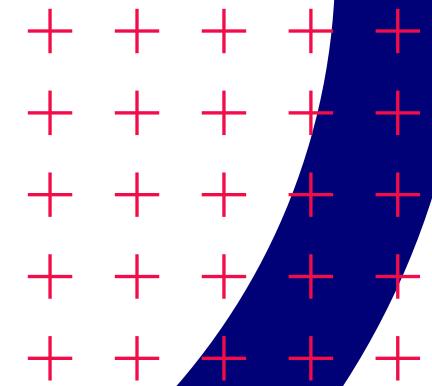


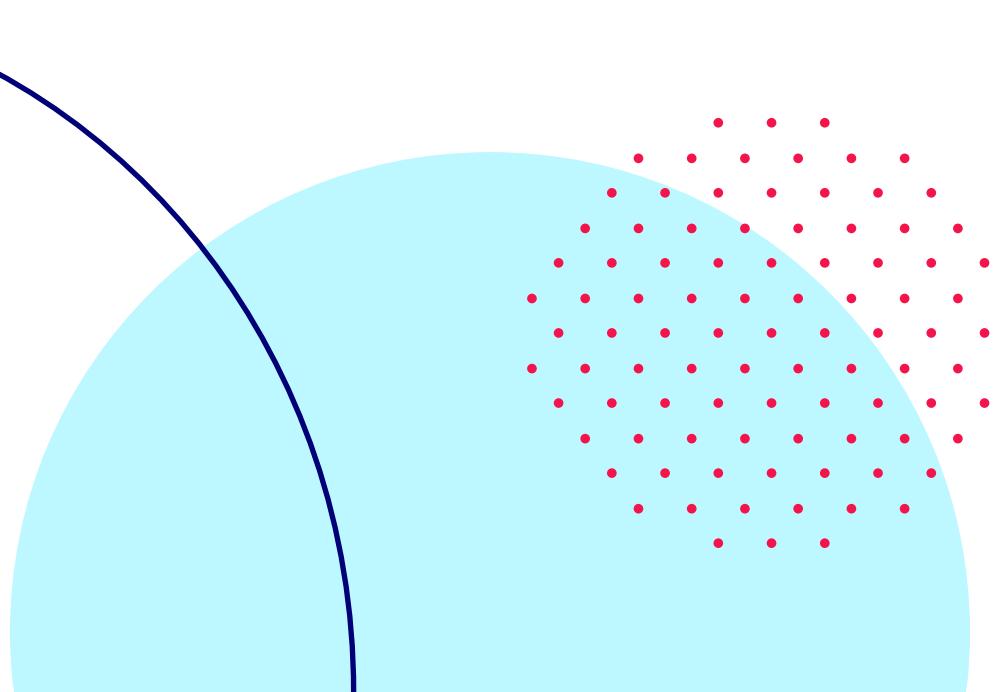
# **Creating Buyer Personas**

by Hannah Langen & Louisa Rudow



# Objective & Methods

The aim is to develop buyer personas by using existing customer data containing sociodemographic and buying behavior information.



**1**

K-Means Clustering

**2**

Descriptive Analysis  
of Clusters

**3**

Prioritization using  
RFM-Analysis (Top 3)

# Why Buyer Personas?

- Gives the target group a face, making them tangible.
- It's easier to find the right approach with a concrete idea of the customer in mind: **"What would my ideal customer do?"**
- Central role in developing use cases for marketing campaigns, product development and corporate strategy.



# Dataset

Store Customer Data

**Source:** Kaggle

**Timeframe:** 7/2012 - 6/2014

**Columns:** 29

**Entries:** 2.240

## Sociodemographics

- Age
- Education
- Marital Status
- Income
- Kid Home
- Teen Home
- ...

