Data-driven customer insights, ad channel, and product portfolio analysis

Alexandra Akaoui

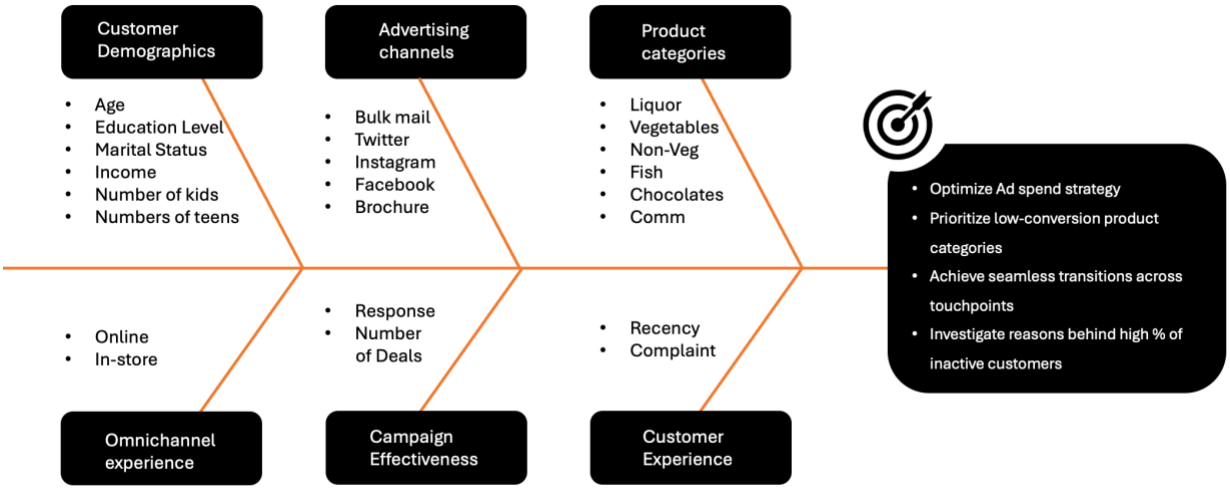
Project Delivery Date: 07.04.2025

1. Context and problem definition

Context:
2Market is an omnichannel global supermarket operating in eight markets.

Problem Statement:
2Market aims to extract data-driven insights from its customer demographics and purchasing behavior. Knowing that without a strong grasp of the subject, 2Market risks having an unfocused Ad strategy, under-prioritized product categories, and weak overall brand loyalty. The analysis aims to identify patterns in customer demographics, optimize marketing efforts, and shed light on low-conversion product categories to positively affect business performance.

Root Cause Analysis (Ishikawa Diagram)
Refer to 0. Appendix Five Whys Framework



Questions to the 2Market team:

- Would you define yourself as a discounter, wholesaler, or regular supermarket?
- Are you planning to expand in one specific region?

Questions to be answered by the analysis:

- What insights can we draw from the analysis of the customer demographics?
- Regarding your marketing strategy, which Ad channels are the most effective per country? Are there Ad channels to be deprioritized?
- What is your best-selling product category? What are the implications of this?
- How would we evaluate your customers' omnichannel experience?

2. Data cleaning and exploratory analysis

Analysis Assumptions:

It is assumed that the data for Amt, Num, Response, and Complaint columns are monthly values. It is also assumed that the analysis was done in 2015.

Data Cleaning:

Refer to I. Appendix – Data cleaning and Grouping (Excel)

- No duplicates have been identified.
- Date and income columns were formatted consistently (currency and date format)
- Education and country groups and names were adjusted to better represent the data
- Columns with numerical values were checked to identify erroneous data points using box and whisker charts. Identified erroneous data rows were removed from the data set. (I. Appendix)
- New groups were made to better reflect age and marital status (Generation, age range, and new marital status groups) (I. Appendix)

Findings' Observation:

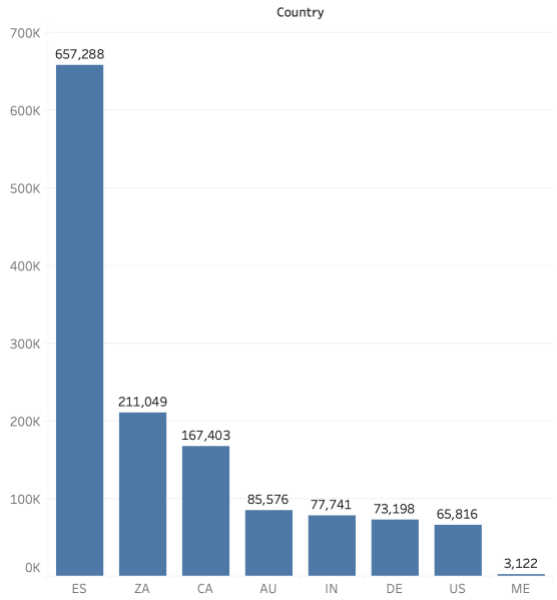
- ES is the country with the highest market share
- Liquor is the category with the highest average spend across countries
- 71.41% of the customers have between 1-3 kids and/or teens
- The average spend has an inverse relationship with the number of kids and teens per household.
- Instagram and Twitter are the most popular social platforms across countries (except for the US) and marital statuses.
- Brochure is the lowest lead-generating ad channel
- Gen X is the generation with the highest market share within the customer base
- ES and IN have over 40% inactive customers if we assume that inactivity is > 60 days.

Analysis Limitations:

- No information on social platforms' actual conversion rates (conversions that can be linked back to actual transactions). The current analysis assumed the platform with the highest leads as the most effective.
- Complaints don't specify the cause which would require further investigation/data to trace it back and propose solutions
- Data doesn't specify current campaigns' and discounts product categories.

Detailed Findings:

- Total sales by Country



- Nb of Customers with kids and/or teens

0 Kids	632
1 Kid	1,114
2 Kids	415
3 Kids	50

- Products with the highest average spend by education level

Product	Education	Average Spend	Number Of Cust..
Commodities	Basic	22	54
Liquor	Bachelor	285	1,115
	Master / Postgraduate Di..	287	563
	PhD	407	479

- Highest average spend by grouped marital status

Product	Gr Marital Status	Average Spend	Number Of Customers
Liquor	Married/Couple	303	1,428
	Opt-Out information	338	4
	Single	309	779

- Avg spend for households with a total of 0 – 3 minors broken down by category and nb of customers

Total Kids (group)	Product	Avg Spend	Nb Of Customers
0 Kids	Liquor	487	632
	Meat	370	632
	Fish	76	632
	Commodities	63	632
	Chocolates	53	632
	Vegetables	52	632
1 Kid	Liquor	269	1,114
	Meat	97	1,114
	Commodities	40	1,114
	Fish	26	1,114
	Chocolates	20	1,114
	Vegetables	19	1,114
2 Kids	Liquor	142	415
	Meat	51	415
	Commodities	24	415
	Fish	11	415
	Chocolates	8	415
	Vegetables	7	415
3 Kids	Liquor	161	50
	Meat	59	50
	Commodities	18	50
	Vegetables	5	50
	Fish	5	50
	Chocolates	5	50

- Top social media platform per country *(excluding ME with zero leads on all 3 platforms)*

Country	Platform	Nb Customers	Total Leads
AU	Instagram	147	12
CA	Twitter	266	24
DE	Twitter	116	11
ES	Instagram	1,090	88
IN	Twitter	146	10
US	Facebook	106	7
ZA	Instagram	335	21

- Calculation of the % lead share by country & social media platform

Country	Facebook	Instagram	Twitter	Grand Total
AU	28.0	48.0	24.0	**100.0**
CA	28.6	33.3	38.1	**100.0**
DE	26.9	30.8	42.3	**100.0**
ES	30.3	35.1	34.7	**100.0**
IN	30.4	26.1	43.5	**100.0**
US	38.9	27.8	33.3	**100.0**
ZA	32.8	34.4	32.8	**100.0**

- Market share by education

Education	
Basic	0.33
Bachelor	51.60
Master / Postgraduate Diploma	23.97
PhD	24.10

- Number of online and offline purchases

Country	Generation	Number Offline Sales	Number Online Sales
AU	Baby Boomer	311	229
	Millenials	140	103
	Gen X	376	260
	Gen Z	3	3
CA	Baby Boomer	587	435
	Millenials	269	168
	Gen X	698	539
DE	Baby Boomer	234	158
	Millenials	145	91
	Gen X	309	212
	Gen Z	12	3
ES	Baby Boomer	2,358	1,583
	Millenials	1,123	733
	Gen X	2,807	2,016
	Gen Z	37	15
IN	Baby Boomer	223	164
	Millenials	214	160
	Gen X	337	254
	Gen Z	8	4
ME	Baby Boomer	7	10
	Millenials	4	6
	Gen X	8	2
US	Baby Boomer	251	192
	Millenials	122	81
	Gen X	275	205
	Gen Z	2	1
ZA	Baby Boomer	730	536
	Millenials	433	263
	Gen X	816	590
	Gen Z	7	7

- Online to offline share broken down by generation

Generation	Share Offline Sales	Share Online Sales
Baby Boomer	58.70	41.30
Gen X	57.98	42.02
Gen Z	67.65	32.35
Millenials	60.42	39.58

- % Complaints by country

Count..	Nb of Customers	Total Complains	% Complains
ES	1,091	14	1.28%
ZA	336	3	0.89%
DE	116	1	0.86%
CA	266	2	0.75%
US	106	0	0.00%
ME	3	0	0.00%
IN	146	0	0.00%
AU	147	0	0.00%

- Campaign acceptance rate and % of purchases with discounts

Country	Accepted Campaigns	% of campaign acceptance	Purchases With Discounts	% of purchases with discount
AU	22	15	334	227
CA	38	14	640	241
DE	17	15	241	208
ES	176	16	2,461	226
IN	13	9	364	249
ME	2	67	7	233
US	13	12	270	255
ZA	52	15	814	242

- Sales Share per Ad channel

Count..	Bulkmail Liquor Share	Bulkmail Meat Share	Bulkmail Co mmodities ..	Bulkmail Chocolates Sh..	Bulkmail Fish Share	Bulkmail Vegetables Sh..
ME	30.00	27.00	19.00	40.00	14.00	100.00
AU	12.00	11.00	14.00	7.00	9.00	8.00
IN	13.00	12.00	13.00	12.00	15.00	6.00
CA	10.00	9.00	13.00	10.00	8.00	9.00
US	6.00	4.00	12.00	4.00	6.00	8.00
ES	8.00	8.00	11.00	8.00	7.00	9.00
ZA	7.00	5.00	10.00	4.00	4.00	5.00
DE	13.00	9.00	10.00	6.00	8.00	9.00

Country	Brochure Liquor Share	Brochure Meat Share	Brochure Commodities S..	Brochure Chocolates Share	Brochure Fish Share	Brochure Vegetables Sha..
CA	5.00	3.00	2.00	2.00	2.00	2.00
DE	6.00	3.00	3.00	1.00	3.00	1.00
ES	5.00	2.00	2.00	2.00	2.00	1.00
IN	6.00	6.00	2.00	2.00	2.00	2.00
ZA	3.00	1.00	3.00	2.00	0.00	2.00

Country	Facebook Liquor Share	Facebook Meat Share	Facebook Commodities ..	Facebook Chocolates S..	Facebook Fish Share	Facebook Vegetables S..
AU	12.00	13.00	10.00	7.00	16.00	10.00
CA	16.00	20.00	11.00	17.00	16.00	12.00
DE	13.00	14.00	8.00	13.00	20.00	14.00
ES	18.00	18.00	12.00	17.00	16.00	16.00
IN	11.00	12.00	12.00	18.00	14.00	7.00
US	17.00	12.00	9.00	9.00	7.00	7.00
ZA	15.00	16.00	11.00	15.00	17.00	14.00

Country	Instagram Liquor Share	Instagram Meat Share	Instagram Commodities Sh..	Instagram Chocolates Share	Instagram Fish Share	Instagram Vegetables Share
AU	24.00	23.00	18.00	15.00	17.00	14.00
CA	21.00	18.00	13.00	14.00	13.00	14.00
DE	18.00	18.00	10.00	20.00	12.00	13.00
ES	23.00	24.00	14.00	20.00	17.00	20.00
IN	11.00	16.00	6.00	18.00	10.00	5.00
US	14.00	9.00	4.00	8.00	7.00	4.00
ZA	19.00	16.00	12.00	14.00	14.00	12.00

Country	Twitter Liquor Share	Twitter Meat Share	Twitter Commodities ..	Twitter Chocolates S..	Twitter Fish Share	Twitter Vegetables S..
AU	12.00	9.00	3.00	4.00	7.00	4.00
CA	20.00	11.00	9.00	7.00	10.00	8.00
DE	20.00	13.00	10.00	8.00	10.00	14.00
ES	20.00	12.00	10.00	11.00	9.00	9.00
IN	16.00	6.00	5.00	5.00	5.00	4.00
US	12.00	3.00	2.00	1.00	1.00	1.00
ZA	17.00	10.00	7.00	9.00	7.00	7.00

