

A background image showing a person's hand holding a red and silver handheld payment device over a red shopping basket. The basket contains green lettuce. The scene is set in a supermarket checkout area.

Supermarket Sales Analysis

Exploratory data analysis of supermarket sales

15th December 2023

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Background

Initial Request ...

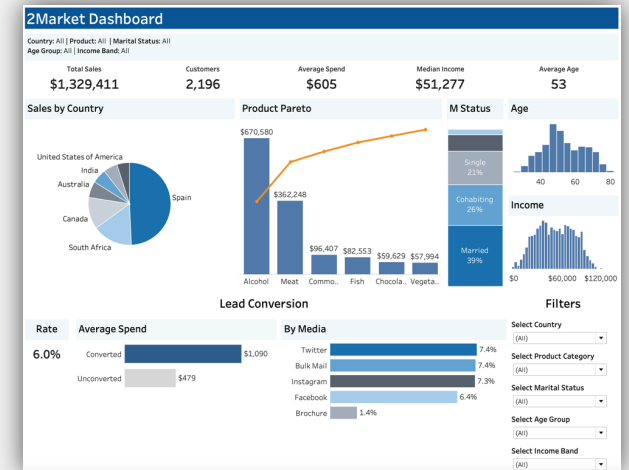
2Market, a global supermarket, wants to understand their customer purchase behaviour. In particular, 2Market wants to understand:

- The demographics of their customers
- Which advertising channels seem to be the most effective
- Which products seem to sell the best and if that varies based on demographic

Problem Statement

2Market is a global supermarket that sells products in store and online in eight countries. They want to **grow sales revenues through targeted marketing campaigns**. Customer demographics and previous campaign data will be used to **identify the best opportunities for future campaigns**. The data will be visualised to aid decision making.

2Market Dashboard



Purpose

To identify the best opportunities for future targeted marketing campaigns

Key Metrics

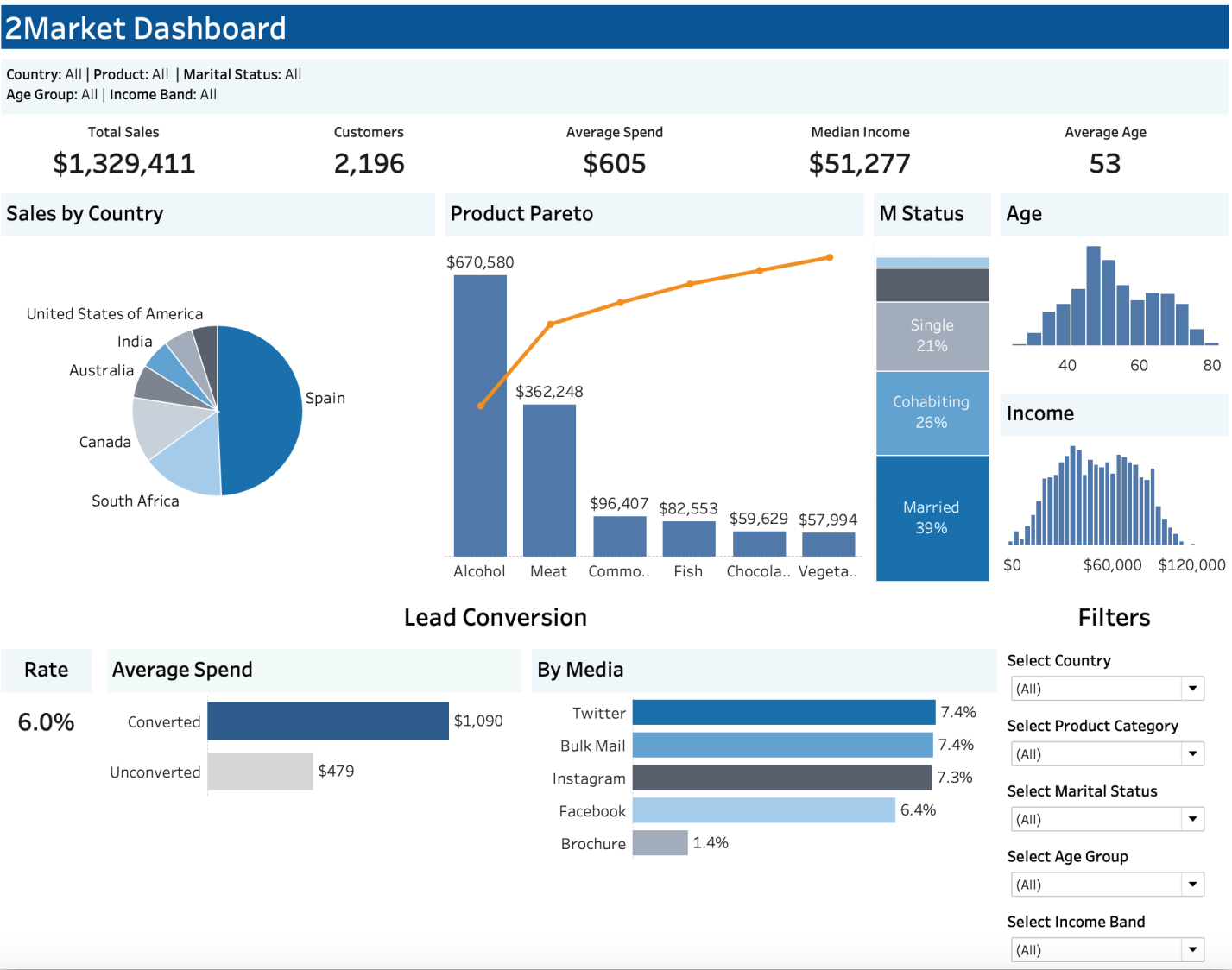
Sales, customer demographics, lead conversions