## Buying Behavior

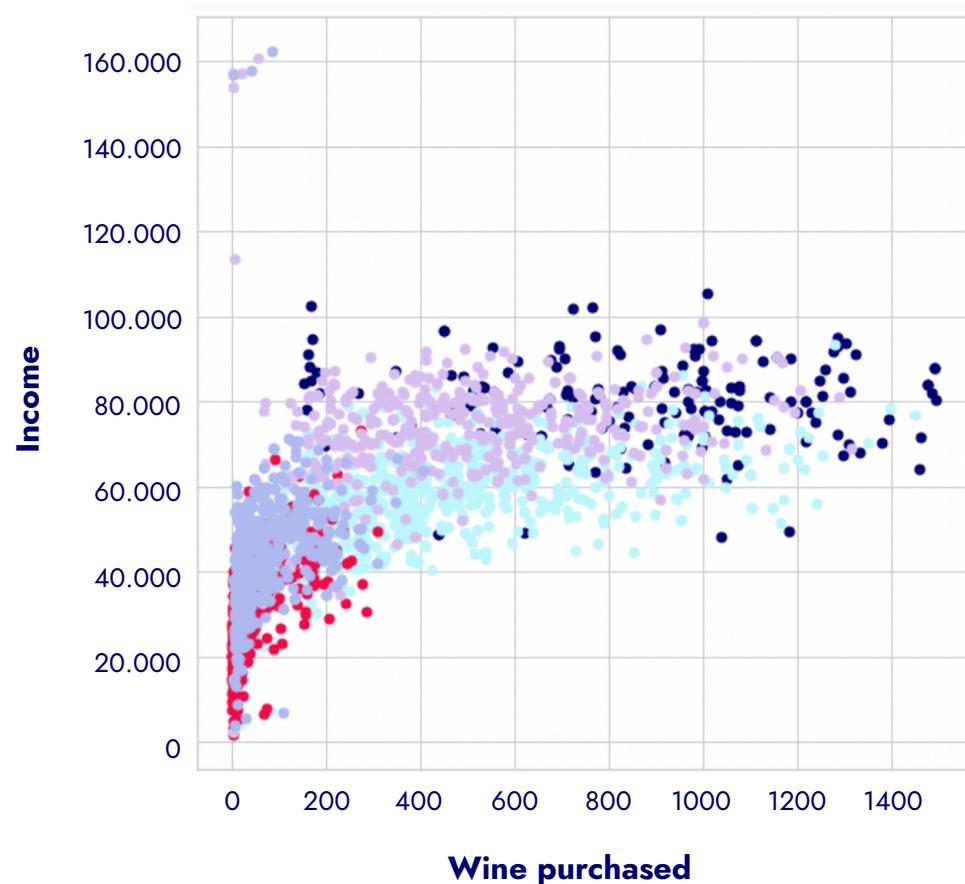
- Web Purchases,
- Catalog Purchases
- Store Purchases
- Deal Purchases
- Accepted Campaigns,
- Web Visits
- Complains
- ...

