**K327 Exam 2**

Sprayer Parts.com launched a website two years ago to sell sprayer parts to the agricultural community. The launch was successful, but the challenge is to find different cross-selling opportunities when a customer is on the site selecting various parts. To capitalize upon the opportunity, we need to understand what parts were also purchased by customers when they were buying a specific item.

**Part 1**

The Items Sold Template has three datasets. The first is the Sales Data; this has several years of data and shows, by invoice number, what was purchased and the quantity shipped. Item Code is the field which lists the part numbers. The second table is Bill To information: by invoice number, who was the customer which purchased the items. Finally, Parts Data lists, by part number, the manufacturer and spray category or application of the part.

The initial model should include a drop down box for the Primary part number (part numbers should be sorted for ease of use); invoice numbers of the transaction when the part was purchased; customer name and whether they are repeat customers for this part; a list of parts purchased on the invoice except the one in the drop down box. A PFD is provided for guidance, with two caveats’: First, you can make whatever model fulfills the requirements; two, this is not necessary comprehensive either vertically or horizontally, but the print area was formatted to fit something on one page.

Hint: on the Sales Data worksheet, generate a list of the Part Numbers sold, and the number of transactions they were part of. Then, develop a similar list of Invoice Numbers. This will give you an idea as the scope of the issue, both in terms of the maximum number of times a part was purchased, and the maximum number of parts that was purchased at one time. **Note: any data in an Excel Table format is the result of a database query, and as a result can NOT be sorted or modified!**

**Part 2**

Design a table that will list all parts sold with the Primary part, the number of time sold, and number of times sold with a repeat customer as well as unique order. Also include the manufacturer and manufacturing category.

Hint: Link into the analysis in Part 1 and create two fields: one for the list of parts sold with the primary, and another indicating whether it was a repeat order or not. Use a unique and comprehensive list of parts, and perform the rest of the analysis. A **Plug** will not be given ***any*** credit.

**Part 0**

Think through this exam carefully. What you generate in Part 1 may have a direct bearing to what you can accomplish in Part 2. Prepare a **Word** doc to explain what your initial plan was, and if and how you modified it in the process of the building the model. The more thoughtful your plan is up front, the more time you may actually save in the long run. No credit will be given to a plan which appears to be post-mortem.

**Note: if the calculation time requires more than 30 seconds, there are more formulas than necessary, the ranges are incorrectly sized and/or formulas are far too complex than necessary. If a model is submitted in this condition, at most 50% credit will be awarded.**

**Note: this is an individual project and the Kelley Honor Code is in effect. Sign the Kelley Honor Code in the Confirmations workbook; failure to do will result in no credit for the exam.**

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