

Cohort Analysis

Introduction	Cohort - User Retention Rate	Cohort - Average Quantity Sold and Sal..	Results
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COHORT ANALYSIS OF A UK-BASED ONLINE RETAIL STORE

About the project

The overall purpose of this project is to get better understanding of customer behaviours with cohort analysis : examining purchasing patterns of customers, changes in purchase quantity and sales throughout the time.

About the dataset

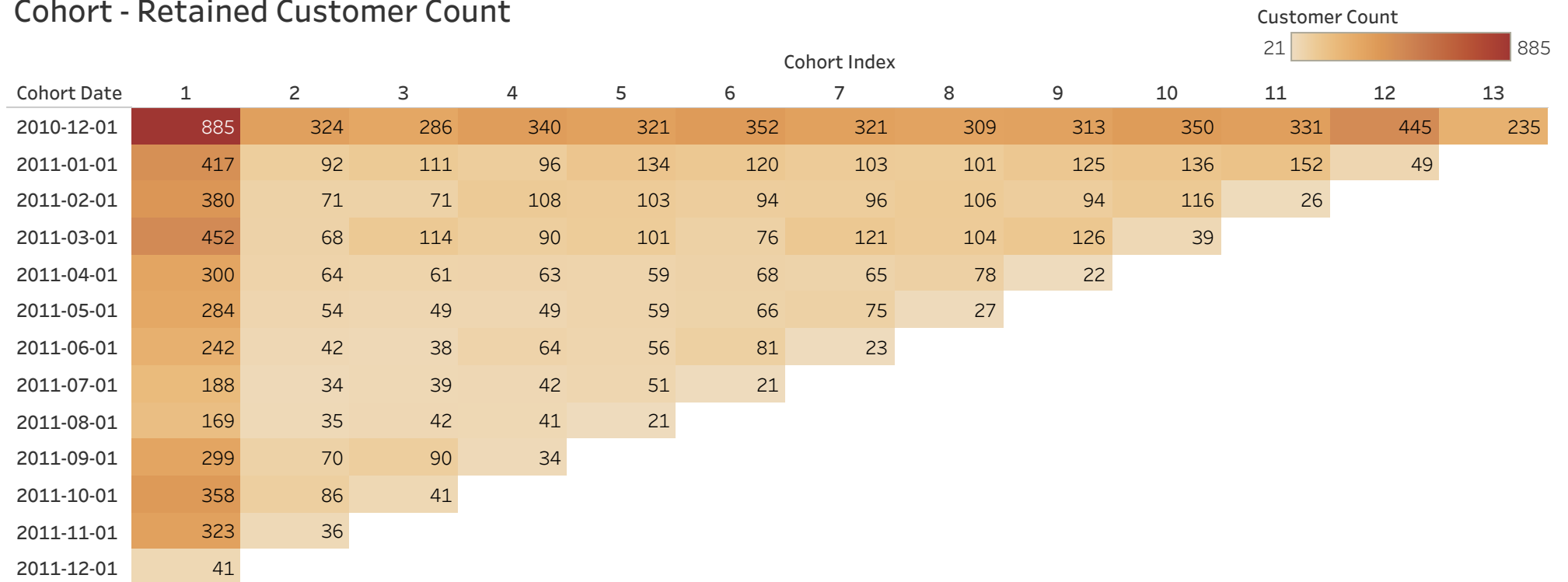
Dataset collected from UCI Machine Learning Repository: Online Retail Data Set, a transnational data set which contains all the transactions occurring between 01/12/2010 and 09/12/2011 for a UK-based and registered non-store online retail that sells unique all-occasion gifts.



