



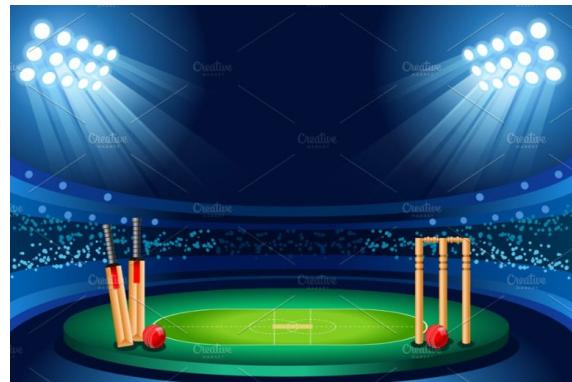
Capstone Project Presentation

Prajwal Chidri Prashanth

May 1, 2024

A Little About Me:

- Bachelor's degree in Engineering from Ramaiah Institute of Technology, India
- A Masters degree student, majoring in Business Analytics at University of Illinois, Chicago
- Technical Skills: SQL, Python, Tableau, Power BI, MS-Excel
- Hobbies: Numismatics, Cricket and Badminton

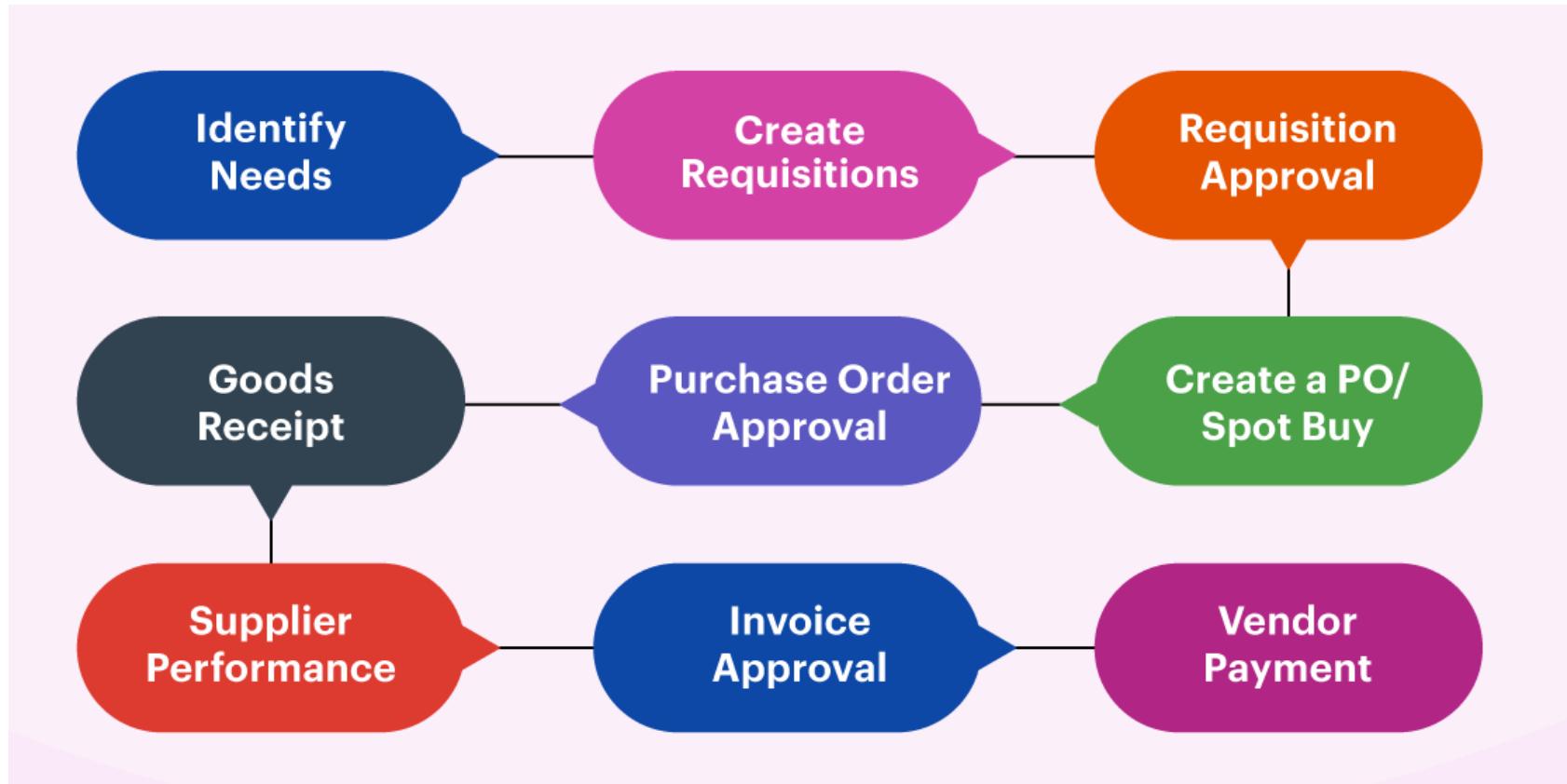


Phase I:

