

Trivago Sessions Analysis

May, June 2022

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Tribe: Data Intelligence

Assumptions

- **is_app=0**: Indicates traffic from the website
- **is_app=1**: Indicates traffic from the Trivago mobile app
- **is_repeater=0**: Indicates a first visit by the user
- **is_repeater=1**: Indicates a repeat visit by the user
- **Agent id**: Represents the type of device used by the user
- **Count distinct clickouts per session**: Ensures that multiple clicks are not counted multiple times in the Clickout Ratio (COR) calculation
- Session volumes in China are way too low even when considering covid impact

Definitions

- **Clickout Ratio (COR):** The percentage of sessions that involve at least one clickout
 - Formula: $(\text{Sum of distinct clickouts} / \text{Count of sessions}) * 100$
- **Conversion Rate (or Booking Rate):** The percentage of sessions that result in bookings
 - Formula: $(\text{Sum of bookings} / \text{Count of sessions}) * 100$
- **Repeat Visitor Rate:** The percentage of sessions by users who have visited the platform more than once
 - Formula: $(\text{Number of repeat sessions} / \text{Total sessions}) * 100$

Quick Descriptive Statistics

Key Insights:

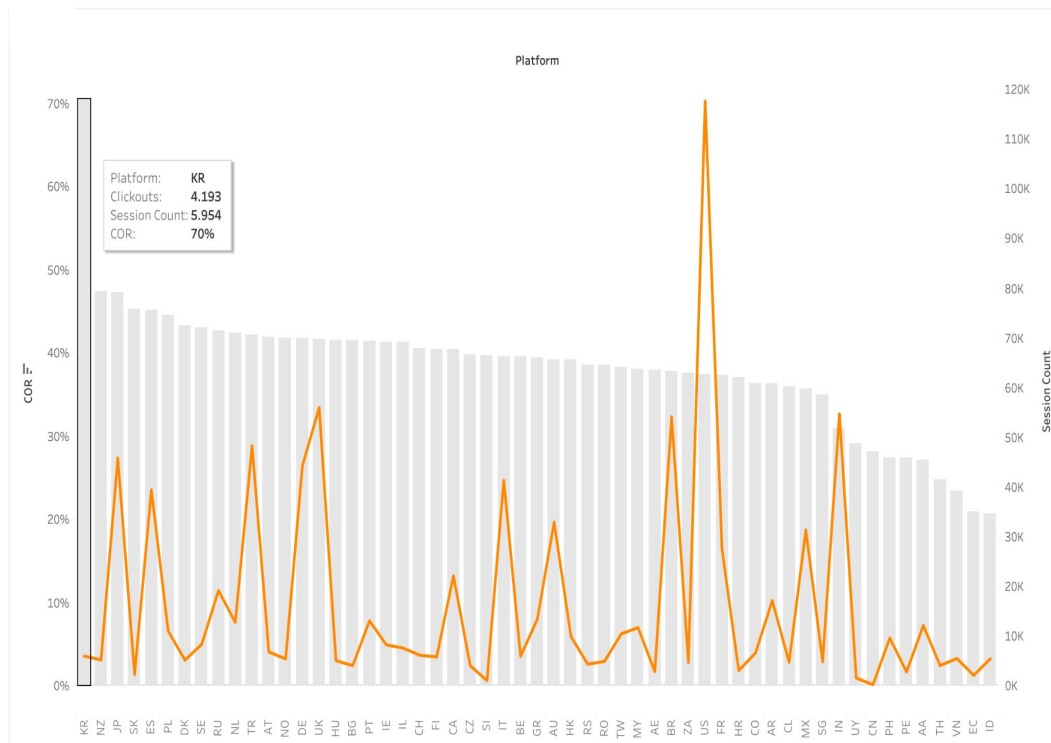
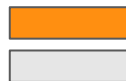
- **Non-App Usage:** All sessions recorded are from non-app platforms(assuming is_app=1 for app)
- **User Retention:** A significant portion of users (40%) are repeat users
- **User Engagement:** 39% clickouts from total sessions is already a good indicator of user engagement and is above industry standards. This also indicates that there is still room for improvement in engaging users
- **Conversion Rates:** The booking rate is low, with a small fraction of sessions resulting in bookings. The mean booking rate of 1.2% highlights room for improvement in conversion
- **Session Duration:** Most sessions are short, with the median duration being just over a minute, suggesting that users either find what they need quickly or leave without engaging deeply. Mean duration=391 seconds (around 6.5 minutes)
- **Clicks to Pages:** The majority of users make very few clicks, indicating potential areas for enhancing user interaction and engagement

