

# User Requirement Doc: Identify the least represented demographic groups in terms of sales.

## Objective

To determine where marketing effort needs to be applied in specific markets to reach under-represented demographic groups.

## Problems Identified

- Sharon the Head of marketing has found finding the least performing marketing ads difficult.
- She has performed online research but constantly bumps into overly complicated and conflicting insights.
- The BI reporting team lacks the bandwidth to assist her with the assignment.
- She has also held calls with different third-party providers, but they are all expensive options for underwhelming results.

## Target Audience

- Primary – Sharon
- Secondary - marketing team

## Use Cases

1. Identify the least represented demographic groups.

### User story

As the head of marketing, I want to identify areas where marketing campaigns can be improved. I want to focus on the areas where we have the least sales. I want to see the age group with the least sales, the country they belong to and the gender they belong to.

## Acceptance criteria

The solution should:

- Display sales by country, age group, and gender.
- Deploy key metrics (gender, country, age group).
- Be user friendly and easy to use.
- Use data for the past 5 years.

## User story

As the head of marketing, I want to analyze the potential for successful marketing campaigns.

### Acceptance criteria

The solution should:

- Recommend areas where marketing efforts should be improved.
- Clearly explain the recommendations with data driven justification.

## Success criteria

Sharon can

- Easily identify where marketing campaigns should be improved based on the key metrics mentioned above.

## Information needed.

Sharon needs the least successful marketing campaigns.

- Age group (integer)
- gender (string)
- country (string)

We will focus on data from 2011 to 2016 for simplicity.

## Data quality check

We need to add measures in place to confirm the dataset contains the data required without any issues – here are the data quality checks we need to consider:

- Row count check
- Column count check
- Data type check
- Duplicate check

## Additional Requirements

- Document the solution and include the data source, transformation process and walk through on analysis conclusion.
- Ensure the solution is reproducible and maintainable so that it can support future updates.
- Make source code and doc available on GitHub.

## Send to Sharon

The original aim was to determine where marketing effort needs to be applied in specific markets to reach under-represented demographic groups and to see if there are differences between the countries where it operates. The chart graphically shows that the seniors age group is globally the poorest area of sales. Female adults are buying most of this product.

Questions that the company can pose, and then develop business decisions, may include:

Why does the senior age group have the lowest sales globally?