

THE UNIVERSITY OF NEWCASTLE  
SCHOOL OF ELECTRICAL ENGINEERING AND COMPUTING



ADVANCED DATABASES  
COMP3350 - SEMESTER 1, 2020

---

# Item Sales and Ordering Patterns

---

*Author:*  
Karl FOLEY  
Dillon LATIMORE

May 5, 2020

# Contents

<b>List of Figures</b>	<b>ii</b>
<b>1 Introduction</b>	<b>1</b>
1.1 DashBoards . . . . .	1
1.2 Limitations . . . . .	1
<b>2 Item Sales Tends by Year</b>	<b>1</b>
2.1 Stock Items By Sales Count . . . . .	1
2.2 Items By Total Sales . . . . .	2
2.3 Items Ordered by State . . . . .	2
2.4 Item By Sales Territories . . . . .	2
2.5 Profit by Item . . . . .	2
<b>3 Item Purchase Tends by Year</b>	<b>2</b>
3.1 2013 . . . . .	2
3.2 2014 . . . . .	2
3.3 2015 . . . . .	2
3.4 2016 . . . . .	3
<b>4 Conclusions and Recommendations</b>	<b>3</b>
<b>5 Appendix</b>	<b>5</b>

## List of Figures

1	Item Sales 2013 DashBoard . . . . .	5
2	Item Sales 2014 DashBoard . . . . .	6
3	Item Sales 2015 DashBoard . . . . .	7
4	Item Sales 2016 DashBoard . . . . .	8
5	Stock item by Sale Count 2013 . . . . .	9
6	Stock item by Sale Count 2014 . . . . .	9
7	Stock item by Sale Count 2015 . . . . .	10
8	Stock item by Sale Count 2016 . . . . .	10
9	Total Sales by item 2013 . . . . .	11
10	Total Sales by item 2014 . . . . .	12
11	Total Sales by item 2015 . . . . .	13
12	Total Sales by item 2016 . . . . .	14
13	Sale Count by State Province2013 . . . . .	15
14	Item Purchase 2013 DashBoard . . . . .	16
15	Item Purchase 2014 DashBoard . . . . .	17
16	Item Purchase 2015 DashBoard . . . . .	18
17	Item Purchase 2016 DashBoard . . . . .	19

# 1 Introduction

## 1.1 DashBoards

This report explores the buying trends of WW1's customers by year. The data is presented in two different dashboards. The first dashboard is the item Sales Dashboard, this looks at most bought items, the amount of items by region, alongside profit per item and the total dollar revenue amount sold for an item. The Last 3 diagrams only look at the top ten items for either respective view.

The second dashboard is the item Purchase Dashboard, This looks at most Purchased items, most purchased items by Supplier, Suppliers and corresponding post codes and the volume of purchases by month.

For further Drill downs of each of these metrics Refer to the dashboard in power BI for a closer look at each item.

## 1.2 Limitations

When comparing where WW1 customers are and where WW1 Suppliers are we are unable to compare the two because data provided for supplies location are a postcode which is not a dataset of the cities dimension given to us by WW1.

# 2 Item Sales Trends by Year

For Items Sales charts are all on a year specific Dashboard- 2013 figure: 1, 2014 figure: 2, 2015 figure: 3 and 2016 figure: 4.

## 2.1 Stock Items By Sales Count

Looking at each year's items by the quantity that are sold, refer to 2013 figure: 5, 2014 figure: 6, 2015 figure: 7 and 2016 figure: 8. Starts to show that there is no trend popular items over the four years of data. The top 10 items that WW1 ships per year based on quantity are not the same. There is only one recurring item across all items which is the "DBA Joke mug - it depends (white)". In the past 2 years "10 mm Static Bubble Wrap (blue) 10m" has appeared in the top 10. The top 10 items per quantity year over year tends to be about the same quantity. With only having 5 months of data for 2016, the trend that the most popular items for WW1 will have a quantity between 300-400 items looks to be on track.

## **2.2 Items By Total Sales**

Exploring the Data year over year for Items by total sales price, refer to 2013 figure: 9, 2014 figure: 10, 2015 figure: 11 and 2016 figure: 12.. Shows that the same items show up. With further exploration of these items there is a combination of factors why these items show up. The leading factor is item price, these items year over year sell about the same quantity which is why the items move around in the top 10.

## **2.3 Items Ordered by State**

Stuff

## **2.4 Item By Sales Territories**

Stuff

## **2.5 Profit by Item**

Stuff

# **3 Item Purchase Trends by Year**

For Items purchased charts are all on a year specific Dashboard - 2013 figure: 14, 2014 figure: 15, 2015 figure: 16 and 2016 figure: 17.

