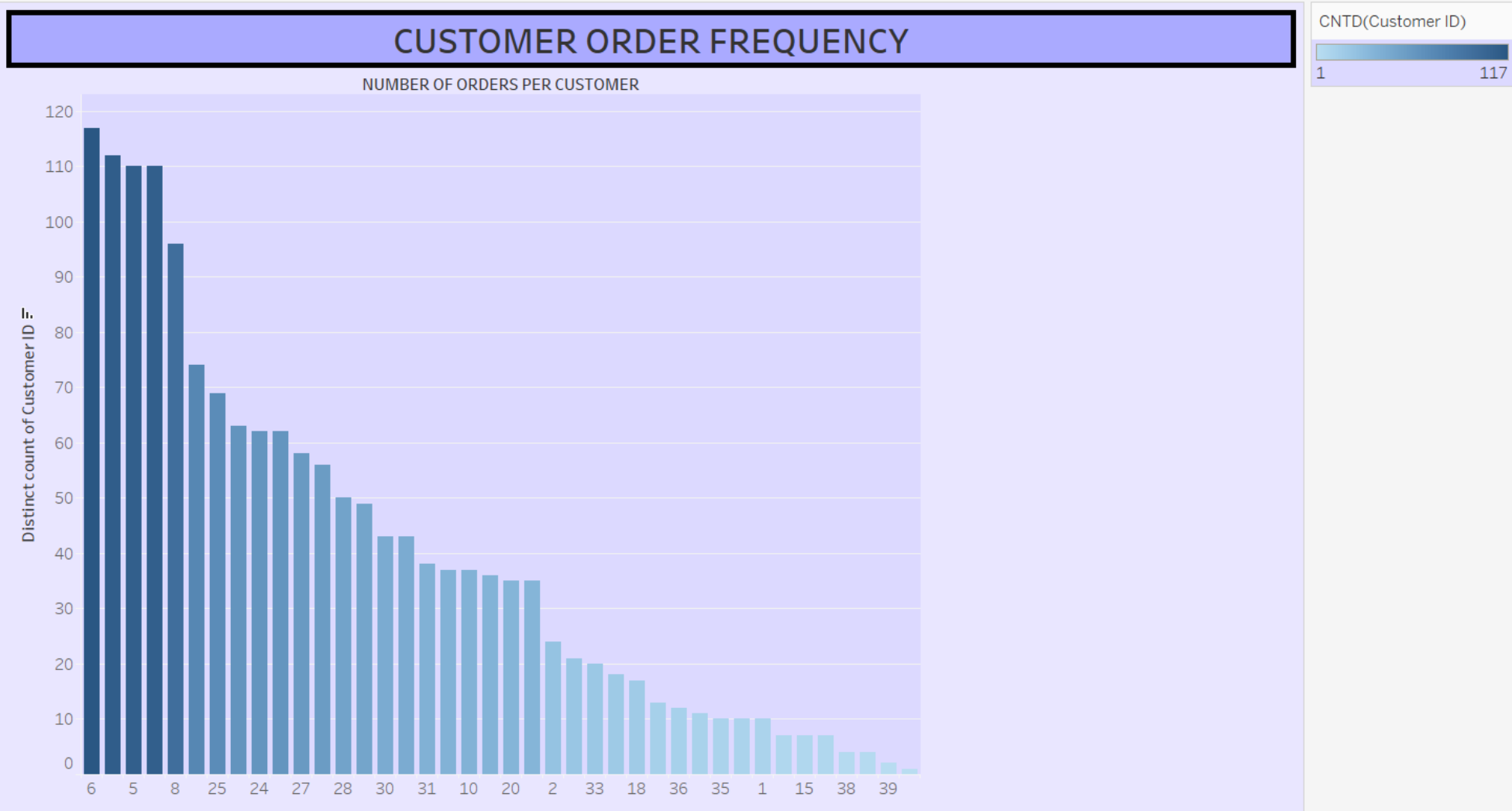
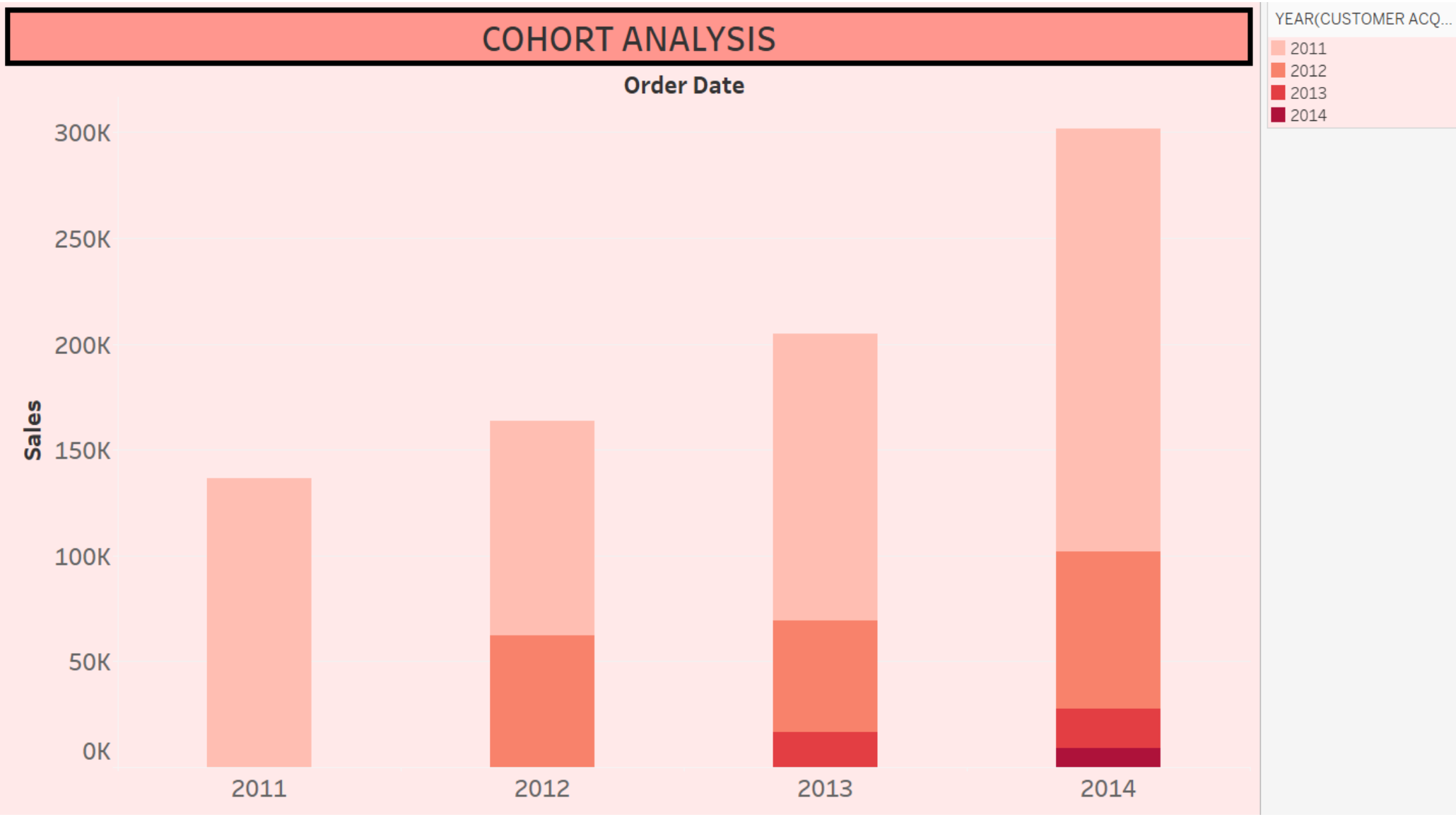
# DATA ANALYTICS