

Queries Used

Query 1

```
Part 1 Query.sql - c:\...ter (conradhill (52))
USE [AdventureWorksDW2012];
SELECT rs.[ProductKey], [EnglishProductName] AS [Product Name], SUM([SalesAmount]) AS [Total], [OrderQuantity] AS [Order Quantity],
[EnglishCountryRegionName],
DATEPART(year, [OrderDate]) AS [Year],
DATEPART(month, [OrderDate]) AS [Month],
[ProductAlternateKey] AS [ProductID],
Format([StandardCost], 'C2') AS [Cost],
Format([DealerPrice], 'C2') AS [Dealer Price], Format([ListPrice], 'C2') AS [List Price],
[Color], [Weight]

FROM [dbo].[FactResellerSales] as rs
INNER JOIN [dbo].[DimGeography] as g ON rs.SalesTerritoryKey = g.SalesTerritoryKey
Inner JOIN [dbo].[DimProduct] as p ON p.ProductKey = rs.ProductKey
WHERE [EnglishCountryRegionName] IN ('France', 'Germany', 'United Kingdom') and RS.[ProductKey] IN (414, 415, 422, 423, 424)

--one country may have no sales for this time period, that's ok we are building a query to use year after year for the European market

GROUP BY rs.[ProductKey], [EnglishProductName], [OrderDate], [EnglishCountryRegionName], [ProductAlternateKey],
[StandardCost], [DealerPrice], [ListPrice], [Color], [Weight], [OrderQuantity]
Having DATEPART(year, [OrderDate]) = 2007 and DATEPART(month, [OrderDate]) Between 2 and 8
ORDER BY rs.[ProductKey]
```

Query 2

```
SQLQuery1.sql - cb-...er (conradhill (57)) Part 1 Initial.sql - c:\...ster (conradhill (55)) Part 1 Query.sql - c:\...ter (conradhill (52))
USE [AdventureWorksDW2012];

SELECT [ProductAlternateKey] AS [ProductID], [EnglishProductName] AS [Product Name]
, Format([StandardCost], 'C2') AS [Cost],
Format([DealerPrice], 'C2') AS [Dealer Price], Format([ListPrice], 'C2') AS [List Price],
[Color], [Weight]

FROM [dbo].[DimProduct]

WHERE [EnglishProductName] Like '%Road%' and [EnglishProductName] Like '%wheel%'

Order By [EnglishProductName]
```

Query 3

```
Part 2 B Query.sql - ...ter (conradhill (58)) SQLQuery1.sql - cb-...er (conradhill (57)) Part 1 Initial.sql - c:\...ster (conradhill (55))
USE [AdventureWorksDW2012];

SELECT rs.[ProductKey], [OrderQuantity], [SalesAmount],
[ProductAlternateKey],
[EnglishProductName], [EnglishDescription],
[City], [StateProvinceName], [EnglishCountryRegionName]

FROM [dbo].[FactResellerSales] as rs
INNER JOIN [dbo].[DimGeography] as g ON rs.SalesTerritoryKey = g.SalesTerritoryKey
Inner JOIN [dbo].[DimProduct] as p ON p.ProductKey = rs.ProductKey

WHERE [EnglishCountryRegionName] IN ('France', 'Germany', 'United Kingdom') and RS.[ProductKey] IN (414, 415, 422, 423, 424)

Group By [OrderQuantity], [SalesAmount], rs.[ProductKey],
[ProductAlternateKey],
[EnglishProductName], [EnglishDescription],
[City], [StateProvinceName], [EnglishCountryRegionName]

Order By [City], [EnglishCountryRegionName]
```

Executive Summary

The table in Part 1 looks at the total sales and order quantities for the different road wheel products sold in the year 2007 between the months of February and August. The two additional columns on the right are the projected total sales for the European market and the projected total order quantities for the European market. The projection was arrived at by summing the totals for sales and order quantities and then increasing them by 15% to account for the projected growth. The goal of creating this query and table was to be able to have a query that could be used year after year to project the total sales and total order quantities in the European market.

Managerial Recommendation

The first recommendation would be to focus selling products in more countries throughout Europe. Germany was included in the query but no sales were made there for the year 2007. Consider marketing to more countries in Europe (including Germany) to continue to grow the business. This can be seen in the table as well as in figures 1 and 3.