COR

High Session Count Does Not Necessarily Correlate with High Click-Out Rate (COR)

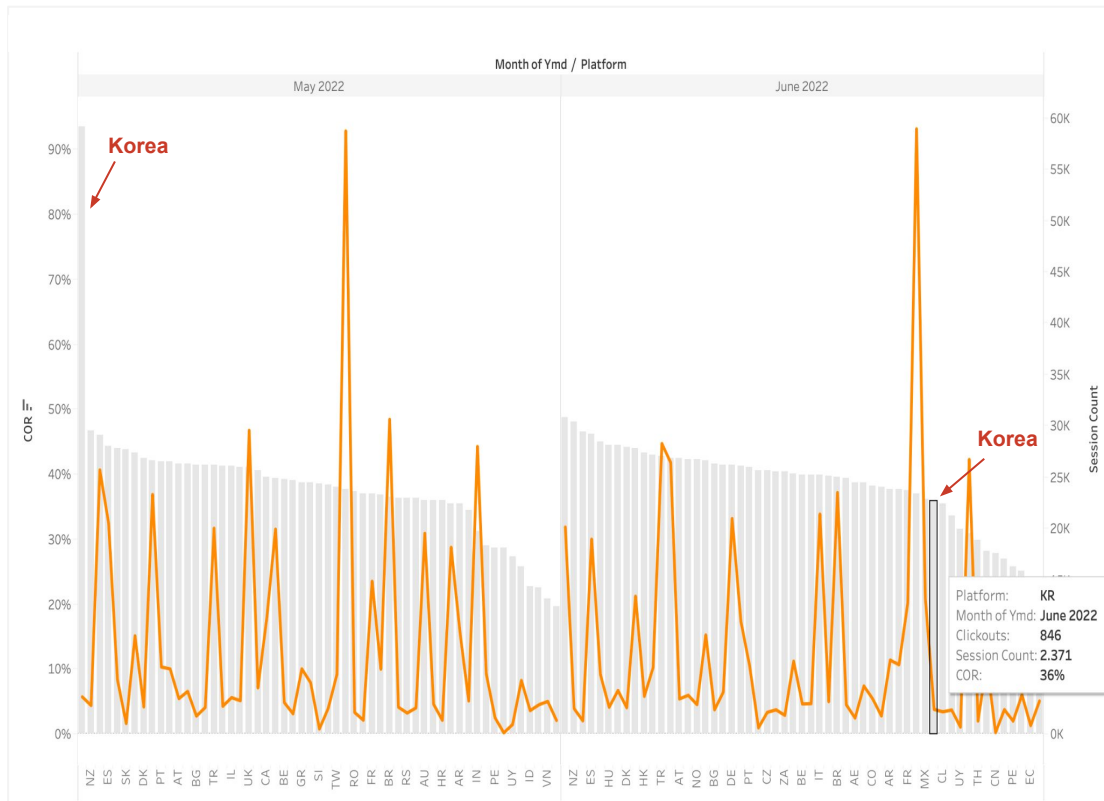
- **Discrepancies in COR:** Countries such as the US, India, and Brazil, despite high session volumes, exhibit significantly lower COR compared to Poland, Slovenia, and New Zealand, which have fewer sessions but higher COR
- **Outlier Analysis:** South Korea emerges as an outlier with an exceptional COR of 70%
- **Regional Differences:** Southeast Asia exhibits one of the lowest CORs in contrast to European and Oceania markets (AU, NZ)
- **Market Penetration Insights:** High session counts in India and Brazil indicate substantial market penetration. However, the low COR suggests untapped potential for enhancing user engagement
- **China's Low Session Volume:** The low session count in China may be attributed to dominant local competitors like Ctrip and Meituan, along with regulatory and search engine restrictions