Target Audience

Marketing department

Live Dashboard Overview

Go To Dashboard



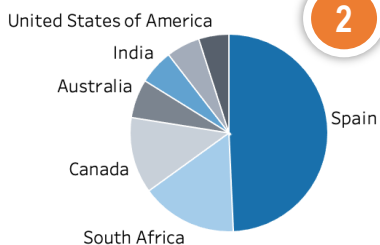
Initial Insights

2Market Dashboard

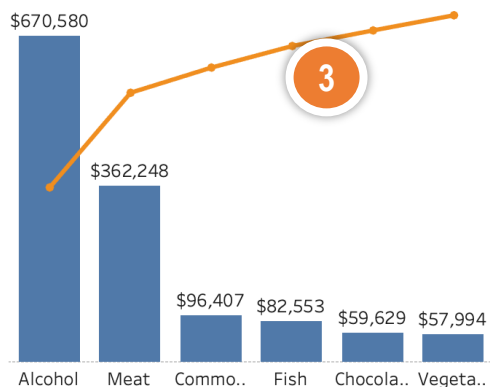
Country: All | Product: All | Marital Status: All
Age Group: All | Income Band: All

1 Total Sales **\$1,329,411** Customers **2,196** Average Spend **\$605** Median Income **\$51,277** Average Age **53**

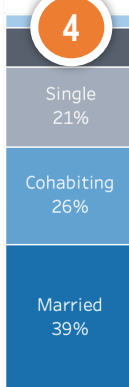
Sales by Country



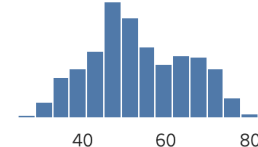
Product Pareto



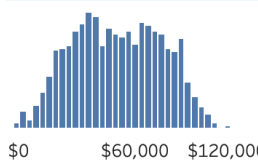
M Status



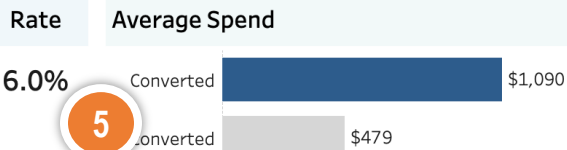
Age



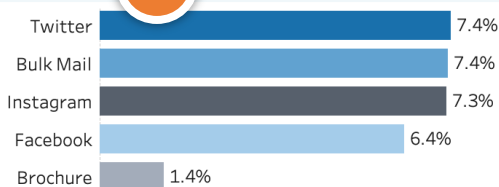
Income



Lead Conversion



By Media



Filters

Select Country
(All)

Select Product Category
(All)

Select Marital Status
(All)

Select Age Group
(All)

Select Income Band
(All)

1 Overview

2Market has total sales of \$1.3M, 2,196 customers with an average spend of \$605. The average age of customers is 53 and their median income is \$51K.

