

A top-down view of a wooden surface displaying an assortment of French bakery items. On the left, a long wooden tray holds several long baguettes and smaller rolls. To the right, a wicker basket is filled with golden-brown croissants. In the foreground, there are more rolls, some topped with seeds, and a small wooden box containing more bread. The background shows a green and white striped cloth.

French bakery sales (2021-2022)

Personal data analysis project

MySQL + Tableau + Python

1. Description

The dataset contains major information regarding sales of various types of pastry of one French bakery shop, including date, time, product name, quantity, price per unit;

2. Objectives

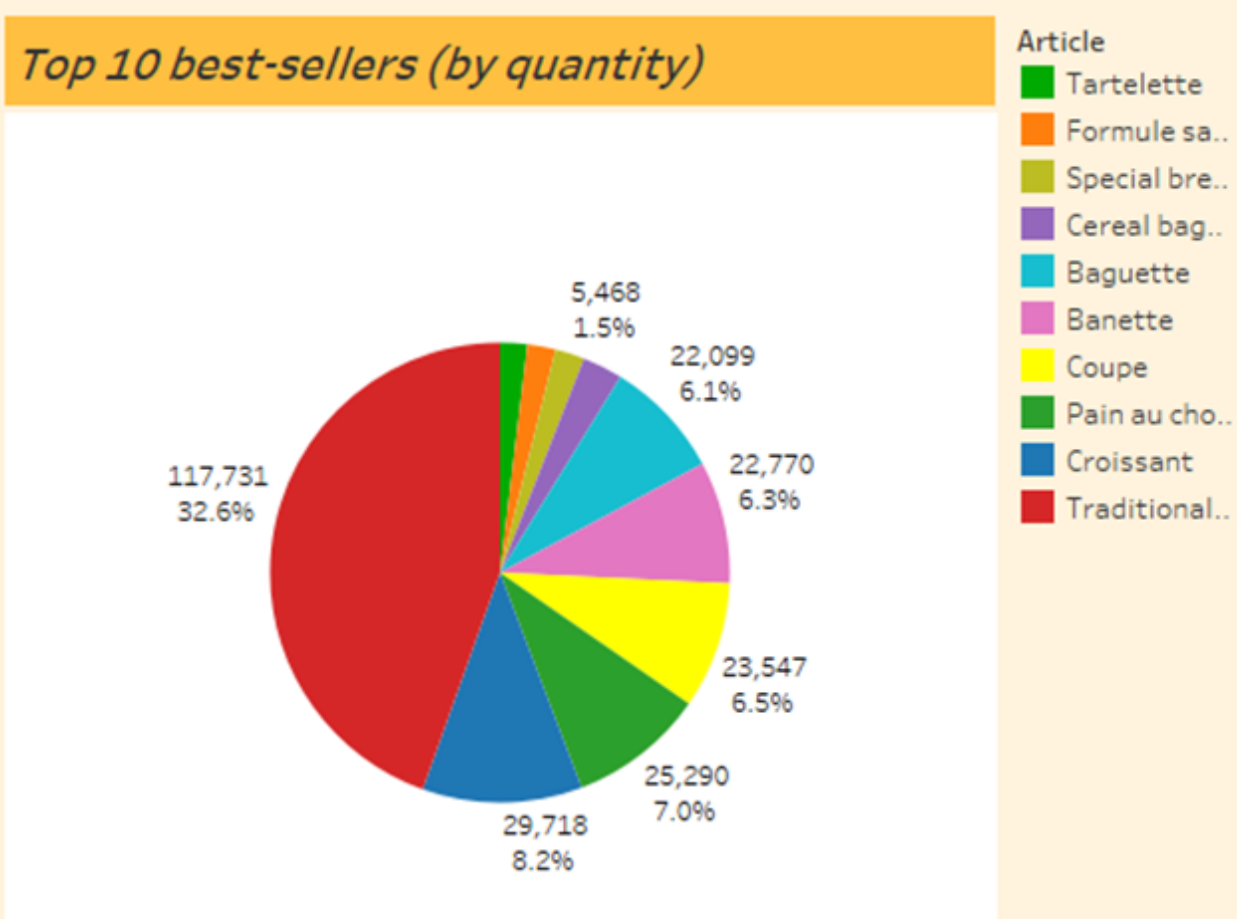
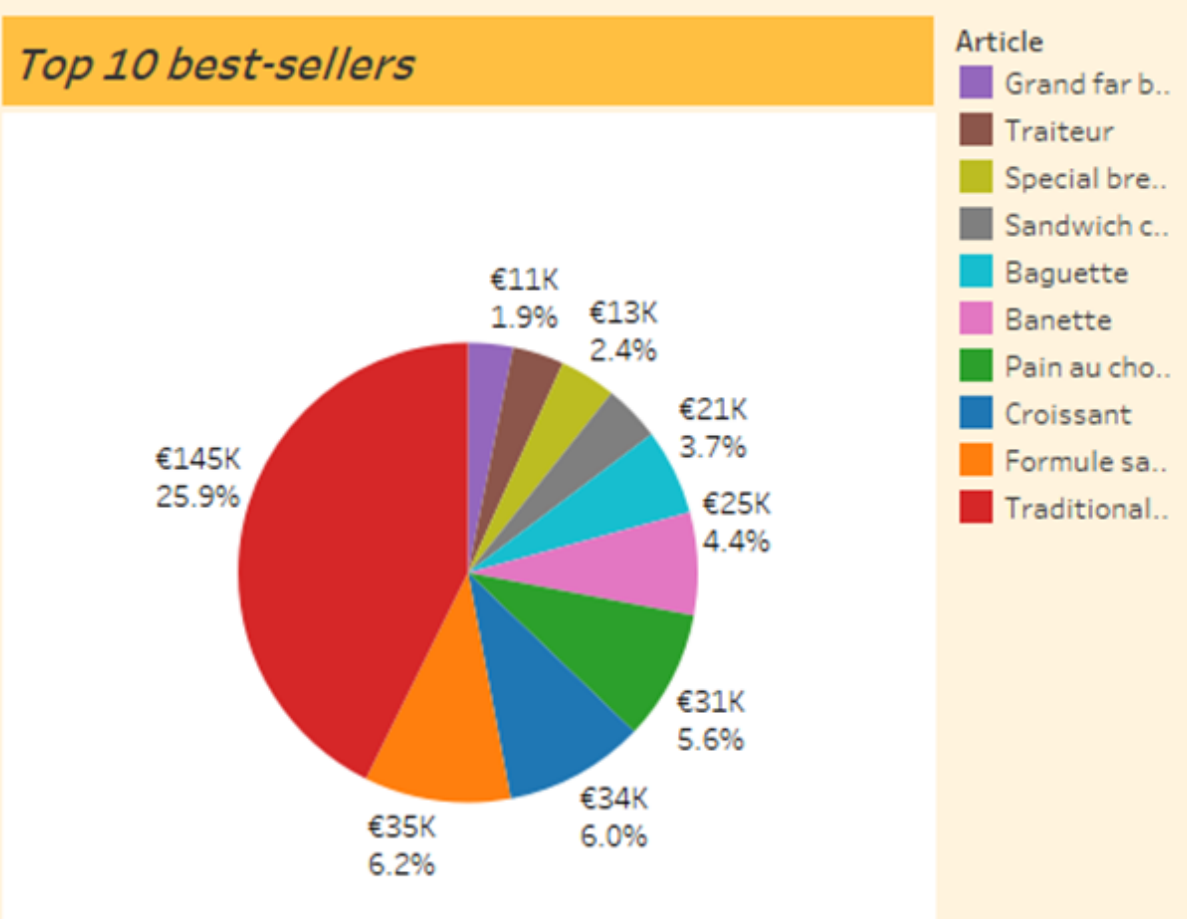
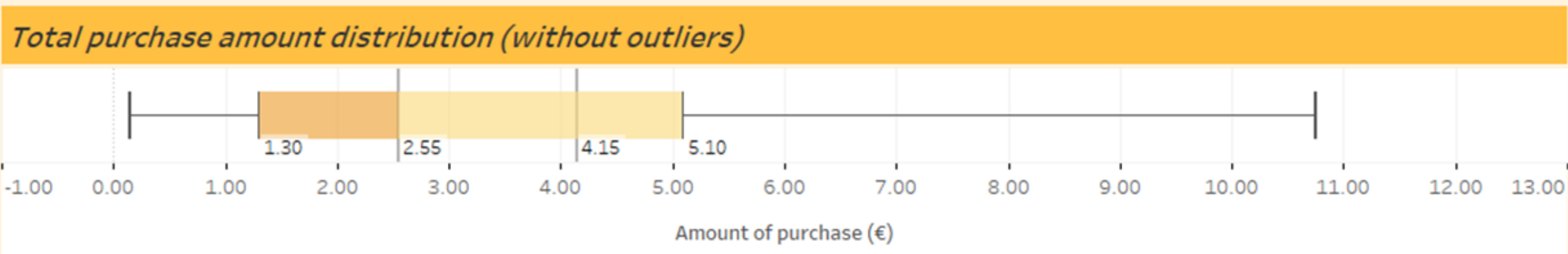
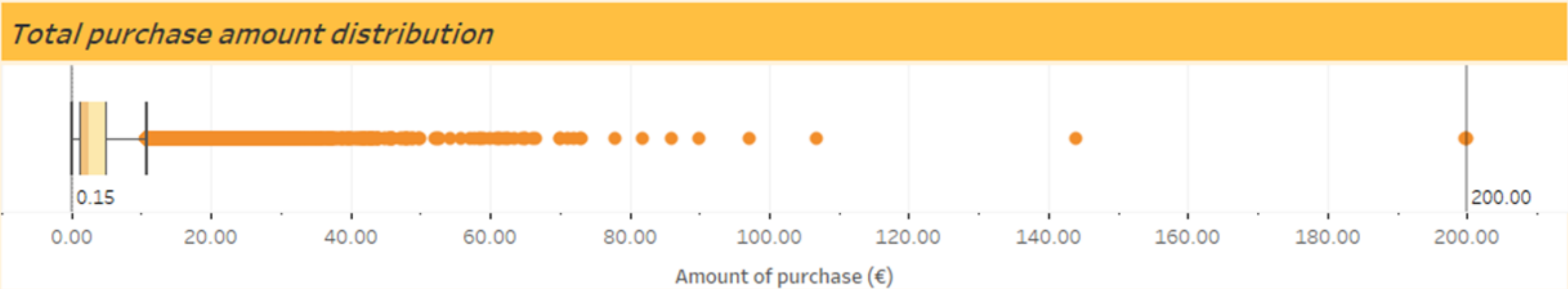
1. ***Upload*** the raw data on **MySQL** server using **Python**;^{*}
2. Perform data ***normalisation***, quantify **additional information**, if necessary;^{**}
3. ***Visualise*** the data using **Tableau**.