Session Count
COR



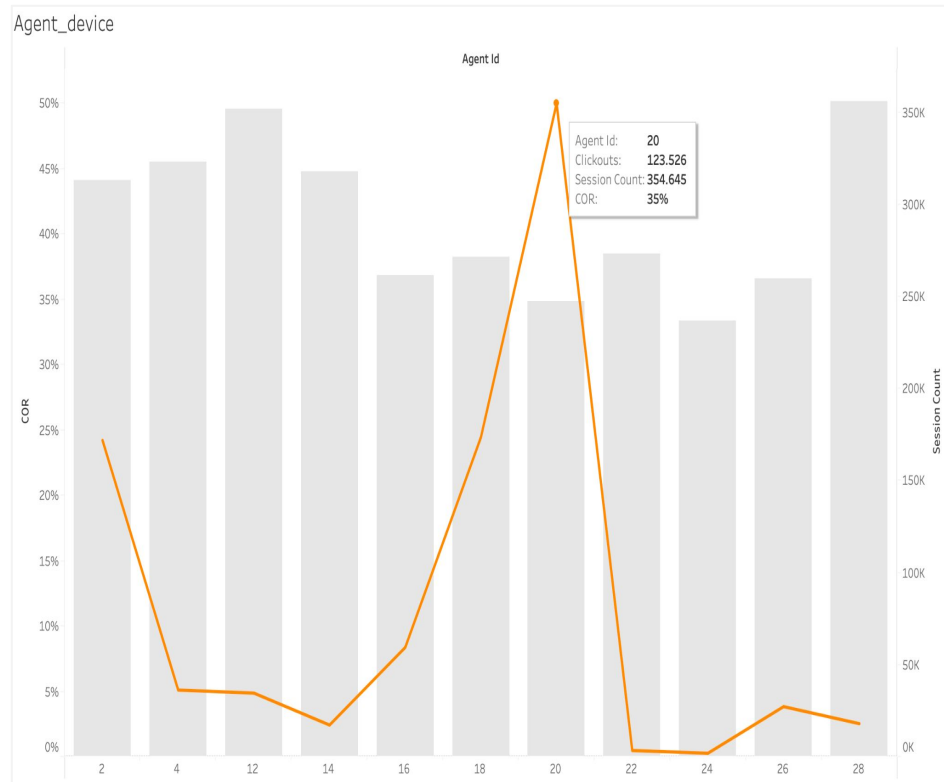
While the monthly trends for May and June are consistent across most markets, they reveal a distinct seasonality for Korea in May

- **Seasonality in Korea:** The monthly trends for May and June reveal a distinct seasonality in Korea, marked by public holidays and favorable travel weather, leading to a high COR in May
- **Marketing and Covid Relaxation:** Effective marketing campaigns and the relaxation of COVID restrictions in Korea may have further contributed to the high COR
- **Weather Impact:** Favorable weather in Europe and Oceania during May and June coupled with covid relaxation, contrasted with Southeast Asia's monsoon season and more stringent covid restrictions, explains the regional differences in COR
- **Potential Market:** China, potentially a major market, exhibits very low session counts, possibly influenced by strong competitors such as Ctrip and Meituan. Regulatory challenges and restrictions from search engines may also contribute to the low session volume and low Clickout Rate (COR)



COR by Device

- **Device Performance:** Devices 20 and 24 have the lowest CORs. These may represent less popular web browsers like Opera and Brave. Device 20, despite high session volumes, underscores that high sessions don't equate to high COR
- **High COR Devices:** Devices 12 and 28 show the highest COR, likely representing popular browsers



COR by Traffic Type

Traffic Type 2 (Clickout ratio: 49.9%):

- May represent paid search or affiliate marketing traffic
- Users are directed to specific listings or deals, likely leading to high click-through rates

Traffic Type 10 (Clickout ratio: 47.55%):

- Likely social media traffic from platforms like Facebook, Instagram, or Twitter
- Users are directed to Trivago, resulting in higher clickouts

Traffic Type 4 (Clickout ratio: 43.01%):