## **3.1 2013**

Stuff

## **3.2 2014**

Stuff

## **3.3 2015**

Stuff

### **3.4 2016**

Stuff

## **4 Conclusions and Recommendations**

Stuff



## 5 Appendix

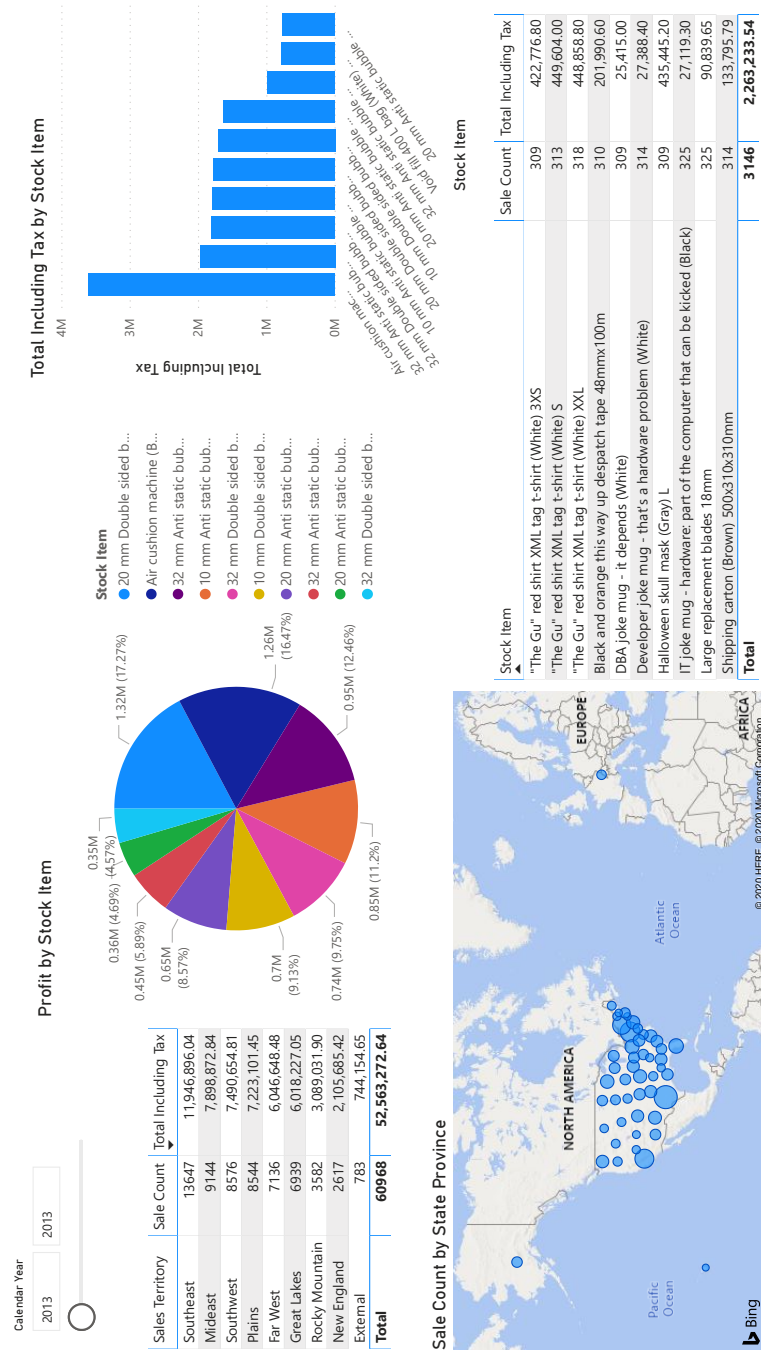
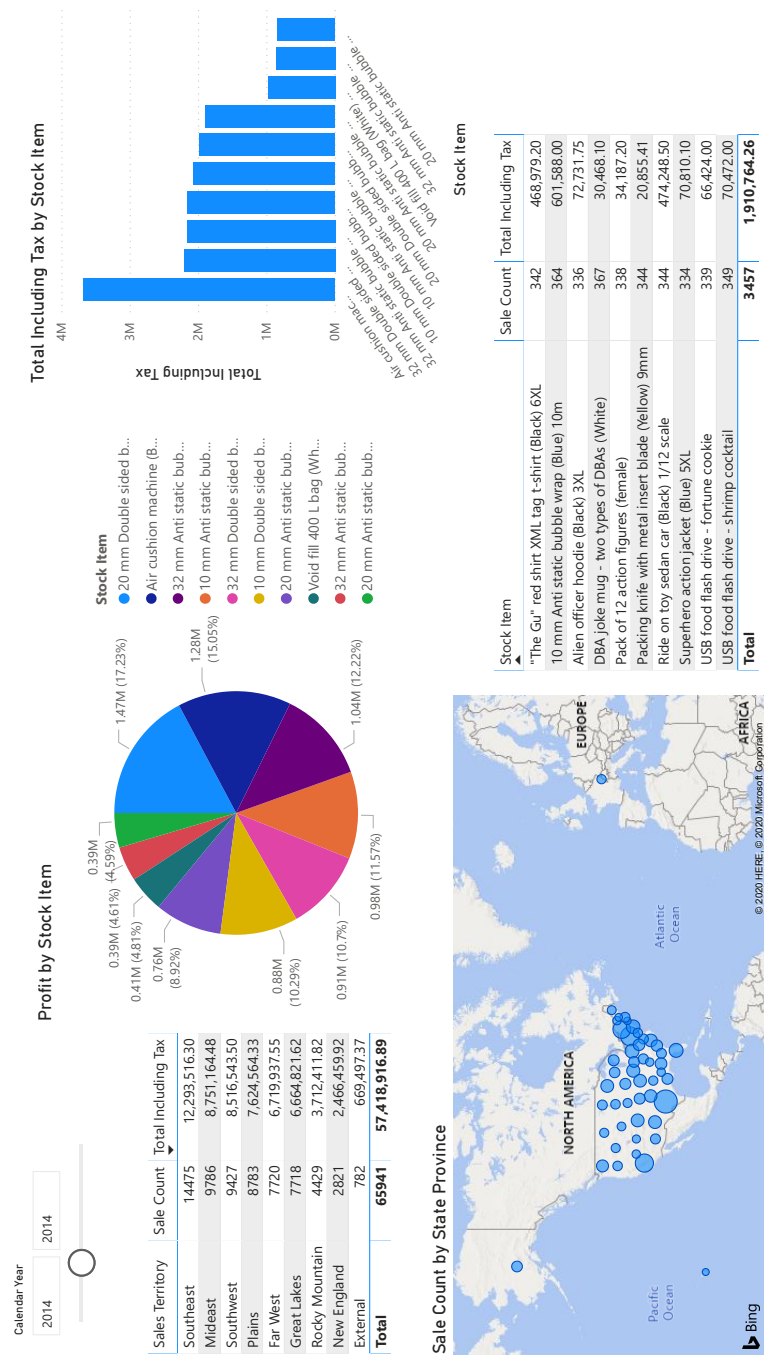


