ONLINE RETAIL SALES ANALYSIS

DATA ANALYST

EXECUTIVE SUMMARY

The data used in this analysis is data that contains transactions from sales products from an online retail company based in the UK

01 - ANALYSIS NEEDS

- Descriptive analysis to understand data distribution, outliers, and sales trends.
- Segment customers based on purchasing behavior.
- Analyze sales trends by time (weekly, monthly, yearly).
- Identify the best-selling products and the products with the lowest sales.

02 - VISUALIZATION

- Histograms and box plots for data distribution.
- Scatter plots for customer segmentation.
- Line charts for sales trends.
- Bar charts for best-selling products.

DESCRIPTIVE ANALYSIS TO UNDERSTAND THE DISTRIBUTION OF SALES TREND DATA

Customer Segmentation Trends by Country
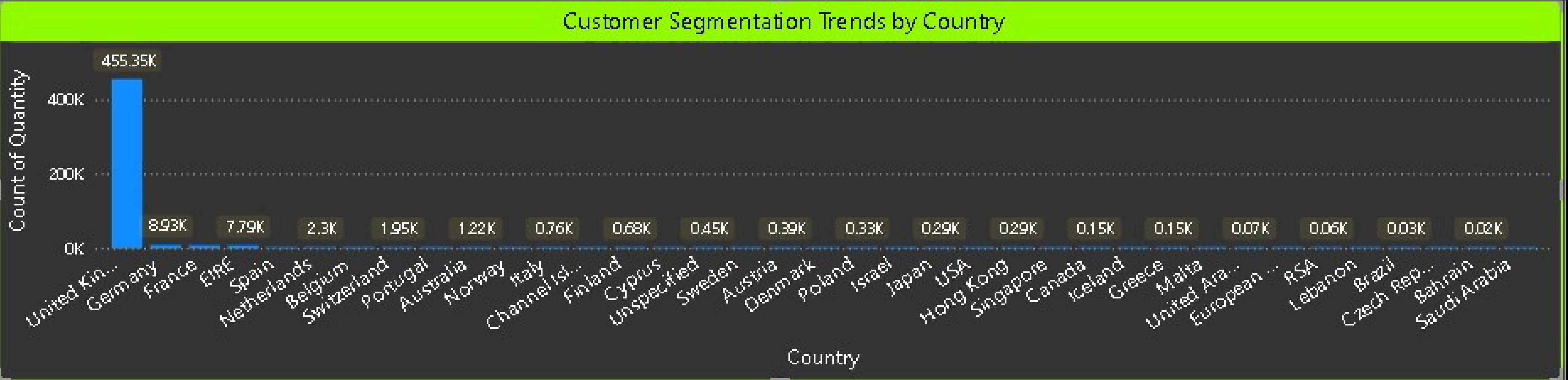
From the data output results related to the analysis of the description of data distribution, the sales trend is dominated by customers from the United Kingdom with a number of around 135,080 customers and the total quantity is 455.35k.
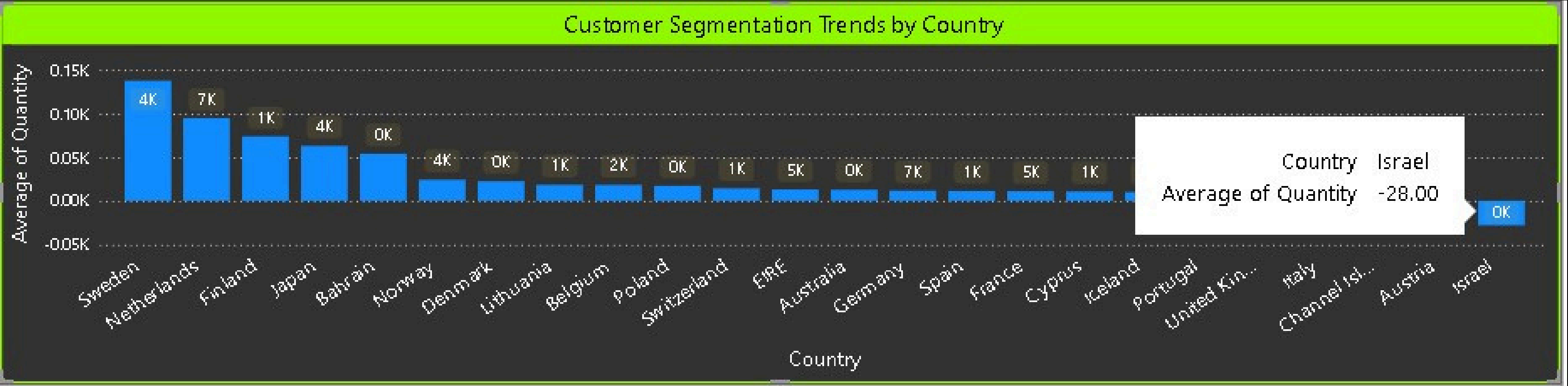
SALES TRENDS