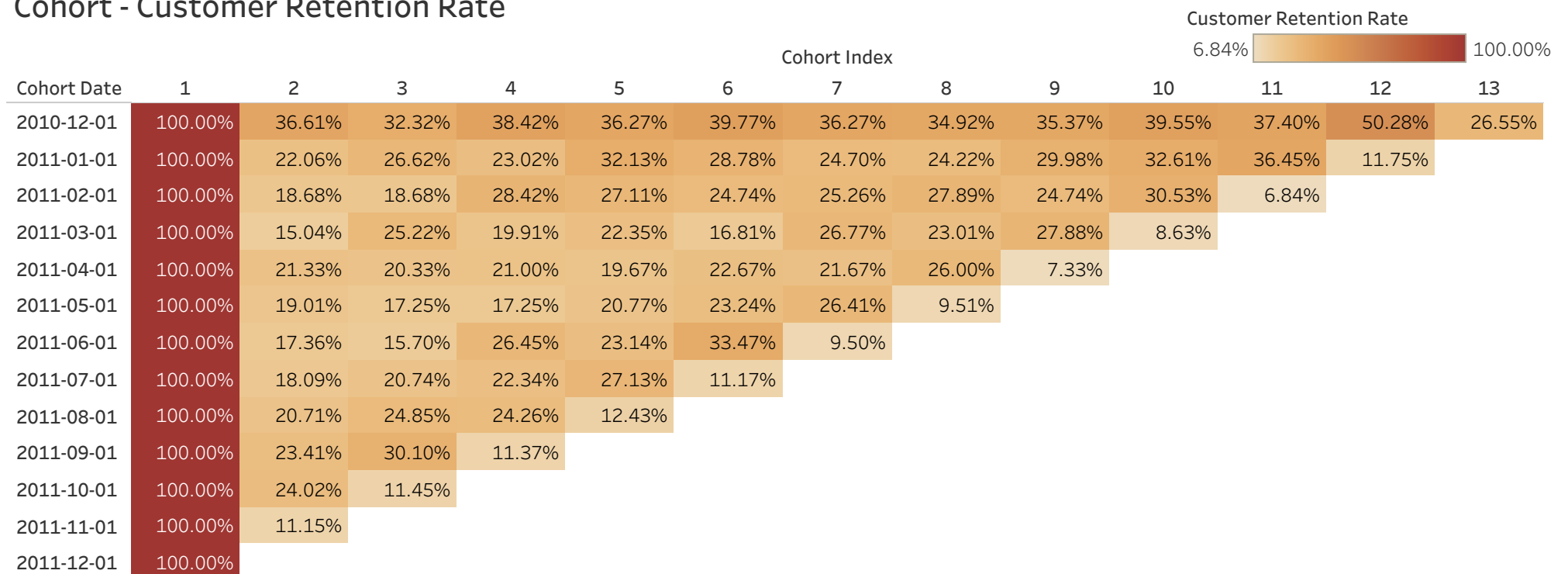
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Cohort - Retained Customer Count