Figure 1: Item Sales 2013 Dashboard





Sale Count by State Province

NORTH AMERICA

EUROPE

AFRICA

Atlantic Ocean

Pacific Ocean

Bing

© 2020 HERE. © 2020 Microsoft Corporation

Figure 2: Item Sales 2014 DashBoard

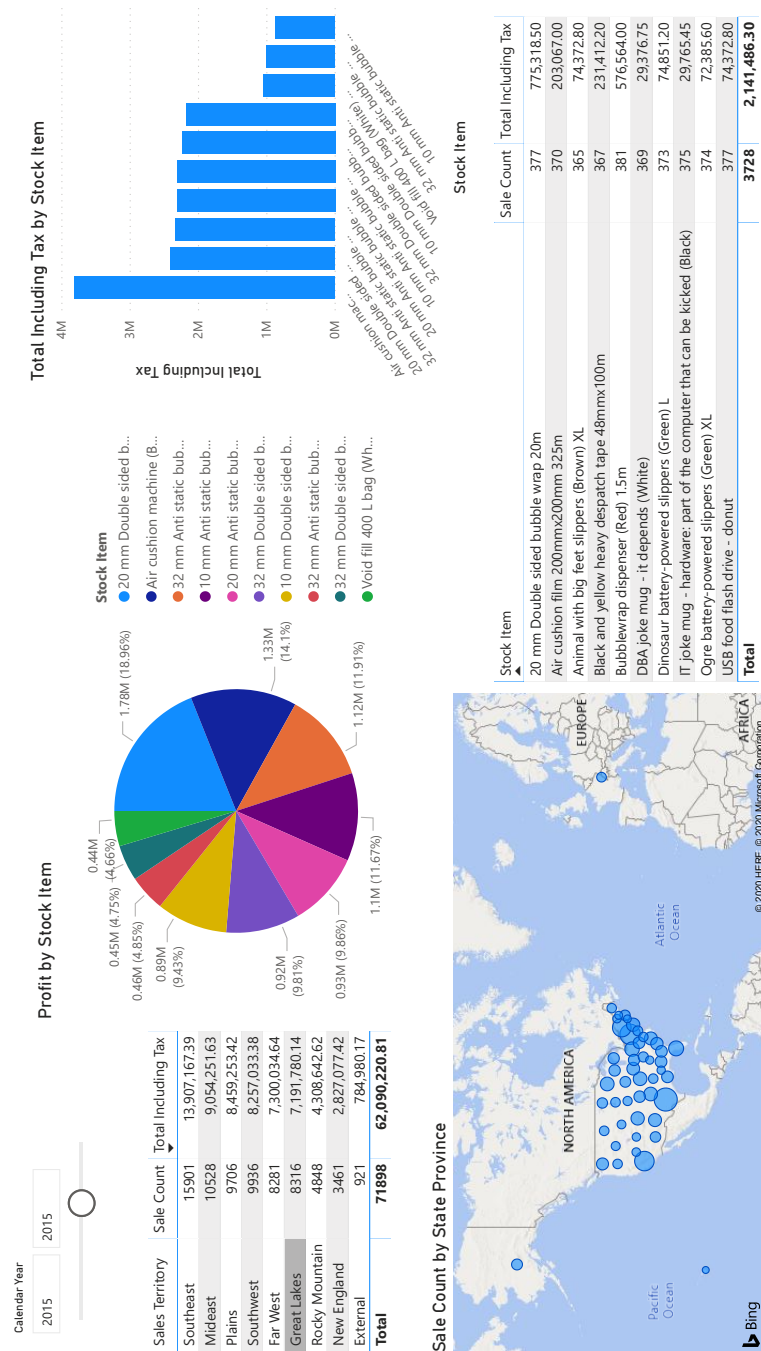


Figure 3: Item Sales 2015 DashBoard

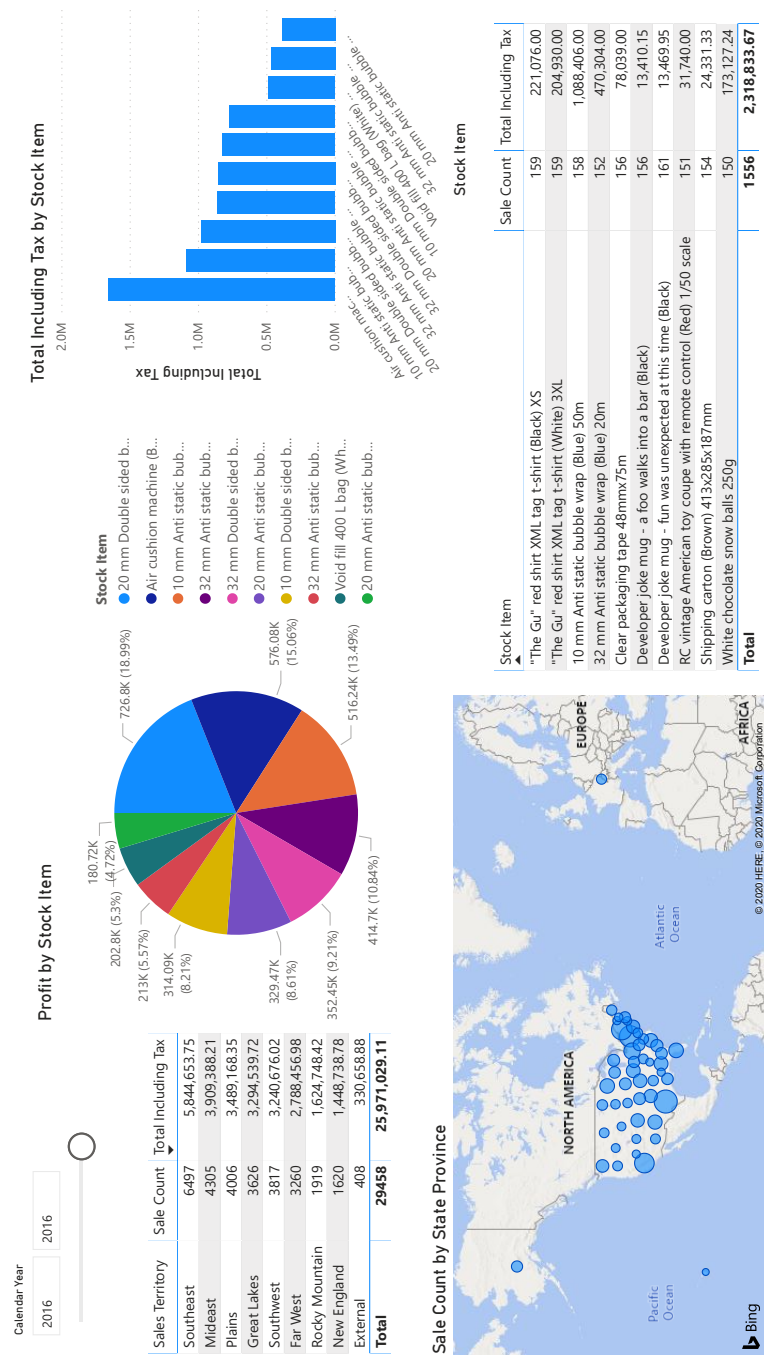


Figure 4: Item Sales 2016 DashBoard

Stock Item	Sale Count ▼	Total Including Tax
IT joke mug - hardware: part of the computer that can be kicked (Black)	325	27,119.30
Large replacement blades 18mm	325	90,839.65
"The Gu" red shirt XML tag t-shirt (White) XXL	318	448,858.80
Developer joke mug - that's a hardware problem (White)	314	27,388.40
Shipping carton (Brown) 500x310x310mm	314	133,795.79
"The Gu" red shirt XML tag t-shirt (White) S	313	449,604.00
Black and orange this way up despatch tape 48mmx100m	310	201,990.60
"The Gu" red shirt XML tag t-shirt (White) 3XS	309	422,776.80
DBA joke mug - it depends (White)	309	25,415.00
Halloween skull mask (Gray) L	309	435,445.20
<b>Total</b>	<b>3146</b>	<b>2,263,233.54</b>