^{*}Python script for uploading raw data on MySQL server;

^{**}MySQL data processing script

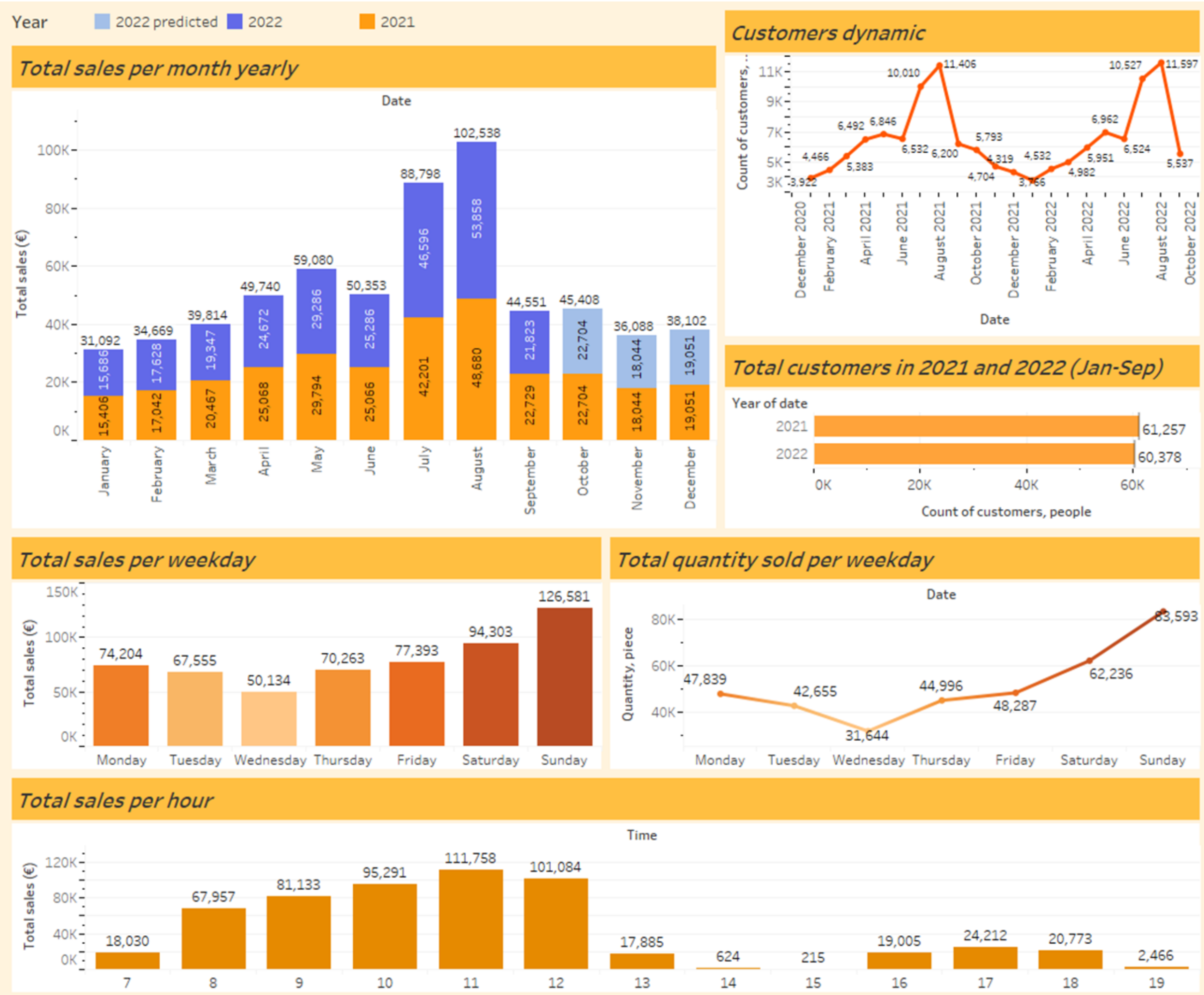
General information

Clear income	=	Total income	+	Total refund		Total customers		Total refunds
€560,432.95		€563,612.75		-€3,179.80		135,841 people		622 people