PER-QUARTER 4 2010

Trend Product

Description	Sum of Quantity
WORLD WAR ...	5.2K
PACK OF 72 R...	4.1K
HAND WARM...	3.4K
WHITE HANGI...	3.3K
SMALL POPC...	2.7K
MINI PAINT S...	2.7K
PACK OF 12 L...	2.7K
GROW A FLYT...	2.6K
PAPER CHAIN...	2.5K
ASSORTED C...	2.4K
CREAM HEAR...	2.3K
RED HARMO...	2.2K

Trend Sales

Sum of Quantity vs Year

Data points: 27K, 15K, 25K, 11K, 18K, 30K, 4K, 15K, 3K, 6K

X-axis: Dec 05, Dec 12, Dec 19
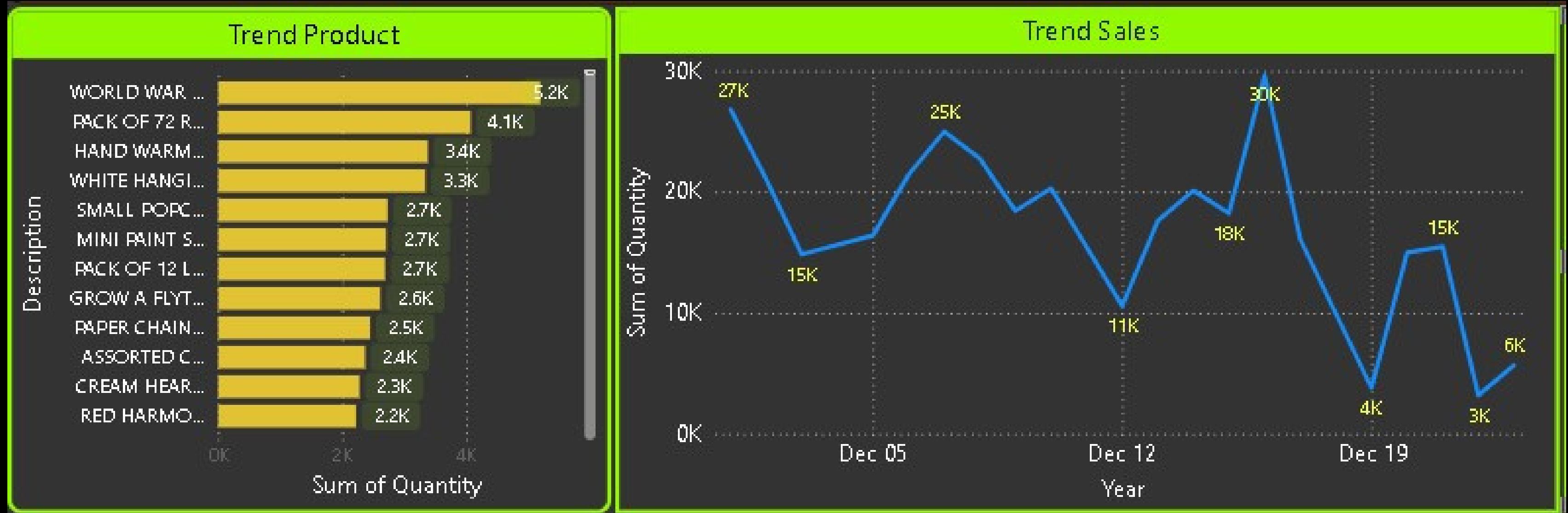
The results of the analysis of the above data are that for the best-selling and best-selling products during the 2010 period, namely the "World War..." with a total quantity of 5.2k while the chart from the trend of the line chart has decreased to 6k in December to be precise.