ASSIGNMENT – 4

**Ridhi Jaisingh**

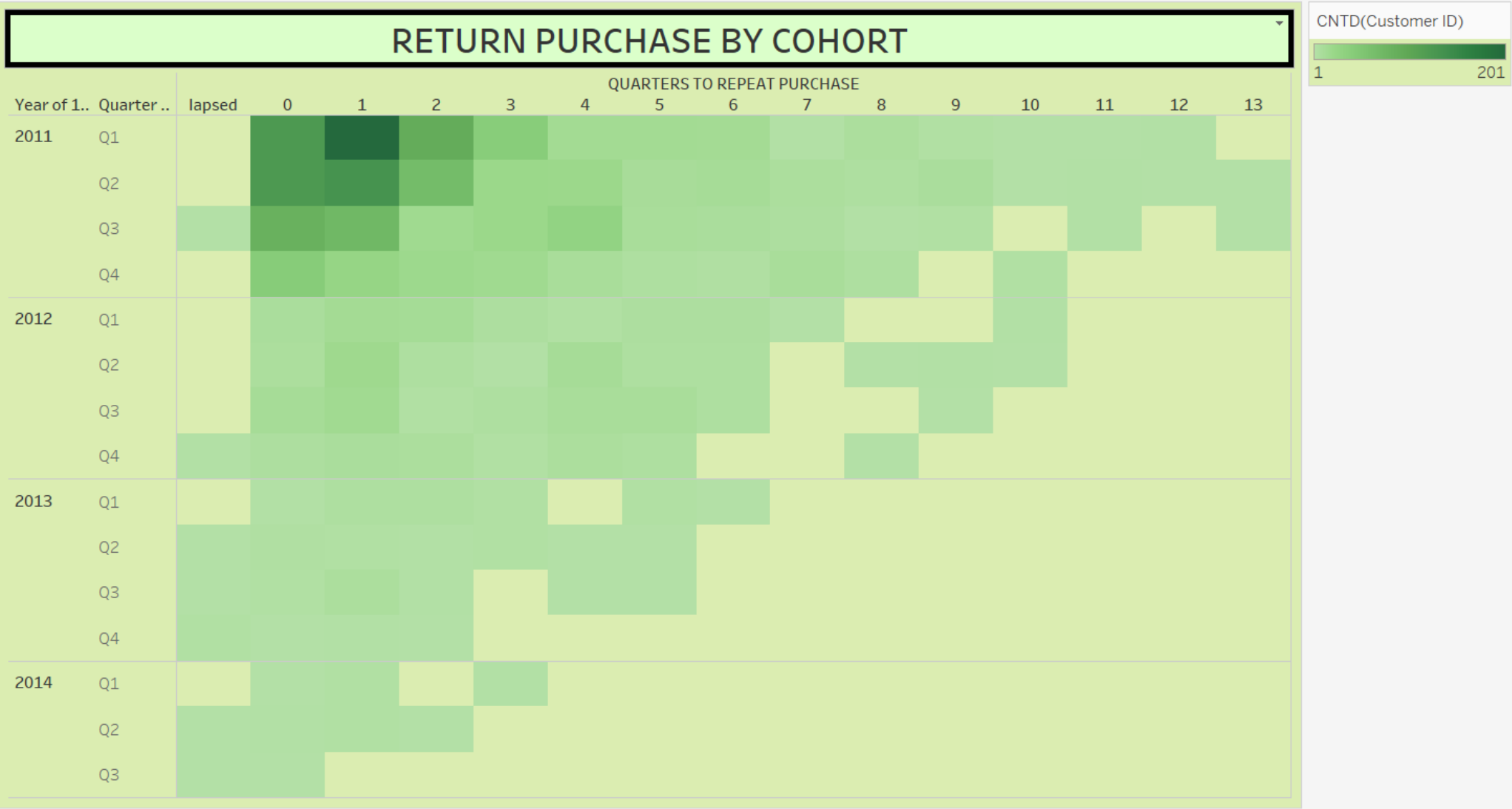
a. **CUSTOMER ORDER FREQUENCY –** To build this view, we must break up the number of customers by the number of orders made.