Figure 5: Stock item by Sale Count 2013

Stock Item	Sale Count ▼	Total Including Tax
DBA joke mug - two types of DBAs (White)	367	30,468.10
10 mm Anti static bubble wrap (Blue) 10m	364	601,588.00
USB food flash drive - shrimp cocktail	349	70,472.00
Packing knife with metal insert blade (Yellow) 9mm	344	20,855.41
Ride on toy sedan car (Black) 1/12 scale	344	474,248.50
"The Gu" red shirt XML tag t-shirt (Black) 6XL	342	468,979.20
USB food flash drive - fortune cookie	339	66,424.00
Pack of 12 action figures (female)	338	34,187.20
Alien officer hoodie (Black) 3XL	336	72,731.75
Superhero action jacket (Blue) 5XL	334	70,810.10
<b>Total</b>	<b>3457</b>	<b>1,910,764.26</b>

Figure 6: Stock item by Sale Count 2014

Stock Item	Sale Count ▼	Total Including Tax
Bubblewrap dispenser (Red) 1.5m	381	576,564.00
20 mm Double sided bubble wrap 20m	377	775,318.50
USB food flash drive - donut	377	74,372.80
IT joke mug - hardware: part of the computer that can be kicked (Black)	375	29,765.45
Ogre battery-powered slippers (Green) XL	374	72,385.60
Dinosaur battery-powered slippers (Green) L	373	74,851.20
Air cushion film 200mmx200mm 325m	370	203,067.00
DBA joke mug - it depends (White)	369	29,376.75
Black and yellow heavy despatch tape 48mmx100m	367	231,412.20
Animal with big feet slippers (Brown) XL	365	74,372.80
<b>Total</b>	<b>3728</b>	<b>2,141,486.30</b>

Figure 7: Stock item by Sale Count 2015

Stock Item	Sale Count ▼	Total Including Tax
Developer joke mug - fun was unexpected at this time (Black)	161	13,469.95
"The Gu" red shirt XML tag t-shirt (Black) XS	159	221,076.00
"The Gu" red shirt XML tag t-shirt (White) 3XL	159	204,930.00
10 mm Anti static bubble wrap (Blue) 50m	158	1,088,406.00
Clear packaging tape 48mmx75m	156	78,039.00
Developer joke mug - a foo walks into a bar (Black)	156	13,410.15
Shipping carton (Brown) 413x285x187mm	154	24,331.33
32 mm Anti static bubble wrap (Blue) 20m	152	470,304.00
RC vintage American toy coupe with remote control (Red) 1/50 scale	151	31,740.00
White chocolate snow balls 250g	150	173,127.24
<b>Total</b>	<b>1556</b>	<b>2,318,833.67</b>

