# Database Documentation

Write a detailed summary of your analysis of the items below. Prepare your summary for nontechnical stakeholders. Use the list below to guide the structure and organization of your report.

**Preparation and Discovery**:

Text

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SHOW DATABASES;

Text

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USE QuantigrationRMA;

SHOW TABLES;

**Collaborators VIEW’s columns and datatypes**

A picture containing diagram

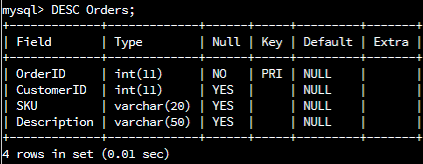
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**Customers TABLE’s columns and datatypes**

A screenshot of a computer

Description automatically generated with low confidence

**Orders TABLE’s columns and datatype**



**RMA TABLE’s columns and datatypes**

A screenshot of a computer

Description automatically generated with low confidence

**Customers TABLE’s first 10 rows**

Graphical user interface, text

Description automatically generated

**Orders TABLE’s first 10 rows (‘Description’ omitted for readability)**

Graphical user interface, text

Description automatically generated

**RMA TABLE’s first 10 rows**

Graphical user interface, application

Description automatically generated

1. **Write SQL commands** that capture specific, usable datathat can be used in your analysis.

**Customers’ Total Records**

Graphical user interface, text

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**Orders’ Total Records**

Text

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**RMA’s Total Records**

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**Customers’ Distinct ‘State’ Instances**

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**Orders’ Distinct ‘SKU’ Instances**

Text

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**RMA’s Distinct 'Status’ Instances**

Text

Description automatically generated with medium confidence

**Customers’ ‘State’ Mode/Anti-Mode**

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**Mode**: ‘Ne’ | f = 4591

**Anti-Mode**: ‘NC’, ‘NY’ | f = 1

**Orders’ ‘SKU’ Mode\Anti-Mode**

A screenshot of a computer

Description automatically generated with medium confidence

**Mode**: ‘BAS-48-1 C’ | f = 8385

**Anti-Mode**: ‘BAS-24-1 C’ | f = 34

**RMA’s ‘Status’ Mode/Anti-Mode**

A screenshot of a computer

Description automatically generated with low confidence

**Mode**: ‘Complete’ | f = 33653

**Anti-Mode**: ‘Initiated’ | f = 1495

**Orders TABLE’s Total Products Sold:**

Text

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**Total Products Sold in Northwestern states:**





Text

Description automatically generated with low confidence

1. **Analyze the results of queries** to identify specific information that can be presented in your summary.
   1. Sales by region:
      1. Analyze sales data by state to determine where the company has the largest customer base.

The state of Nebraska has the largest customer base with 4591 customers, as seen the in “**Customers’ ‘State’ Mode/Anti-Mode**” results table. Then comes Michigan and Massachusetts at 3177 and 2518, respectively. New York and North Carolina come out at bottom with only 1 customer each, followed by Texas at 5.

* + 1. Analyze the data to determine the top three products sold in the United States.

As seen in the “**Orders ‘SKU’ Mode/Anti-Mode**” results, ‘BAS-48-1 C’ (Basic Switch 10/100/1000 BaseT 48 port) is the top sold product in the United States at 8385 units sold, followed by ‘ENT-48-40F’ (Enterprise Switch 40GigE SFP+ 48 port) and ‘ENT-48-10F’ (Enterprise Switch 10GigE SFP+ 48 port) at 6186 and 4329, respectively. ‘BAS-24-1 C’ (Basic Switch 10/100/1000 BaseT 24 port) bottoms out the list at only 34 units.

* + 1. Analyze the data to determine the top three products sold in the southeastern region of the United States.
       - Southeastern states to include in your analysis: Virginia, North Carolina, South Carolina, and Georgia





A screenshot of a computer screen

Description automatically generated with low confidence

‘BAS-48-1 C’ (Basic Switch 10/100/1000 BaseT 8 port) at 519 units sold, ‘ENT-48-40F‘ (Enterprise Switch 40GigE SFP+ 48 port) at 354, and ‘ENT-48-10F’ (Enterprise Switch 10GigE SFP+ 48 port) at 254 are the most popular products in the Southeastern United States. ‘BAS-24-1 C’ (Basic Switch 10/100/1000 BaseT 24 port) comes in last with only a single unit sold.

* 1. Returns by region:
     1. Analyze the data to determine the top three products returned in the United States.