The second recommendation would be to focus on gaining more sales in the United Kingdom. As seen in figure 3, France has around \$90,000 more in total sales than the United Kingdom. This could be improved by advertising more heavily or adding some more promotions in the United Kingdom to generate more sales and work to close the gap.

Part 1

Product Key	ProductID	Product Name	Total	Order Quantity	English Country Region Name	Year	Month	Total Projected Sales Europe	Projected Total Units Europe
414	FW-R762	ML Road Front Wheel	\$23,695.93	3	United Kingdom	2007	4	\$463,623.89	77
414	FW-R762	ML Road Front Wheel	\$21,460.46	3	France	2007	5		
414	FW-R762	ML Road Front Wheel	\$7,898.64	1	United Kingdom	2007	5		
414	FW-R762	ML Road Front Wheel	\$7,153.49	1	France	2007	6		
414	FW-R762	ML Road Front Wheel	\$21,460.46	3	France	2007	6		
414	FW-R762	ML Road Front Wheel	\$50,074.42	7	France	2007	6		
415	FW-R820	HL Road Front Wheel	\$20,991.82	2	United Kingdom	2007	4		
415	FW-R820	HL Road Front Wheel	\$38,022.91	4	France	2007	5		
415	FW-R820	HL Road Front Wheel	\$20,991.82	2	United Kingdom	2007	5		
415	FW-R820	HL Road Front Wheel	\$9,505.73	1	France	2007	6		
415	FW-R820	HL Road Front Wheel	\$38,022.91	4	France	2007	6		
415	FW-R820	HL Road Front Wheel	\$31,487.72	3	United Kingdom	2007	6		
422	RW-R623	LL Road Rear Wheel	\$22,693.10	7	France	2007	2		
422	RW-R623	LL Road Rear Wheel	\$3,241.87	1	France	2007	3		
422	RW-R623	LL Road Rear Wheel	\$14,318.27	4	United Kingdom	2007	3		
422	RW-R623	LL Road Rear Wheel	\$3,241.87	1	France	2007	4		
422	RW-R623	LL Road Rear Wheel	\$7,159.13	2	United Kingdom	2007	4		
422	RW-R623	LL Road Rear Wheel	\$21,477.40	6	United Kingdom	2007	4		
422	RW-R623	LL Road Rear Wheel	\$9,725.62	3	France	2007	5		
422	RW-R623	LL Road Rear Wheel	\$12,967.49	4	France	2007	5		
422	RW-R623	LL Road Rear Wheel	\$10,738.70	3	United Kingdom	2007	5		
422	RW-R623	LL Road Rear Wheel	\$3,241.87	1	France	2007	6		
422	RW-R623	LL Road Rear Wheel	\$3,579.57	1	United Kingdom	2007	6		