SALES TRENDS (AVG-SEGMENTATION)
PER-QUARTER 4 2010

Customer Segmentation Trends by Country

The results of the analysis of the data above show that the trend of quantity by country has decreased or reached a negative number, with an average of –28.00 in Israel

SALES TRENDS
PERIODE 2011

Trend Sales

Sum of Quantity

40K

20K

0K

-20K

44K

40K

46K

46K

11K

13K

8K

7K

5K

-14K

Mar 2011　　May 2011　　Jul 2011　　Sep 2011　　Nov 2011

Year

SALES TRENDS
PER-QUARTER 1 2011

Trend Product

| Description	Sum of Quantity
JUMBO BAG ...	11.0K
PACK OF 72 R...	9.5K
WHITE HANGI...	9.4K
WORLD WAR ...	8.9K
-	8.2K
SMALL POPC...	7.3K
BROCADE RI...	7.0K
PACK OF 12 L...	6.8K
ASSORTED C...	6.1K
ASSORTED C...	5.7K
MINI PAINT S...	5.5K
JUMBO BAG ...	5.5K

Trend Sales

The results of the analysis from the above data show that the sales trend in the period of Q1 2011 is precisely from January – March with uncertain results. The highest trend results were in March which reached 32K and the lowest was in February which reached 2K

SALES TRENDS (AVG-SEGMENTATION)
PER-QUARTER 1 2011

Customer Segmentation Trends by Country
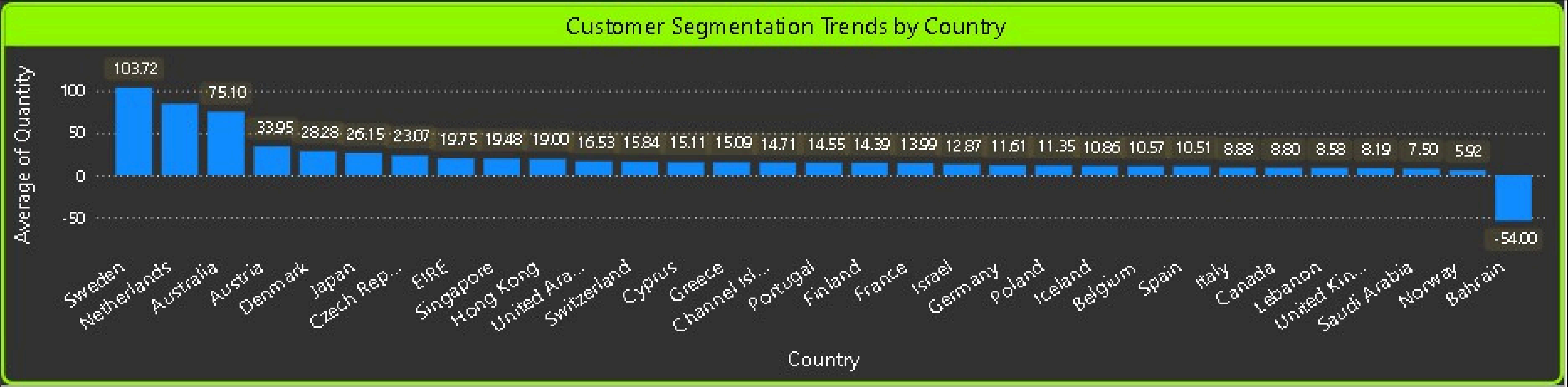
And if you look at the data above during this period it has decreased or reached an average minus number, namely Bahrain with a figure of –54.00