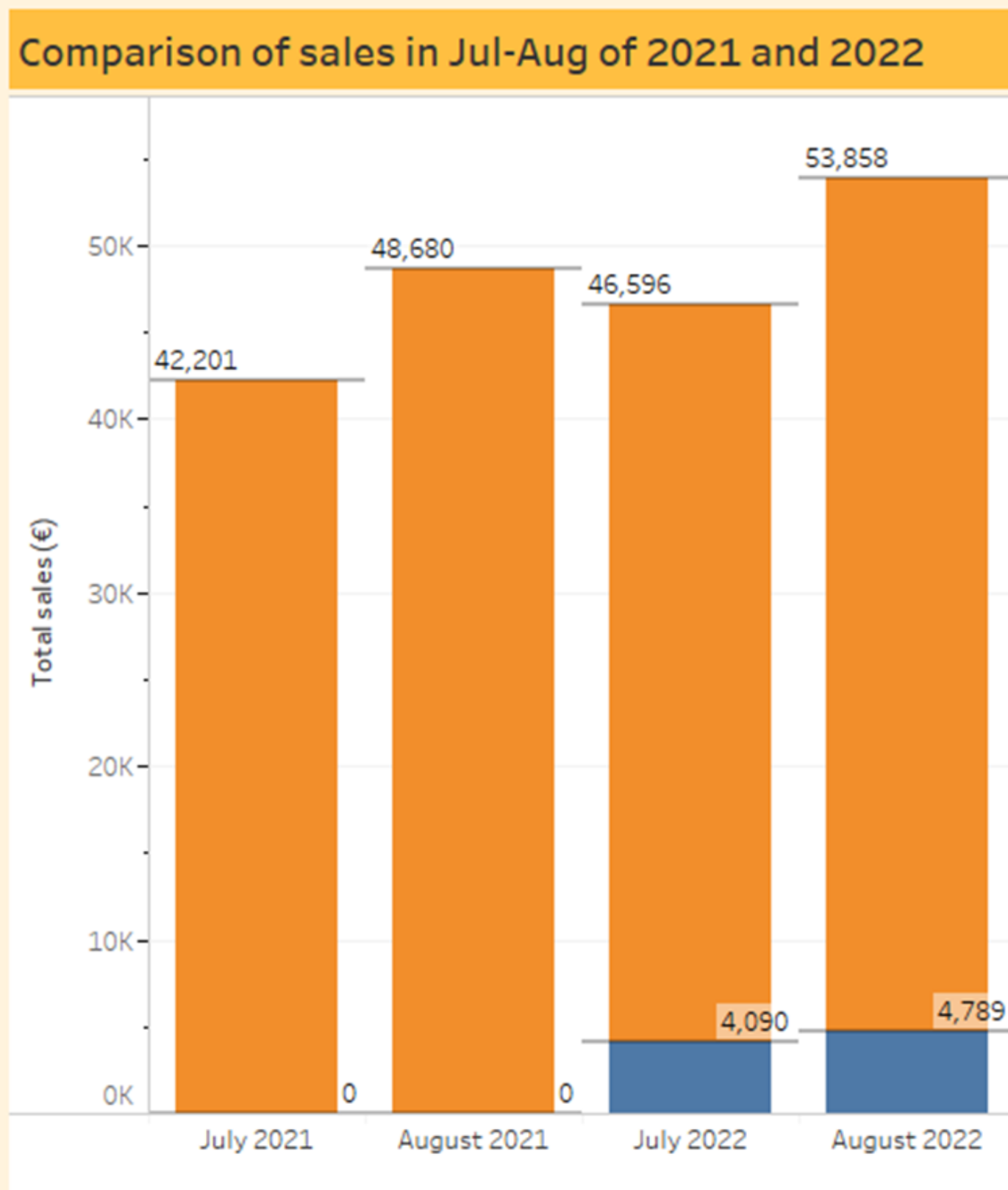
- **Total income** : €560.5k
- **Total refunds**: €3k
- Purchase **range**:
€0.15 - €200
IQR: €1.3 - €5.1
Median: €2.55
Mean: €4.15
- **Top sold** products:
1.Traditional Baguette: 25%
2.Formule sandwich: 6.2%
3.Croissant: 6.0%
- ...
- **Top sold** products (**by quantity**):
1.Traditional Baguette: 32.6%
2.Croissant: 8.2%
3.Pain au chocolat: 7.0%
- ...

