RFM Analysis

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Objective

Contributing to Determine Marketing Strategies by Segmenting E-Commerce Customers

Dataset Story

- The dataset, called “Online Retail II” contains sales data of an online store in UK between 01/12/2009 and 09/12/2011.
- There are souvenirs in the product catalog of company.
- It is known that most of its customers are wholesalers.
- The dataset is imported from the sheet called “Year 2010-2011” in ***https://archive.ics.uci.edu/ml/datasets/Online+Retail+II***

Variables

Invoice : *Invoice number. The unique number of each operation. If this value starts with "C", it means that the operation is cancelled.*

StockCode : *Product number. The unique number of each product.*

Description : *The name of products.*

Quantity : *The quantity of products. It shows that how many products is sold in invoice.*

InvoiceDate : *Invoice date and time.*

Price : *The price of products in £.*

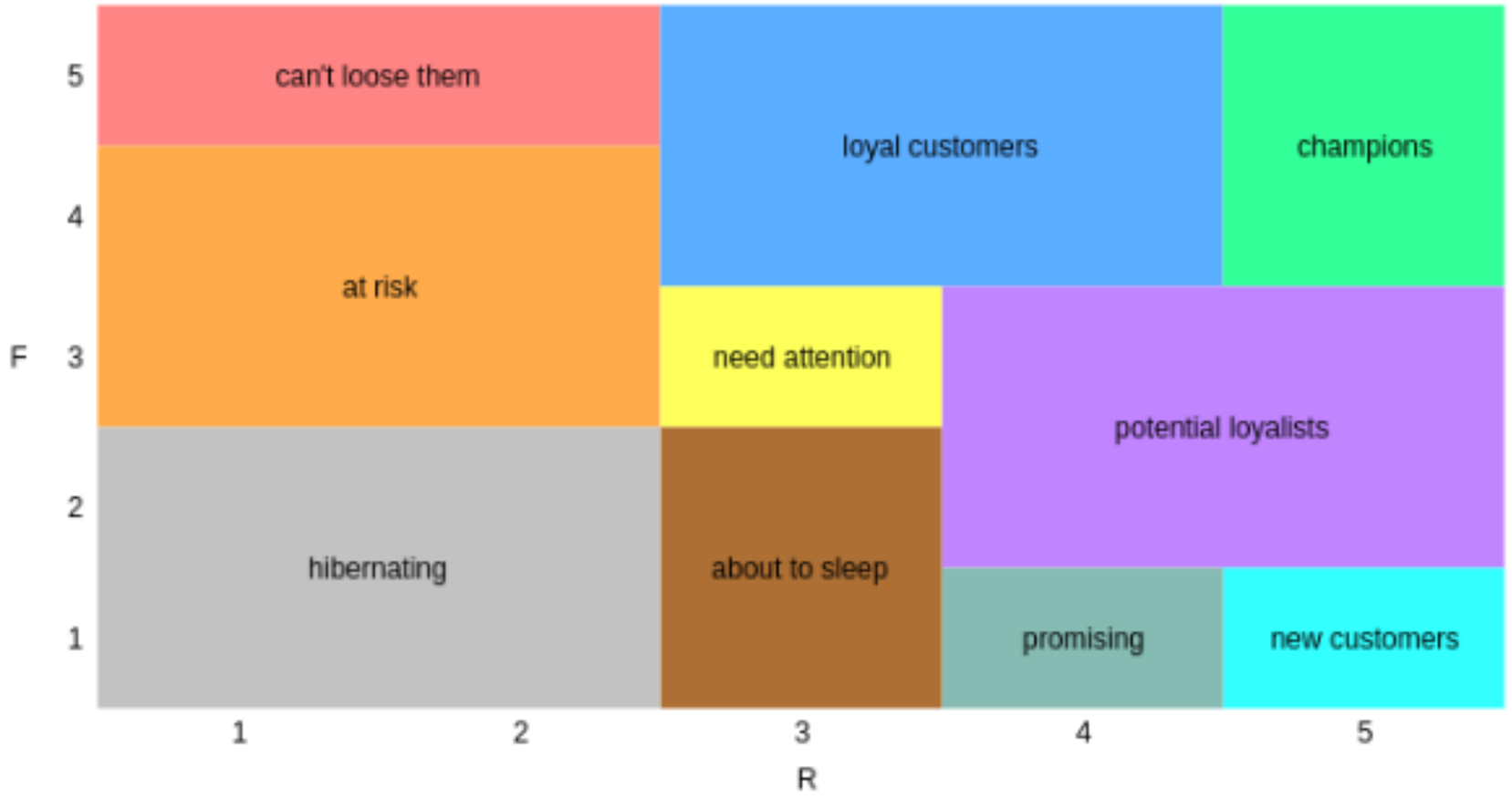
Customer ID : *The unique number of customers.*

Country : *Names of the countries that the customers live in.*

Number of Categorical Variables: 4
Number of Numerical Variables: 3
Number of Date Variables: 1