Figure 1

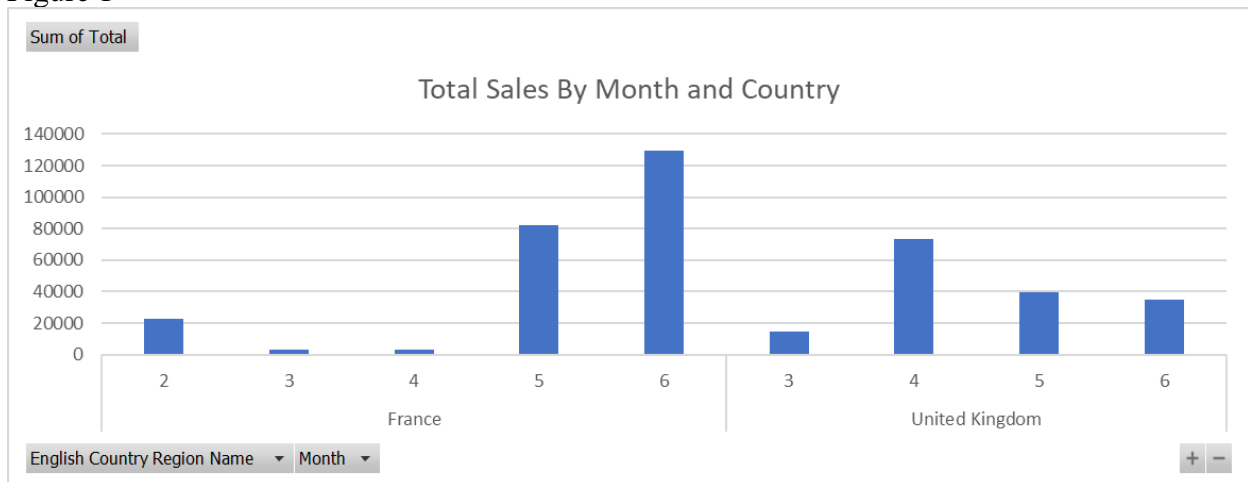


Figure 1 looks at the total sales by month broken down by country. The main takeaways from here would be that the vast majority of sales for France occurred in the months of May and June. In the United Kingdom the majority of sales took place between the months of April and June. The query also included the months of July and August but based on this no sales for either country occurred during this time. Consider looking into why this may have happened.

Figure 2

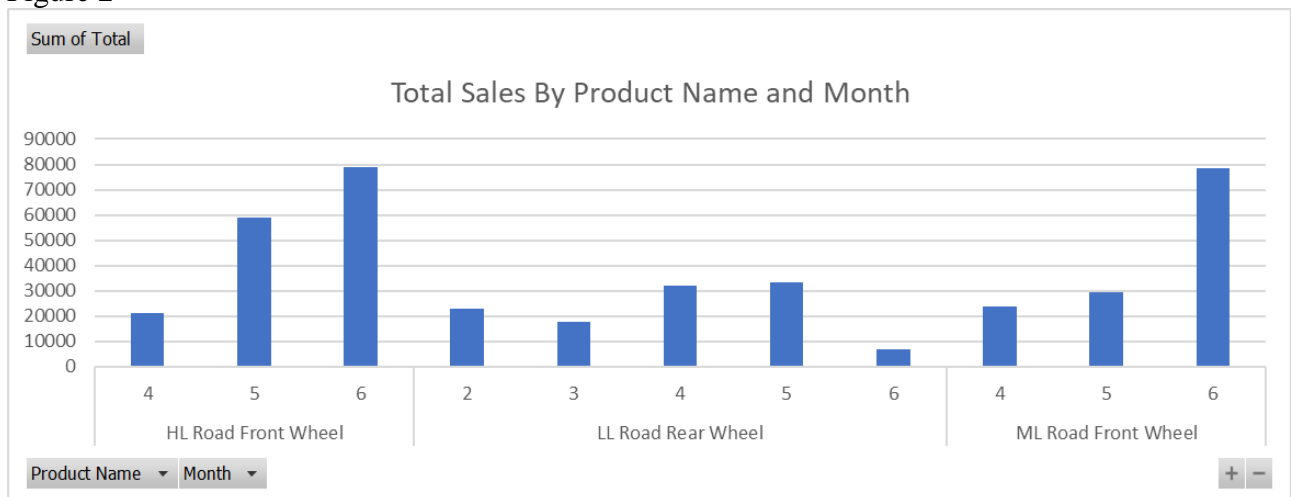


Figure 2 looks at the total sales by month broken down by the types of road wheel products sold. The main takeaways here would be that the HL Road Front Wheel and ML Road Front Wheel has really strong sales during the month of June. Once again there were no sales in the months of July or August which seems strange. The LL Road Rear Wheel sold fairly consistently with its worst month being June.