SALES TRENDS
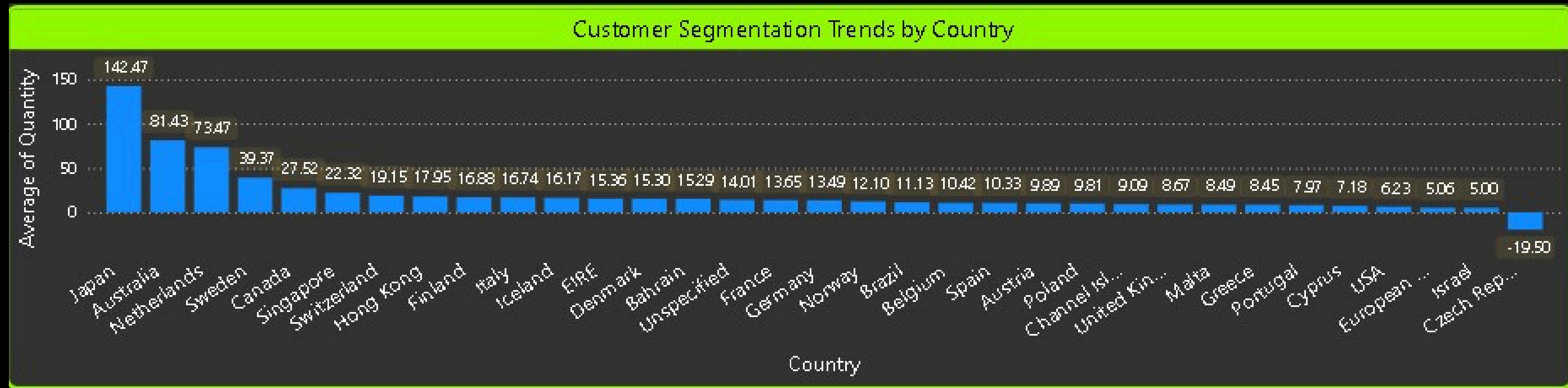## PER-QUARTER 2 2011

Trend Product

Description	Sum of Quantity
WORLD WAR ...	16K
ASSORTED C...	10K
SMALL POPC...	10K
JUMBO BAG ...	10K
PACK OF 72 R...	8K
PACK OF 60 P...	8K
PARTY BUNTI...	8K
WHITE HANGI...	8K
ASSORTED C...	7K
COLOUR GLA...	7K
VICTORIAN G...	6K
PACK OF 12 L...	6K

Trend Sales

17K, 4K, 11K, 36K, 27K, 5K, 30K, 30K, -14K, 21K

Apr 2011 — May 2011 — Jun 2011

The results of the analysis of the data above show that the sales trend is unstable where the increase is in May with a figure of 36k and in June it has decreased to a minus number of –14k

