# DAD 220 Analysis and Summary Template

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DAD 220

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Replace the bracketed text in this template with your responses and any supporting screenshots. Then submit it to the Module Five Activity for grading and feedback. Rename this document by adding your last name to the file name before you submit.

1. **Analyze the data** you’ve been provided with to **identify themes**:
   1. Which parts are being replaced most?

Fule tanks, Tire Repairs/Replacement, and Windshields. Fule tanks are by far being replaced the most.

Text

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* 1. Is there a region of the country that experiences more part failures and replacements than others?
     1. Identify region: The Midwest

Text

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* + 1. How might the fleet maintenance team use the information to update its maintenance schedule?
       1. The fleet maintenance team could easily use this information to ensure adequate parts in the Midwest meet that demand. The team could also figure out what repairs and replacements are common in each area of the country and allocate the proper resources to those areas.
  1. Which parts are being replaced most due to corrosion or rust?

Wheel arches are the most replaced part due to rust. Brake line replacement is the most replaced part due to corrosion.

Text

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* 1. Which parts are being replaced most because of mechanical failure or accident, like a flat tire or rock through the windshield?

Tire repair and replacement and windshield replacement are being replaced the most due to mechanical failure or accident.

Graphical user interface, text

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1. **Write a brief summary of your analysis** thattakes the information from Step 1 and presents it in a way that nontechnical stakeholders can understand.
   1. Based on the data provided and my interpretation of it, there are several strategies that can be used to increase productivity and efficiency.
      1. Since fule tanks are the most common repair, increasing the inventory of this repair item will help raise profit margins and increase efficiency.
      2. The data suggests that more repairs occur in the Midwest than in any other area of the country. Reallocation of resources to meet that demand would further increase project margins and efficiency.
      3. The fleet maintenance team can use this information to allocate resources appropriate based on location and common repairs in those areas to handle the predicted workflow in those regions. By allocating the company’s resources to areas of high demand, the workload should be manageable.
      4. Rust is much more prevalent regarding repairs than corrosion. Implementing a rust repair and prevention plan would decrease the cost of these repairs but would also generate sustainable revenue for the company.
      5. Flat tires or general tire repair is the most common demand by customers. By ensuring we have sufficient tire inventory and repair equipment, we should be able to meet consumer demands.
2. **Outline the approach** that you took to conduct the analysis.
   1. What queries did you use to identify trends or themes in the data?
      1. The queries I used can be seen in the above screenshots. These queries displayed the data in a useful manner for me to solve the questions posed to me by allowing me to sort the data based on repairs, locations, etc.
   2. What are the benefits of using these queries to retrieve the information in a way that allows you to provide valuable information to your stakeholders?
      1. The benefits of using these queries are significant regarding inventory management and personnel management. By identifying common failures by location, the company can readily allocate the appropriate resources to those areas, therefore, increasing productivity, efficiency, and profits.
3. **Explain how the functions in the analysis tool** allowed you to organize the data and retrieve records quickly.
   1. The COUNT function allowed me to count the data that I requested into an easily readable format. The UNION function allowed me to combine my requests for regions into a single table, instead of issuing each command separately.