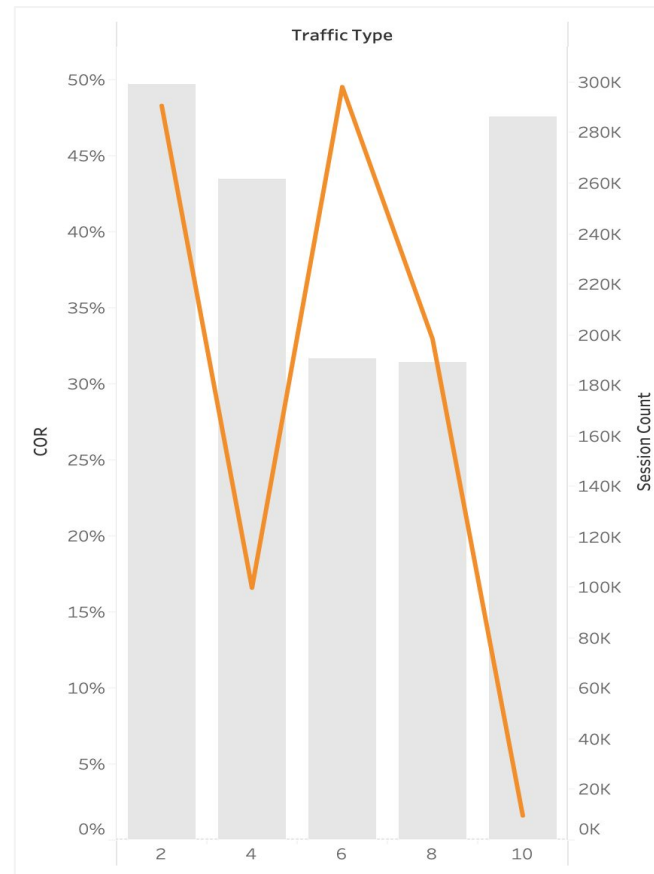
- May represent organic search traffic from search engines like Google or Bing
- Users actively search for travel-related information, contributing to higher engagement

Traffic Type 8 (Clickout ratio: 32.01%):

- Indicates direct traffic where users directly access Trivago's site
- Users might type the URL or have it bookmarked, indicating strong engagement

Traffic Type 6 (Clickout ratio: 31.7%):

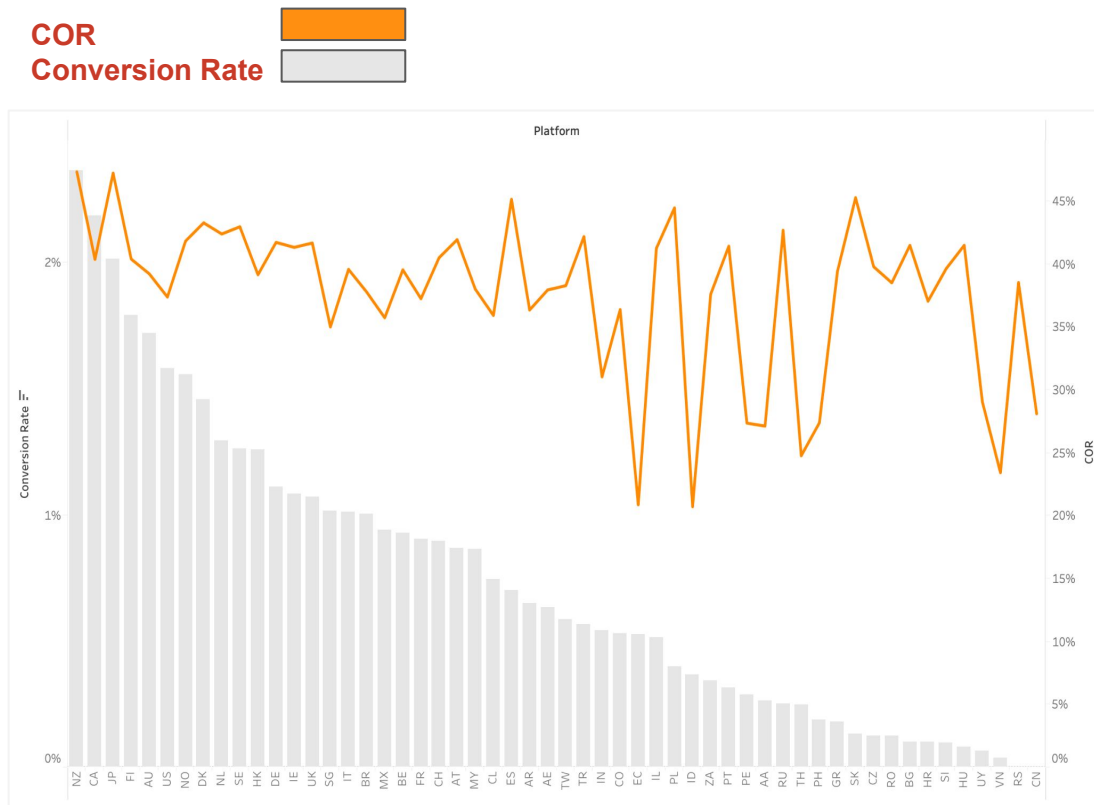
- Likely traffic from referral sources, such as partner websites
- Users arrive at Trivago with a high intent to book, reflecting effective referrals