SALES TRENDS (AVG-SEGMENTATION)
PER-QUARTER 2 2011

Customer Segmentation Trends by Country

And if you look at the average number of segmentation quantities, there are those that have decreased or reached a minus number, namely the Czech Republic with a figure of –19.50
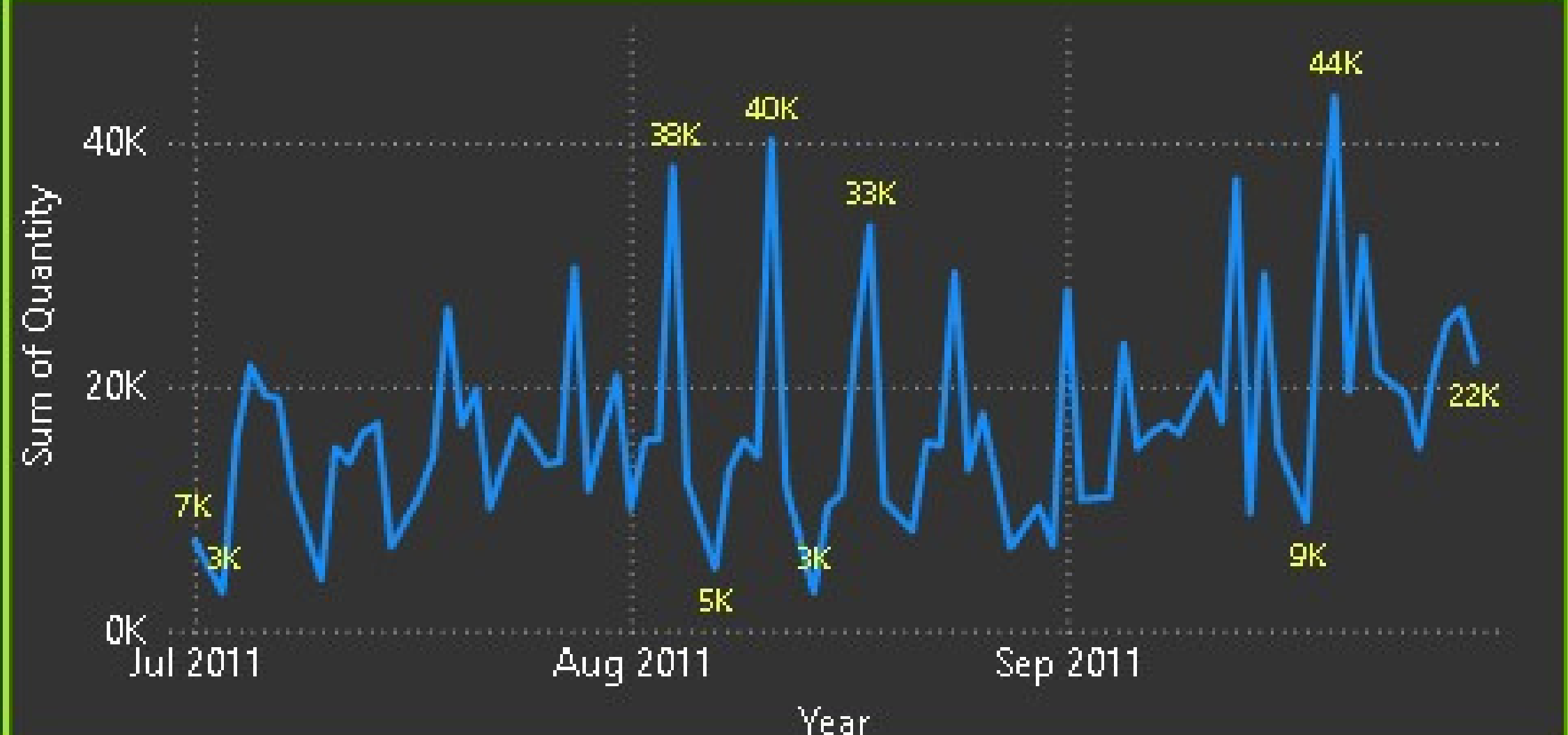
SALES TRENDS
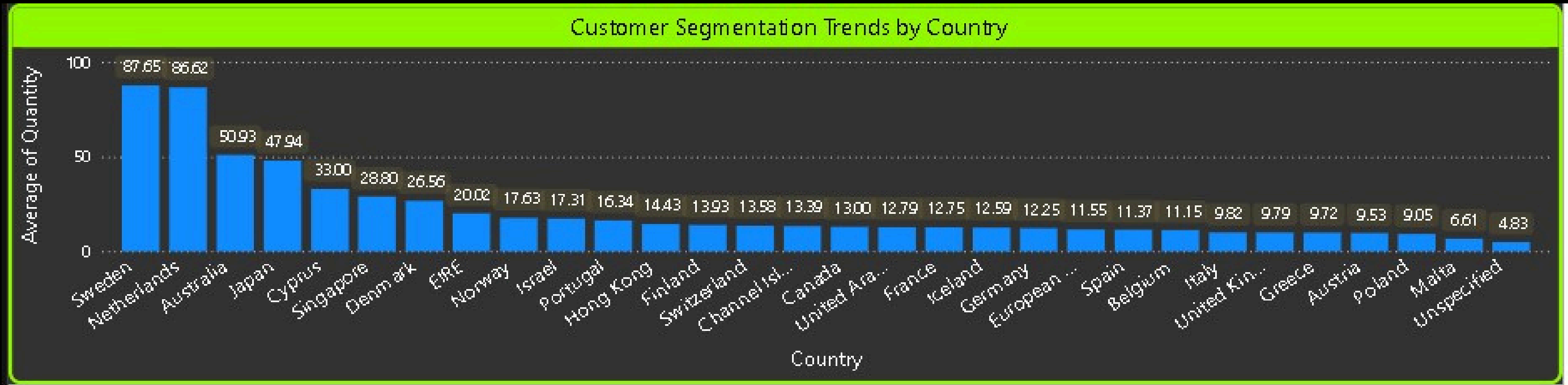## PER-QUARTER 3 2011