- Share of inactive customers assuming inactivity period is > 60 days

Count..	
IN	41.78
ES	40.05
DE	39.66
US	38.68
ZA	36.31
CA	36.09
ME	33.33
AU	29.93

3. Dashboard Design Considerations:

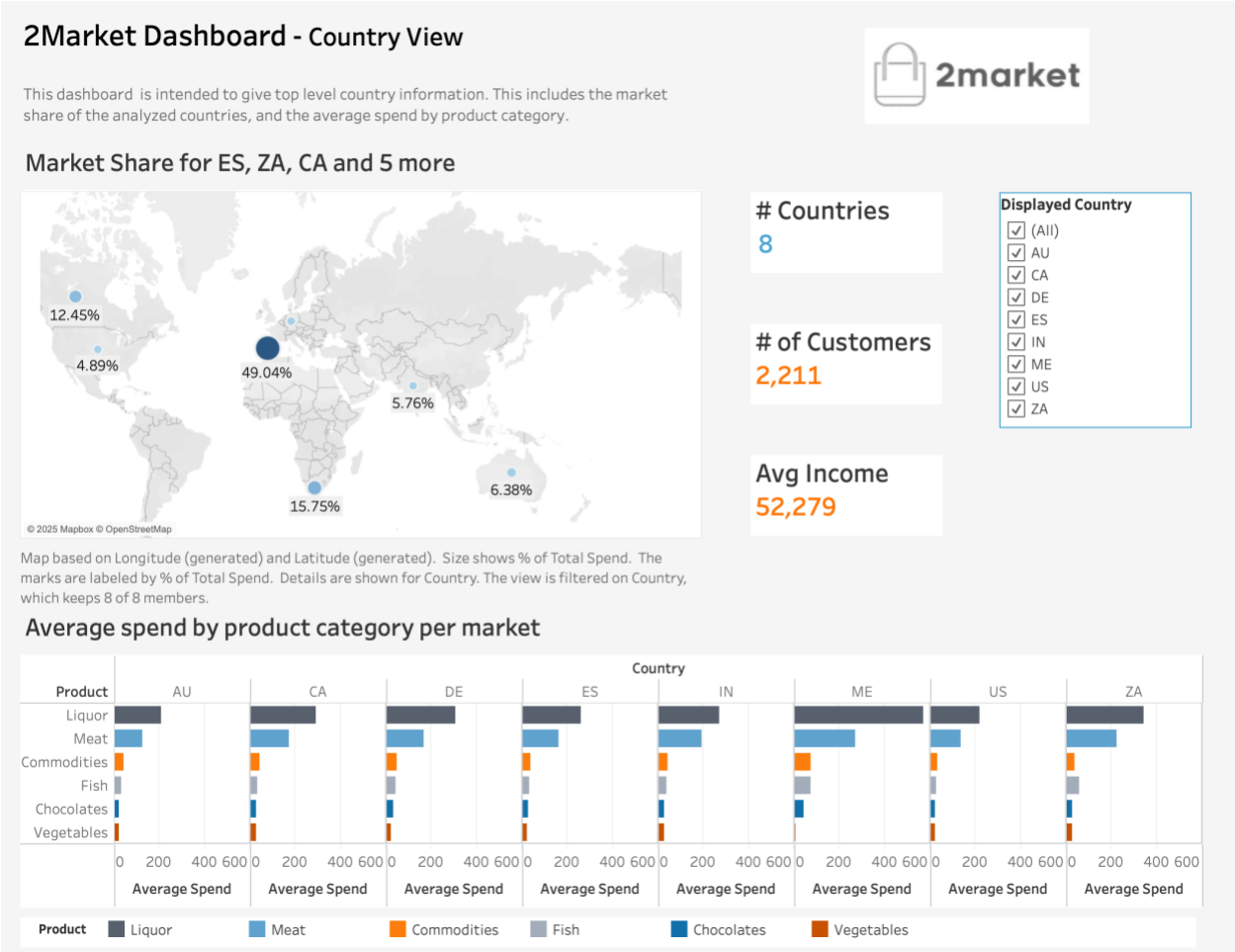
- Separate dashboards were created to focus on key aspect of the analysis.
- Users with sight impairment can still draw insights from the charts used, as they also rely on sizes, lengths, and shapes to represent the information. Color shades take color-blind users into account.
- The order of the charts on each dashboard follows a logical sequence to accommodate keyboard users.
- Alt text and captions were added to make sure the data and charts are accessible to all users.

Dashboards' Overview

Country View

Gives top-level insights into:

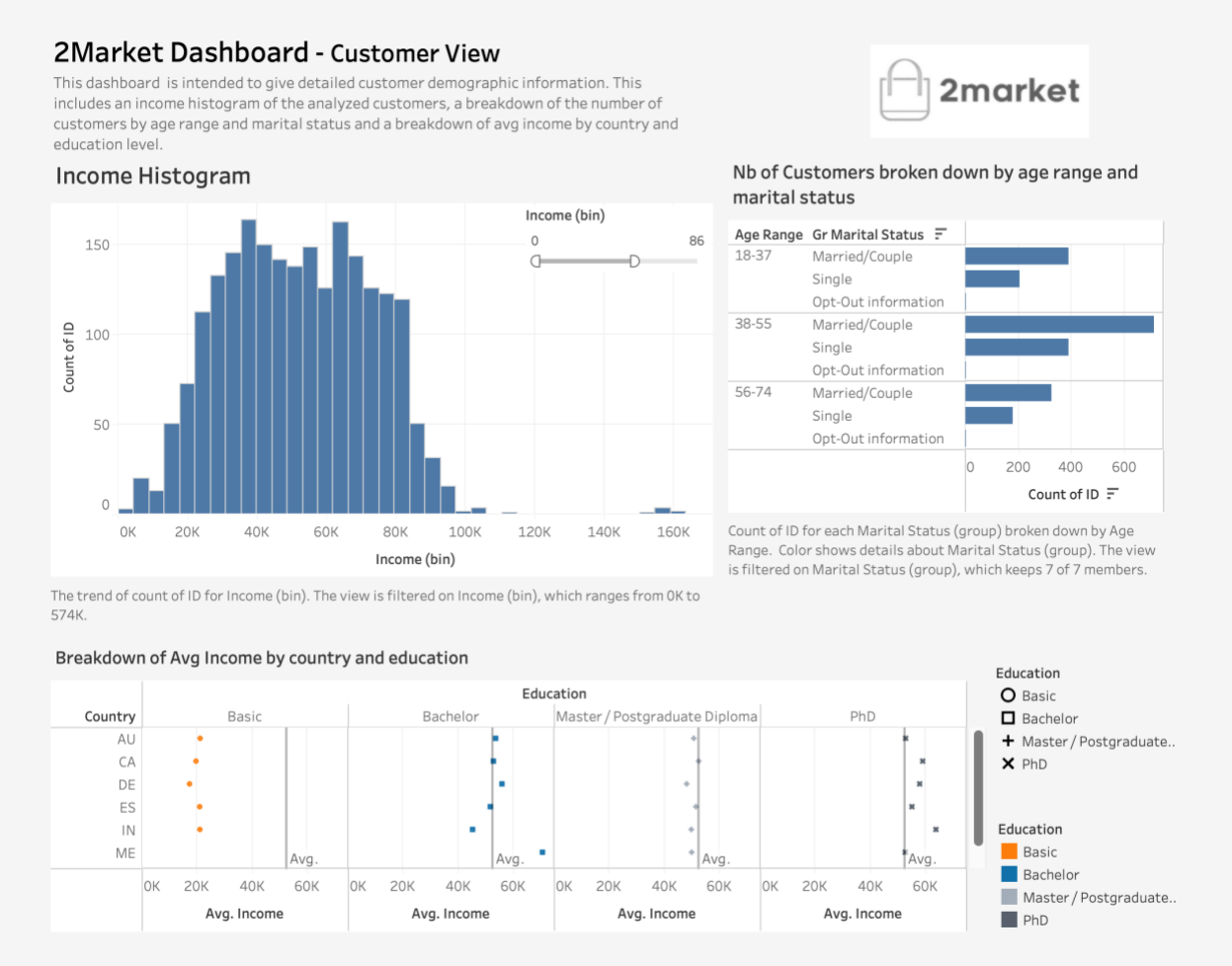
- Nb of Active countries, customers, and their avg income
- Current market share per country
- Avg spend by product category per market



Customer View

Is a deep dive into the customer demographics giving information on their:

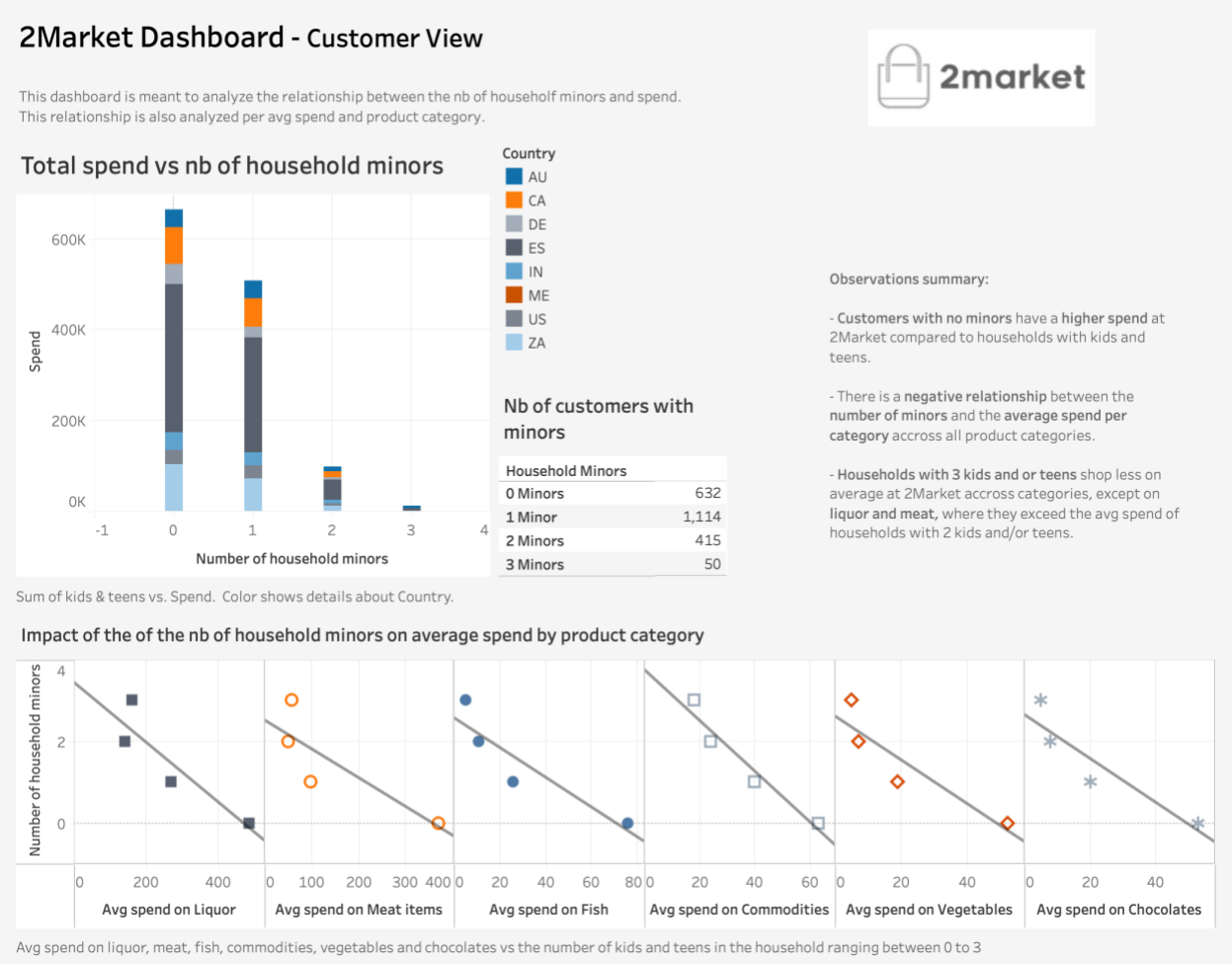
- Income distribution
- Age ranges and marital status vs nb of customers
- The relationship between education level and avg income across markets



2nd Customer View

Mainly focuses on the relationship between having kids and/or teens on the average spend:

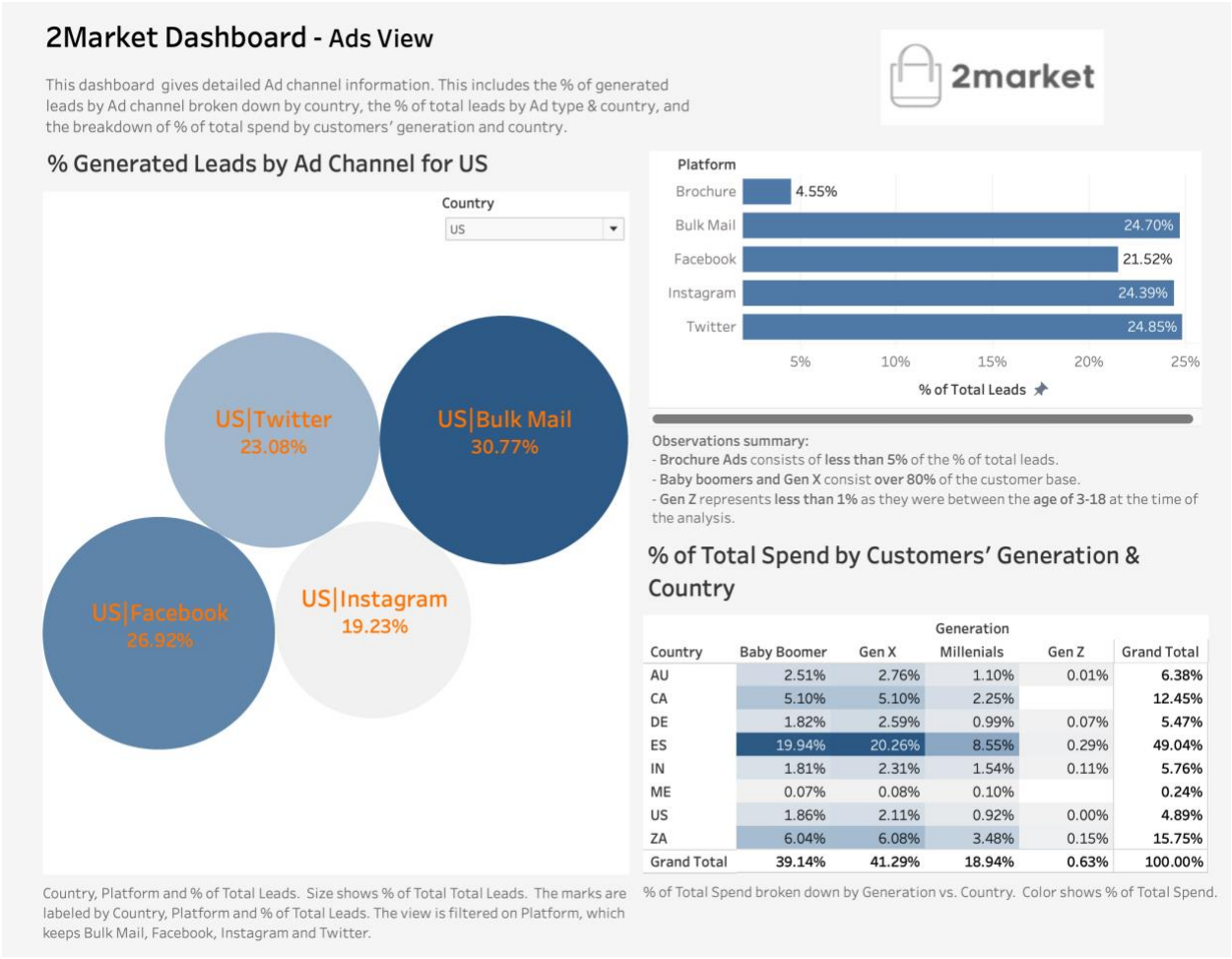
- Total Spend for customers with 0 to 3 **household minors**.
- The effect of the **total nb of household minors** was further analyzed per category in the last chart.