Conversion Rate

Engagement alone does not guarantee conversions

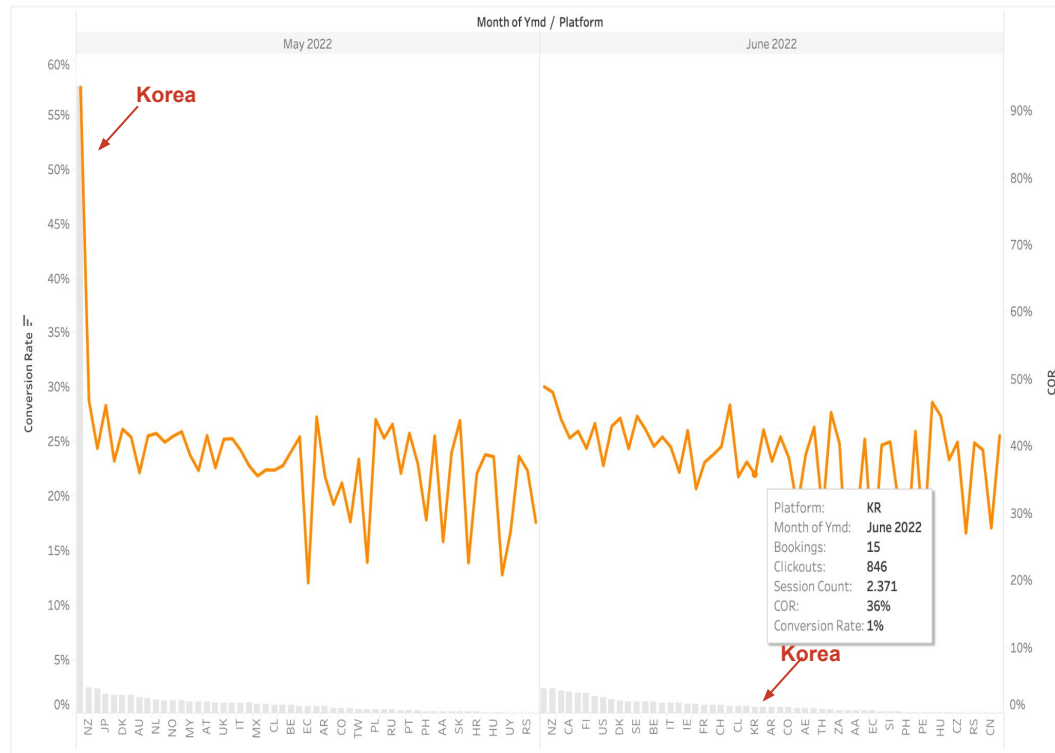
- Overall, conversion rates are very low, ranging from 0.1% to 2%
- Countries like New Zealand, Japan, and Denmark, with higher Clickout Rates (COR), achieve conversion rates of 1% to 2%
- In contrast, Poland, Russia, and Slovenia, despite high COR, have very low conversion rates (less than 1%)
- High COR and low booking rates suggest users are likely comparing prices across providers and may abandon transactions for better deals or due to unexpected costs
- Users in these regions may research travel options in May and June but delay bookings or change plans, contributing to high COR and low bookings
- Technical challenges and slow loading times can also hinder booking completion
- Korea, an outlier with a 35% conversion rate, was excluded from the chart due to its skewing effect on trends