Observations: 541K

Customer Segments



According to Frequency and Recency Values

Report

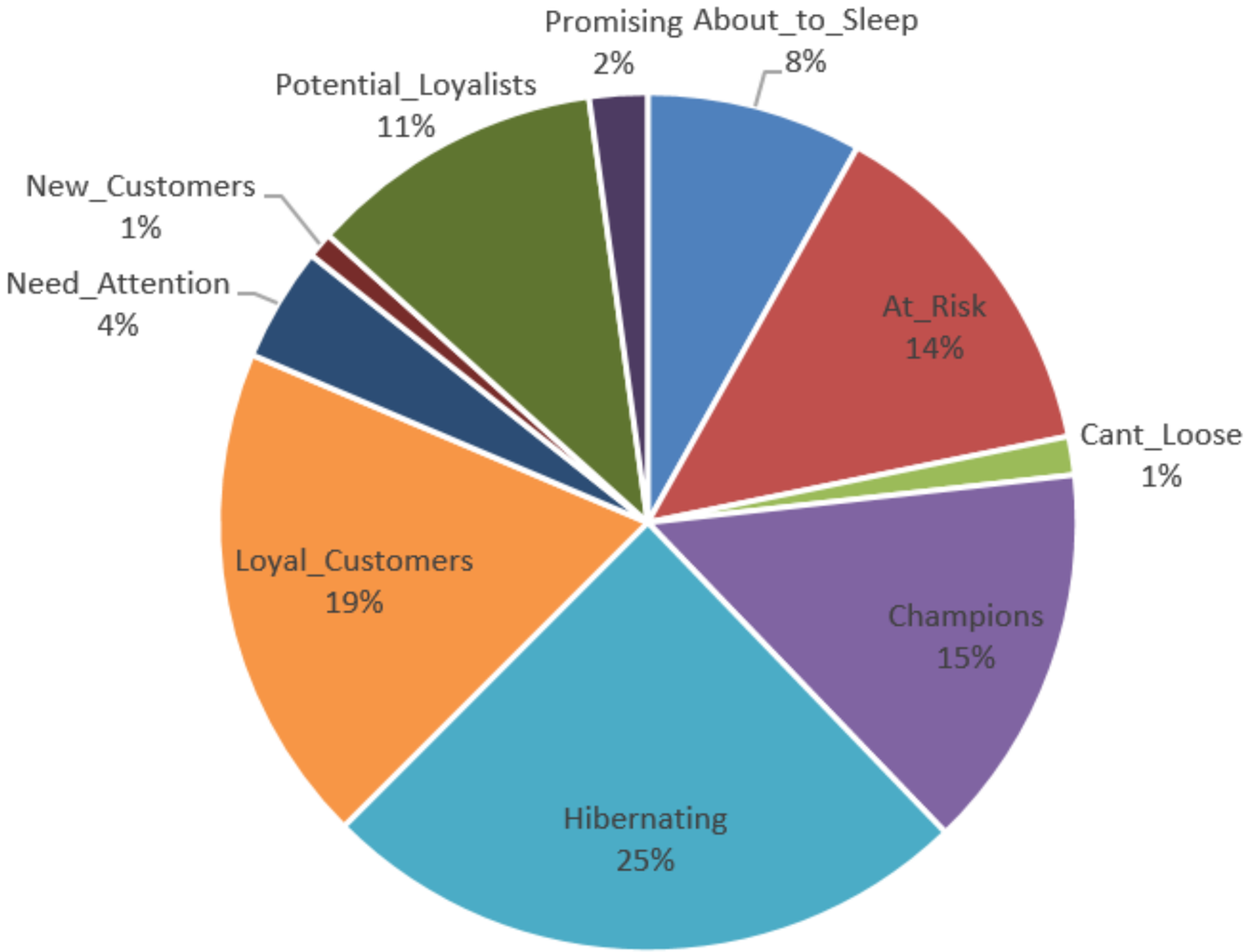
Segment	Recency_mean	Recency_count	Frequency_mean	Frequency_count	Monetary_mean	Monetary_count
About_to_Sleep	53,31	352	1,16	352	471,99	352
At_Risk	153,79	593	2,88	593	1084,54	593
Cant_Loose	132,97	63	8,38	63	2796,16	63
Champions	6,36	633	12,42	633	6857,96	633
Hibernating	217,61	1071	1,10	1071	488,64	1071
Loyal_Customers	33,61	819	6,48	819	2864,25	819
Need_Attention	52,43	187	2,33	187	897,63	187
New_Customers	7,43	42	1,00	42	388,21	42
Potential_Loyalists	17,40	484	2,01	484	1041,22	484
Promising	23,42	95	1,00	95	290,91	95

RECENCY → It gives information about how many days ago each customer made the last purchase (The lower one is ideal).

FREQUENCY → It gives each customer’s shopping frequency (The higher one is ideal).

MONETARY → It shows the expenditure made per customer (The higher one is ideal).

Distributions of Customers



Evaluation

LOYAL CUSTOMERS

The most crowded second customer population in dataset. For this reason, in order to increase the amount of expenditure of the relevant customer population, cross-selling practices can be developed specific to the product groups that they buy the most.

POTENTIAL LOYALIST

This population forms 11% of total customer population. For increasing the frequency, gift cards and extra discounts can be defined for these customers. This population also can be included in loyalty programs.

NEW CUSTOMERS

This population is the group that has the potential to increase our market share. Therefore, extra discounts can be defined for their next shopping. And also feedbacks about customer experience can be received after their first shopping.

Thank You

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