**SQL Assignment #3**

You have been asked by David Bradley the AdventureWorks marketing manager to identify the ‘best’ reseller so that they may receive an award. There has been considerable discussion in the managerial offices of AdventureWorks Bicycles as to what criteria should be used. Some managers believe one criteria should be used, others want to use more than one and want to use a weighting of several criteria.

There is no agreement as to which criteria should be used to choose the best reseller, and whether one reseller should be selected or one per business type (value added reseller, warehouse, specialty bike shops). Also there is discussion to choose one reseller in the United Sates and one reseller that is not in the United States. In the past the Sales Managers just argued it out, but this year management wants to decide using analytics.   
  
You are tasked to make your argument for whom the best reseller is (for US and non-US sales). **Pick five criteria** from the list below (or add-in your own). This list was generated from the AdventureWorks managers as useful decision criteria upon which to base the top reseller decision upon.

1. Total $$ sales (volume)
2. Total # orders (frequency)
3. Total line items (breadth/width)
4. Total # units (volume) over time or for the last year
5. Total # models of bicycle sold (breadth of purchases)
6. Average # Line items per invoice (breadth/width)
7. Number different products regularly purchased (breadth)
8. Analyze reseller performance for the last year (recency) as compared to the prior year. For example which vendor increased their number of purchases or $$ amount of purchases the most in the last year?
9. Profitability analysis. The FactResellerSales table has the cost of the products sold so you can evaluate profitability.

**Turn-in** - Write a page or two report to Vice President of Sales Brian Welcker, Marketing Manager David Bradley, and CEO Ken Sanchez that specifies which reseller you believe should receive the best reseller award. Include which metrics and decision criteria were used, and whether the decision criteria were weighted. Add one or two tables of metrics. Nominate one ‘best reseller’ award for US based and a second for non-US based.

Better grades for more thoughtful and in-depth analysis, but keep it to two pages.

There are many different factors to consider when determining which seller is the “best”. Five different criteria have been selected to compare sellers against which help paint a broad overall picture of each sellers’ operations. These criteria are as follows: total sales revenue, total number of orders, number of different products purchased, and profitability. No single criteria can show how well a seller is operating as many different factors go into each. Sales revenue is important as it shows how much the seller is able to generate in income, number of sales is important as it gives insight into the conversion rate of customers and how often orders are being made, the number of different products is important as it shows a seller’s ability to move different types of inventories effectively, and profitability combines all of the above to show how effectively the business is able to operate with all of the other factors in play. With all of these factors considered, two sellers have been selected to be nominated as best reseller, one in the US and one abroad. The reseller that has been selected for the US nominee is Brakes and Gear from Tooele, Utah. Brakes and Gear demonstrated a high ability to generate revenue with a total sales amount of $877,107.19, and an average invoice amount of $2943.31. This is an exceptional revenue stream that has also converted to a high profitability for this particular reseller. Compared to other US resellers Brakes and Gear goes above and beyond across the board. Across the pond in Milton Keynes England is the second nominee for best reseller, Exhibition Showroom. Exhibition Showroom is a warehouse that provides the highest average number of line items per invoice. While they do not generate as much revenue as top earners in the US such as Brakes and Gear, Exhibition Showroom demonstrates a superior strategy when it comes to moving high volumes of merchandise. They consistently have a high number of invoices, as well as a high number of different items on each invoice which shows their ability to move a variety of product. There are many quality candidates that could fit the bill for the best reseller, but these two in their respective regions and practices demonstrate some of the highest abilities based on the selected criteria above, and outshine other resellers.