****Note:** Axis are deliberately not aligned to ensure easy readability. Please refer to relevant axis to draw conclusions

The substantial Clickout Rate (COR) observed in Korea directly drives the observed Conversion Rate in May

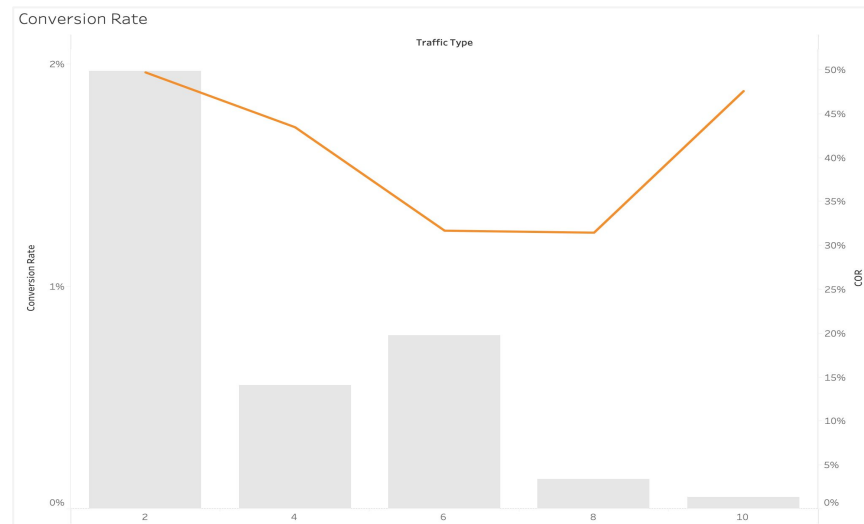
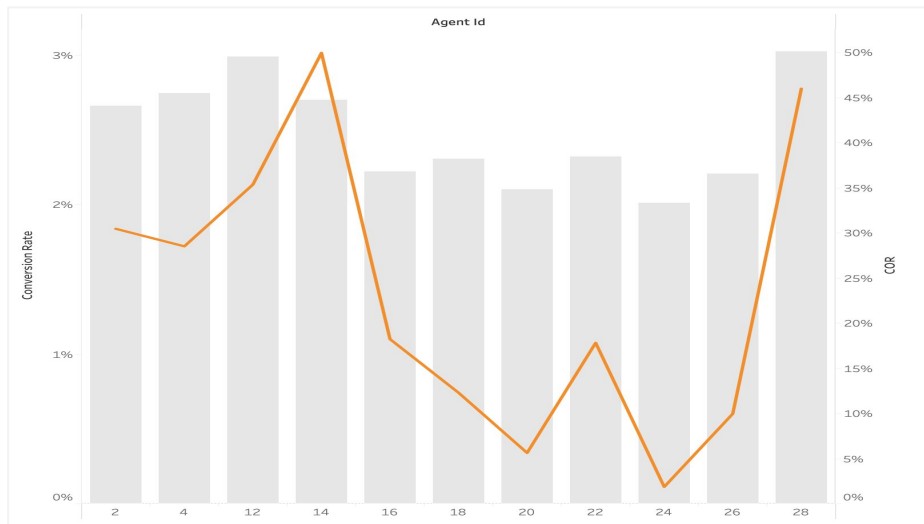
- Overall, conversion rates in May and June are similar across markets, except for Korea
- Korea's conversion rate in May is exceptionally high at 58%, correlating with its unusually high Clickout Rate (COR) during the same period
- The high Conversion Rate indicates that a significant number of users who clicked on listings completed bookings, suggesting compelling offers and high user intent during the holiday season
- Effective marketing strategies, relevant content presentation, and competitive pricing likely contributed to Trivago's success in Korea during peak season
- A high Conversion Rate reflects trust, satisfaction with the booking process, platform usability, and overall user experience provided by Trivago in Korea



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The Conversion Rate across Agent IDs and Traffic type aligns consistently with their Clickout Rates (COR). The users redirected from referrals demonstrate a heightened intent to book

