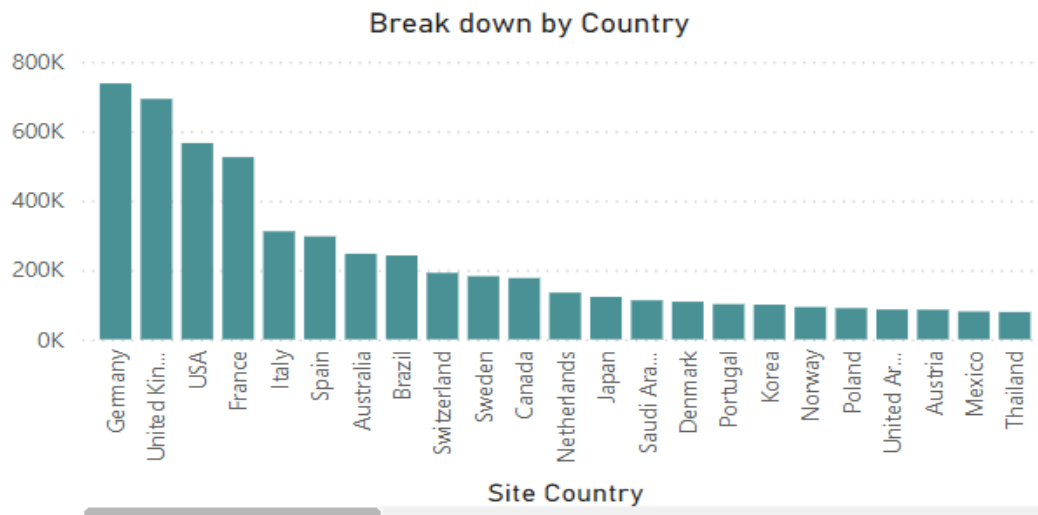
The majority of bookings, nearly 60% of the orders, are made for individuals rather than couples, families, or larger groups



3. Site Country

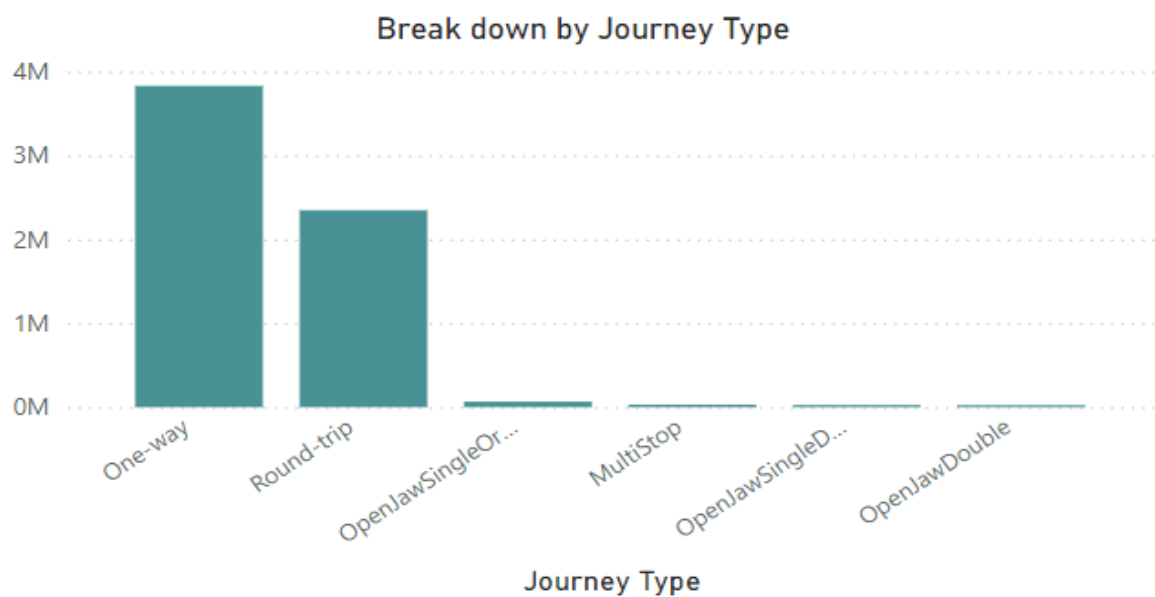
The top 5 countries with the highest number of bookings are:

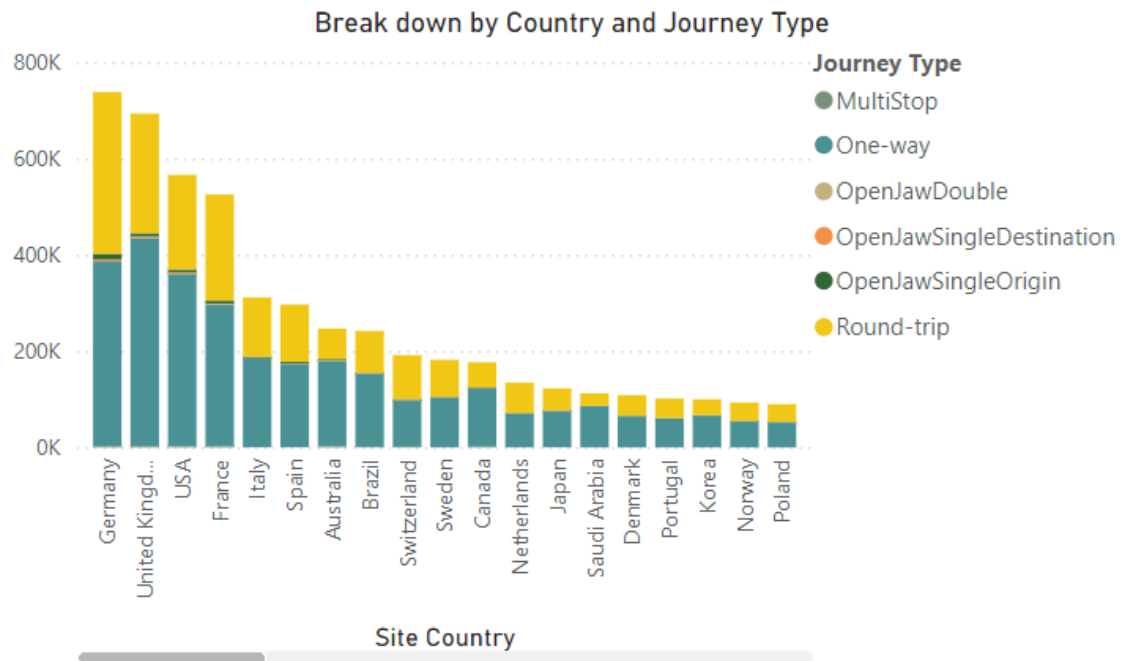
- Germany
- UK
- USA
- France
- Italy



4. Journey Type

The majority of bookings are for one-way journeys rather than round trips. Additionally, most one-way bookings are made in the UK, while majority of bookings in Germany are for round trips, rather than one-way journeys

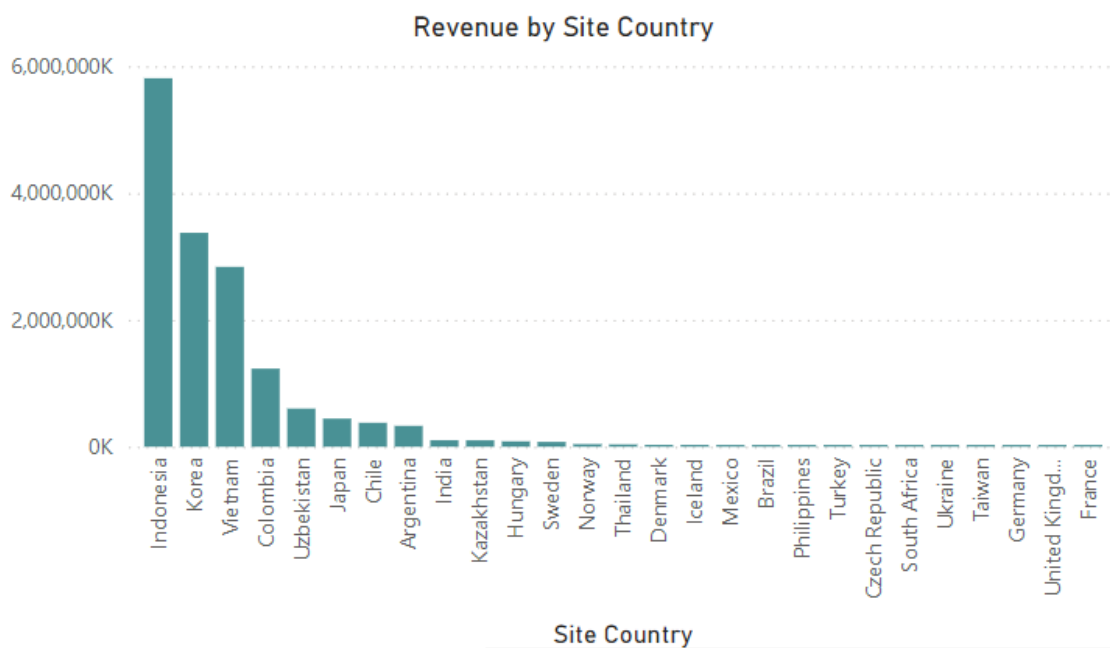




5. Revenue

The highest revenue is generated from bookings made in

- Indonesia
- Korea
- Vietnam



Recommendations:

Recommendations for Improving Customer Service

Based on the analysis of errands and orders data, the following recommendations are proposed to enhance customer service efficiency and satisfaction:

- 1. Enhance Chat**
 - Since chat is the most commonly used channel by customers, efforts should focus on enhancing its functionality and responsiveness
- 2. Provide Clear Information on Ticket Flexibility**
 - Many customer inquiries revolve around cancellations and refunds for non-flexible tickets. To address this:
 - Clearly highlight rules about these tickets, including cancellation fees and refund eligibility, on all relevant platforms.
 - Make this information easily accessible on relevant platforms to reduce unnecessary customer contacts.
 - Emphasize that refunds are not available for certain tickets when no action has been taken, saving both customer and agent time
- 3. Allocate Additional Resources During Peak Periods**
 - Increase customer service capacity in spring, as this period sees the highest volume of contacts, likely related to cancellations or rebooking for summer trips.
 - Focus on peak hours during the day, especially between 12:00 PM and 6:00 PM, to handle the increased workload.
- 4. Introduce a “Resolved” Status System**
 - Implement a system that tracks whether customer issues are resolved, enabling more transparent follow-ups.
- 5. Create Customer Feedback Surveys for Chat**
 - Create a feedback surveys to assess whether customer issues were resolved and gather insights for further improvement.
- 6. Invest in AI Chatbots**
 - Invest in AI chatbots to handle frequently asked questions and repetitive queries, allowing agents to focus on complex issues.
- 7. Monitor and Optimize Contact Time**
 - Track the time spent on each customer contact to improve efficiency and better allocate resources.
- 8. Enhance the FAQ Section**
 - Expand and clarify FAQs, particularly regarding non-flexible tickets, cancellation policies, and refund rules, to make it easier for customers to find the answers they need