Figure 8: Stock item by Sale Count 2016

## Total Including Tax by Stock Item

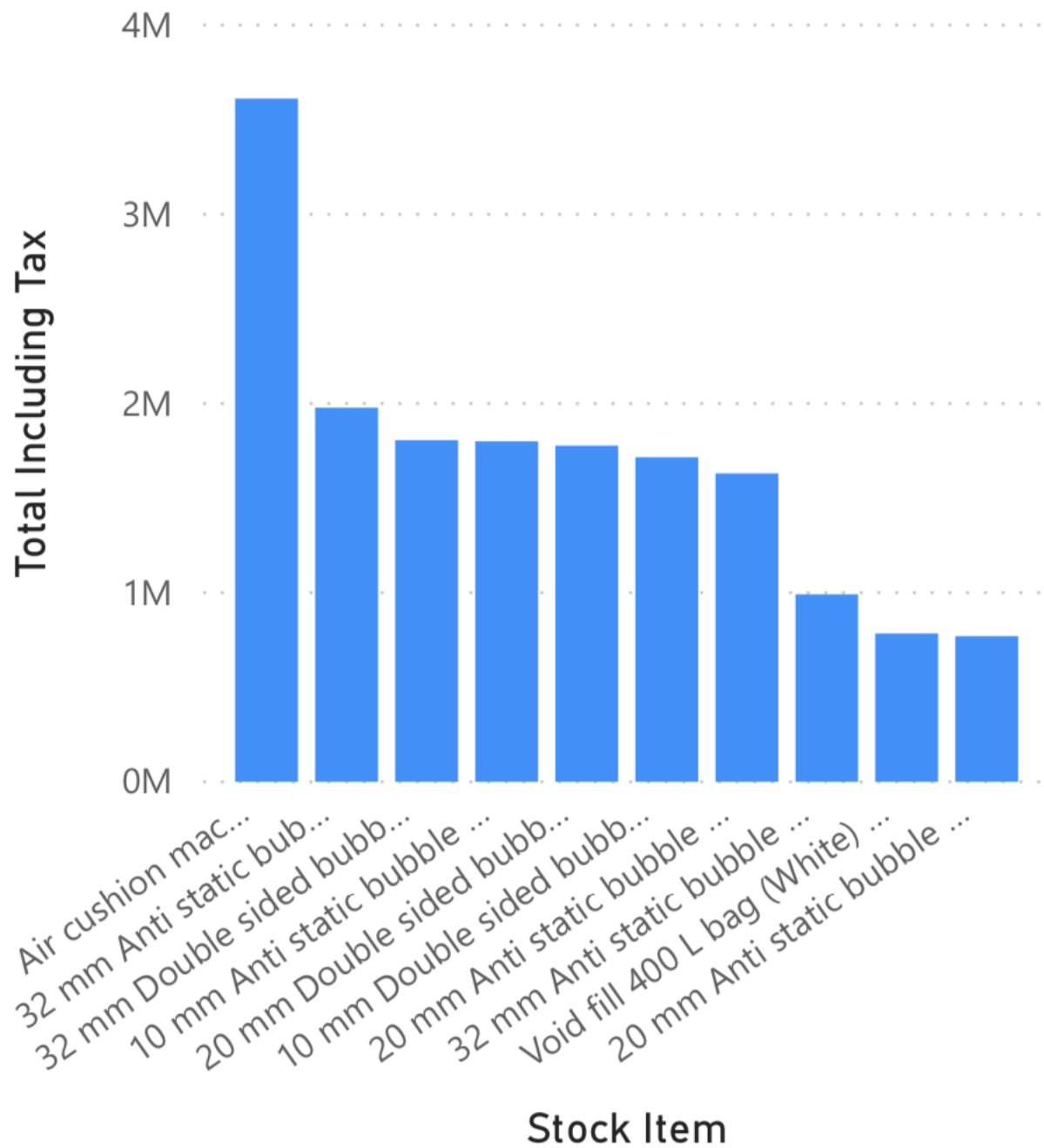


Figure 9: Total Sales by item 2013

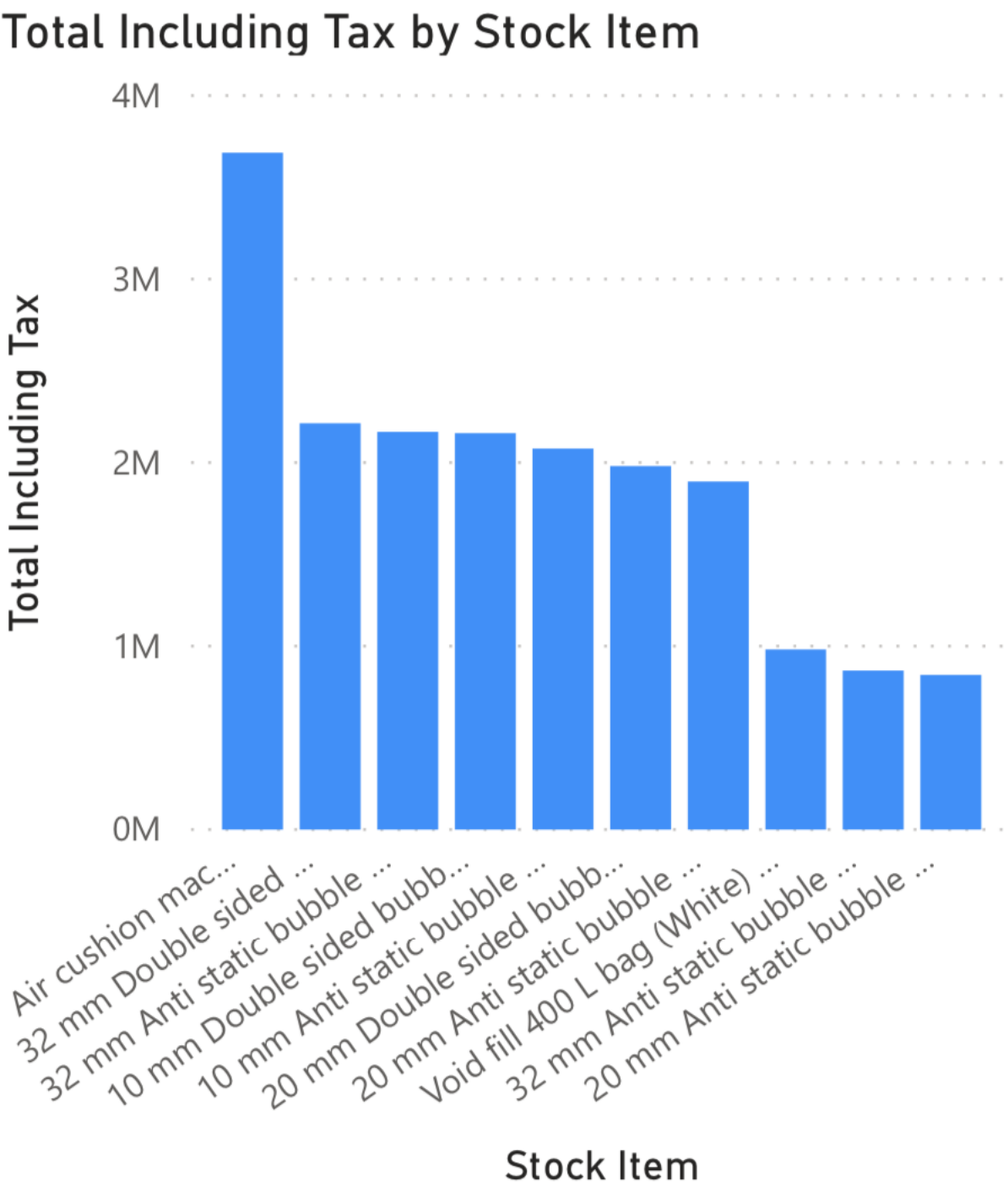