Figure 3

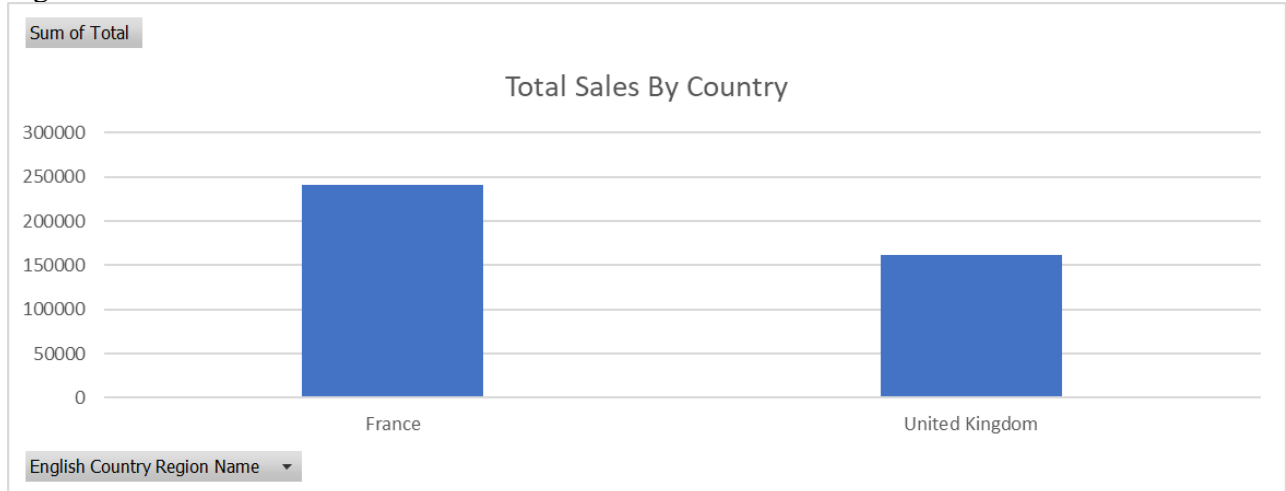


Figure 3 was already discussed in the Managerial Recommendation section. The main takeaways are that France has around \$90000 more in total sales than the United Kingdom had and that no sales were made in Germany.

Executive Summary

This table looks at the quantity of each of the road wheel products sold by each of the resellers. It should be noted that this query was not filtered out for the year 2007 between the months of February and August as was the last one. This query looked at the data from all of the years past. This means that it should provide a less granular overview and a good historical view of how successful each reseller is since it is looking at all of the years of data, so it should even out the possibility of a reseller having a bad year and that skewing their results too badly.

Managerial Recommendation

The main recommendation would be to work on figuring out why the majority of resellers sold so much less than Getaway Inn, Metropolitan Equipment, and Prosperous Tours. Those three sold significantly more than the other resellers. This could be due to the size of these resellers or them being in better areas to sell but it should be looked into what makes them so much more successful and how the other resellers can improve.

Part 2 A Quantity of Each Product Sold by Each Reseller

Row Labels	Sum of OrderQuantity
Area Sheet Metal Supply	35
RW-R623	35
Bulk Discount Store	420
FW-R762	35
FW-R820	140
RW-R623	245
Cycling Goods	175

FW-R762	35
FW-R820	105
RW-R623	35
Getaway Inn	1116
FW-R762	504
FW-R820	360
RW-R623	180
RW-R762	36
RW-R820	36
Leisure Clearing House	70
FW-R762	35
RW-R820	35
Metropolitan Equipment	1260
FW-R762	288
FW-R820	252
RW-R623	648
RW-R820	72
Number One Bike Co.	210
FW-R762	70
FW-R820	70
RW-R623	70
Prosperous Tours	1015
FW-R762	175
FW-R820	175
RW-R623	455
RW-R762	70
RW-R820	140
Racing Sales and Service	396
FW-R762	144
FW-R820	108
RW-R623	144
Rural Mountain Bike Mart	648
FW-R762	144
FW-R820	252
RW-R623	252
Self-Contained Cycle Parts Company	72
FW-R762	36
RW-R762	36
Steel Inc.	288
FW-R762	36
FW-R820	72
RW-R623	180
Uttermost Bike Shop	525
FW-R762	140