Ads View:

Mainly shows:

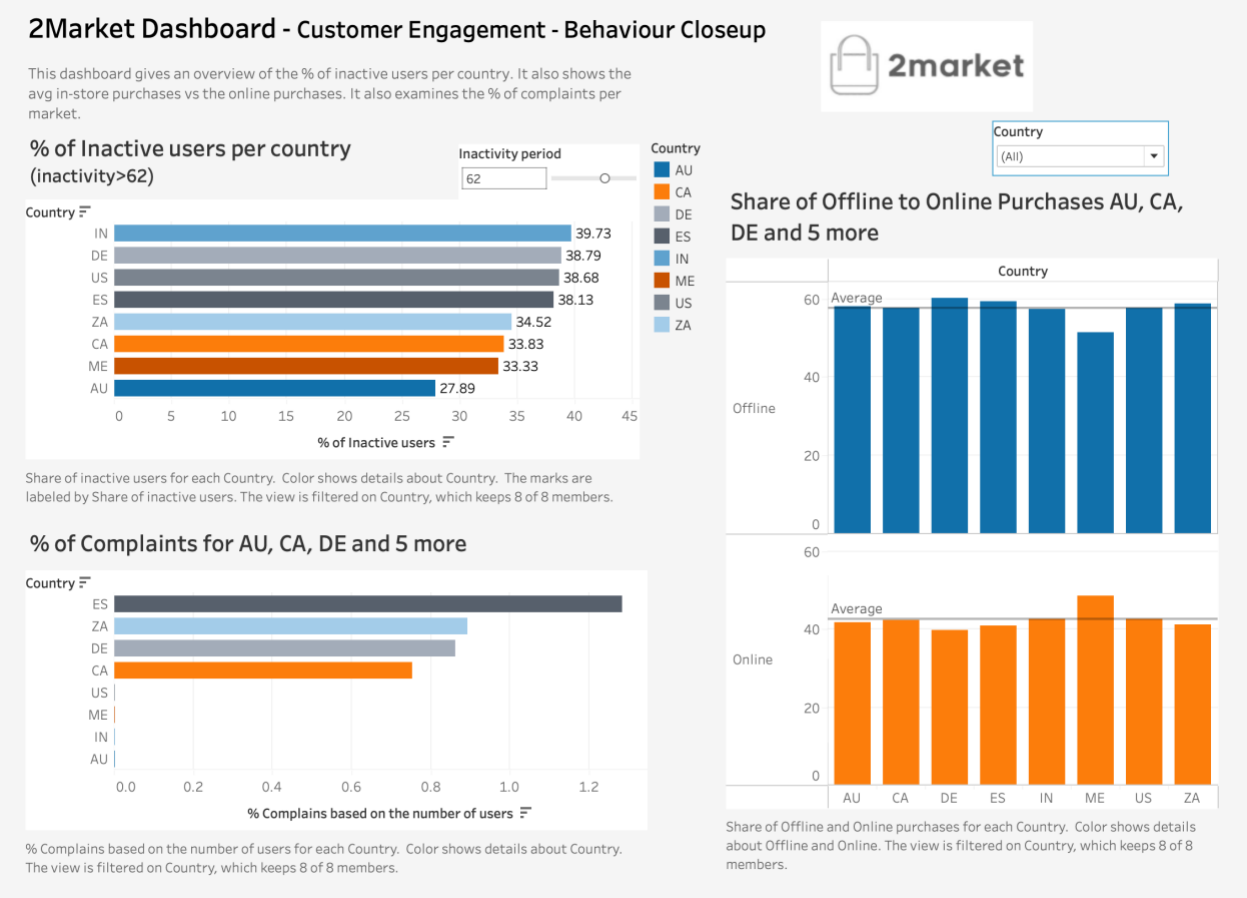
- Breakdown of Ad channels by % of generated leads (Platform leads calculated against total leads per country to get % of generated leads) excluding brochures.
- A breakdown of % the total leads by ad type and the country clearly shows the weak performance of brochures.
- % Total spend by customers' generation to see which generation leads the conversions and if based on that a certain ad type should be prioritized



Customer Engagement – Behaviour Closeup View

Dives in:

- The % of inactive customers per country counting the number of users exceeding a certain inactivity period (assumed 60 days in the screenshot) and dividing by the total number of customers per country
- % of Complaints calculated by counting the nb of complaints and dividing by the nb of customers per country
- Share of offline to online purchases showing the lead of in-store purchases.



4. Conclusion & Recommendations

- Increase deals and campaigns focusing on low conversion driver products (commodities, fish, chocolates and Vegetables) as this may positively reflect on the avg spend of customers with kids and/or teens
- Brochures should be deprioritized as an Ad channel. Instead, 2Market should focus on a strategy to attract Gen Z customers as they're the future conversion driver generation.
- Maintaining social media strategy agility by prioritizing platforms that would positively reflect on conversions. Instagram being a candidate for a shift towards social commerce (1).
- Investigate reasons for customers' inactivity across countries
- Optimize countries' eCommerce websites and delivery logistics to better reflect on online purchases.

References

(1) Cooper Smith. (2015) It’s time for retailers to start paying close attention to social media. Business Insider

0. Appendix: The 5 Whys Framework

Summary: 2Market is trying to understand its customer demographics

1. Why is 2Market trying to understand its customer demographics?

To better target its customers

2. Why is 2Market trying to target its customers?

To better serve them and cater to their needs

3. Why is it trying to cater to their different needs?

Because 2Market has a diverse customer base, it wants to understand if there are any patterns to look out for and if there are certain subgroups that they should focus on to improve their conversions.

4. Why is it trying to identify patterns?

It would mainly help 2Market focus on the most effective ad channel and on boosting sales across its categories.

5. Why is it trying to focus on the most effective ad channel and better conversions for their categories?

This is to optimize its performance and make sure that it's not over-investing in the wrong ad channels or wrong categories for its customer base.

I. Appendix – Data Cleaning & Grouping (Excel)

Data Cleaning

Box and whisker plots were used to examine columns with numerical values.

Data Column	Observation	Action Taken	Customer to action
ID	There is a '0' customer ID.	The ID was kept and unchanged and will be flagged to customer.	Yes
Year_Birth	There are customers with potentially erroneous years of birth (1894, 1900 & 1901). Assuming the analysis is happening in 2015.	Rows with the ID 11004, 1150, 7829 have been removed given the high probability of them being false.	Yes
Education	The list includes two different categories for 2n Cycle and Masters degrees.	Research suggests that 2n Cycle includes Masters and postgraduate diplomas. *Masters' together with 2n Cycle entries were replaced with Master / Postgraduate Diploma*.	No
	Graduation is included on the list.	Graduation was replaced by Bachelor's to make it clearer to stakeholders of different backgrounds.	No
Data Column	**Observation**	**Action Taken**	**Customer to action**
Income	Income column was saved as text including the currency sign.	The column was split in two separate columns: one for the currency and	No

		one for the income, where the income has been formatted as number.	
Dt_Customer	Date formats were not consistent.	Dates are formatted consistently in the following sequence: DD/MM/YY	No
AmtNonVeg	For the ID 5376, the amount seems false compared to the income of the customer.	The row has been removed as part of the data cleaning process and it will be flagged to the customer.	Yes
AmtNonVeg **AmtChocolates**	Customers with the ID 4931, 8475, 1501 are outliers in the data when examined using the box and whiskers chart.	It doesn't look like erroneous data as the customer comes from the high-income bracket.	No
AmtChocolates	Customer with the ID 4619 is an outlier on the AmtChocolates		
NumWebBuy and NumVisits	ID 6237 seems erroneous. It's unreasonable for a customer to do 23 online purchases with 0 website visits. The row as a whole isn't consistent as it also shows that the customer has a Phd and yet has a very low income	The ID 6237 was removed from the data set.	Yes
	ID 6428, 10286, 11074, 8584 and 5832 have 0 NumVisits and yet have data under NumWebBuy	This will be flagged to 2Market as it could be a typo.	Yes
Country	The country codes provided don't match	Changes have been made to make sure the information is	Yes

	the ISO 2 Alpha country codes.	understood by all stakeholders AUS → AU GER→DE IND→IN SP→ES SA→ZA Remaining country codes were left unchanged.	

Excluded Rows

Rows that were excluded are as follows:

- 11004
- 1150
- 7829
- 5376
- 6237

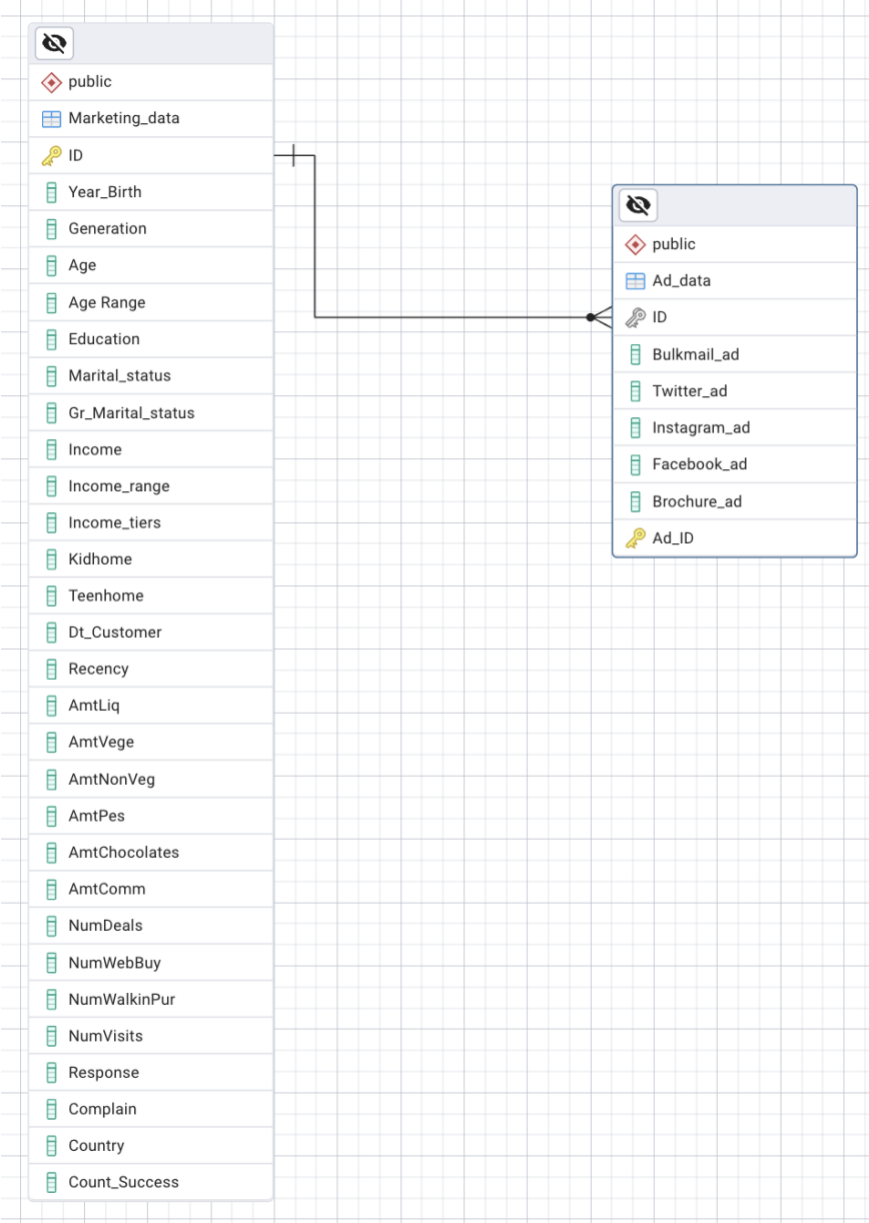
Analysis Groupings:

Grouping Type	Reasoning	Actual groups
Generation	To better visualize the data on charts and to improve their readability, the customers were grouped based on their generation. This was done on Excel using nested if functions.	Theye were defined as follows: Baby Boomers <1964 Gen X between 1965 and 1979 Millenials between 1980 and 1994 Gen Z >1995
Marital Status	There are subcategories under the marital status that could be grouped differently without jeopardizing the quality of the data.	YOLO and Absurd were assumed to be coming from customers not comfortable sharing their marital status. They were both → Opt-Out information. Single, divorced, alone, and Widow →single

		Married and Together → Married/Couple.
Age ranges	To group the customers' ages in brackets the calculation for the Q1, Q3 and max was used to divide the data set into 3 ranges. This is to also highlight the weight of the middle group having 50% of the data values.	Age Groups were as follows: 18-37 38-55 55-74
Income	Income was also grouped into two main groups using the Q1 and Q3 calculation for the income.	Low income <35284 High Income>68487