Figure 10: Total Sales by item 2014

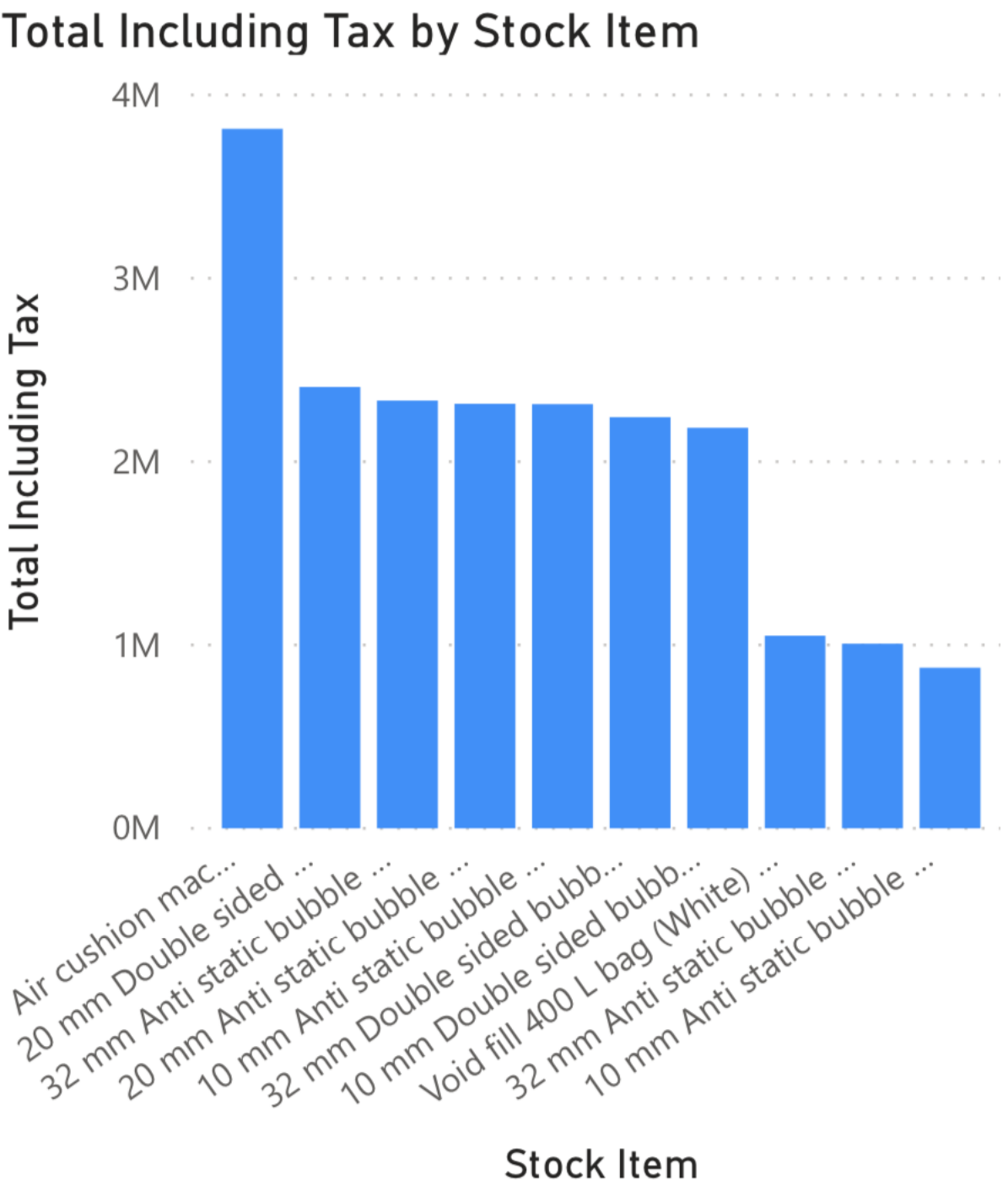


Figure 11: Total Sales by item 2015



## Total Including Tax by Stock Item

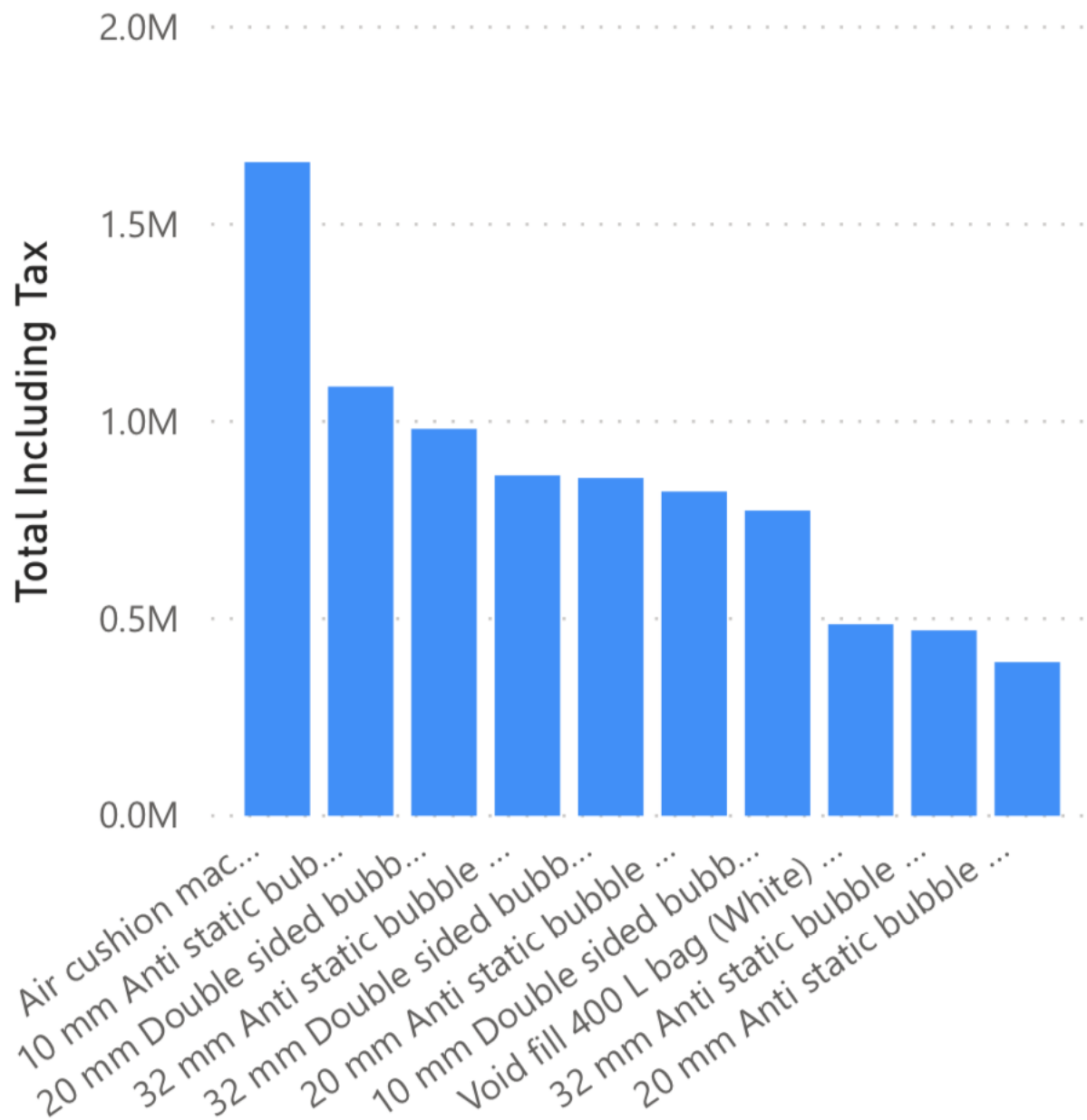


Figure 12: Total Sales by item 2016