## Products purchased

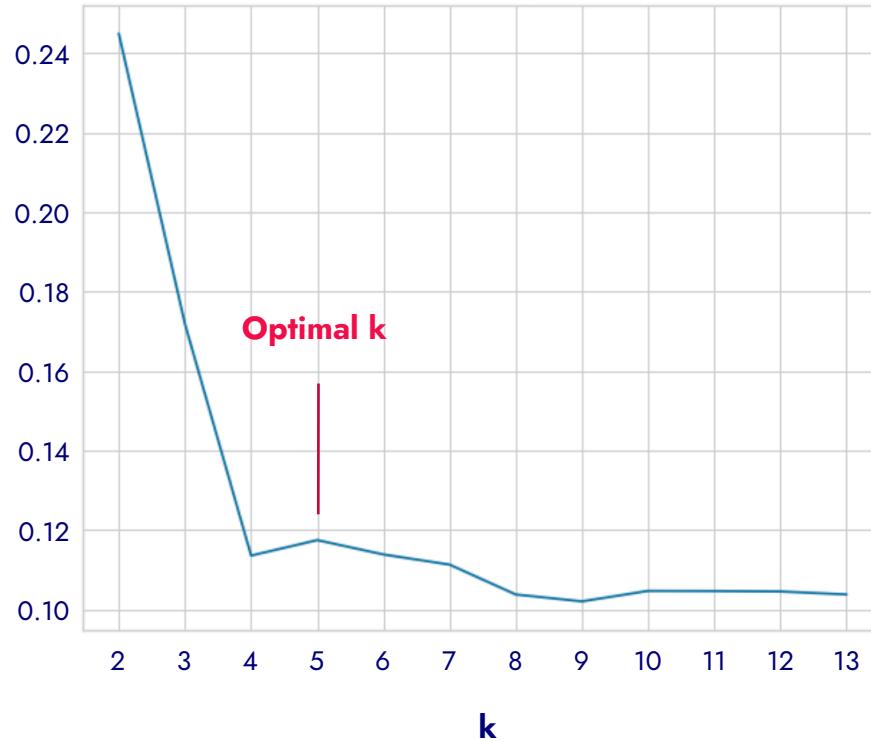
- Wine
- Fruits
- Sweets
- Meat
- Fish
- Gold Products