II. Appendix – Diagnostic Analysis on Postgres

Schema



Syntax

```
---============================================================
--- TOTAL SPEND BY COUNTRY
---============================================================
CREATE VIEW TOTAL_SPEND_COUNTRY_VIEW AS
SELECT
    COUNTRY,
    SUM(TOTAL_SALES) AS TOTAL_SALES
FROM
    (
        SELECT
            COUNTRY,
            COALESCE(AMT_LIQ, 0) +
            COALESCE(AMT_VEGE, 0) +
            COALESCE(AMT_NONVEG, 0) +
            COALESCE(AMT_PES, 0) +
            COALESCE(AMT_CHOCOLATES, 0) +
            COALESCE(AMT_COMM, 0) AS TOTAL_SALES
        FROM
            MARKETING_DATA
    )
GROUP BY
    COUNTRY
ORDER BY
    COUNTRY;

---============================================================
--- TOTAL SPEND BY PRODUCT PER COUNTRY
---============================================================
CREATE VIEW PRODUCT_PER_CATEGORY_COUNTRY AS
SELECT
    COUNTRY,
    SUM(AMT_LIQ) AS SUM_LIQ,
    SUM(AMT_VEGE) AS SUM_VEGE,
    SUM(AMT_NONVEG) AS SUM_NONVEG,
    SUM(AMT_PES) AS SUM_PES,
    SUM(AMT_CHOCOLATES) AS SUM_CHOCOLATES,
    SUM(AMT_COMM) AS SUM_COMM
FROM
    MARKETING_DATA
GROUP BY
    COUNTRY
ORDER BY
    COUNTRY;
```

```
---============================================================
--- TOTAL SPEND BY ID PER COUNTRY
---============================================================
CREATE VIEW TOTAL_SPEND_ID_VIEW AS
SELECT
    ID,
    COUNTRY,
    SUM(TOTAL_SALES)
FROM
    (
            SELECT
                    ID,
                    COUNTRY,
                    COALESCE(AMT_LIQ, 0) +
                    COALESCE(AMT_VEGE, 0) +
                    COALESCE(AMT_NONVEG, 0) +
                    COALESCE(AMT_PES, 0) +
                    COALESCE(AMT_CHOCOLATES, 0) +
                    COALESCE(AMT_COMM, 0) AS TOTAL_SALES
            FROM
                    MARKETING_DATA
    )
GROUP BY
    ID,
    COUNTRY
ORDER BY
    ID;

---============================================================
---PIVOTED SPEND BY CATEGORY
---============================================================
CREATE VIEW SPEND_BY_CATEGORY_VIEW AS
SELECT
    ID,
    'Liquor' PRODUCT,
    AMT_LIQ AS AMOUNT
FROM
    PUBLIC.MARKETING_DATA M
UNION ALL
SELECT
    ID,
    'Vegetables' PRODUCT,
    AMT_VEGE AS AMOUNT
```

```
FROM
    PUBLIC.MARKETING_DATA M
UNION ALL
SELECT
    ID,
    'Non Vegetables' PRODUCT,
    AMT_NONVEG AS AMOUNT
FROM
    PUBLIC.MARKETING_DATA M
UNION ALL
SELECT
    ID,
    'Fish' PRODUCT,
    AMT_PES AS AMOUNT
FROM
    PUBLIC.MARKETING_DATA M
UNION ALL
SELECT
    ID,
    'Chocolates' PRODUCT,
    AMT_CHOCOLATES AS AMOUNT
FROM
    PUBLIC.MARKETING_DATA M
UNION ALL
SELECT
    ID,
    'Commodities' PRODUCT,
    AMT_COMM AS AMOUNT
FROM
    PUBLIC.MARKETING_DATA M


---============================================================
    ---HIGHEST AVERAGE SPEND BY EDUCATION LEVEL AND PRODUCT CATEGORY
---============================================================
CREATE VIEW AVGSPEND_EDU_CAT_VIEW AS
SELECT
    MD.EDUCATION,
    S.PRODUCT,
    SUM(S.AMOUNT) / COUNT(S.ID) AS AVERAGE_SPEND,
    COUNT(S.ID) AS NUMBER_OF_CUSTOMERS
FROM
    SPEND_BY_CATEGORY_VIEW S
    JOIN PUBLIC.MARKETING_DATA MD ON S.ID = MD.ID
```

```
GROUP BY
    MD.EDUCATION,
    S.PRODUCT
ORDER BY
    AVERAGE_SPEND DESC;

SELECT
    EDUCATION,
    PRODUCT,
    AVERAGE_SPEND,
    NUMBER_OF_CUSTOMERS
FROM
    (
            SELECT
                    AV.EDUCATION,
                    AV.PRODUCT,
                    AV.AVERAGE_SPEND,
                    AV.NUMBER_OF_CUSTOMERS,
                    RANK() OVER (
                            PARTITION BY
                                    AV.EDUCATION
                            ORDER BY
                                    AV.AVERAGE_SPEND DESC
                    ) AS RANK
            FROM
                    AVGSPEND_EDU_CAT_VIEW AV
    ) RANKED
WHERE
    RANKED.RANK = 1;

---============================================================
---HIGHEST AVERAGE SPEND BY EDUCATION LEVEL, COUNTRY, GENERATION AND PRODUCT
CATEGORY
---============================================================
CREATE VIEW AVGSPEND_EDU_GEN_COUNT_CAT_VIEW AS
SELECT
    MD.EDUCATION,
    MD.COUNTRY,
    MD.GENERATION,
    S.PRODUCT,
    SUM(S.AMOUNT) / COUNT(S.ID) AS AVERAGE_SPEND,
    COUNT(S.ID) AS NUMBER_OF_CUSTOMERS
FROM
    SPEND_BY_CATEGORY_VIEW S
```

```
    JOIN PUBLIC.MARKETING_DATA MD ON S.ID = MD.ID
GROUP BY
    MD.EDUCATION,
    MD.COUNTRY,
    MD.GENERATION,
    S.PRODUCT
ORDER BY
    AVERAGE_SPEND DESC;

SELECT
    EDUCATION,
    PRODUCT,
    AVERAGE_SPEND,
    NUMBER_OF_CUSTOMERS
FROM
    (
            SELECT
                    AV.EDUCATION,
                    AV.PRODUCT,
                    AV.AVERAGE_SPEND,
                    AV.NUMBER_OF_CUSTOMERS,
                    RANK() OVER (
                            PARTITION BY
                                    AV.EDUCATION
                            ORDER BY
                                    AV.AVERAGE_SPEND DESC
                    ) AS RANK
            FROM
                    AVGSPEND_EDU_CAT_VIEW AV
    ) RANKED
WHERE
    RANKED.RANK = 1;

---=========================================================
---HIGHEST AVERAGE SPEND BY MARITAL STATUS AND PRODUCT CATEGORY
---=========================================================
CREATE VIEW AVGSPEND_MARITAL_CAT_VIEW AS
SELECT
    MD.MARITAL_STATUS,
    S.PRODUCT,
    SUM(S.AMOUNT) / COUNT(S.ID) AS AVERAGE_SPEND,
    COUNT(S.ID) AS NUMBER_OF_CUSTOMERS
FROM
    SPEND_BY_CATEGORY_VIEW S
```

```
    JOIN PUBLIC.MARKETING_DATA MD ON S.ID = MD.ID
GROUP BY
    MD.MARITAL_STATUS,
    S.PRODUCT
ORDER BY
    AVERAGE_SPEND DESC;

SELECT
    MARITAL_STATUS,
    PRODUCT,
    AVERAGE_SPEND,
    NUMBER_OF_CUSTOMERS
FROM
    (
            SELECT
                    AV.MARITAL_STATUS,
                    AV.PRODUCT,
                    AV.AVERAGE_SPEND,
                    AV.NUMBER_OF_CUSTOMERS,
                    RANK() OVER (
                            PARTITION BY
                                    AV.MARITAL_STATUS
                            ORDER BY
                                    AV.AVERAGE_SPEND DESC
                    ) AS RANK
            FROM
                    AVGSPEND_MARITAL_CAT_VIEW AV
    ) RANKED
WHERE
    RANKED.RANK = 1;

SELECT
    *
FROM
    AVGSPEND_MARITAL_CAT_VW
---=========================================================
    ---AVERAGE SPEND BY GROUPED MARITAL STATUS
---=========================================================
CREATE VIEW AVGSPEND_GRMARITAL_CAT_VIEW AS
SELECT
    MD.GR_MARITAL_STATUS,
    S.PRODUCT,
    SUM(S.AMOUNT) / COUNT(S.ID) AS AVERAGE_SPEND,
    COUNT(S.ID) AS NUMBER_OF_CUSTOMERS
```

```
FROM
    SPEND_BY_CATEGORY_VIEW S
    JOIN PUBLIC.MARKETING_DATA MD ON S.ID = MD.ID
GROUP BY
    MD.GR_MARITAL_STATUS,
    S.PRODUCT
ORDER BY
    AVERAGE_SPEND DESC;

SELECT
    GR_MARITAL_STATUS,
    PRODUCT,
    AVERAGE_SPEND,
    NUMBER_OF_CUSTOMERS
FROM
    (
            SELECT
                    AV.GR_MARITAL_STATUS,
                    AV.PRODUCT,
                    AV.AVERAGE_SPEND,
                    AV.NUMBER_OF_CUSTOMERS,
                    RANK() OVER (
                            PARTITION BY
                                    AV.GR_MARITAL_STATUS
                            ORDER BY
                                    AV.AVERAGE_SPEND DESC
                    ) AS RANK
            FROM
                    AVGSPEND_GRMARITAL_CAT_VIEW AV
    ) RANKED
WHERE
    RANKED.RANK = 1;
---============================================================
---CATEGORY WITH HIGHEST AVERAGE SPEND BY COUNTRY AND PRODUCT CATEGORY
---============================================================
CREATE VIEW AVGSPEND_COUNTRY_CAT_VIEW AS
SELECT
    MD.COUNTRY,
    S.PRODUCT,
    SUM(S.AMOUNT) / COUNT(S.ID) AS AVERAGE_SPEND,
    COUNT(S.ID) AS NUMBER_OF_CUSTOMERS
FROM
    SPEND_BY_CATEGORY_VIEW S
    JOIN PUBLIC.MARKETING_DATA MD ON S.ID = MD.ID
```

```
GROUP BY
    MD.COUNTRY,
    S.PRODUCT
ORDER BY
    AVERAGE_SPEND DESC;

SELECT
    COUNTRY,
    PRODUCT,
    AVERAGE_SPEND,
    NUMBER_OF_CUSTOMERS
FROM
    (
            SELECT
                    AV.COUNTRY,
                    AV.PRODUCT,
                    AV.AVERAGE_SPEND,
                    NUMBER_OF_CUSTOMERS,
                    RANK() OVER (
                            PARTITION BY
                                    AV.COUNTRY
                            ORDER BY
                                    AVERAGE_SPEND DESC
                    ) AS RANK
            FROM
                    AVGSPEND_COUNTRY_CAT_VIEW AV
    ) RANKED
WHERE
    RANKED.RANK = 1;

---============================================================
---AVERAGE SPEND BY GROUPED TOTAL NUMBER OF KIDS AND TEENS (RANGING FROM 0
TO 3 KIDS)
---============================================================
CREATE VIEW FAMILIES_NBOFKIDS_VIEW AS
SELECT
    MD.ID,
    SUM(KID_HOME + TEEN_HOME) AS TOTAL_KIDS
FROM
    PUBLIC.MARKETING_DATA MD
GROUP BY
    MD.ID
ORDER BY
    MD.ID;
```

```
CREATE VIEW AVG_SPEND_CAT_KIDS_VIEW AS
SELECT
    F.TOTAL_KIDS,

    SUM(AMOUNT) AS AVG_SPEND,
    COUNT(S.ID) AS NB_OF_CUSTOMERS
FROM
    FAMILIES_NBOFKIDS_VIEW F
    JOIN SPEND_BY_CATEGORY_VIEW S USING (ID)
GROUP BY
    F.TOTAL_KIDS

ORDER BY
    AVG_SPEND DESC;


---============================================================
---PIVOTED TABLE OF THE AVG SPEND BY NUMBER OF KIDS
---============================================================
CREATE VIEW SUM_OFFSPRING_VIEW AS
SELECT
    ID,
    SUM(KID_HOME) + SUM(TEEN_HOME) AS SUM_OFFSPRING,
    AMT_LIQ,
    AMT_VEGE,
    AMT_NONVEG,
    AMT_PES,
    AMT_CHOCOLATES,
    AMT_COMM
FROM
    MARKETING_DATA
GROUP BY
    ID
ORDER BY
    ID;



CREATE VIEW NB_KIDS_TEENS_CATEGORY_AVGSPEND_VIEW AS
SELECT
    COUNT(ID) AS FAMILY_COUNT,
    SUM_OFFSPRING AS NB_OF_KIDSANDTEENSINHOUSE,
    SUM(AMT_LIQ) / COUNT(ID) AS AVG_LIQ,
```

```
    SUM(AMT_VEGE) / COUNT(ID) AS AVG_VEGE,
    SUM(AMT_NONVEG) / COUNT(ID) AS AVG_NONVEG,
    SUM(AMT_PES) / COUNT(ID) AS AVG_PES,
    SUM(AMT_CHOCOLATES) / COUNT(ID) AS AVG_CHOCOLATES,
    SUM(AMT_COMM) / COUNT(ID) AS AVG_COMM
FROM
    SUM_OFFSPRING_VIEW
GROUP BY
    NB_OF_KIDSANDTEENSINHOUSE
ORDER BY
    NB_OF_KIDSANDTEENSINHOUSE ASC;

SELECT
    *
FROM
    NB_KIDS_TEENS_CATEGORY_AVGSPEND_VIEW;
---============================================================
--- PIVOTED SOCIAL MEDIA LEADS BY USERS
---============================================================
CREATE VIEW SOCIAL_MEDIA_USER_VIEW AS
SELECT
    AD.ID,
    'Twitter' AS PLATFORM,
    AD.TWITTER_AD AS TOTAL
FROM
    PUBLIC.AD_DATA AD
GROUP BY
    AD.ID,
    AD.TWITTER_AD
UNION ALL
SELECT
    AD.ID,
    'Instagram' AS PLATFORM,
    AD.INSTAGRAM_AD AS TOTAL
FROM
    PUBLIC.AD_DATA AD
GROUP BY
    AD.ID,
    AD.INSTAGRAM_AD
UNION ALL
SELECT
    AD.ID,
    'Facebook' AS PLATFORM,
    AD.FACEBOOK_AD AS TOTAL
```

```
FROM
    PUBLIC.AD_DATA AD
GROUP BY
    AD.ID,
    AD.FACEBOOK_AD;

SELECT
    *
FROM
    SOCIAL_MEDIA_USER_VIEW
---============================================================
    --- SOCIAL MEDIA BY COUNTRY
---============================================================
CREATE VIEW SOCIAL_MEDIA_COUNTRY_VIEW AS
SELECT
    MD.COUNTRY,
    SM.PLATFORM,
    SUM(CAST(SM.TOTAL AS INTEGER)) AS TOTAL_LEADS
FROM
    SOCIAL_MEDIA_USER_VIEW SM
    JOIN PUBLIC.MARKETING_DATA MD ON MD.ID = SM.ID
GROUP BY
    MD.COUNTRY,
    SM.PLATFORM
ORDER BY
    SUM(CAST(SM.TOTAL AS INTEGER)) DESC;

---============================================================
---Ad Channels
---============================================================
CREATE VIEW AD_USER_VIEW AS
SELECT
    AD.ID,
    'Brochure' AS PLATFORM,
    AD.BROCHURE_AD AS TOTAL
FROM
    PUBLIC.AD_DATA AD
GROUP BY
    AD.ID,
    AD.BROCHURE_AD
UNION ALL
SELECT
    AD.ID,
    'Bulk Mail' AS PLATFORM,
```

```
    AD.BULKMAIL_AD AS TOTAL
FROM
    PUBLIC.AD_DATA AD
GROUP BY
    AD.ID,
    AD.BULKMAIL_AD
UNION ALL
SELECT
    AD.ID,
    'Twitter' AS PLATFORM,
    AD.TWITTER_AD AS TOTAL
FROM
    PUBLIC.AD_DATA AD
GROUP BY
    AD.ID,
    AD.TWITTER_AD
UNION ALL
SELECT
    AD.ID,
    'Instagram' AS PLATFORM,
    AD.INSTAGRAM_AD AS TOTAL
FROM
    PUBLIC.AD_DATA AD
GROUP BY
    AD.ID,
    AD.INSTAGRAM_AD
UNION ALL
SELECT
    AD.ID,
    'Facebook' AS PLATFORM,
    AD.FACEBOOK_AD AS TOTAL
FROM
    PUBLIC.AD_DATA AD
GROUP BY
    AD.ID,
    AD.FACEBOOK_AD;

SELECT
    *
FROM
    AD_USER_VIEW