## Sale Count by State Province



Figure 13: Sale Count by State Province2013

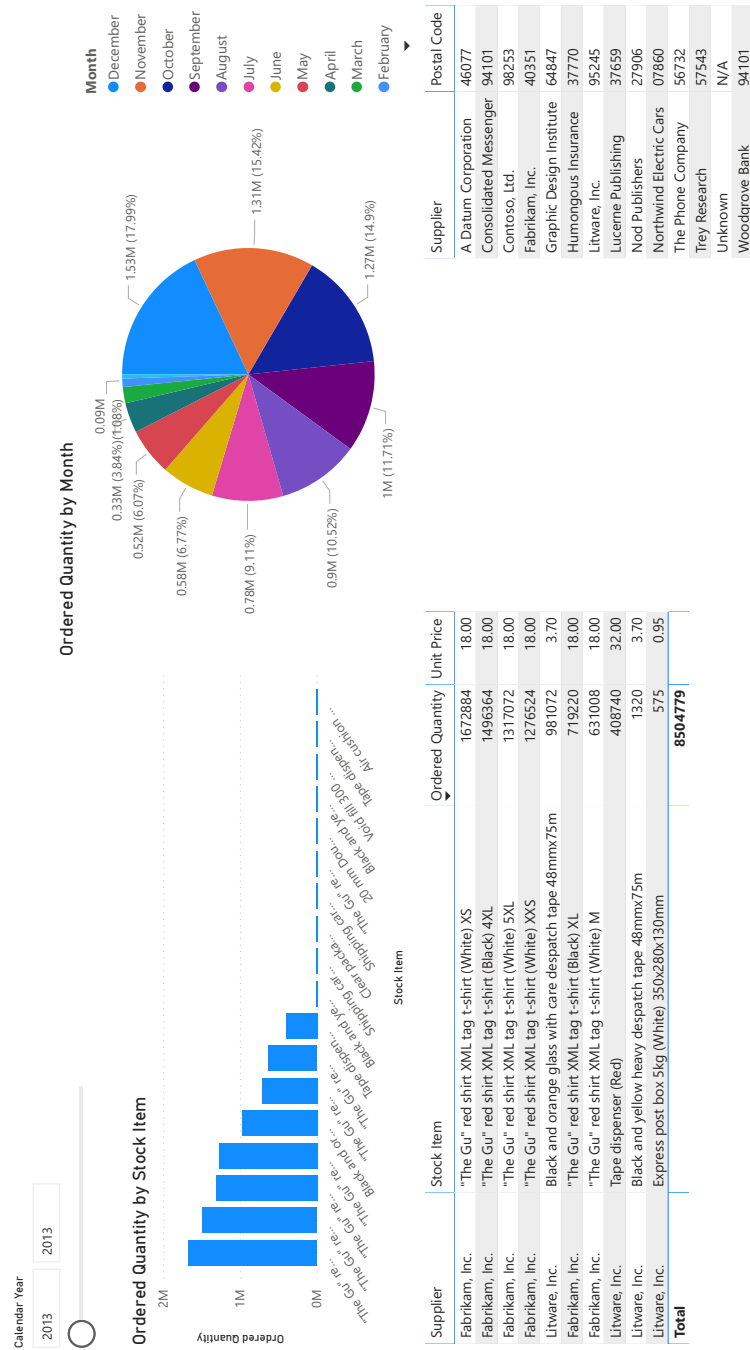


Figure 14: Item Purchase 2013 DashBoard

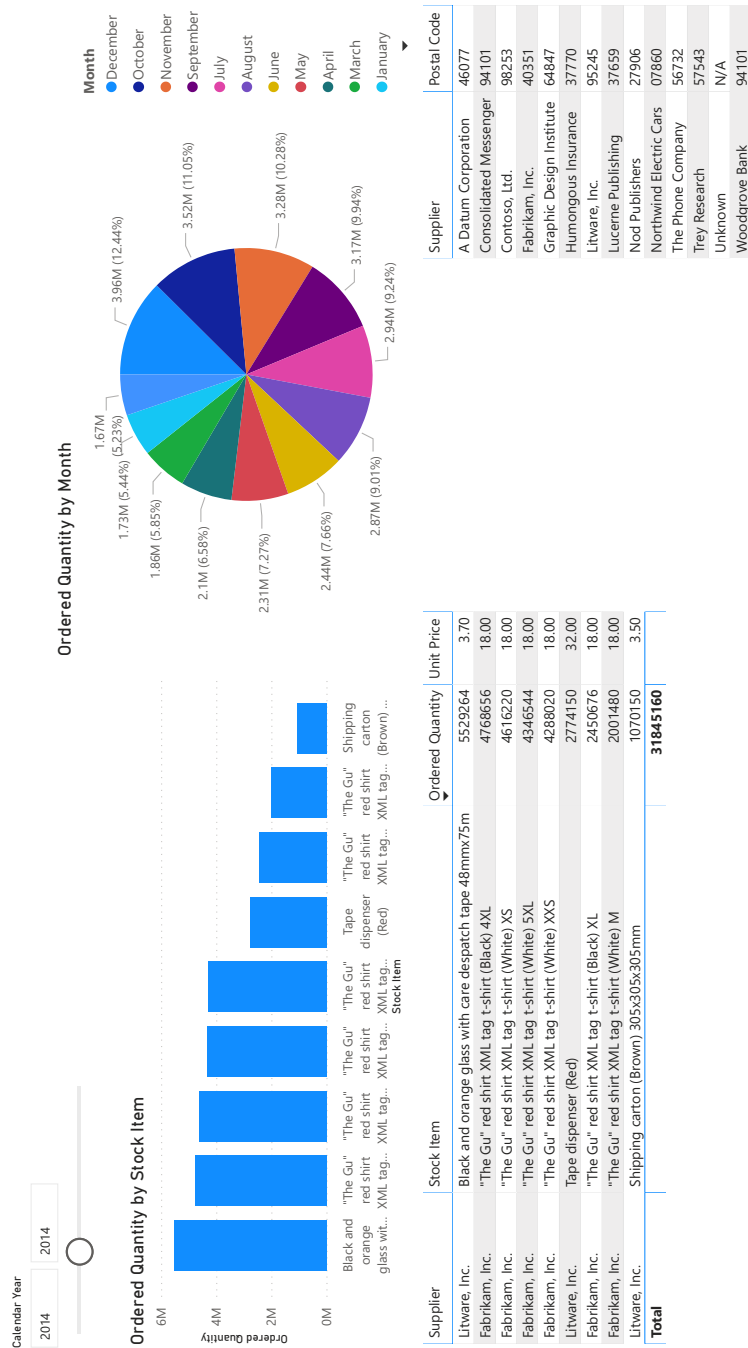