FW-R820	175
RW-R623	210
(blank)	
(blank)	
Grand Total	6230

Figure 4

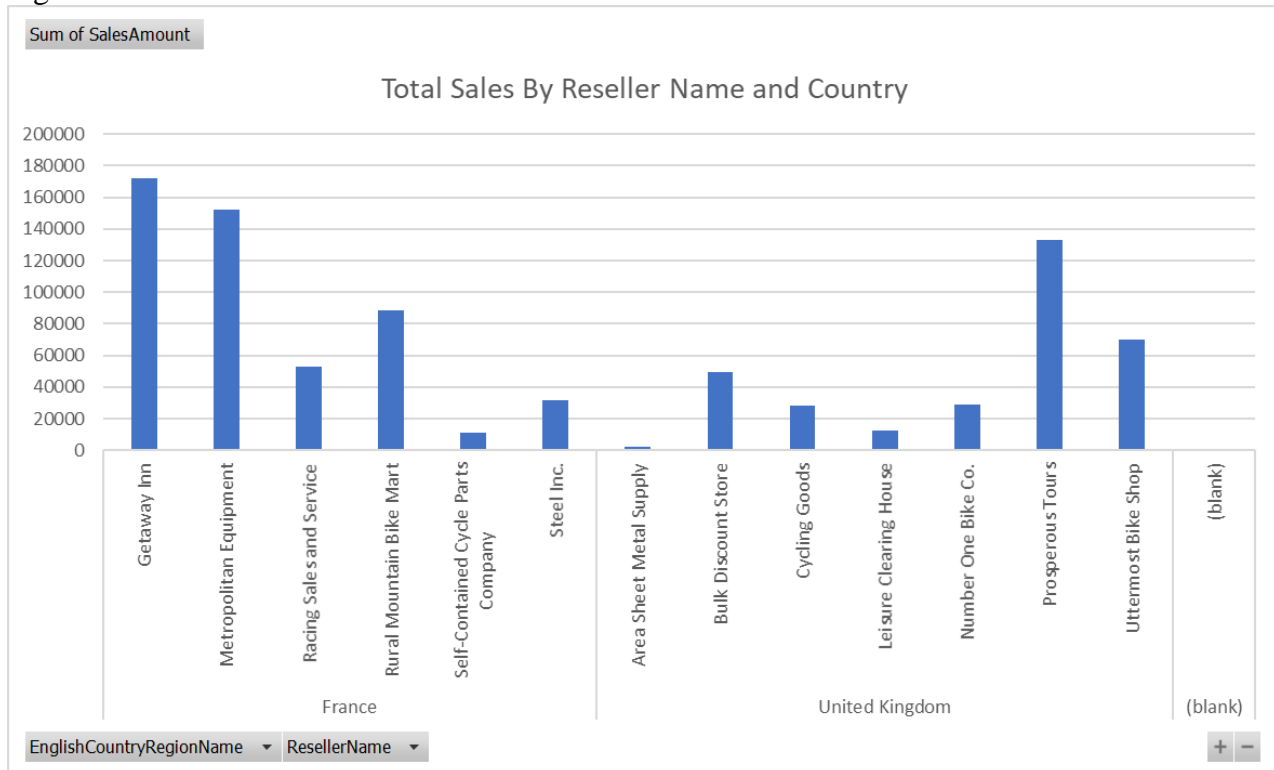


Figure 4 looks at the total sales of each reseller as well as the country each reseller is in. This table helps reiterate the idea that France is generating more sales than the United Kingdom. It also shows that Getaway Inn, Metropolitan Equipment, and Prosperous Tours are the three most successful resellers as mentioned in the Managerial Recommendation section.

Executive Summary

This table was generated using a query that did not filter the results for the year 2007 between the months of February and August like the previous query. For that reason, this one is also focusing on a less granular overview and gives a good historical perspective. The table generate below looks at the total order quantities if each of the road wheel products broken down by the city they were ordered in. The goal of this table is to help the company get a better idea of where the products will need to be shipped so that they can coordinate with their logistics provider. This table includes a lot of data in the future it may be useful to look into breaking it down more with further analysis.

Managerial Recommendation

The recommendation here would that the RW-R623 was the most commonly ordered product by a large margin so be sure to produce enough of that product and have them ready to go. The RW-R762 had by far the lowest order quantities so it would be worth looking further into why that is the case. This could be due to many factors such as it being a lower quality product or that it is being marketed poorly. Either way it should be figured out why it has such low order quantities.