---============================================================
    --- AD CHANNELS PER COUNTRY
---============================================================
```

```
CREATE VIEW AD_CHANNELS_COUNTRY_VIEW AS
SELECT
    MD.COUNTRY,
    AD.PLATFORM,
    SUM(CAST(AD.TOTAL AS INTEGER)) AS TOTAL_LEADS
FROM
    AD_USER_VIEW AD
    JOIN PUBLIC.MARKETING_DATA MD ON MD.ID = AD.ID
GROUP BY
    MD.COUNTRY,
    AD.PLATFORM
ORDER BY
    MD.COUNTRY DESC;

---============================================================
---MOST EFFECTIVE PLATFORM BY COUNTRY
---============================================================
CREATE VIEW EFFECTIVE_PLATFORM_COUNTRY_VIEW AS
WITH
    SOCIALMEDIA_BYCOUNTRY AS (
            SELECT
                    MD.COUNTRY,
                    SM.PLATFORM,
                    SUM(CAST(SM.TOTAL AS INTEGER)) AS TOTAL_LEADS,
                    COUNT(MD.ID) AS NB_CUSTOMERS
            FROM
                    SOCIAL_MEDIA_USER_VIEW SM
                    JOIN PUBLIC.MARKETING_DATA MD ON MD.ID = SM.ID
            GROUP BY
                    MD.COUNTRY,
                    SM.PLATFORM
            ORDER BY
                    SUM(CAST(SM.TOTAL AS INTEGER)) DESC
    )
SELECT
    COUNTRY,
    PLATFORM,
    TOTAL_LEADS,
    NB_CUSTOMERS
FROM
    (
            SELECT
                    COUNTRY,
                    PLATFORM,
```

```
                TOTAL_LEADS,
                NB_CUSTOMERS,
                RANK() OVER (
                        PARTITION BY
                                COUNTRY
                        ORDER BY
                                TOTAL_LEADS DESC
                ) AS RANK
        FROM
                SOCIALMEDIA_BYCOUNTRY SC
    ) RANKED
WHERE
    RANKED.RANK = 1;
---============================================================
---MOST EFFECTIVE PLATFORM BY COUNTRY BY SUMMATION AND COUNT OF AD
CHANNELS
---============================================================
CREATE VIEW AD_USER_ACCEPTED AS
SELECT ID,
       PLATFORM,
       TOTAL
FROM AD_USER_VIEW
WHERE TOTAL is true

---BULKMAIL
CREATE VIEW BULKMAIL_SPEND_VIEW AS
SELECT MD.COUNTRY,
       AU.PLATFORM,
       SUM(CAST(AU.TOTAL AS INTEGER))AS COUNT_BULK,
       SUM(MD.AMT_LIQ)AS BULKMAIL_LIQ_SPEND,
       SUM(MD.AMT_VEGE)AS BULKMAIL_VEGE_SPEND,
       SUM(MD.AMT_NONVEG)AS BULKMAIL_NONVEG_SPEND,
       SUM(MD.AMT_PES)AS BULKMAIL_PES_SPEND,
       SUM(MD.AMT_CHOCOLATES)AS BULKMAIL_CHOCOLATES_SPEND,
       SUM(MD.AMT_COMM)AS BULKMAIL_COMM_SPEND
FROM PUBLIC.MARKETING_DATA MD
JOIN AD_USER_ACCEPTED AU ON MD.ID = AU.ID
WHERE AU.PLATFORM='Bulk Mail'
GROUP BY MD.COUNTRY,
      AU.PLATFORM;

---Twitter
CREATE VIEW TWITTER_SPEND_VIEW AS
SELECT MD.COUNTRY,
```

```
        AU.PLATFORM,
        SUM(CAST(AU.TOTAL AS INTEGER))AS COUNT_TWITTER,
        SUM(MD.AMT_LIQ)AS TWITTER_LIQ_SPEND,
        SUM(MD.AMT_VEGE)AS TWITTER_VEGE_SPEND,
        SUM(MD.AMT_NONVEG)AS TWITTER_NONVEG_SPEND,
        SUM(MD.AMT_PES)AS TWITTER_PES_SPEND,
        SUM(MD.AMT_CHOCOLATES)AS TWITTER_CHOCOLATES_SPEND,
        SUM(MD.AMT_COMM)AS TWITTER_COMM_SPEND
FROM PUBLIC.MARKETING_DATA MD
JOIN AD_USER_ACCEPTED AU ON MD.ID = AU.ID
WHERE AU.PLATFORM='Twitter'
GROUP BY MD.COUNTRY,
       AU.PLATFORM;

---Facebook
CREATE VIEW FACEBOOK_SPEND_VIEW AS
SELECT MD.COUNTRY,
        AU.PLATFORM,
        SUM(CAST(AU.TOTAL AS INTEGER))AS COUNT_FACEBOOK,
        SUM(MD.AMT_LIQ)AS FACEBOOK_LIQ_SPEND,
        SUM(MD.AMT_VEGE)AS FACEBOOK_VEGE_SPEND,
        SUM(MD.AMT_NONVEG)AS FACEBOOK_NONVEG_SPEND,
        SUM(MD.AMT_PES)AS FACEBOOK_PES_SPEND,
        SUM(MD.AMT_CHOCOLATES)AS FACEBOOK_CHOCOLATES_SPEND,
        SUM(MD.AMT_COMM)AS FACEBOOK_COMM_SPEND
FROM PUBLIC.MARKETING_DATA MD
JOIN AD_USER_ACCEPTED AU ON MD.ID = AU.ID
WHERE AU.PLATFORM='Facebook'
GROUP BY MD.COUNTRY,
       AU.PLATFORM;


---Instagram
CREATE VIEW INSTAGRAM_SPEND_VIEW AS
SELECT MD.COUNTRY,
        AU.PLATFORM,
        SUM(CAST(AU.TOTAL AS INTEGER))AS COUNT_INSTAGRAM,
        SUM(MD.AMT_LIQ)AS INSTAGRAM_LIQ_SPEND,
        SUM(MD.AMT_VEGE)AS INSTAGRAM_VEGE_SPEND,
        SUM(MD.AMT_NONVEG)AS INSTAGRAM_NONVEG_SPEND,
        SUM(MD.AMT_PES)AS INSTAGRAM_PES_SPEND,
        SUM(MD.AMT_CHOCOLATES)AS INSTAGRAM_CHOCOLATES_SPEND,
        SUM(MD.AMT_COMM)AS INSTAGRAM_COMM_SPEND
FROM PUBLIC.MARKETING_DATA MD
```

```
JOIN AD_USER_ACCEPTED AU ON MD.ID = AU.ID
WHERE AU.PLATFORM='Instagram'
GROUP BY MD.COUNTRY,
	AU.PLATFORM;

---Brochure
CREATE VIEW BROCHURE_SPEND_VIEW AS
SELECT MD.COUNTRY,
	AU.PLATFORM,
	SUM(CAST(AU.TOTAL AS INTEGER))AS COUNT_BROCHURE,
	SUM(MD.AMT_LIQ)AS BROCHURE_LIQ_SPEND,
	SUM(MD.AMT_VEGE)AS BROCHURE_VEGE_SPEND,
	SUM(MD.AMT_NONVEG)AS BROCHURE_NONVEG_SPEND,
	SUM(MD.AMT_PES)AS BROCHURE_PES_SPEND,
	SUM(MD.AMT_CHOCOLATES)AS BROCHURE_CHOCOLATES_SPEND,
	SUM(MD.AMT_COMM)AS BROCHURE_COMM_SPEND
FROM PUBLIC.MARKETING_DATA MD
JOIN AD_USER_ACCEPTED AU ON MD.ID = AU.ID
WHERE AU.PLATFORM='Brochure'
GROUP BY MD.COUNTRY,
	AU.PLATFORM;


---Bulkmail share view
CREATE VIEW BULKMAIL_SHARE_VIEW AS
SELECT PC.COUNTRY,
	ROUND(SUM(BS.BULKMAIL_LIQ_SPEND)/SUM(PC.SUM_LIQ),2)*100 AS
BULKMAIL_LIQ_SHARE,
	ROUND(SUM(BS.BULKMAIL_VEGE_SPEND)/SUM(PC.SUM_VEGE),2)*100 AS
BULKMAIL_VEGE_SHARE,
	ROUND(SUM(BS.BULKMAIL_NONVEG_SPEND)/SUM(PC.SUM_NONVEG),2)*100 AS
BULKMAIL_NONVEG_SHARE,
	ROUND(SUM(BS.BULKMAIL_PES_SPEND)/SUM(PC.SUM_PES),2)*100 AS
BULKMAIL_PES_SHARE,

ROUND(SUM(BS.BULKMAIL_CHOCOLATES_SPEND)/SUM(PC.SUM_CHOCOLATES),2)*100 AS
BULKMAIL_CHOCOLATES_SHARE,
	ROUND(SUM(BS.BULKMAIL_COMM_SPEND)/SUM(PC.SUM_COMM),2)*100 AS
BULKMAIL_COMM_SHARE
FROM BULKMAIL_SPEND_VIEW BS
JOIN PRODUCT_PER_CATEGORY_COUNTRY PC   ON BS.COUNTRY = PC.COUNTRY
GROUP BY PC.COUNTRY;

---Twitter share view
```

```
CREATE VIEW TWITTER_SHARE_VIEW AS
SELECT PC.COUNTRY,
	ROUND(SUM(BS.TWITTER_LIQ_SPEND)/SUM(PC.SUM_LIQ),2)*100 AS
TWITTER_LIQ_SHARE,
	ROUND(SUM(BS.TWITTER_VEGE_SPEND)/SUM(PC.SUM_VEGE),2)*100 AS
TWITTER_VEGE_SHARE,
	ROUND(SUM(BS.TWITTER_NONVEG_SPEND)/SUM(PC.SUM_NONVEG),2)*100 AS
TWITTER_NONVEG_SHARE,
	ROUND(SUM(BS.TWITTER_PES_SPEND)/SUM(PC.SUM_PES),2)*100 AS
TWITTER_PES_SHARE,
	ROUND(SUM(BS.TWITTER_CHOCOLATES_SPEND)/SUM(PC.SUM_CHOCOLATES),2)*100
AS TWITTER_CHOCOLATES_SHARE,
	ROUND(SUM(BS.TWITTER_COMM_SPEND)/SUM(PC.SUM_COMM),2)*100 AS
TWITTER_COMM_SHARE
FROM TWITTER_SPEND_VIEW BS
JOIN PRODUCT_PER_CATEGORY_COUNTRY PC   ON BS.COUNTRY = PC.COUNTRY
GROUP BY PC.COUNTRY;

---Facebook share view
CREATE VIEW FACEBOOK_SHARE_VIEW AS
SELECT PC.COUNTRY,
	ROUND(SUM(BS.FACEBOOK_LIQ_SPEND)/SUM(PC.SUM_LIQ),2)*100 AS
FACEBOOK_LIQ_SHARE,
	ROUND(SUM(BS.FACEBOOK_VEGE_SPEND)/SUM(PC.SUM_VEGE),2)*100 AS
FACEBOOK_VEGE_SHARE,
	ROUND(SUM(BS.FACEBOOK_NONVEG_SPEND)/SUM(PC.SUM_NONVEG),2)*100 AS
FACEBOOK_NONVEG_SHARE,
	ROUND(SUM(BS.FACEBOOK_PES_SPEND)/SUM(PC.SUM_PES),2)*100 AS
FACEBOOK_PES_SHARE,

ROUND(SUM(BS.FACEBOOK_CHOCOLATES_SPEND)/SUM(PC.SUM_CHOCOLATES),2)*100 AS
FACEBOOK_CHOCOLATES_SHARE,
	ROUND(SUM(BS.FACEBOOK_COMM_SPEND)/SUM(PC.SUM_COMM),2)*100 AS
FACEBOOK_COMM_SHARE
FROM FACEBOOK_SPEND_VIEW BS
JOIN PRODUCT_PER_CATEGORY_COUNTRY PC   ON BS.COUNTRY = PC.COUNTRY
GROUP BY PC.COUNTRY;

---Instagram Share
CREATE VIEW INSTAGRAM_SHARE_VIEW AS
SELECT PC.COUNTRY,
	ROUND(SUM(BS.INSTAGRAM_LIQ_SPEND)/SUM(PC.SUM_LIQ),2)*100 AS
INSTAGRAM_LIQ_SHARE,
```

```
	ROUND(SUM(BS.INSTAGRAM_VEGE_SPEND)/SUM(PC.SUM_VEGE),2)*100 AS
INSTAGRAM_VEGE_SHARE,
	ROUND(SUM(BS.INSTAGRAM_NONVEG_SPEND)/SUM(PC.SUM_NONVEG),2)*100 AS
INSTAGRAM_NONVEG_SHARE,
	ROUND(SUM(BS.INSTAGRAM_PES_SPEND)/SUM(PC.SUM_PES),2)*100 AS
INSTAGRAM_PES_SHARE,

ROUND(SUM(BS.INSTAGRAM_CHOCOLATES_SPEND)/SUM(PC.SUM_CHOCOLATES),2)*100
AS INSTAGRAM_CHOCOLATES_SHARE,
	ROUND(SUM(BS.INSTAGRAM_COMM_SPEND)/SUM(PC.SUM_COMM),2)*100 AS
INSTAGRAM_COMM_SHARE
FROM INSTAGRAM_SPEND_VIEW BS
JOIN PRODUCT_PER_CATEGORY_COUNTRY PC   ON BS.COUNTRY = PC.COUNTRY
GROUP BY PC.COUNTRY;

---Brochure Share
CREATE VIEW BROCHURE_SHARE_VIEW AS
SELECT PC.COUNTRY,
	ROUND(SUM(BS.BROCHURE_LIQ_SPEND)/SUM(PC.SUM_LIQ),2)*100 AS
BROCHURE_LIQ_SHARE,
	ROUND(SUM(BS.BROCHURE_VEGE_SPEND)/SUM(PC.SUM_VEGE),2)*100 AS
BROCHURE_VEGE_SHARE,
	ROUND(SUM(BS.BROCHURE_NONVEG_SPEND)/SUM(PC.SUM_NONVEG),2)*100 AS
BROCHURE_NONVEG_SHARE,
	ROUND(SUM(BS.BROCHURE_PES_SPEND)/SUM(PC.SUM_PES),2)*100 AS
BROCHURE_PES_SHARE,

ROUND(SUM(BS.BROCHURE_CHOCOLATES_SPEND)/SUM(PC.SUM_CHOCOLATES),2)*100 AS
BROCHURE_CHOCOLATES_SHARE,
	ROUND(SUM(BS.BROCHURE_COMM_SPEND)/SUM(PC.SUM_COMM),2)*100 AS
BROCHURE_COMM_SHARE
FROM BROCHURE_SPEND_VIEW BS
JOIN PRODUCT_PER_CATEGORY_COUNTRY PC   ON BS.COUNTRY = PC.COUNTRY
GROUP BY PC.COUNTRY;


---Liq
SELECT MD.COUNTRY,
	BR.BROCHURE_LIQ_SHARE,
	B.BULKMAIL_LIQ_SHARE,
	F.FACEBOOK_LIQ_SHARE,
	T.TWITTER_LIQ_SHARE,
	I.INSTAGRAM_LIQ_SHARE
FROM PUBLIC.MARKETING_DATA MD
```

```
FULL OUTER JOIN BULKMAIL_SHARE_VIEW B ON B.COUNTRY =  MD.COUNTRY
FULL OUTER JOIN BROCHURE_SHARE_VIEW BR ON BR.COUNTRY = B.COUNTRY
FULL OUTER JOIN FACEBOOK_SHARE_VIEW F ON F.COUNTRY = B.COUNTRY
FULL OUTER JOIN INSTAGRAM_SHARE_VIEW I ON  I.COUNTRY = F.COUNTRY
FULL OUTER JOIN TWITTER_SHARE_VIEW T ON T.COUNTRY = I.COUNTRY
GROUP BY MD.COUNTRY,
        BR.BROCHURE_LIQ_SHARE,
        B.BULKMAIL_LIQ_SHARE,
        F.FACEBOOK_LIQ_SHARE,
        T.TWITTER_LIQ_SHARE,
        I.INSTAGRAM_LIQ_SHARE
ORDER BY MD.COUNTRY;

---Comm
SELECT MD.COUNTRY,
        BR.BROCHURE_COMM_SHARE,
        B.BULKMAIL_COMM_SHARE,
        F.FACEBOOK_COMM_SHARE,
        T.TWITTER_COMM_SHARE,
        I.INSTAGRAM_COMM_SHARE
FROM PUBLIC.MARKETING_DATA MD
FULL OUTER JOIN BULKMAIL_SHARE_VIEW B ON B.COUNTRY =  MD.COUNTRY
FULL OUTER JOIN BROCHURE_SHARE_VIEW BR ON BR.COUNTRY = B.COUNTRY
FULL OUTER JOIN FACEBOOK_SHARE_VIEW F ON F.COUNTRY = B.COUNTRY
FULL OUTER JOIN INSTAGRAM_SHARE_VIEW I ON  I.COUNTRY = F.COUNTRY
FULL OUTER JOIN TWITTER_SHARE_VIEW T ON T.COUNTRY = I.COUNTRY
GROUP BY MD.COUNTRY,
        BR.BROCHURE_COMM_SHARE,
        B.BULKMAIL_COMM_SHARE,
        F.FACEBOOK_COMM_SHARE,
        T.TWITTER_COMM_SHARE,
        I.INSTAGRAM_COMM_SHARE
ORDER BY MD.COUNTRY;

---Chocolates
SELECT MD.COUNTRY,
        BR.BROCHURE_CHOCOLATES_SHARE,
        B.BULKMAIL_CHOCOLATES_SHARE,
        F.FACEBOOK_CHOCOLATES_SHARE,
        T.TWITTER_CHOCOLATES_SHARE,
        I.INSTAGRAM_CHOCOLATES_SHARE
FROM PUBLIC.MARKETING_DATA MD
FULL OUTER JOIN BULKMAIL_SHARE_VIEW B ON B.COUNTRY =  MD.COUNTRY
FULL OUTER JOIN BROCHURE_SHARE_VIEW BR ON BR.COUNTRY = B.COUNTRY
```

```
FULL OUTER JOIN FACEBOOK_SHARE_VIEW F ON F.COUNTRY = B.COUNTRY
FULL OUTER JOIN INSTAGRAM_SHARE_VIEW I ON  I.COUNTRY = F.COUNTRY
FULL OUTER JOIN TWITTER_SHARE_VIEW T ON T.COUNTRY = I.COUNTRY
GROUP BY MD.COUNTRY,
        BR.BROCHURE_CHOCOLATES_SHARE,
        B.BULKMAIL_CHOCOLATES_SHARE,
        F.FACEBOOK_CHOCOLATES_SHARE,
        T.TWITTER_CHOCOLATES_SHARE,
        I.INSTAGRAM_CHOCOLATES_SHARE
ORDER BY MD.COUNTRY;

---Vegetables
SELECT MD.COUNTRY,
        BR.BROCHURE_VEGE_SHARE,
        B.BULKMAIL_VEGE_SHARE,
        F.FACEBOOK_VEGE_SHARE,
        T.TWITTER_VEGE_SHARE,
        I.INSTAGRAM_VEGE_SHARE
FROM PUBLIC.MARKETING_DATA MD
FULL OUTER JOIN BULKMAIL_SHARE_VIEW B ON B.COUNTRY =  MD.COUNTRY
FULL OUTER JOIN BROCHURE_SHARE_VIEW BR ON BR.COUNTRY = B.COUNTRY
FULL OUTER JOIN FACEBOOK_SHARE_VIEW F ON F.COUNTRY = B.COUNTRY
FULL OUTER JOIN INSTAGRAM_SHARE_VIEW I ON  I.COUNTRY = F.COUNTRY
FULL OUTER JOIN TWITTER_SHARE_VIEW T ON T.COUNTRY = I.COUNTRY
GROUP BY MD.COUNTRY,
        BR.BROCHURE_VEGE_SHARE,
        B.BULKMAIL_VEGE_SHARE,
        F.FACEBOOK_VEGE_SHARE,
        T.TWITTER_VEGE_SHARE,
        I.INSTAGRAM_VEGE_SHARE
ORDER BY MD.COUNTRY;

---Non Vegetables
SELECT MD.COUNTRY,
        BR.BROCHURE_NONVEG_SHARE,
        B.BULKMAIL_NONVEG_SHARE,
        F.FACEBOOK_NONVEG_SHARE,
        T.TWITTER_NONVEG_SHARE,
        I.INSTAGRAM_NONVEG_SHARE
FROM PUBLIC.MARKETING_DATA MD
FULL OUTER JOIN BULKMAIL_SHARE_VIEW B ON B.COUNTRY =  MD.COUNTRY
FULL OUTER JOIN BROCHURE_SHARE_VIEW BR ON BR.COUNTRY = B.COUNTRY
FULL OUTER JOIN FACEBOOK_SHARE_VIEW F ON F.COUNTRY = B.COUNTRY
FULL OUTER JOIN INSTAGRAM_SHARE_VIEW I ON  I.COUNTRY = F.COUNTRY
```

```
FULL OUTER JOIN TWITTER_SHARE_VIEW T ON T.COUNTRY = I.COUNTRY
GROUP BY MD.COUNTRY,
	BR.BROCHURE_NONVEG_SHARE,
	B.BULKMAIL_NONVEG_SHARE,
	F.FACEBOOK_NONVEG_SHARE,
	T.TWITTER_NONVEG_SHARE,
	I.INSTAGRAM_NONVEG_SHARE
ORDER BY MD.COUNTRY;

---Pes
SELECT MD.COUNTRY,
	BR.BROCHURE_PES_SHARE,
	B.BULKMAIL_PES_SHARE,
	F.FACEBOOK_PES_SHARE,
	T.TWITTER_PES_SHARE,
	I.INSTAGRAM_PES_SHARE
FROM PUBLIC.MARKETING_DATA MD
FULL OUTER JOIN BULKMAIL_SHARE_VIEW B ON B.COUNTRY =  MD.COUNTRY
FULL OUTER JOIN BROCHURE_SHARE_VIEW BR ON BR.COUNTRY = B.COUNTRY