Trend Product

Description	Sum of Quantity
JUMBO BAG ...	12.8K
ASSORTED C...	11.4K
POPCORN H...	11.1K
WORLD WAR ...	9.5K
PACK OF 72 R...	9.1K
WHITE HANGI...	7.6K
GIRLS ALPHA...	7.0K
PACK OF 60 P...	6.9K
MINI PAINT S...	6.8K
JUMBO BAG ...	6.5K
SET OF 60 PA...	6.1K
BUBBLEGUM ...	6.0K

Trend Sales

The results of the analysis of the data above show that the sales trend is very positive from during this period, but in early July and mid-August there was a very significant decline, reaching 3K and at the beginning of SEP experiencing a quite intense increase, reaching 44K.

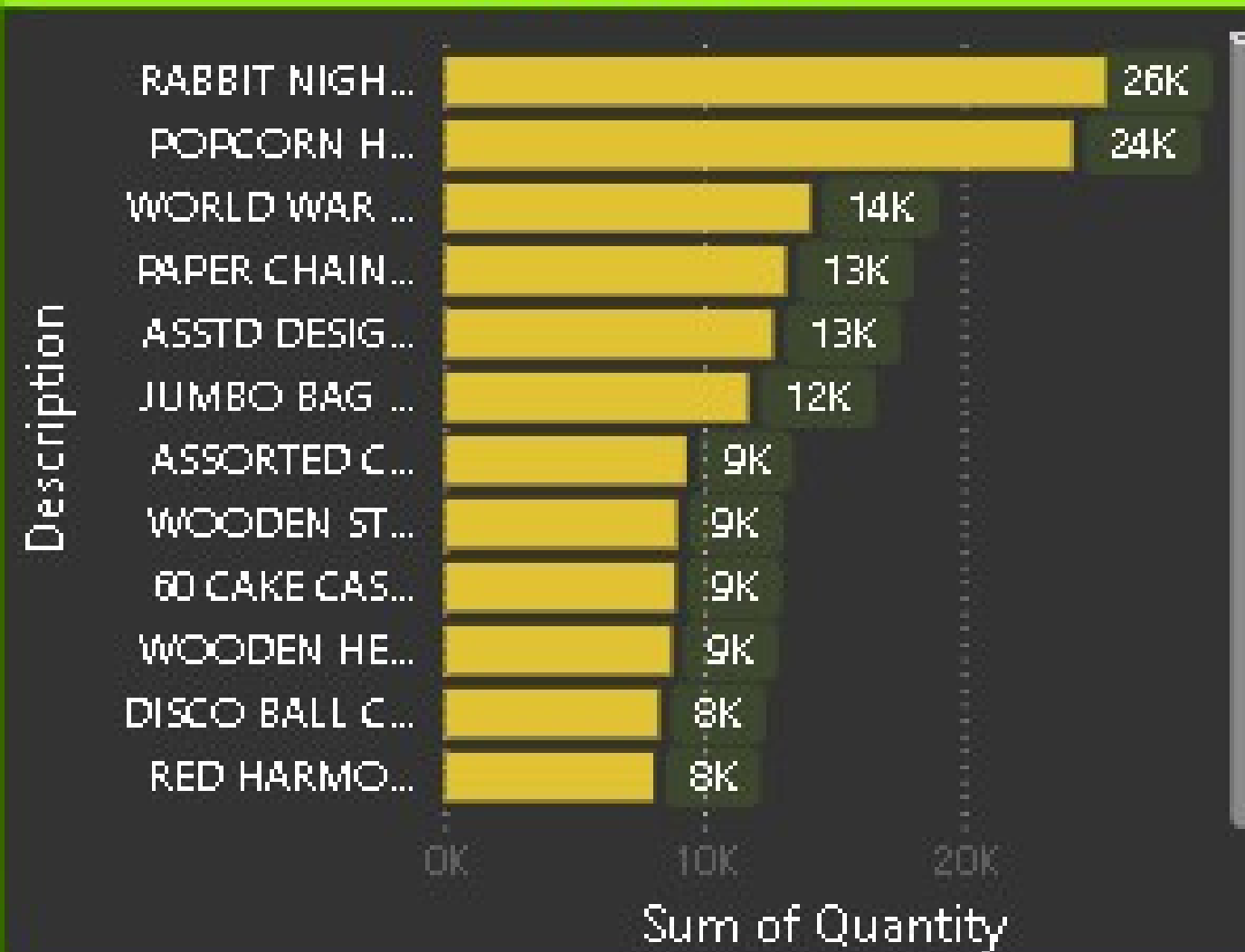# SALES TRENDS (AVG-SEGMENTATION)
PER-QUARTER 3 2011

Customer Segmentation Trends by Country

