## **Dumbledore's Army**

What is the factor that differentiates accommodation bookings for North America to North America business accommodations and North America to other continents business accommodations? Intuitively, as Expedia is a USA-based website and the travel agency market is more extensive in North America than in other continents, business travelers (hence accommodations) are more from North America to North America than from North America to other continents. To validate this intuition, we visualized the data in terms of traffic flow from one continent to another. Was our intuition, right? Yes! We now have a business scope for Expedia to exploit business traveler segments.

### **Exploitable Quadrants**

Based on the above analysis, we chose 4 quadrants to classify the bookings – North America to South America, North America to Asia, North America to Europe and Domestic (North America to North America). Within these quadrants, we explored the accommodation booking behavior using the following parameters: Business v/s Leisure travelers, Last minute v/s pre-booking, Computer or mobile, Price Sensitivity, Brand Sensitivity

## **Customer Behavior**

Price-sensitive customers generally validate all competitors pricing before booking. So, what channels would they use and would they book through a computer or a smartphone? Because the market for travel agencies mobile apps is growing, a price sensitive customer would *first* check prices through a mobile app but *shift* to the computer for booking. So, our data indicates that the percentage of bookings through mobiles is only 20%. As such, there is no seasonal pattern for mobile bookings. However, in our dataset of 2015 bookings, the rate of change of adoption to mobile *increases* significantly every month.

# **Comparisons for Expedia markets**

% of bookings for NA-SA -> Business -> not price sensitive -> book through mobile

Is greater than

% of booking for NA-SA -> Business ->

sensitive -> book through mobile

% of booking for NA-NA -> Business -> not price sensitive -> book through mobile

Is lesser than

%of booking for NA-NA -> Business -> pricesensitive -> book through mobile

This pattern was highly consistent for all travel segments accommodations. Additionally, business travelers who book locally are price-sensitive and they book through mobile whereas in other continent, non-price sensitive people book through mobile. This is because of the different business models in North America and other continents. In North America, business travelers who book through mobile tend to be price-sensitive when compared to other continents.

#### **Actionable Recommendations**

- 1. To encourage mobile bookings for non-price sensitive users from North America to other continents, Expedia could potentially provide:
  - a. Package deals which involve prop\_is\_branded=1 and distance\_band = VC
  - b. From research of external data (US Travel Association and Europian Central Bank, there is a strong correlation between US travel Trends index and the USD to Euro currency exchange rate. Thus, Expedia could give recommendations on mobile based on currency fluctuations and display savings amounts.