Figure 15: Item Purchase 2014 DashBoard

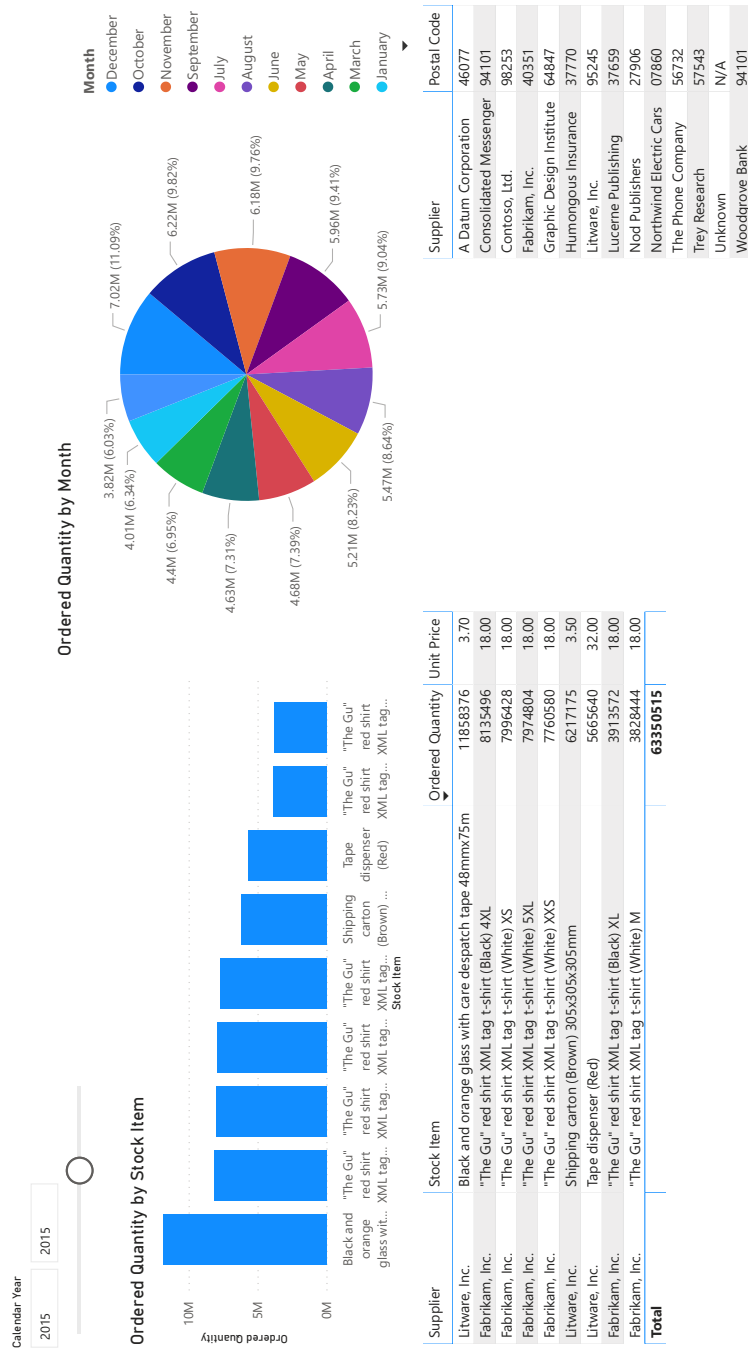


Figure 16: Item Purchase 2015 DashBoard

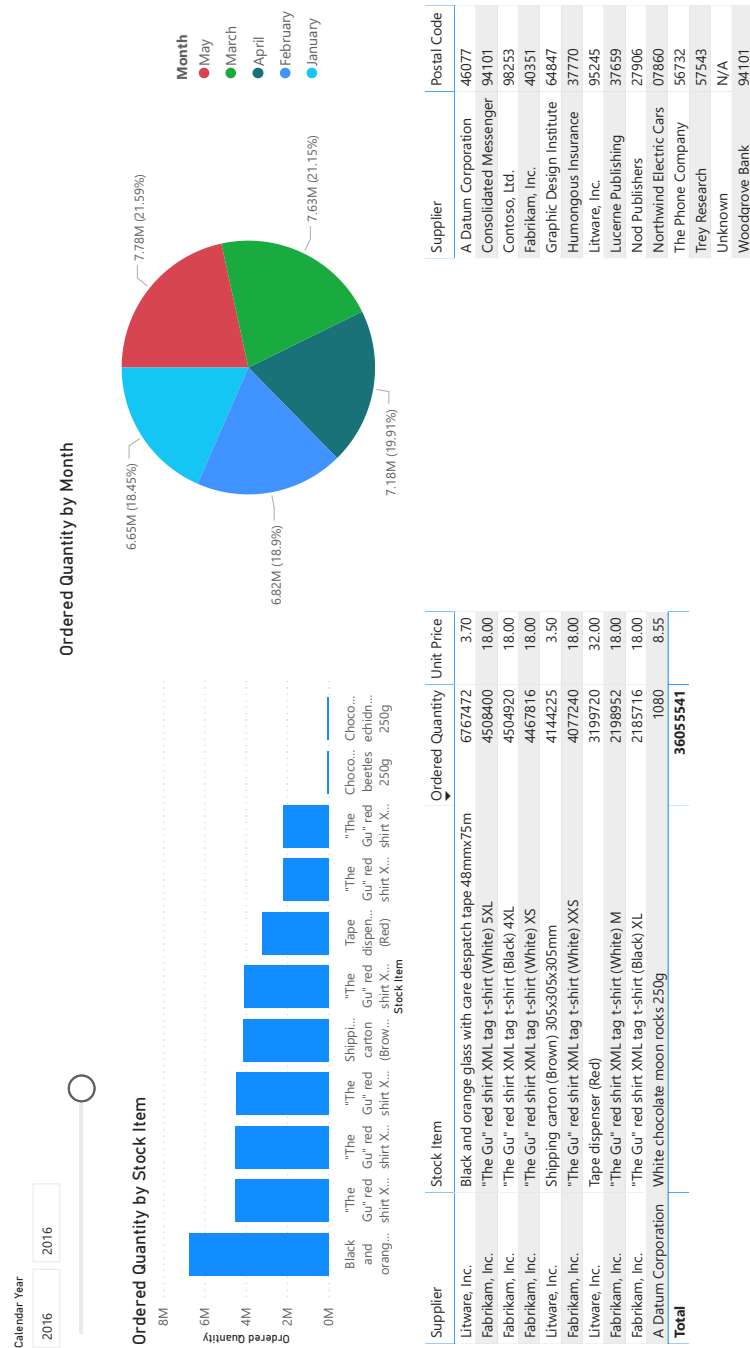


Figure 17: Item Purchase 2016 DashBoard