Introduction

From recent financial reports from Expedia, foreign markets have been a large driver of growth. The YoY increases for international gross bookings and revenue outpaced the United States by double digit percentages.

With this business need in mind, we determined that Germany is a promising market for international growth, given its low saturation and high population.

Then, we developed a profile for users in Germany, based on lifestyle preferences and cultural interests, taking into account search frequency and city attributes of their destinations. We found that Germans, compared to Americans, are more interested in cities with rich cultural features (such as museums and architecture), and nature and outdoor activities (such as waterfall scenery or hiking).

With an understanding of these preferences, Expedia can optimize search algorithms, homepage destination suggestions, and third-party advertisements for city activities. With more relevant outreach and cross-sell opportunities, Expedia will drive user growth and conversions.

Why Germany?

Our analysis on the target market was two-pronged.

First, we investigated saturation, given by the proportion of unique users over population within a country, with the US, Expedia's main market, as the benchmark.

Because the data is limited to three domains (.com, .ca, .de), countries that predominantly use a different domain are downward biased because many of these users are not included in our dataset. Our results showed Germany has a low saturation rate, even compared to the downward-biased saturations of excluded countries. Combined with its high population, Germany presents a strong growth opportunity for Expedia.

Then, we developed a linear model using World Bank data on the literacy rate, internet access, GDP, and age, to see which variables impacted saturation most. While the adjusted R-squared value was 33%, population, GDP, and internet access were all statistically significant and negatively correlated with saturation, which tells us that these macro factors are important to understand saturation.

Based on this information, we concluded Germany represents a strong opportunity for Expedia's expansion because of its low saturation rate, high population, high internet adoption, and rapidly growing GDP.

How to grow in Germany?

Across all 50 destinations, we analyzed preferences for Germany and the US. We did this by adding the popularity scores for each category for these 50 destinations. This sum helps us understand what categories these top destinations are known for.

From here, we performed a 2-sample differences of means t-test between US and Germany to determine which categories were most significantly different for the two countries. Grouping these important categories into broader umbrellas like nature, culture, and lifestyle showed us that in general, Germans are interested in cities known for culture while Americans care more about lifestyle choices like luxury and budget.

In this graph, we can see this trend - on the top, you can see that Germany's top destinations were rated higher for cultural activities, like archaeology or history, across 14/15 categories. On the bottom, you can see that the US's top destinations scored higher for lifestyle across all 4 categories.

Across all top 50 destinations for Americans and Germans, we looked at the top activities most important to each country. We then corresponded the activity to the city with the highest popular score to show, for example, where an American or German would travel for nightclubs or business. The illustration also affirms that Germans tend to prioritize cultural activities over lifestyle ones. We can use this information to specifically market homepage advertisements to a user based on their country and choice of destination.

We visualized a few of these insights on our Sankey Chart. For example, New York serves two different purposes for American and German users. While both Germans and Americans go to New York for business, Americans also enjoy New York for its musicals. Meanwhile, Germans are more likely to go to Amsterdam for their musicals.

Conclusion

Our final recommendation to Expedia is to optimize marketing and advertising efforts within Germany using these distinct preferences. For example, the homepage should suggest locations known for nature or cultural activities to immediately capture attention of new users. Search results should prioritize hotels and activities with convenient access to museums or hikes. By partnering with third parties that specialize in services like ecotourism, Expedia can improve conversion rates and increase ad revenue.