

SPROCKET CENTRAL

A One-Stop Solution
for Bike & Cycling
Accessories

Sales & Customer Segments Analysis

A Forage Project by Dharmendra Dudi

Explore more about the project on [GitHub](#)



Project Background

Sprocket Central Pty Ltd , a medium size bikes & cycling accessories organization, has approached Tony Smith (Partner) in KPMG's Lighthouse & Innovation Team.

Sprocket Central Pty Ltd is keen to learn more about KPMG's expertise in its Analytics, Information & Modelling team.

To achieve this, the client has provided KPMG with three datasets, including customer demographics, customer addresses, and transaction data. Through effective data analysis, valuable insights will be derived to drive Sprocket Central's marketing success.

The Task: As a data analyst in the KPMG's analytics team, provide the requested insights to Sprocket...



Overview

The Task: As a data analyst in the KPMG's analytics team, provide the requested insights to Sprocket Central marketing team to enhance target marketing.



Identified the data quality issues in the provided dataset and rectified the issues to prepare the data for analysis.

Analyzed the data to target high-value customers based on demographics and different attributes.

Developed a Tableau interactive dashboard to communicate findings with visuals.



Dataset Schema

transactions
transaction_id
product_id
customer_id
transaction_date
online_order
order_status
brand
product_line
product_class
product_size
list_price
standard_cost
product_first_sold_date

customerdemographic
customer_id
first_name
last_name
gender
past_3_years_bike_related_purchases
dob
job_title
job_industry_category
wealth_segment
deceased_indicator
default
owns_car
tenure

customeraddress
customer_id
address
postcode
state
country
property_valuation



Data Quality Assessment

Performed data quality assessment of the data in MS-excel to prepare the data for analysis.

Identified few issues in the three tables related to accuracy, completeness, consistency, and validity. Mainly lacking the completeness of the data.

Also removed some columns to ease the analysis as these are not to be used in the data analysis task.

🔗 Please view the [report](#) of the data quality assessment which was sent to the Sprocket team for feedback for more details.

Data Quality Metrics	Transactions	CustomerDemographic	CustomerAddress
Accuracy		DOB: inaccurate	
Completeness	Brand: missing All product details for some records missing Standard cost: missing Customer_ID: incomplete	DOB: missing Job Title: missing Customer_ID: incomplete	Customer_ID: incomplete
Consistency		Gender: inconsistency	States: inconsistency
Validity	Product first sold date: Wrong format		
Currency		Deceased Customers: filter out	
Relevancy		Default: no need	



Customer Segmentation (RFM Analysis)

The historical data of customer transactions is used to perform the RFM Analysis.

RFM stands for *Recency*, *Frequency* and *Monetary*. The customers are assigned different segments based on how recent they have made a purchase, in what frequency they are ordering, and what is the average order value.

There are a total of 10 segments in which customers have been divided. There are total **3493** customers.

Out of the total, **1378** customers fall into the *Recent Customers* segment meaning that, these customers have bought recently, but not often. These customers can be offered exclusive offers, early access to upcoming products which can tempt these customers to buy again.

There are **1333** customers in the *Potential Loyalist* segment. These are recent customers, spending a good amount and have bought more than once. These customers can be offered premium memberships with low cost, loyalty programs, etc.

Segment	Total Customers
About to Sleep	232
At Risk	1
Champions	167
Hibernating	54
Lost	22
Loyal	236
Need Attention	44
Potential Loyalist	1333
Promising	26
Recent Customers	1378



Customer Segmentation (RFM Analysis)

Only **22** customers fall in the *Lost* segment, which is a good indicator of business sustainability. However, there are few customers more which are on the risk of being Lost, these customers can be offered helpful resources and send personalized emails for renewals, or recommend in demand products.

There are **236** customers which are *regularly buying and spending significant amount*. They are very responsive to the promotions shared on emails. High value products can be recommended to these customers. Reviews can be asked on the bought products through emails too.

The ultimate goal is to increase the Loyal customers as much as possible to increase revenue. Each customer segment needs different kind of targeted marketing.

🔗 To know more about these segments and associated customers, please explore the [Tableau dashboard](#).

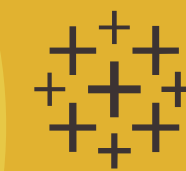
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Thanks you for you Time !



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