# K-Means Clustering

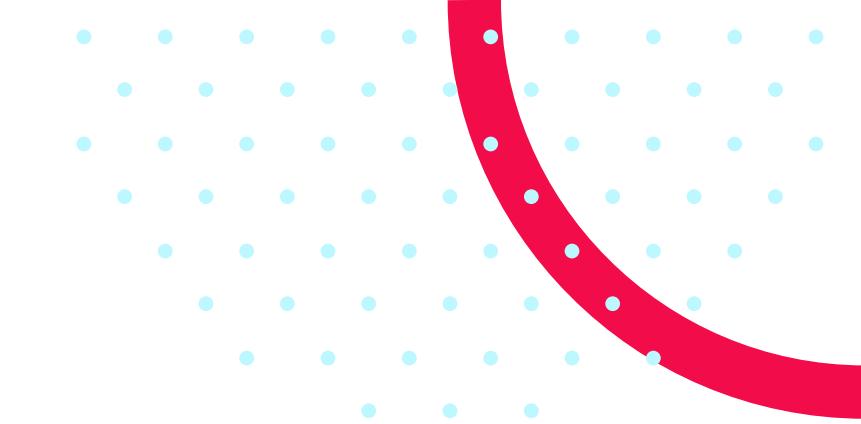
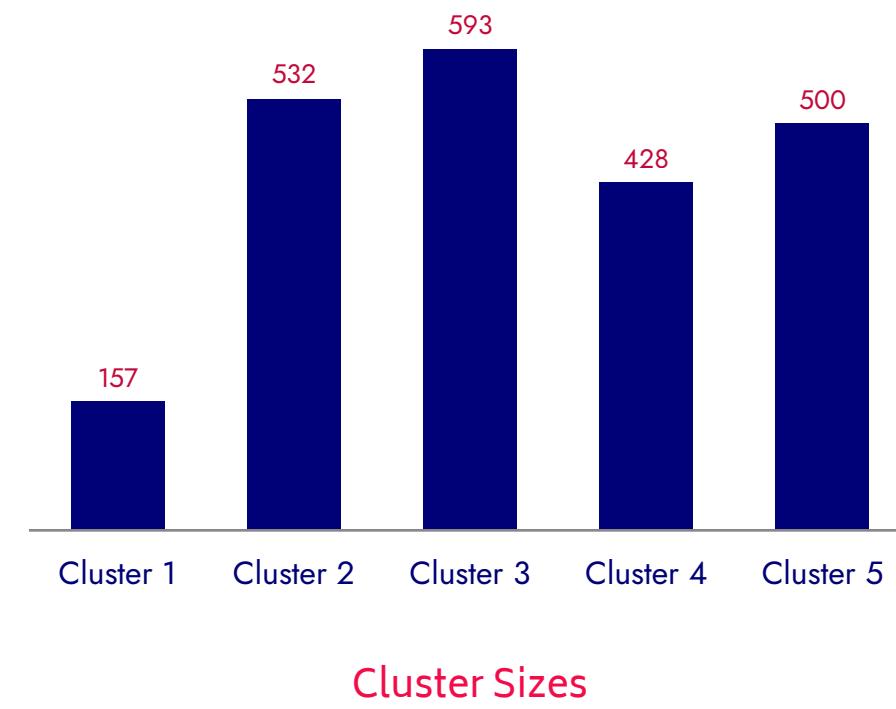
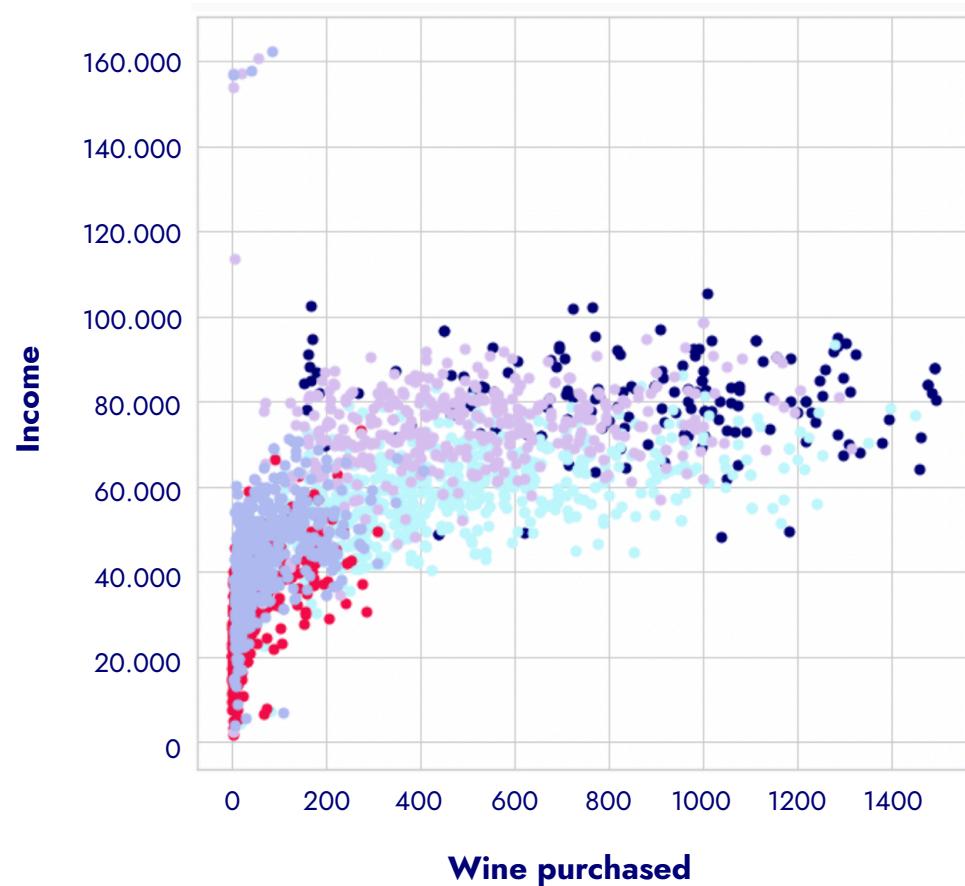
# Clustering with K-Means