- Devices 20 and 24 exhibit the lowest Clickout Rates (CORs) and Conversion Rates
- Devices 12 and 28 show the highest CORs with decent Conversion Rates
- Traffic type 6 (Referrals) demonstrates a higher conversion rate compared to type 10 (Social Media), indicating that users referred through referrals show greater intent to complete a booking



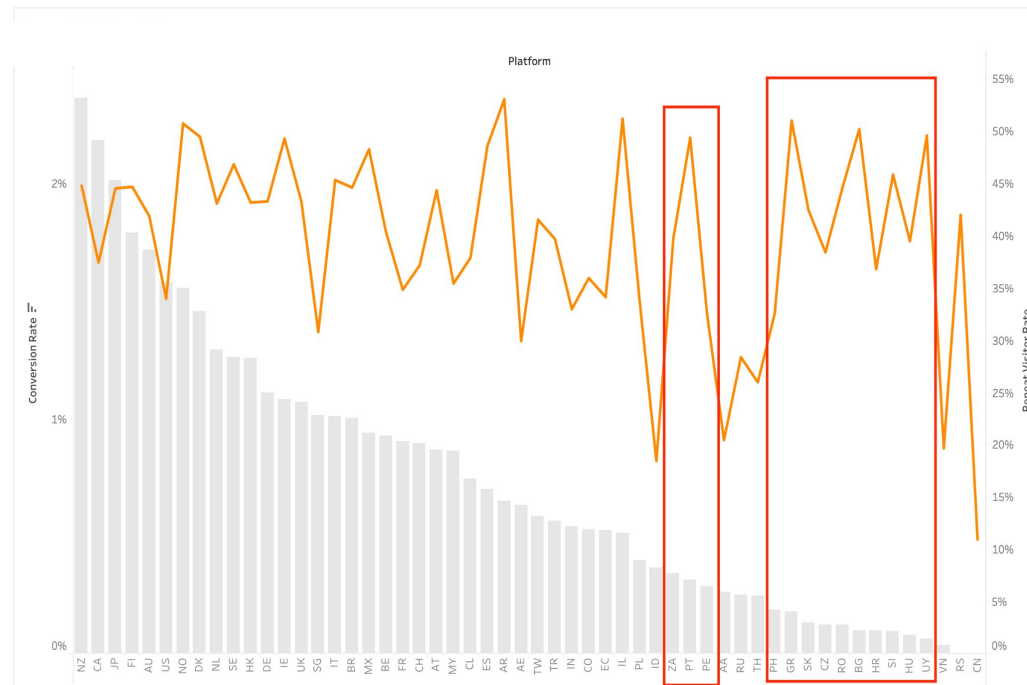
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Repeat Visitor Rate

Countries with low conversion rates frequently show a notable pattern of high repeat visitor rates

- Repeat Visitor Rate averages around 40%
- The Repeat Visitor Rate remained consistent across both May and June
- Many countries with low conversion rates also exhibit repeat visitor rates of 40-45%
- Low conversion rates coupled with high repeat visitor rates suggest users compare prices and may abandon transactions due to better deals or unexpected costs
- Technical issues and slow loading times in these countries could hinder conversions despite repeat visits
- Korea stands out with a low repeat customer rate of 34% in May, suggesting many first-time visitors completed bookings