A picture containing graphical user interface

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A picture containing diagram

Description automatically generated

The top three product returns in the United States: ‘BAS-48-1 C’ (Basic Switch 10/100/1000 BaseT 48 port) at 8282, and ‘ENT-48-40F’ (Enterprise Switch 40GigE SFP+ 48 port) at 6118, and ENT-48-10F (Enterprise Switch 10GigE SFP+ 48 port) at 4287 returns. ‘BAS-24-1 C’ (Basic Switch 10/100/1000 BaseT 24 port) was returned only 33 times.

* + 1. Analyze the data to determine the top three products returned in the northwestern region of the United States.
       - Northwestern states to include in your analysis: Washington, Oregon, Idaho, and Montana

‘





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Description automatically generated with medium confidence





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The top three product returns in the Northwestern states: ‘BAS-48-1 C’ (Basic Switch 10/100/1000 BaseT 48 port) at 536, ‘ENT-48-10F’ (Enterprise Switch 40GigE SFP+ 48 port) at 380, and ‘BAS-08-1 C’ (Basic Switch 10/100/1000 BaseT 8 port) at 302 returns. ‘ENT-24-40F’ (Enterprise Switch 40GigE SFP+ 24 port) lands at the bottom of the list at only 148 returns.

1. **Write a report** to the Quantigration product manager that explains your findings in a way nontechnical stakeholders can digest and use.
   1. This report should include an effective summary of the analysis of the captured data.

Included below is a summary of the findings in this report. Some calculations are included for verification purposes.

* + 1. Sales data by region: Provide a well-written summary of your analysis on Part A.

In terms of total sales in the United States, Nebraska is home to our largest customer base at 4591 customers – that is 12% of our total customer base of 38,007 customers:

That’s followed by Michigan and Massachusetts at 3177 and 2518, respectively. Michigan comes out to 8.4% of our customer base:

That is a difference of about 36% from the top spot that Nebraska holds:

New York and North Carolina are home to the least number of customers, with only 1 customer each.

The top product sold in the United States is our Basic 48-port 1-Gigabit Ethernet Switch (BAS-48-1 C), coming in at 8385 units sold, which is around 22% of the total 37,997 product sales:

Next, is our Enterprise 48-port 40-Gigabit Ethernet Switch (ENT-48-40F), coming in at 6186 units sold, which is around 16% of total products sold:

That’s a difference of about 30%:

Next in line is the Enterprise 48-port 10-Gigabit Ethernet Switch (ENT-48-10F) at 4329. And at the bottom of the list is our Basic 24-port 1-Gigabit Ethernet Switch (BAS-24-1 C) at only 34 units sold.

The top product sold in the Southeastern region, which includes Virginia, North Carolina, South Carolina, and Georgia, is our Basic 8-port 1-Gigabit Ethernet Switch (BAS-48-1 C), coming in at 519 units sold. Then, our Enterprise 48-port 40-Gigabit Switch (ENT-48-40F) at 354 units, and the Enterprise 48-port 10-Gigabit Switch ( ENT-48-10F) at 254 units sold. The least sold product of ours is the Basic 24-port 1-Gigabit Switch (BAS-24-1 C), coming in at only a single unit sold.

* + 1. Returns data by region: Provide a well-written summary of your analysis of Part B.

In terms of returns in the United States, the Basic 48-port 1-Gigabit Ethernet Switch (BAS-48-1 C) is our top returned product, with 8282 total returns, which is 22% of total 37,564 product returns:

Next, comes our Enterprise 48-port 40-Gigabit Ethernet Switch (ENT-48-40F) at 6118 – that’s 16% of our product returns:

This is a difference from the top returned product of about 30%:

Our third most returned item is the Enterprise 48-port 10-Gigabit Ethernet Switch (ENT-48-10F) with 4287 returns. Our least returned product is the Basic 24-port 1-Gigabit Ethernet Switch (BAS-24-1-C) with 33 returns.

In the Northwestern region, including Washington, Oregon, Idaho, and Montana, our top product return is the Basic 48-port 1-Gigabit Ethernet Switch (BAS-48-1 C) with 536 returns, which is 22% of the total 2,443 returns in the region:

Next, is our Enterprise 48-port 40-Gigabit Ethernet Switch (ENT-48-10F) at 380 returns, which is 16% of total returns:

This is a difference from the most returned item by about 34%:

Third, is the Basic 8-port 1-Gigabit Ethernet Switch (BAS-08-1 C) with 302 returns. The product with the least number of returns is the Enterprise 24-port 40-Gigabit Ethernet Switch (ENT-24-40F) with 148 returned units.

Consumer and Enterprise customers continue to be essential parts of this company. Better distribution of product and company awareness may prove beneficial in locations like New York and South Carolina. A focus on reducing unnecessary R.M.A.s should be addressed.