FULL OUTER JOIN FACEBOOK_SHARE_VIEW F ON F.COUNTRY = B.COUNTRY
FULL OUTER JOIN INSTAGRAM_SHARE_VIEW I ON  I.COUNTRY = F.COUNTRY
FULL OUTER JOIN TWITTER_SHARE_VIEW T ON T.COUNTRY = I.COUNTRY
GROUP BY MD.COUNTRY,
	BR.BROCHURE_PES_SHARE,
	B.BULKMAIL_PES_SHARE,
	F.FACEBOOK_PES_SHARE,
	T.TWITTER_PES_SHARE,
	I.INSTAGRAM_PES_SHARE
ORDER BY MD.COUNTRY;
---============================================================
---MOST EFFECTIVE PLATFORM BY MARITAL STATUS
---============================================================
    SOCIALMEDIA_BYMARITAL AS (
        SELECT
            MD.MARITAL_STATUS,
            SM.PLATFORM,
            SUM(CAST(SM.TOTAL AS INTEGER)) AS TOTAL_LEADS,
            COUNT(MD.ID) AS NB_CUSTOMERS
        FROM
            SOCIAL_MEDIA_USER_VIEW SM
            JOIN PUBLIC.MARKETING_DATA MD ON MD.ID = SM.ID
        GROUP BY
            MD.MARITAL_STATUS,
            SM.PLATFORM
```

```
        ORDER BY
            SUM(CAST(SM.TOTAL AS INTEGER)) DESC
    )
SELECT
    MARITAL_STATUS,
    PLATFORM,
    TOTAL_LEADS,
    NB_CUSTOMERS
FROM
    (
        SELECT
            MARITAL_STATUS,
            PLATFORM,
            TOTAL_LEADS,
            NB_CUSTOMERS,
            RANK() OVER (
                PARTITION BY
                    MARITAL_STATUS
                ORDER BY
                    TOTAL_LEADS DESC
            ) AS RANK
        FROM
            SOCIALMEDIA_BYMARITAL SC
    ) RANKED
WHERE
    RANKED.RANK = 1;

---============================================================
---MOST EFFECTIVE PLATFORM BY GROUPED MARITAL STATUS
---============================================================
WITH
    SOCIALMEDIA_BYMARITAL AS (
        SELECT
            MD.GR_MARITAL_STATUS,
            SM.PLATFORM,
            SUM(CAST(SM.TOTAL AS INTEGER)) AS TOTAL_LEADS,
            COUNT(MD.ID) AS NB_CUSTOMERS
        FROM
            SOCIAL_MEDIA_USER_VIEW SM
            JOIN PUBLIC.MARKETING_DATA MD ON MD.ID = SM.ID
        GROUP BY
            MD.GR_MARITAL_STATUS,
            SM.PLATFORM
        ORDER BY
```

```
                SUM(CAST(SM.TOTAL AS INTEGER)) DESC
    )
SELECT
    GR_MARITAL_STATUS,
    PLATFORM,
    TOTAL_LEADS,
    NB_CUSTOMERS
FROM
    (
        SELECT
            GR_MARITAL_STATUS,
            PLATFORM,
            TOTAL_LEADS,
            NB_CUSTOMERS,
            RANK() OVER (
                PARTITION BY
                    GR_MARITAL_STATUS
                ORDER BY
                    TOTAL_LEADS DESC
            ) AS RANK
        FROM
            SOCIALMEDIA_BYMARITAL SC
    ) RANKED
WHERE
    RANKED.RANK = 1;

---============================================================
--- LEAD SHARE PER SOCIAL MEDIA PLATFORM
---============================================================
CREATE VIEW LEAD_SHARE_VIEW AS
WITH
    LEAD_SHARE AS (
        SELECT
            MD.COUNTRY,
            SM.PLATFORM,
            SUM(CAST(SM.TOTAL AS INTEGER)) AS TOTAL_SOCIALLEAD
        FROM
            SOCIAL_MEDIA_USER_VIEW SM
            JOIN PUBLIC.MARKETING_DATA MD ON MD.ID = SM.ID
        GROUP BY
            MD.COUNTRY,
            SM.PLATFORM
        ORDER BY
            TOTAL_SOCIALLEAD DESC
```

```
    )
SELECT
    LS.COUNTRY,
    LS.PLATFORM,
    LS.TOTAL_SOCIALLEAD,
    ROUND(
            TOTAL_SOCIALLEAD * 100.0 / NULLIF(
                    SUM(TOTAL_SOCIALLEAD) OVER (PARTITION BY LS.COUNTRY),0),3) AS
LEAD_SHARE_PERCOUNTRY
FROM
    LEAD_SHARE LS
ORDER BY
    LS.COUNTRY,
    LEAD_SHARE_PERCOUNTRY;

SELECT
    *
FROM
    LEAD_SHARE_VIEW
WHERE
    LEAD_SHARE_PERCOUNTRY IS NOT NULL
ORDER BY
    LEAD_SHARE_PERCOUNTRY DESC;

---============================================================
--- ESTIMATED SALES GENERATED BY PLATFORM PER COUNTRY
---============================================================
CREATE VIEW ESTIMATED_SALES_PLATFORM_COUNTRY_VIEW AS
SELECT
    LS.COUNTRY,
    LS.PLATFORM,
    LS.TOTAL_SOCIALLEAD,
    LS.LEAD_SHARE_PERCOUNTRY,
    TS.TOTAL_SALES,
    ROUND((LS.LEAD_SHARE_PERCOUNTRY * 0.01) * TS.TOTAL_SALES,2) AS
ESTIMATED_SALES_PERPLATFORM,
    ROUND(((LS.LEAD_SHARE_PERCOUNTRY * 0.01) * TS.TOTAL_SALES) /
LS.TOTAL_SOCIALLEAD,2) AS SALES_PER_LEAD
FROM
    LEAD_SHARE_VIEW LS
    JOIN TOTAL_SPEND_COUNTRY_VIEW TS ON LS.COUNTRY = TS.COUNTRY
GROUP BY
    LS.COUNTRY,
    LS.PLATFORM,
```

```
    LS.TOTAL_SOCIALLEAD,
    LS.LEAD_SHARE_PERCOUNTRY,
    TS.TOTAL_SALES
ORDER BY
    LS.COUNTRY;

SELECT
    *
FROM
    ESTIMATED_SALES_PLATFORM_COUNTRY_VIEW
WHERE
    LEAD_SHARE_PERCOUNTRY IS NOT NULL;

---============================================================
--- MARKET SHARE BY COUNTRY
---============================================================
CREATE VIEW MARKET_SHARE_VIEW AS
WITH
    SPEND_CTE AS (
            SELECT
                    M.COUNTRY,
                    SUM(M.AMT_LIQ +
                    M.AMT_VEGE +
                    M.AMT_NONVEG +
                    M.AMT_PES +
                    M.AMT_CHOCOLATES +
                    M.AMT_COMM
                    ) TOTAL_SPEND
            FROM
                    MARKETING_DATA M
            GROUP BY
                    M.COUNTRY
            ORDER BY
                    TOTAL_SPEND DESC
    )
SELECT
    COUNTRY,
    TOTAL_SPEND,
    SUM(TOTAL_SPEND) OVER () OVERALL_SPEND,
    ROUND(TOTAL_SPEND / (SUM(TOTAL_SPEND) OVER ()) * 100, 2) MARKET_SHARE
FROM
    SPEND_CTE;

SELECT
```

```
    *
FROM
    MARKET_SHARE_VIEW
---============================================================
    --- MARKET SHARE BY GENERATION PER COUNTRY
---============================================================
CREATE VIEW MARKET_SHARE_GENERATION_VIEW AS
WITH
    GEN_SPEND_CTE AS (
        SELECT
            M.COUNTRY,
            M.GENERATION,
            SUM(M.AMT_LIQ +
            M.AMT_VEGE +
            M.AMT_NONVEG +
            M.AMT_PES +
            M.AMT_CHOCOLATES +
            M.AMT_COMM
            ) TOTAL_SPEND
        FROM
            MARKETING_DATA M
        GROUP BY
            M.COUNTRY,
            M.GENERATION
        ORDER BY
            TOTAL_SPEND DESC
    )
SELECT
    COUNTRY,
    GENERATION,
    TOTAL_SPEND AS TOTAL_SALES,
    SUM(TOTAL_SPEND) OVER (
        PARTITION BY
            COUNTRY
    ) AS TOTAL_SALES_COUNTRY,
    ROUND((TOTAL_SPEND / (SUM(TOTAL_SPEND) OVER (PARTITION BY COUNTRY)) *
100),2) MARKET_SHARE_GENERATION_COUNTRY
FROM
    GEN_SPEND_CTE;

SELECT
    *
FROM
    MARKET_SHARE_GENERATION_VIEW
```

```
WHERE
    GENERATION IN ('Gen Z');

---============================================================
--- MARKET SHARE BY GENERATION
---============================================================
CREATE VIEW GEN_SHARE_VIEW AS
WITH
    SPEND_CTE AS (
            SELECT
                    M.GENERATION,
                    SUM(M.AMT_LIQ +
                    M.AMT_VEGE +
                    M.AMT_NONVEG +
                    M.AMT_PES +
                    M.AMT_CHOCOLATES +
                    M.AMT_COMM
                    ) TOTAL_SPEND
            FROM
                    MARKETING_DATA M
            GROUP BY
                    M.GENERATION
            ORDER BY
                    TOTAL_SPEND DESC
    )
SELECT
    GENERATION,
    TOTAL_SPEND,
    SUM(TOTAL_SPEND) OVER () OVERALL_SPEND,
    ROUND(TOTAL_SPEND / (SUM(TOTAL_SPEND) OVER ()) * 100, 2) MARKET_SHARE
FROM
    SPEND_CTE;

SELECT
    *
FROM
    GEN_SHARE_VIEW
---============================================================
    --- MARKET SHARE BY EDUCATION
---============================================================
CREATE VIEW EDU_SHARE_VIEW AS
WITH
    SPEND_CTE AS (
            SELECT
```

```
                M.EDUCATION,
                SUM(
                        M.AMT_LIQ +
                        M.AMT_VEGE +
                        M.AMT_NONVEG +
                        M.AMT_PES +
                        M.AMT_CHOCOLATES +
                        M.AMT_COMM
                ) TOTAL_SPEND
        FROM
                MARKETING_DATA M
        GROUP BY
                M.EDUCATION
        ORDER BY
                TOTAL_SPEND DESC
    )
SELECT
    EDUCATION,
    TOTAL_SPEND,
    SUM(TOTAL_SPEND) OVER () OVERALL_SPEND,
    ROUND(TOTAL_SPEND / (SUM(TOTAL_SPEND) OVER ()) * 100, 2) MARKET_SHARE
FROM
    SPEND_CTE;

SELECT
    *
FROM
    EDU_SHARE_VIEW
---=========================================================
    ---ONLINE VS IN-STORE SALES BY GENERATION PER COUNTRY
---=========================================================
CREATE VIEW ONLINEOFFLINE_COUNTRY_GENERATION_VIEW AS
SELECT
    COUNTRY,
    GENERATION,
    SUM(NUM_WEBBUY) AS NUMBER_ONLINE_SALES,
    SUM(NUM_WALKINPUR) AS NUMBER_OFFLINE_SALES
FROM
    PUBLIC.MARKETING_DATA
GROUP BY
    COUNTRY,
    GENERATION
ORDER BY
    COUNTRY ASC;
```

```
---============================================================
---ONLINE VS IN-STORE BY GENERATION
---============================================================
CREATE VIEW SHARE_ONLINE_OFFLINE_SALES_VIEW AS
SELECT
    GENERATION,
    ROUND(
        SUM(NUM_WEBBUY) * 100.0 / NULLIF(SUM(NUM_WEBBUY +
NUM_WALKINPUR), 0),2) AS SHARE_ONLINE_SALES,
    ROUND(
        SUM(NUM_WALKINPUR) * 100.0 / NULLIF(SUM(NUM_WEBBUY +
NUM_WALKINPUR), 0),2) AS SHARE_OFFLINE_SALES
FROM
    PUBLIC.MARKETING_DATA
GROUP BY
    GENERATION
ORDER BY
    GENERATION ASC;

---============================================================
---ONLINE VS IN-STORE BY PRODUCT CATEGORY
---============================================================
CREATE VIEW SHARE_ONLINE_OFFLINE_SALES_PRODUCT_VIEW AS
WITH
    OFFLINE_ONLINE_CAT AS (
        SELECT
    )
SELECT
    GENERATION,
    ROUND(
        SUM(NUM_WEBBUY) * 100.0 / NULLIF(SUM(NUM_WEBBUY +
NUM_WALKINPUR), 0),2) AS SHARE_ONLINE_SALES,
    ROUND(
        SUM(NUM_WALKINPUR) * 100.0 / NULLIF(SUM(NUM_WEBBUY +
NUM_WALKINPUR), 0),2) AS SHARE_OFFLINE_SALES
FROM
    PUBLIC.MARKETING_DATA
GROUP BY
    GENERATION
ORDER BY
    GENERATION ASC;

---============================================================
```

```
---NB OF COMPLAINS PER COUNTRY
---============================================================
CREATE VIEW COMPLAINS_COUNTRY_VIEW AS
SELECT
    COUNTRY,
    ROUND(
            SUM(CAST(COMPLAIN AS INTEGER)) * 1.0 / COUNT(ID),2) AS
AVG_NB_OF_COMPLAINS,
    COUNT(ID)
FROM
    PUBLIC.MARKETING_DATA
GROUP BY
    COUNTRY
ORDER BY
    AVG_NB_OF_COMPLAINS;

---============================================================
---CAMPAIGN AND DEALS SUCCESS
---============================================================
CREATE VIEW CAMPAIGNS_DEALS_COUNTRY_VIEW AS
SELECT
    COUNTRY,
    SUM(CAST(RESPONSE AS INTEGER)) AS ACCEPTED_CAMPAIGNS,
    SUM(CAST(NUM_DEALS AS INTEGER)) AS PURCHASES_WITH_DISCOUNTS,
    COUNT(ID) AS NB_CUSTOMERS,
    ROUND(
            SUM(CAST(RESPONSE AS INTEGER)) * 1.0 / COUNT(ID) * 100,2) AS
CAMPAIGN_ACCEPTANCE_RATE,
    ROUND(
            SUM(CAST(NUM_DEALS AS INTEGER)) * 1.0 / COUNT(ID) * 100,2) AS
PURCHASES_WITH_DISCOUNT_RATE
FROM
    PUBLIC.MARKETING_DATA
GROUP BY
    COUNTRY
ORDER BY
    NB_CUSTOMERS DESC;
---============================================================
---CAMPAIGN AND DEALS SUCCESS PER CATEGORY
---============================================================
CREATE VIEW CAMPAIGNS_DEALS_CATEGORY_VIEW AS
SELECT
    MD.COUNTRY,
```

```
    SUM(CAST(RESPONSE AS INTEGER)) AS ACCEPTED_CAMPAIGNS,
    SUM(CAST(NUM_DEALS AS INTEGER)) AS PURCHASES_WITH_DISCOUNTS,
    COUNT(ID) AS NB_CUSTOMERS,
    ROUND(
        SUM(CAST(RESPONSE AS INTEGER)) * 1.0 / COUNT(ID) * 100,2) AS
CAMPAIGN_ACCEPTANCE_RATE,
    ROUND(
        SUM(CAST(NUM_DEALS AS INTEGER)) * 1.0 / COUNT(ID) * 100,2) AS
PURCHASES_WITH_DISCOUNT_RATE
FROM
    PUBLIC.MARKETING_DATA
GROUP BY
    COUNTRY
ORDER BY
    NB_CUSTOMERS DESC;

---============================================================
--- INACTIVE USERS FOR OVER 60 DAYS
---============================================================
CREATE VIEW INACTIVE_CUSTOMERS_COUNTRY_VIEW AS
WITH
    INACTIVE_CUSTOMERS AS (
        SELECT
            COUNTRY,
            COUNT(ID) AS NB_CUSTOMERS
        FROM
            PUBLIC.MARKETING_DATA
        WHERE
            RECENCY > 60
        GROUP BY
            COUNTRY
        ORDER BY
            NB_CUSTOMERS DESC
    )
SELECT
    I.COUNTRY,
    I.NB_CUSTOMERS AS INACTIVE_CUSTOMERS,
    COUNT(MD.ID) AS CUSTOMERS_PER_MARKET,
    ROUND(I.NB_CUSTOMERS * 1.0 / COUNT(MD.ID) * 100, 2) AS
SHARE_INACTIVE_CUSTOMERS
FROM
    INACTIVE_CUSTOMERS I
    JOIN MARKETING_DATA MD USING (COUNTRY)
GROUP BY
```