Part 2 B Product Broken Down by Country and City to Ship to (Logistics)

Row Labels	Sum of OrderQuantity
FW-R762	750
France	540
Aujan Mournede	15
Bobigny	15
Boulogne-Billancourt	15
Boulogne-sur-Mer	15
Cergy	15
Chatou	15
Colombes	15
Colomiers	15
Courbevoie	15
Croix	15
Drancy	15
Dunkerque	15
Les Ulis	15
Lieusaint	15
Lille	15
Metz	15
Morangis	15
Orleans	15
Orly	15
Pantin	15
Paris	15
Paris La Defense	15
Roissy en Brie	15
Roncq	15
Roubaix	15
Saint Germain en Laye	15
Saint Ouen	45
Saint-Denis	15
Sèvres	15
Suresnes	15

Tremblay-en-France	15
Verrieres Le Buisson	15
Versailles	15
Villeneuve-d'Ascq	15
United Kingdom	210
Abingdon	6
Basingstoke Hants	6
Berks	6
Berkshire	6
Billericay	6
Birmingham	6
Bracknell	6
Bury	6
Cambridge	6
Cheltenham	6
Esher-Molesey	6
Gateshead	6
Gloucestershire	6
High Wycombe	6
Kirkby	6
Lancaster	6
Leeds	6
Liverpool	6
London	6
Maidenhead	6
Milton Keynes	6
Newcastle upon Tyne	6
Oxford	6
Oxon	6
Peterborough	6
Reading	6
Runcorn	6
Stoke-on-Trent	6
W. York	6
Warrington	6
Watford	6
West Sussex	6
Wokingham	6
Woolston	6
York	6
FW-R820	894
France	684
Aujan Mournede	19
Bobigny	19

Boulogne-Billancourt	19
Boulogne-sur-Mer	19
Cergy	19
Chatou	19
Colombes	19
Colomiers	19
Courbevoie	19
Croix	19
Drancy	19
Dunkerque	19
Les Ulis	19
Lieusaint	19
Lille	19
Metz	19
Morangis	19
Orleans	19
Orly	19
Pantin	19
Paris	19
Paris La Defense	19
Roissy en Brie	19
Roncq	19
Roubaix	19
Saint Germain en Laye	19
Saint Ouen	57
Saint-Denis	19
Sèvres	19
Suresnes	19
Tremblay-en-France	19
Verrieres Le Buisson	19
Versailles	19
Villeneuve-d'Ascq	19
United Kingdom	210
Abingdon	6
Basingstoke Hants	6
Berks	6
Berkshire	6
Billericay	6
Birmingham	6
Bracknell	6
Bury	6
Cambridge	6
Cheltenham	6
Esher-Molesey	6
Gateshead	6

Gloucestershire	6
High Wycombe	6
Kirkby	6
Lancaster	6
Leeds	6
Liverpool	6
London	6
Maidenhead	6
Milton Keynes	6
Newcastle upon Tyne	6
Oxford	6
Oxon	6
Peterborough	6
Reading	6
Runcorn	6
Stoke-on-Trent	6
W. York	6
Warrington	6
Watford	6
West Sussex	6
Wokingham	6
Woolston	6
York	6
RW-R623	1527
France	792
Aujan Mournede	22
Bobigny	22
Boulogne-Billancourt	22
Boulogne-sur-Mer	22
Cergy	22
Chatou	22
Colombes	22
Colomiers	22
Courbevoie	22
Croix	22
Drancy	22
Dunkerque	22
Les Ulis	22
Lieusaint	22
Lille	22
Metz	22
Morangis	22
Orleans	22
Orly	22

Pantin	22
Paris	22
Paris La Defense	22
Roissy en Brie	22
Roncq	22
Roubaix	22
Saint Germain en Laye	22
Saint Ouen	66
Saint-Denis	22
Sèvres	22
Suresnes	22
Tremblay-en-France	22
Verrieres Le Buisson	22
Versailles	22
Villeneuve-d'Ascq	22
United Kingdom	735
Abingdon	21
Basingstoke Hants	21
Berks	21
Berkshire	21
Billericay	21
Birmingham	21
Bracknell	21
Bury	21
Cambridge	21
Cheltenham	21
Esher-Molesey	21
Gateshead	21
Gloucestershire	21
High Wycombe	21
Kirkby	21
Lancaster	21
Leeds	21
Liverpool	21
London	21
Maidenhead	21
Milton Keynes	21
Newcastle upon Tyne	21
Oxford	21
Oxon	21
Peterborough	21
Reading	21
Runcorn	21
Stoke-on-Trent	21
W. York	21