Silhouette showing the optimal k

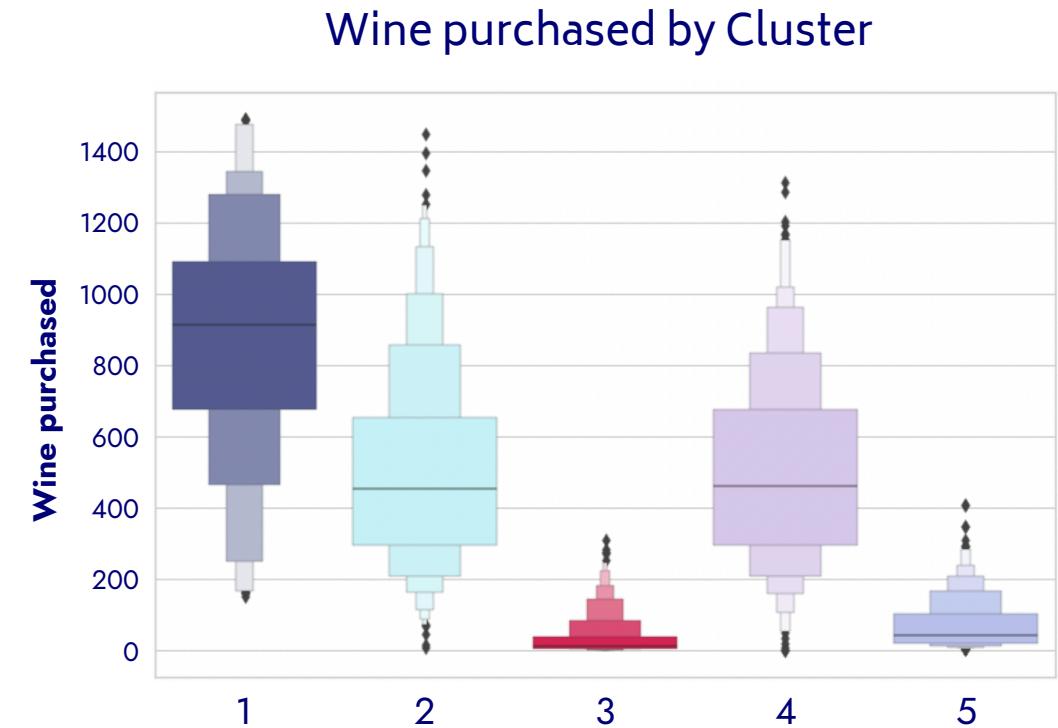
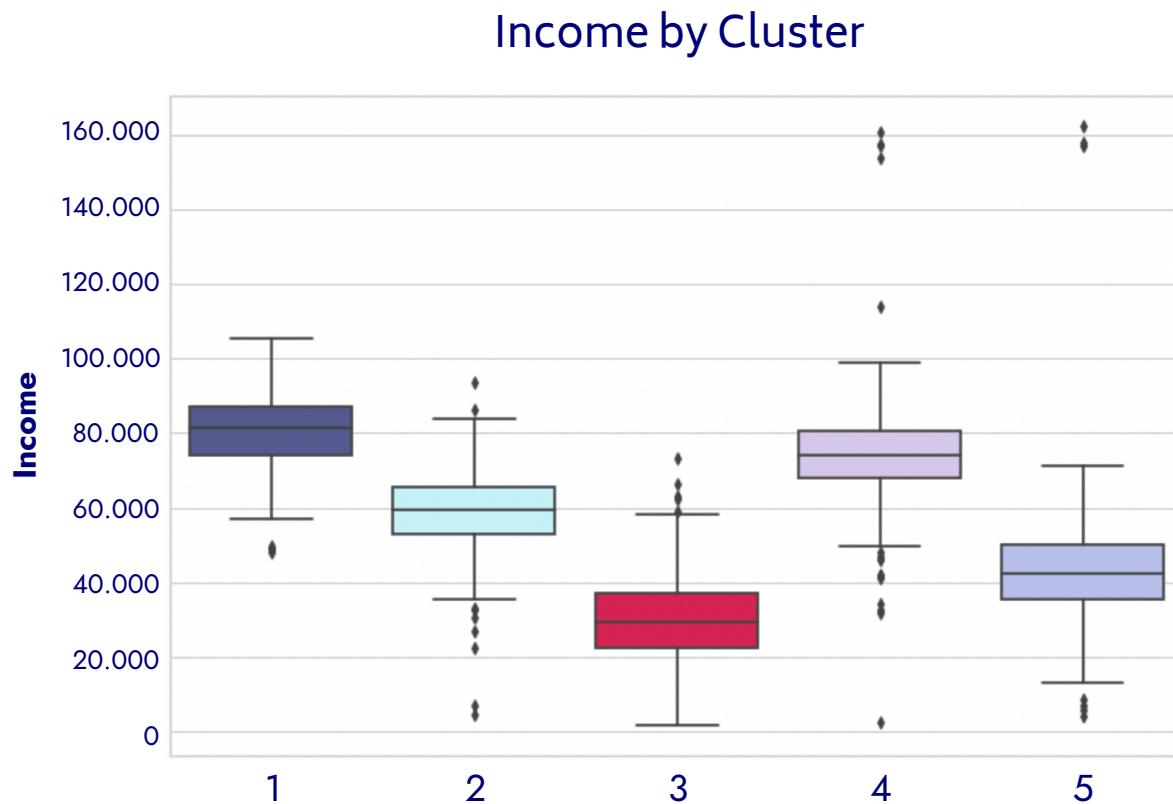