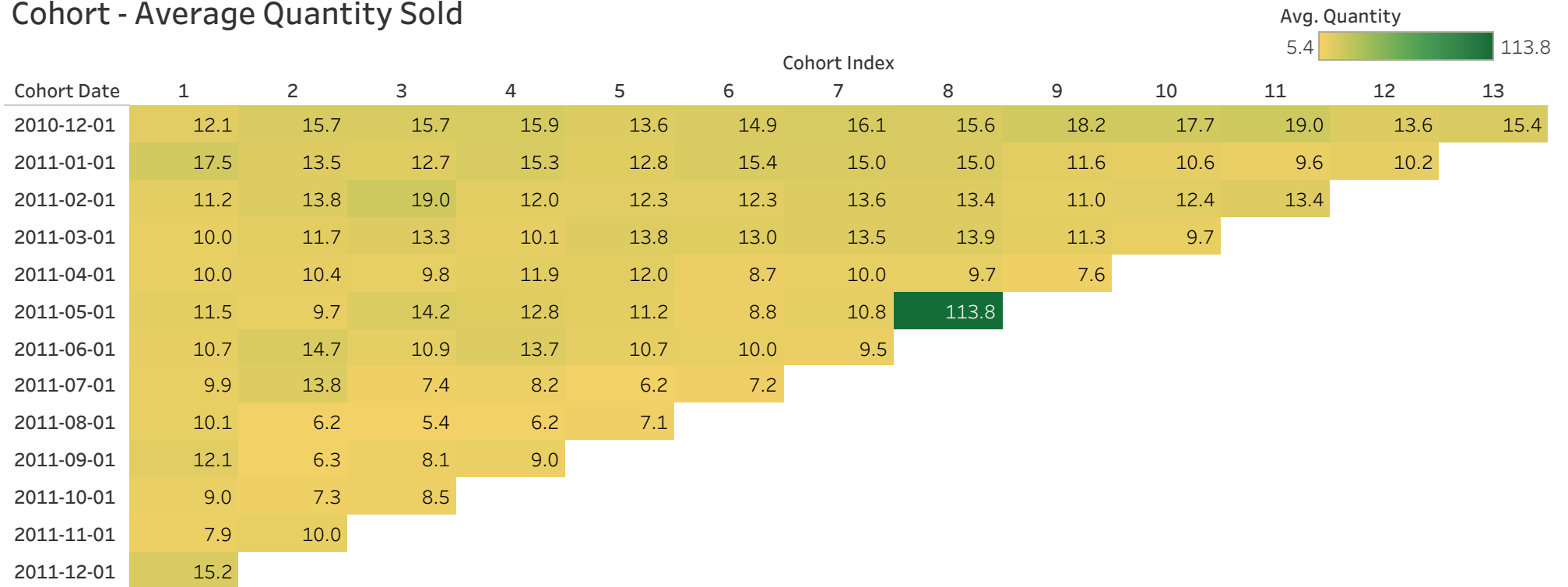
Cohort - Customer Retention Rate



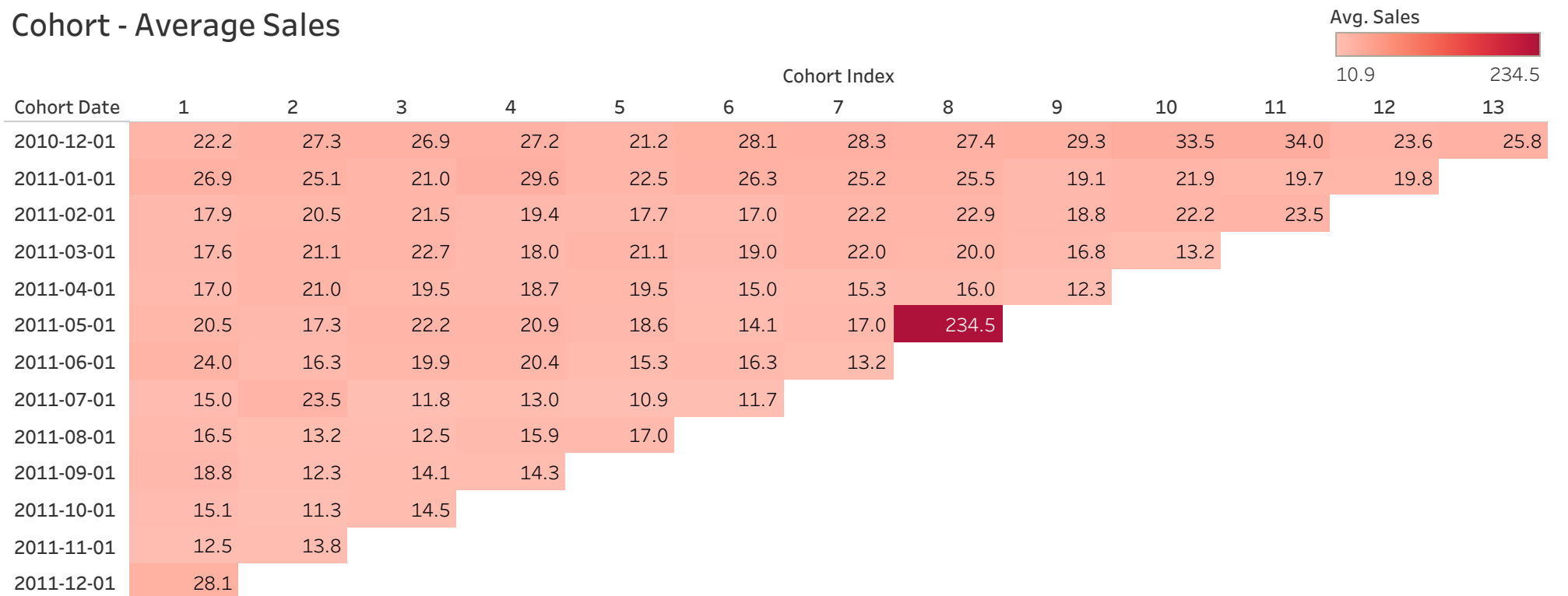
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Cohort - Average Quantity Sold



Cohort - Average Sales



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COHORT ANALYSIS - RESULTS

- Generally, retention rate dropped as times passed by. However, we can observe that 50% of customers who made their first purchased on 12/2010 returns on 11/2011. We can look for any campaigns or seasonal activities that led to this level of retention.
- It can be seen that the average quantity sold during recent cohort dates was facing a decline except the one on 05/2011 in which a customer purchased over 80K quantity for one specific product. Overall, this decline trend is a good insight to investigate the reasons behind and address it.