Warrington	21
Watford	21
West Sussex	21
Wokingham	21
Woolston	21
York	21
RW-R762	106
France	36
Aujan Mournede	1
Bobigny	1
Boulogne-Billancourt	1
Boulogne-sur-Mer	1
Cergy	1
Chatou	1
Colombes	1
Colomiers	1
Courbevoie	1
Croix	1
Drancy	1
Dunkerque	1
Les Ulis	1
Lieusaint	1
Lille	1
Metz	1
Morangis	1
Orleans	1
Orly	1
Pantin	1
Paris	1
Paris La Defense	1
Roissy en Brie	1
Roncq	1
Roubaix	1
Saint Germain en Laye	1
Saint Ouen	3
Saint-Denis	1
Sèvres	1
Suresnes	1
Tremblay-en-France	1
Verrieres Le Buisson	1
Versailles	1
Villeneuve-d'Ascq	1
United Kingdom	70
Abingdon	2

Basingstoke Hants	2
Berks	2
Berkshire	2
Billericay	2
Birmingham	2
Bracknell	2
Bury	2
Cambridge	2
Cheltenham	2
Esher-Molesey	2
Gateshead	2
Gloucestershire	2
High Wycombe	2
Kirkby	2
Lancaster	2
Leeds	2
Liverpool	2
London	2
Maidenhead	2
Milton Keynes	2
Newcastle upon Tyne	2
Oxford	2
Oxon	2
Peterborough	2
Reading	2
Runcorn	2
Stoke-on-Trent	2
W. York	2
Warrington	2
Watford	2
West Sussex	2
Wokingham	2
Woolston	2
York	2
RW-R820	283
France	108
Aujan Mournede	3
Bobigny	3
Boulogne-Billancourt	3
Boulogne-sur-Mer	3
Cergy	3
Chatou	3
Colombes	3
Colomiers	3

Courbevoie	3
Croix	3
Drancy	3
Dunkerque	3
Les Ulis	3
Lieusaint	3
Lille	3
Metz	3
Morangis	3
Orleans	3
Orly	3
Pantin	3
Paris	3
Paris La Defense	3
Roissy en Brie	3
Roncq	3
Roubaix	3
Saint Germain en Laye	3
Saint Ouen	9
Saint-Denis	3
Sèvres	3
Suresnes	3
Tremblay-en-France	3
Verrieres Le Buisson	3
Versailles	3
Villeneuve-d'Ascq	3
United Kingdom	175
Abingdon	5
Basingstoke Hants	5
Berks	5
Berkshire	5
Billericay	5
Birmingham	5
Bracknell	5
Bury	5
Cambridge	5
Cheltenham	5
Esher-Molesey	5
Gateshead	5
Gloucestershire	5
High Wycombe	5
Kirkby	5
Lancaster	5
Leeds	5
Liverpool	5

London	5
Maidenhead	5
Milton Keynes	5
Newcastle upon Tyne	5
Oxford	5
Oxon	5
Peterborough	5
Reading	5
Runcorn	5
Stoke-on-Trent	5
W. York	5
Warrington	5
Watford	5
West Sussex	5
Wokingham	5
Woolston	5
York	5
(blank)	
(blank)	
(blank)	
Grand Total	3560