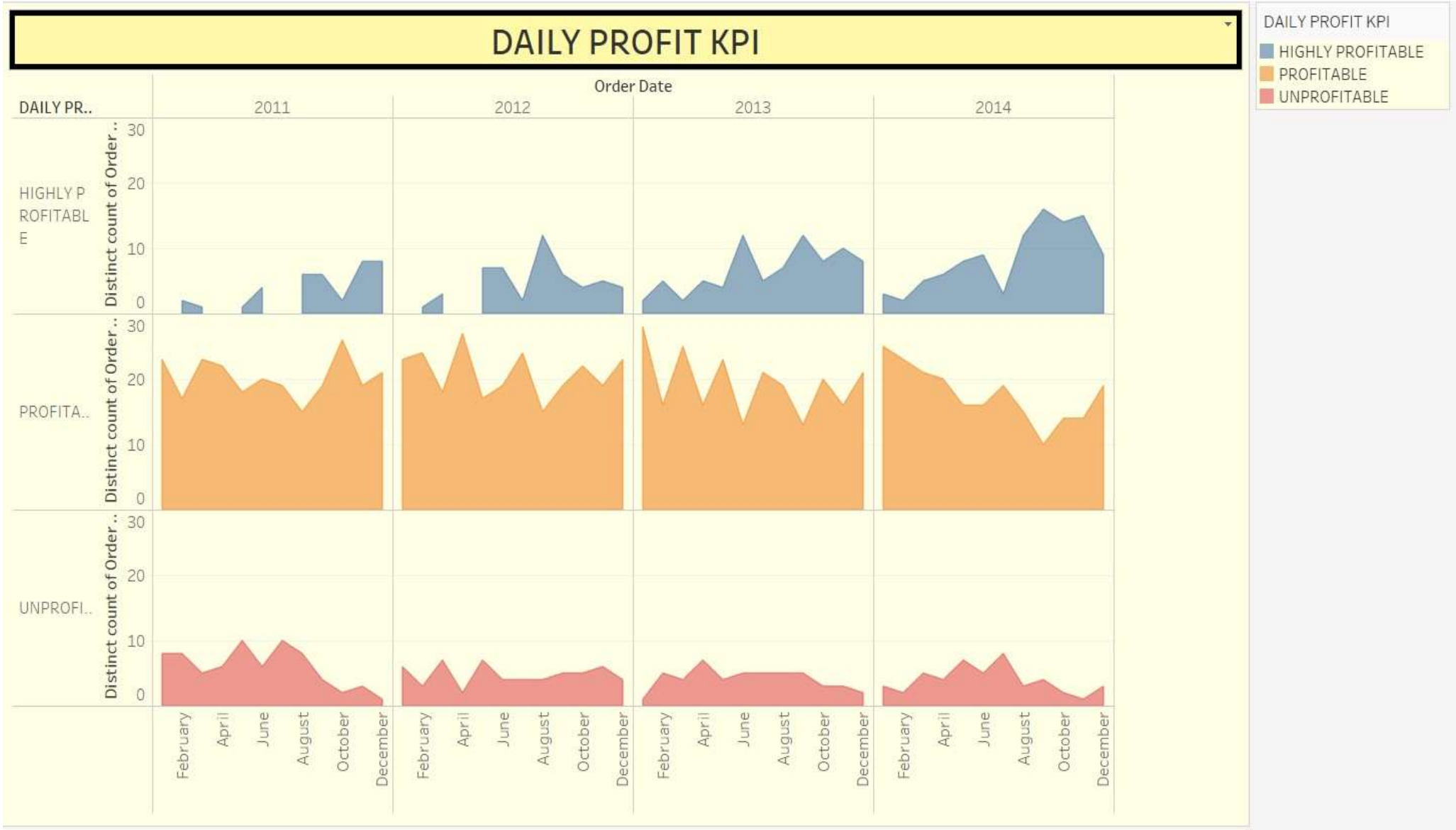
**b. COHORT ANALYSIS –** The view below groups customers by the year of their first purchase to compare sales contributions annually across cohorts.



c. **RETURN PURCHASE BY COHORT –** Acquiring new customers can be expensive, so we want to ensure that existing customers are making repeat purchases. We can use a FIXED Expression to find the first and second purchase dates per customer, and derive the number of quarters to make a repeat purchase from this.



**d. DAILY PROFIT KPI –** We would probably want to know the number of profitable days achieved each month or year, especially if we were curious about seasonal effects. The following view shows how LOD Expressions allow us to easily create bins on aggregated data such as profit per day, while the underlying data is recorded at a transactional level.



**e. PERCENT OF TOTAL –** If we colour by the contribution percentage, we immediately see that the US has the highest contribution to the global sales revenue. However, we may want to focus on a market like the EU that, in absolute terms, has a small contribution. Without LOD Expressions, filtering on a market would cause the percent of total to recalculate, displaying each country's contribution to its market. With a simple LOD Expression, we can filter on a market, and still measure the global contribution.