And if you look at the trend of the average number of semen quantity by country is quite positive

SALES TRENDS
PER-QUARTER 4 2011
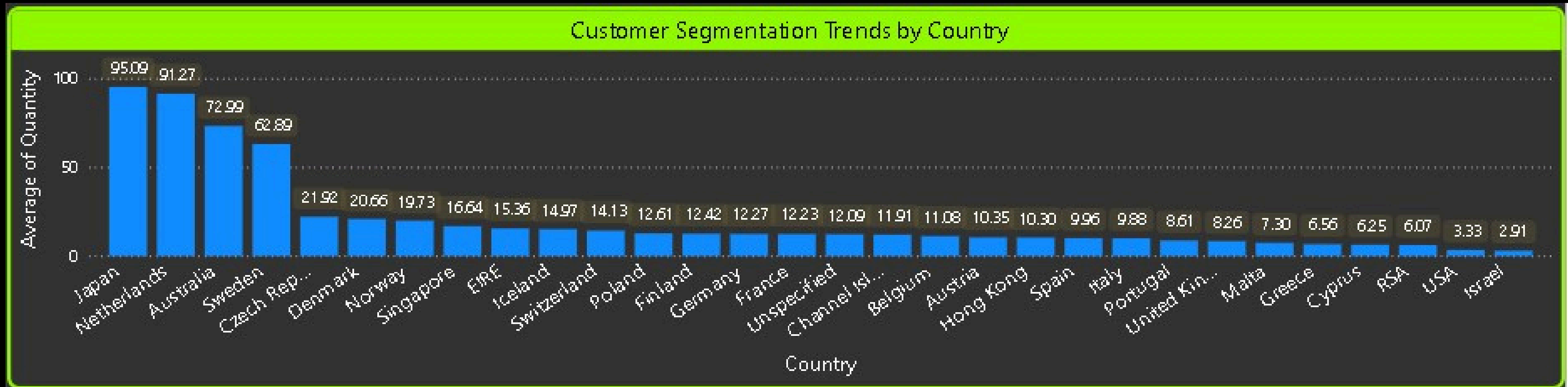

The results of the analysis from the data above can be concluded that the sales trend in this period has decreased from the last 2 months, reaching 5K in November and 12K in December

SALES TRENDS (AVG-SEGMENTATION)
PER-QUARTER 4 2011

Customer Segmentation Trends by Country

But on the other hand, if you look at the average number of segmentation quantities in this period, Japan has experienced an increase from the previous period, which reached 95.09. This means that the trend of selling products is starting to be in demand by several Asian countries, especially Japan.

THANK YOU