Figure 5

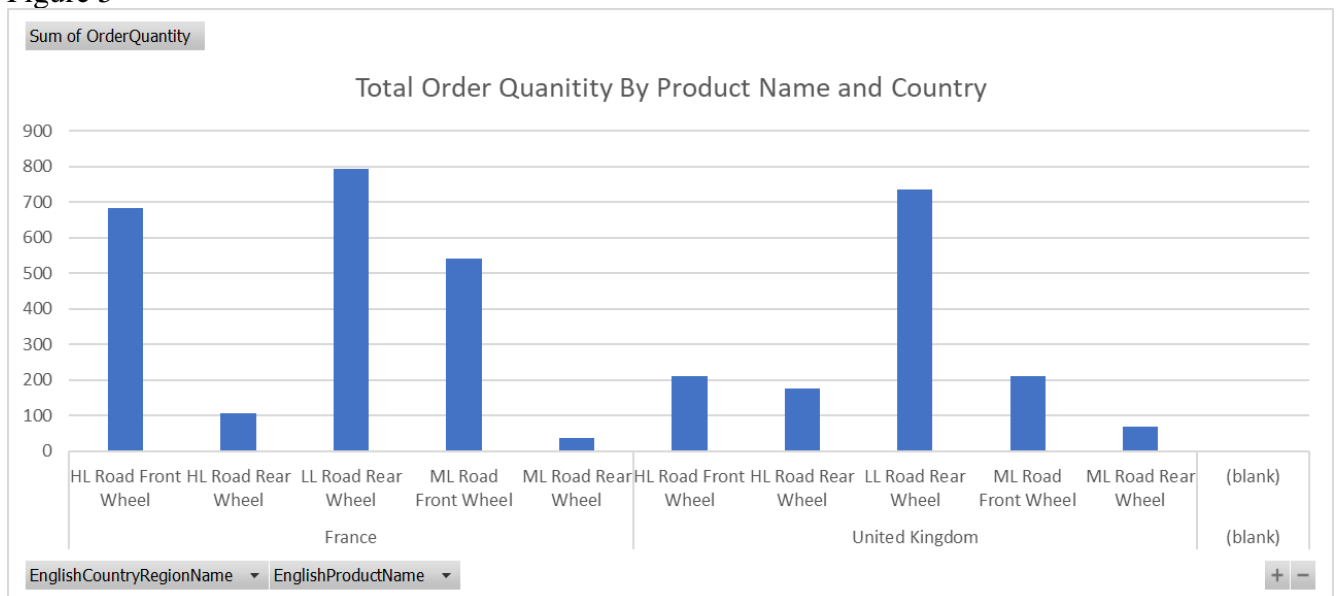


Figure 5 looks at the total order quantity broken down by the road wheel product name and the country. The main takeaways would be the LL Road Rear Wheel had very strong order quantities in both France and the United Kingdom and in the United Kingdom the highest total order quantity. The other takeaway would be that the HL Road Front Wheel and ML Road Front Wheel had very high order quantities in France but much lower order quantities in the United Kingdom. This is another observation worth looking into further.

Further Analysis

For Part 1 I would recommend that instead of picking the data from the year 2007, summing it up, and increasing it by 15% to get the projection query it would be a good idea to filter the data for each year and compare how much it increases each year. Once you have the growth between each year then come up with a number to use as the growth factor. If they are all similar an average could be a good way to go but if there is a trend of increasing or decreasing, then continuing to follow that trend would be a good way to move forward. I think that this would be a more effective way to pick a better growth factor for the projected total sales and ordered units moving forward. I would also make a data set with all the products and total sales for all the countries they do business with in Europe to see which countries they are doing the best in and which countries they would need to work on selling more in. This data set would help to see if France is really selling more than the United Kingdom across the board or if it was just for these specific products.

For Part 2 A I think that once again it would be a good idea to filter out the data for each reseller by year to see which ones are potentially trending in either an upward or downward direction. This would be beneficial because from there it could be determined why the ones trending upward were doing well and from there the ones trending downward could work to implement improvements. The current data set is less granular and provides a good overview, but I think it would be beneficial to look at the data year by year.

For Part 2 B I would recommend breaking the total orders for each city down by year. Since the main purpose of this chart was to help the company plan from logistics standpoint it would be very useful to have the information broken down by year. This would allow them to see the trends happening with each city in terms of the total orders. I think this would make for much more accurate projections from a logistics standpoint.

This was also mentioned with Figure 5 but further analysis as to why the LL Road Rear Wheel had very strong order quantities in both France and the United Kingdom. In the United Kingdom it had by far had by the highest total order quantity. The other takeaway would be that the HL Road Front Wheel and ML Road Front Wheel had very high order quantities in France but much lower order quantities in the United Kingdom. The differences between the products selling well and poorly is very drastic so trying to figure out why this is and working to close the gap would be a worthwhile thing to do. Some example reasons for this discrepancy could be that the prices on the products that are selling poorly is too high, the quality of the product isn't very good, or there simply isn't much of a market for those products but further analysis would help to figure out the answer. There is always going to be room for more analysis, but the above recommendations would be some good places to start.