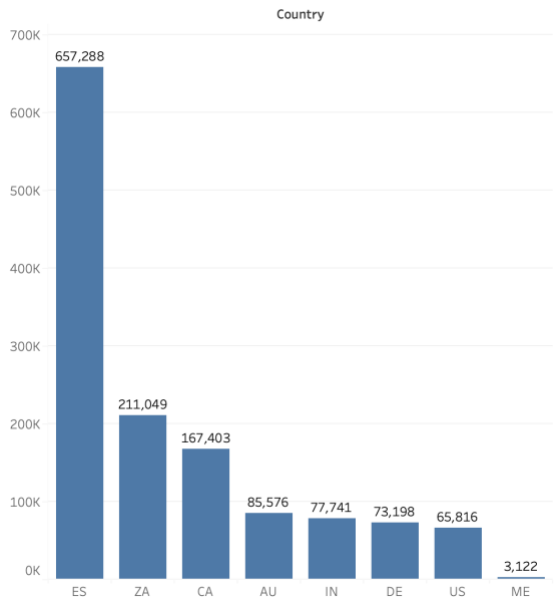
```
    I.COUNTRY,
    I.NB_CUSTOMERS
ORDER BY
    I.NB_CUSTOMERS;
```

III. Appendix: Detail Findings & Calculations

- Customers' average age = 45.09
- Average age per marital status

Opt out (Unknown)	Divorced	Together	Widow	Single	Married	Alone
48.25	45.94	45.64	45.51	45.12	44.45	33.67

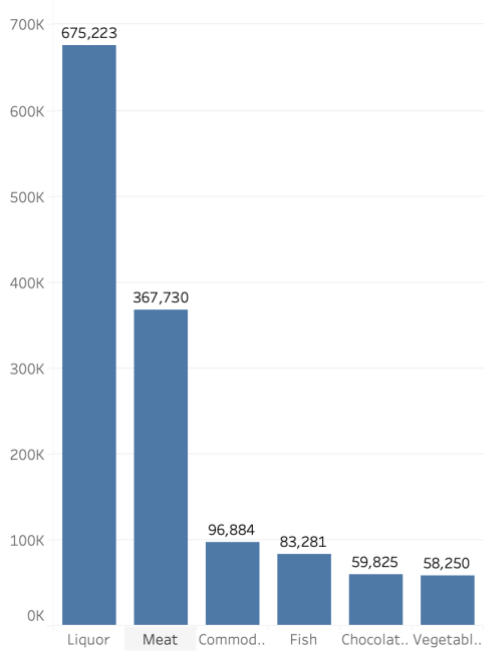
- Total sales by Country



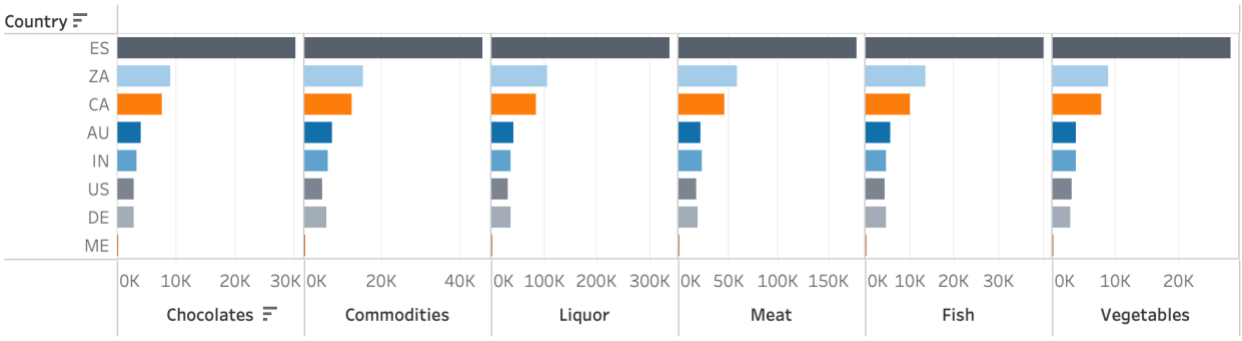
- Nb of Customers with kids and/or teens