Observations on different time scales



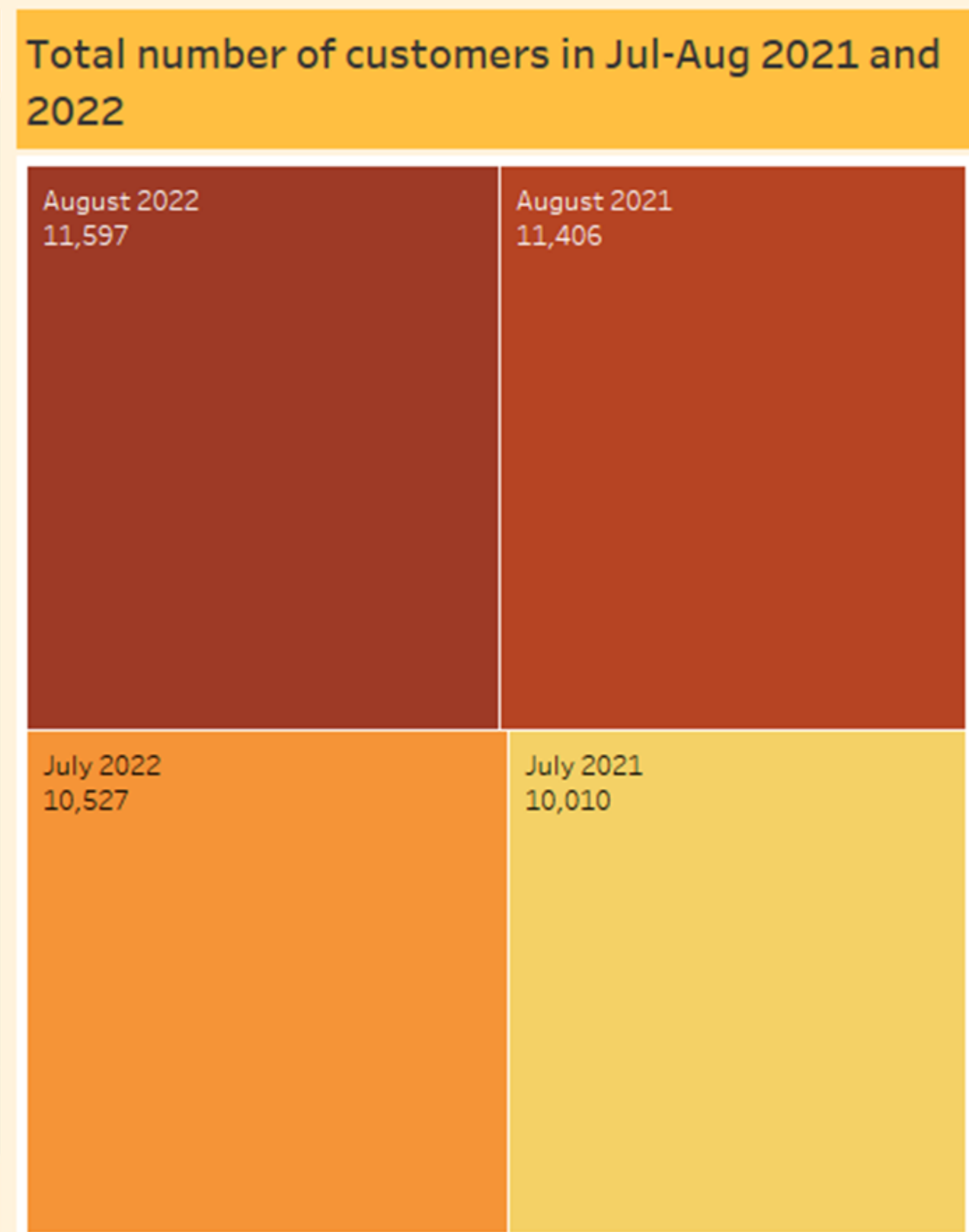
- **Monthly** trend of both **sales** and **customers number**:
Jan-Jun: gradual growth
Jul-Aug: **drastic spike**
Sep-Dec: decline, stagnation
- **Weekday** trend of sales - parabolic :
Mon-Wed: gradual decline
Thu-Sat: continuous rise
Sun&Sat: **highest sales**
- **Hourly** trend:
7-11: continuous growth
10-12: **hot hours**
13-19: drastic drop (>3 times)

Sales composition comparison



Earning type

- Difference between 2022 and 2021 prices
- Total sales with default prices



Count of customers

10,010 11,597

- **July** and **August** account for the **largest amount of total sales**;
- Total sales **increased** in **2022**, but the **number of customers did not change** significantly
- There had been a price rise in 2022
- Due to the **price rise** the shop **increased** total sales by about **€9k** in **July** and **August**