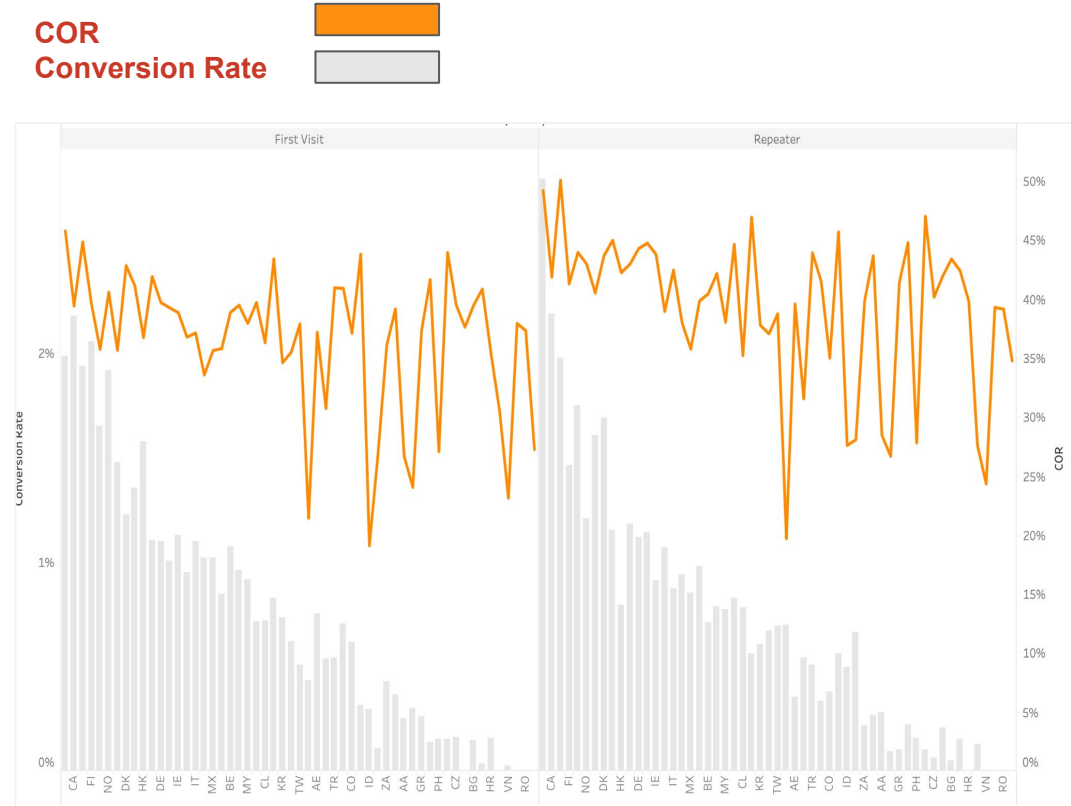
Repeat Visitor Rate
Conversion Rate



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Do repeat visitors significantly increase conversion rates?

- In mature markets with high penetration, repeat customers could drive strong conversions
- Observations in this dataset vary: some markets show enhanced conversions with repeat customers, while others do not
- Further data and deeper market penetration analysis are crucial for exploring this hypothesis



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Recommendations

1. **Enhance User Engagement in Key Markets:**
 - **India and Brazil:** Despite high session counts, the low COR indicates untapped potential. Invest in localized marketing campaigns, user interface improvements, and personalized recommendations to increase user engagement and COR
2. **Optimize for Less Popular Browsers:**
 - **Devices 20 and 24:** Representing less popular browsers with low COR, focus on optimizing Trivago's platform performance for these browsers to improve user experience and engagement
3. **Address Technical Challenges:**
 - **Improve Load Times:** Investigate and resolve technical issues such as slow loading times, which can negatively impact user experience, conversions, and repeat visit rates
4. **Leverage Seasonal Trends in Korea:**
 - **May Marketing Campaigns:** Capitalize on Korea's high travel activity in May by launching targeted marketing campaigns and special promotions during public holidays and favorable weather periods
5. **Competitive Strategy for China:**
 - **Competitor Analysis:** Conduct an in-depth analysis of major competitors like Ctrip and Meituan. Explore strategies to navigate regulatory challenges and improve Trivago's visibility and market share in China
6. **Improve Conversion Optimization:**
 - **Conversion Rate Strategies:** Focus on enhancing the booking process, reducing unexpected costs, and providing competitive pricing to convert high click-out rates into actual bookings
7. **Increase Market Penetration in Southeast Asia:**
 - **Monsoon Season Strategies:** Develop strategies to counteract the low COR during the monsoon season, such as weather-related travel promotions and flexible booking options
8. **Monitor and Enhance Repeat Visitor Experience:**
 - **Engagement Programs:** Implement loyalty programs and personalized follow-ups for repeat visitors to convert their high engagement into higher booking rates

These recommendations aim to address specific insights from the data and drive strategic improvements in user engagement, conversion rates, and market penetration for Trivago

Thank You!!

For any feedback please reach out to abhi_07786@yahoo.in