# Clustering with K-Means



# **Describing Clusters**

# Descriptive Analysis



# Developing Personas



**Susana**

- 42 years old
- single, no kids,
- highest income (\$81.000)
- likes splurging on high quality products (Wine, Meat)
- Responds to advertising campaigns



**Michael**

- 49 years old
- married with an older daughter
- medium-high income (\$60.000)
- enjoys especially wine
- On the hunt for online deals



**Jennifer**

- 35 years old
- married, 1 small kid
- relatively low income (\$30.000)
- searches online, but spends less than others



**Richard**

- 45 years old
- in relationship, no kids
- high income (\$75.000)
- buys high quality products in general
- prefers to shop in store



**Claire**

- 48 years old
- married with 2 kids
- medium income (\$43.000)
- Likes online deals

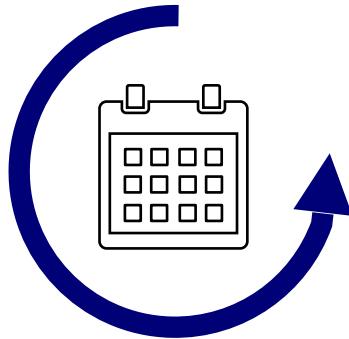
# **RFM Analysis**

# RFM Analysis



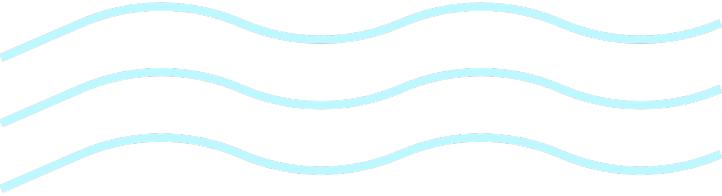
## Recency

The interval between the last purchase and today (Scale: 1 to 4).



## Frequency

The number of purchases between the customer's registration & today (Scale: 1 to 4).



## Monetary value

The sum of revenue within the customer's lifetime (Scale: 1 to 4).

**Best RFM-Score = 111**

# Top 3 Personas



Michael

**222**

RFM-Score

Mailing campaigns  
with wine offers



Richard

**411**

RFM-Score

Offer to participate  
in a live cooking  
event in store



Susana

**111**

RFM-Score

Premium Offers:  
Be the first to  
know about new or  
special products



# Thank you!

Github

[https://github.com/hannahlangen/Final\\_Project](https://github.com/hannahlangen/Final_Project)

Dataset

<https://www.kaggle.com/imakash3011/customer-personality-analysis>