2 Spain has the highest sales, 49% of the total. Three countries generate 77% of the total.

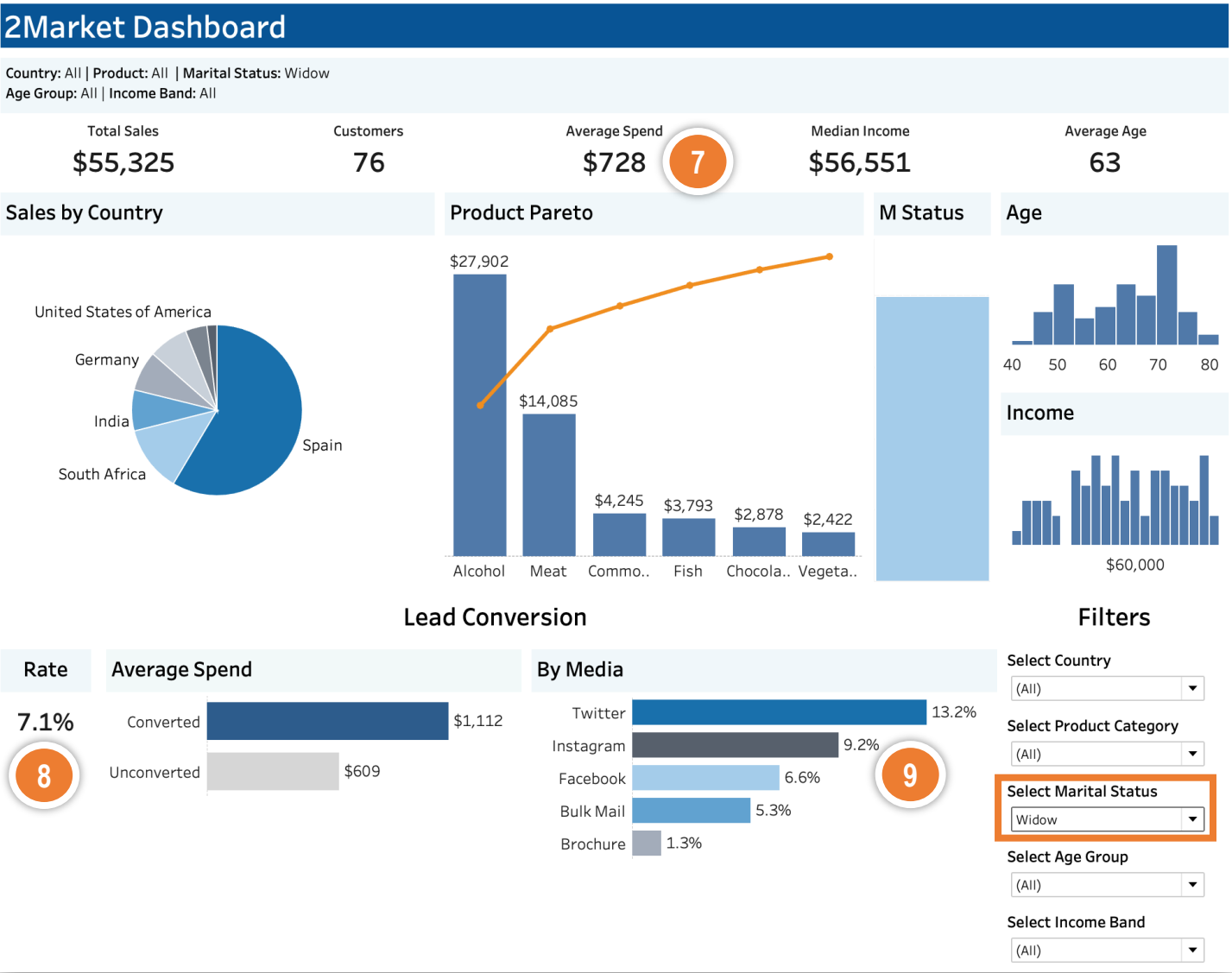
3 Alcohol and meat account for 78% of sales.

4 Married and cohabiting couples account for 65% of sales.

5 Advertising lead conversion rate is 6.0%. Customers who respond to advertising spend \$611 more than those who don't respond.

6 Brochure advertising is the least successful media for lead conversion at 1.4%

Example of Deeper Insights



Drilling down into the data ...

Marital Status = Widow

- 7 Widows have the highest average spend at \$728, which is \$123 more than the overall average.
- 8 Widows respond better to advertising with 7.1% lead conversion, 1.1% higher than the overall average.
- 9 Widows are especially responsive to advertising on Twitter with a 13.2% conversion rate. This is more than double average of 6.0%.

Further investigation is required to uncover additional deeper insights

Recommendations & Next Steps

- Reduce or stop advertising with Brochures and redirect budget to other media
- Focus on increasing advertising lead conversion rate, why is it only 6.0%?
- Target the Widow/Widower market ... but is it ethical?
- Conduct further investigation uncover additional deeper insights
- Identify opportunities for further dashboard enhancements