0 Kids	632
1 Kid	1,114
2 Kids	415
3 Kids	50

- Total spend by product category



- Total spend by country by product category



- Avg spend by education by product category

Education	Chocolates	Commodities	Fish	Liquor	Meat	Vegetables
Basic	12	22	17	7	11	11
Bachelor	31	50	43	285	179	30
Master / Postgraduate Di..	25	42	37	287	153	24
PhD	20	31	26	407	169	19

- Products with the highest average spend by education level

Product	Education	Average Spend	Number Of Cust..
Commodities	Basic	22	54
Liquor	Bachelor	285	1,115
	Master / Postgraduate Di..	287	563
	PhD	407	479

- Highest average spend by marital status and number of customers

Product	Marital Status (group)	Average Spend	Number Of Customers
Commodities	Opt-Out (Unknow)	15.0	2.0
Liquor	Married	292.0	853.0
	Together	325.0	573.0
	Single	319.0	470.0
	Divorced	296.0	232.0
	Opt-Out (Unknow)	371.0	2.0
	Widow	246.0	76.0
	Alone	140.0	3.0

- Highest average spend by grouped marital status

Product	Gr Marital Status	Average Spend	Number Of Customers
Liquor	Married/Couple	303	1,428
	Opt-Out information	338	4
	Single	309	779

- Category with highest avg spend per country and number of customers.

Product	Count..	Average Spend	Number Of Customers
Liquor	ES	307	1,091
	ZA	315	336
	CA	316	266
	AU	290	147
	IN	248	146
	DE	317	116
	US	303	106
	ME	576	3

- Avg spend for households with 0 – 3 kids and/or teens broken down by category and nb of customers

Total Kids (group)	Product	Avg Spend	Nb Of Customers
0 Kids	Liquor	487	632
	Meat	370	632
	Fish	76	632
	Commodities	63	632
	Chocolates	53	632
	Vegetables	52	632
1 Kid	Liquor	269	1,114
	Meat	97	1,114
	Commodities	40	1,114
	Fish	26	1,114
	Chocolates	20	1,114
	Vegetables	19	1,114
2 Kids	Liquor	142	415
	Meat	51	415
	Commodities	24	415
	Fish	11	415
	Chocolates	8	415
	Vegetables	7	415
3 Kids	Liquor	161	50
	Meat	59	50
	Commodities	18	50
	Vegetables	5	50
	Fish	5	50
	Chocolates	5	50

- Total social media leads broken down by country and platform

	Platform		
Country	Facebook	Instagram	Twitter
ES	76	88	87
CA	18	21	24
ZA	20	21	20
DE	7	8	11
AU	7	12	6
IN	7	6	10
US	7	5	6
ME	0	0	0

- Total ad leads broken down by country and platform

	Country							
Platform	AU	CA	DE	ES	IN	ME	US	ZA
Brochure	0	6	2	16	2	0	0	4
Facebook	7	18	7	76	7	0	7	20
Instagram	12	21	8	88	6	0	5	21
Twitter	6	24	11	87	10	0	6	20
Bulk Mail	9	18	10	83	13	1	8	21

- Top social media platform per country *(excluding ME with zero leads on all 3 platforms)*

Country	Platform	Nb Customers	Total Leads
AU	Instagram	147	12
CA	Twitter	266	24
DE	Twitter	116	11
ES	Instagram	1,090	88
IN	Twitter	146	10
US	Facebook	106	7
ZA	Instagram	335	21

- Top platform by marital status *(excluding Opt-Out and Alone with 0 leads)*

Platform	Marital Status	Nb Customers	Total Leads
Instagram	Married	853.0	60.0
	Divorced	232.0	19.0
	Widow	76.0	5.0
Twitter	Together	571.0	47.0
	Single	470.0	40.0

- Top platform by grouped marital status

Gr Marital Status	Platform	Nb Customers	Total Leads
Married/Couple	Instagram	1,426	109
Opt-Out information	Facebook	4	1
	Instagram	4	1
Single	Twitter	779	60

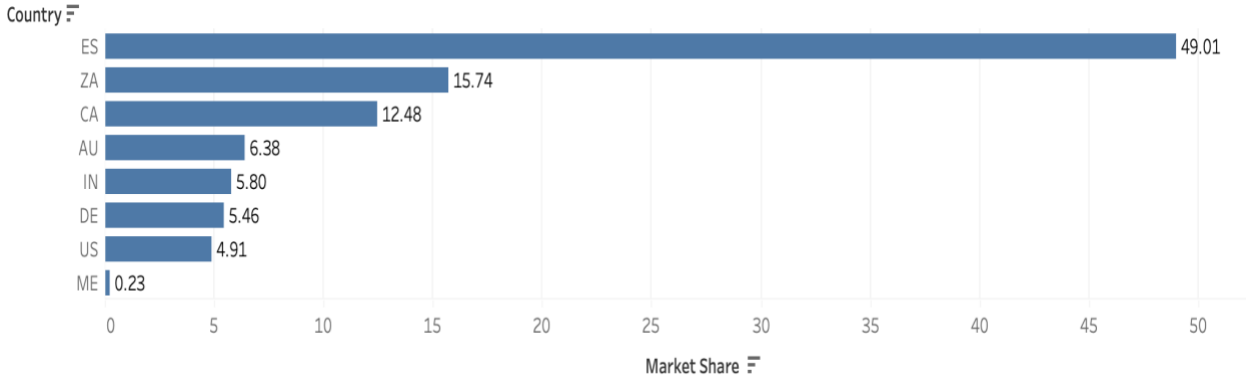
- Calculation of the % lead share by country & social media platform

Country	Facebook	Instagram	Twitter	Grand Total
AU	28.0	48.0	24.0	**100.0**
CA	28.6	33.3	38.1	**100.0**
DE	26.9	30.8	42.3	**100.0**
ES	30.3	35.1	34.7	**100.0**
IN	30.4	26.1	43.5	**100.0**
US	38.9	27.8	33.3	**100.0**
ZA	32.8	34.4	32.8	**100.0**

- Estimated sales per lead broken down by country and social media platform

Country	Platform	Lead Share Percountry	Total Sales	Sales Per Lead
AU	Facebook	28.00	85,576	3,423.04
	Instagram	48.00	85,576	3,423.04
	Twitter	24.00	85,576	3,423.04
CA	Facebook	28.57	167,403	2,657.06
	Instagram	33.33	167,403	2,656.92
	Twitter	38.10	167,403	2,657.52
DE	Facebook	26.92	73,198	2,814.99
	Instagram	30.77	73,198	2,815.38
	Twitter	42.31	73,198	2,815.46
ES	Facebook	30.28	657,288	2,618.77
	Instagram	35.06	657,288	2,618.70
	Twitter	34.66	657,288	2,618.57
IN	Facebook	30.43	77,741	3,379.51
	Instagram	26.09	77,741	3,380.44
	Twitter	43.48	77,741	3,380.18
US	Facebook	38.89	65,816	3,656.55
	Instagram	27.78	65,816	3,656.74
	Twitter	33.33	65,816	3,656.08
ZA	Facebook	32.79	211,049	3,460.15
	Instagram	34.43	211,049	3,460.20
	Twitter	32.79	211,049	3,460.15

- Market share by country



- Market share by Generation

Generation	
Baby Boomer	38.97
Gen X	41.28
Millenials	19.14
Gen Z	0.62

- Market share by Generation by country

Country	Baby Boomer	Gen X	Millenials	Gen Z
AU	38.68	43.68	17.50	0.14
CA	40.86	40.84	18.30	
DE	33.24	47.33	18.12	1.31
ES	40.45	41.34	17.64	0.58
IN	31.66	39.54	26.95	1.85
ME	27.99	31.71	40.29	
US	37.64	43.44	18.88	0.03
ZA	38.19	38.48	22.38	0.94

- Market share by education

Education	
Basic	0.33
Bachelor	51.60
Master / Postgraduate Diploma	23.97
PhD	24.10

- Number of online and offline purchases

Country	Generation	Number Offline Sales	Number Online Sales
AU	Baby Boomer	311	229
	Millenials	140	103
	Gen X	376	260
	Gen Z	3	3
CA	Baby Boomer	587	435
	Millenials	269	168
	Gen X	698	539
DE	Baby Boomer	234	158
	Millenials	145	91
	Gen X	309	212
	Gen Z	12	3
ES	Baby Boomer	2,358	1,583
	Millenials	1,123	733
	Gen X	2,807	2,016
	Gen Z	37	15
IN	Baby Boomer	223	164
	Millenials	214	160
	Gen X	337	254
	Gen Z	8	4
ME	Baby Boomer	7	10
	Millenials	4	6
	Gen X	8	2
US	Baby Boomer	251	192
	Millenials	122	81
	Gen X	275	205
	Gen Z	2	1
ZA	Baby Boomer	730	536
	Millenials	433	263
	Gen X	816	590
	Gen Z	7	7

- Online to offline share broken down by generation

Generation	Share Offline Sales	Share Online Sales
Baby Boomer	58.70	41.30
Gen X	57.98	42.02
Gen Z	67.65	32.35
Millenials	60.42	39.58

- % Complains by country

Count..	Nb of Customers	Total Complains	% Complains
ES	1,091	14	1.28%
ZA	336	3	0.89%
DE	116	1	0.86%
CA	266	2	0.75%
US	106	0	0.00%
ME	3	0	0.00%
IN	146	0	0.00%
AU	147	0	0.00%

- Campaign acceptance rate and % of purchases with discounts

Country	Accepted Campaigns	% of campaign acceptance	Purchases With Discounts	% of purchases with discount
AU	22	15	334	227
CA	38	14	640	241
DE	17	15	241	208
ES	176	16	2,461	226
IN	13	9	364	249
ME	2	67	7	233
US	13	12	270	255
ZA	52	15	814	242

- Share of inactive customers assuming inactivity period is > 60 days

Count..	
IN	41.78
ES	40.05
DE	39.66
US	38.68
ZA	36.31
CA	36.09
ME	33.33
AU	29.93

- Bulkmail sales share per product country and product category

Count..	Bulkmail Liquor Share	Bulkmail Meat Share	Bulkmail Commodities ..	Bulkmail Chocolates Sh..	Bulkmail Fish Share	Bulkmail Vegetables Sh..
ME	30.00	27.00	19.00	40.00	14.00	100.00
AU	12.00	11.00	14.00	7.00	9.00	8.00
IN	13.00	12.00	13.00	12.00	15.00	6.00
CA	10.00	9.00	13.00	10.00	8.00	9.00
US	6.00	4.00	12.00	4.00	6.00	8.00
ES	8.00	8.00	11.00	8.00	7.00	9.00
ZA	7.00	5.00	10.00	4.00	4.00	5.00
DE	13.00	9.00	10.00	6.00	8.00	9.00

- Brochure sales share per country and product category

Country	Brochure Liquor Share	Brochure Meat Share	Brochure Commodities S..	Brochure Chocolates Share	Brochure Fish Share	Brochure Vegetables Sha..
CA	5.00	3.00	2.00	2.00	2.00	2.00
DE	6.00	3.00	3.00	1.00	3.00	1.00
ES	5.00	2.00	2.00	2.00	2.00	1.00
IN	6.00	6.00	2.00	2.00	2.00	2.00
ZA	3.00	1.00	3.00	2.00	0.00	2.00

- Facebook sales share per country and product category

Country	Facebook Liquor Share	Facebook Meat Share	Facebook Commodities ..	Facebook Chocolates S..	Facebook Fish Share	Facebook Vegetables S..
AU	12.00	13.00	10.00	7.00	16.00	10.00
CA	16.00	20.00	11.00	17.00	16.00	12.00
DE	13.00	14.00	8.00	13.00	20.00	14.00
ES	18.00	18.00	12.00	17.00	16.00	16.00
IN	11.00	12.00	12.00	18.00	14.00	7.00
US	17.00	12.00	9.00	9.00	7.00	7.00
ZA	15.00	16.00	11.00	15.00	17.00	14.00

- Instagram sales share per country and product category

Country	Instagram Liquor Share	Instagram Meat Share	Instagram Commodities Sh..	Instagram Chocolates Share	Instagram Fish Share	Instagram Vegetables Share
AU	24.00	23.00	18.00	15.00	17.00	14.00
CA	21.00	18.00	13.00	14.00	13.00	14.00
DE	18.00	18.00	10.00	20.00	12.00	13.00
ES	23.00	24.00	14.00	20.00	17.00	20.00
IN	11.00	16.00	6.00	18.00	10.00	5.00
US	14.00	9.00	4.00	8.00	7.00	4.00
ZA	19.00	16.00	12.00	14.00	14.00	12.00

- Twitter sales share per country and product category

Country	Twitter Liquor Share	Twitter Meat Share	Twitter Commodities ..	Twitter Chocolates S..	Twitter Fish Share	Twitter Vegetables S..
AU	12.00	9.00	3.00	4.00	7.00	4.00
CA	20.00	11.00	9.00	7.00	10.00	8.00
DE	20.00	13.00	10.00	8.00	10.00	14.00
ES	20.00	12.00	10.00	11.00	9.00	9.00
IN	16.00	6.00	5.00	5.00	5.00	4.00
US	12.00	3.00	2.00	1.00	1.00	1.00
ZA	17.00	10.00	7.00	9.00	7.00	7.00