- Campus Tour
- Understanding the Procurement process and its metrics
- Interviewing the Database Administrator – Mr. Sripada Joshi
- Getting familiar with the MS-Excel Functions, OBIEE, eBS and Fermi Reporting Tool
- Performed MS-Excel Functionalities on a dataset that had all the edge cases before working on the actual dataset

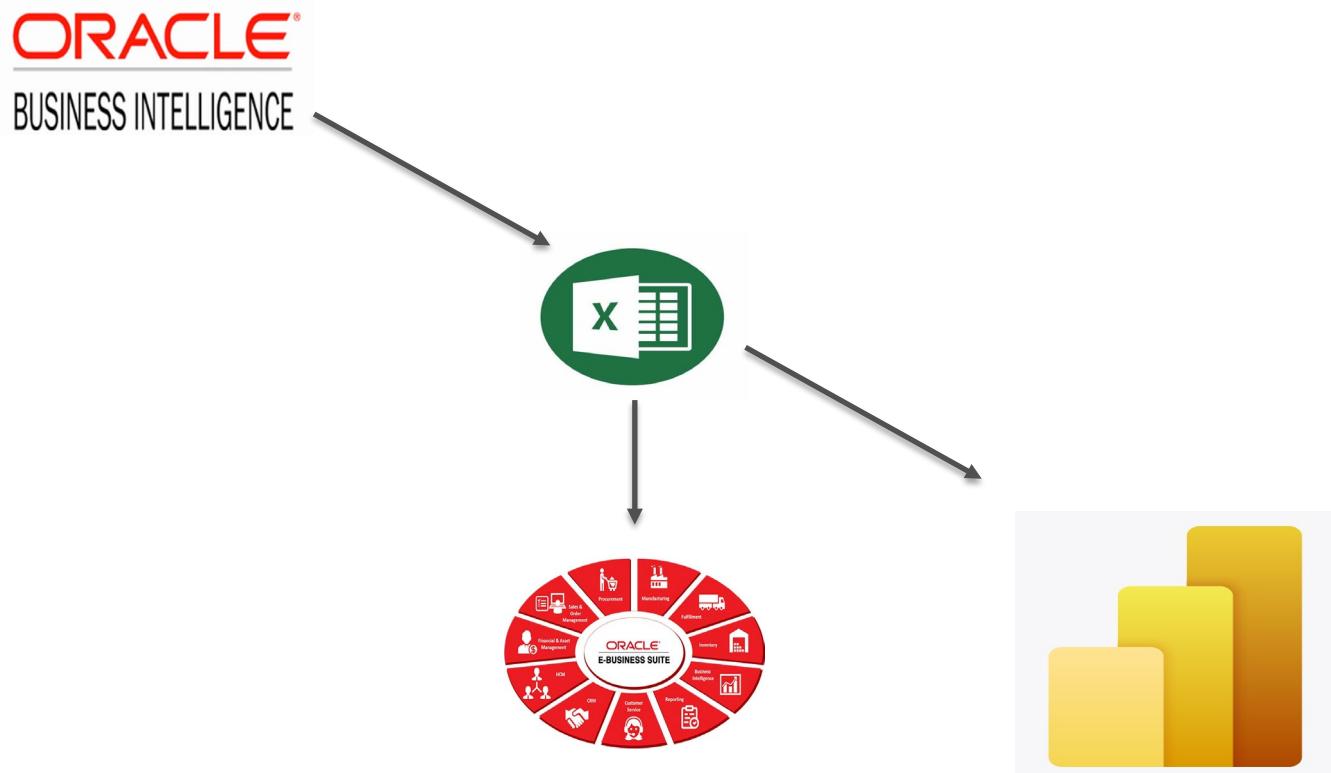


Procurement Process:

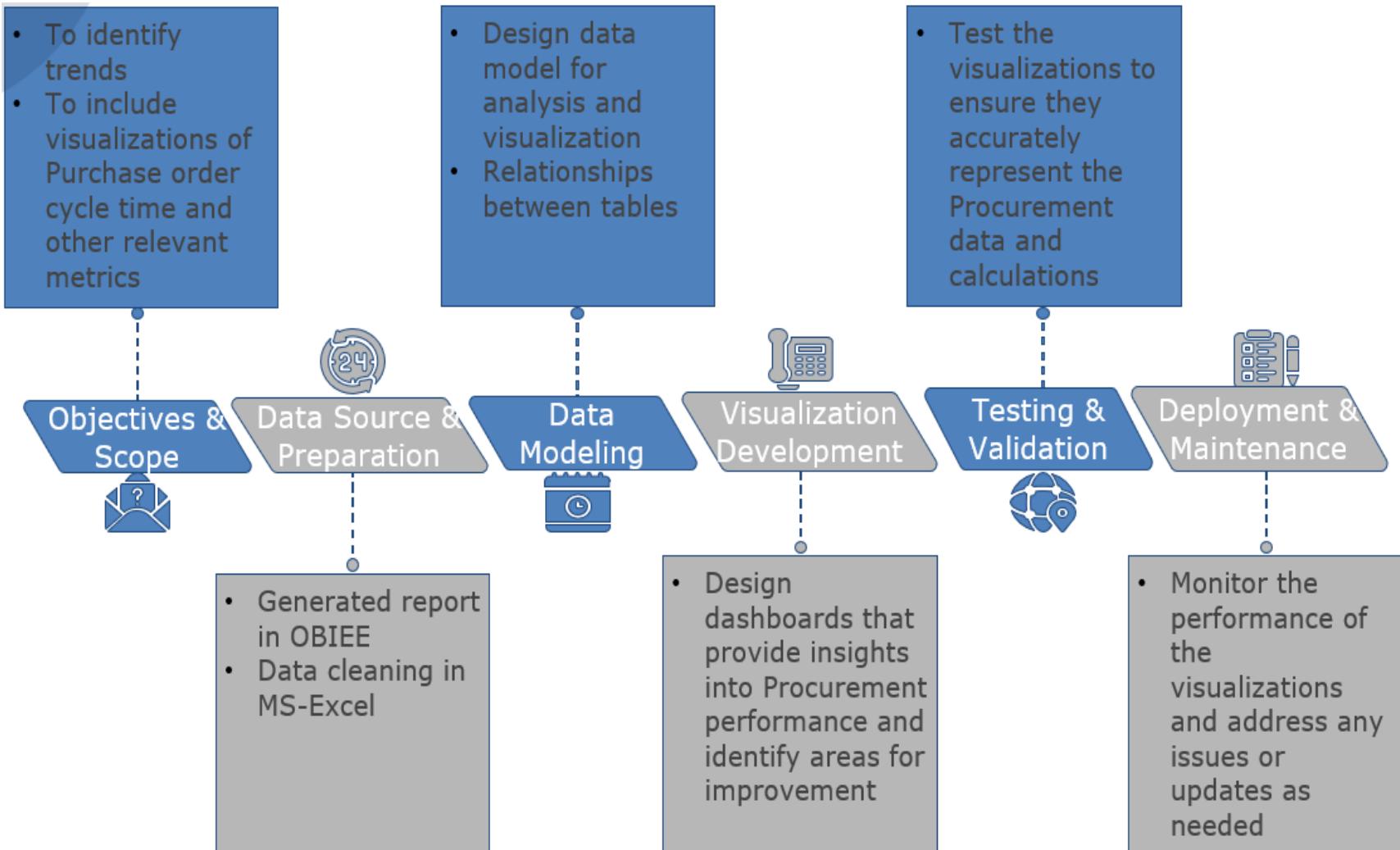


Phase II (Project Overview):

- Analyzing Procurement data to identify areas for improvement in the purchase order process (September 2022 – February 2024)

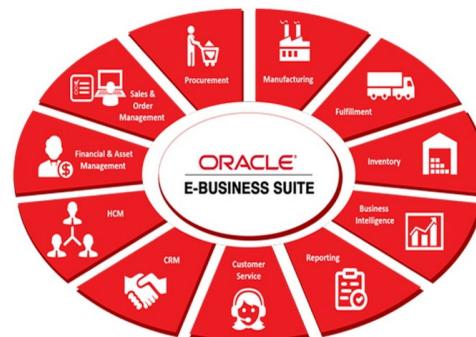


I. Steps Involved in the Project



II. Current Issues:

- Manually fixing the null/incorrect records referring to Oracle EBS
- Restrictions of OBIEE software to generate the reports
- Replacing the null values in Task Number and Item Category columns
- Higher PO Cycle Time with limited updates
- Missing Task Numbers and Item Category in eBS (due to Closed Purchase Orders/Finally Closed Purchase Orders)
- Converting the raw date to short date



1. Reports from OBIEE



Filtered Purchase Order Approved date (2022,2023,2024)



Generated reports from OBIEE (for 3 different years)

2. Filtered for the PO Numbers with the same Requisition numbers

3. Reports from OBIEE, referred to Fermi Reporting Tool and eBS to complete the dataset

Converting Raw Date to Short Date

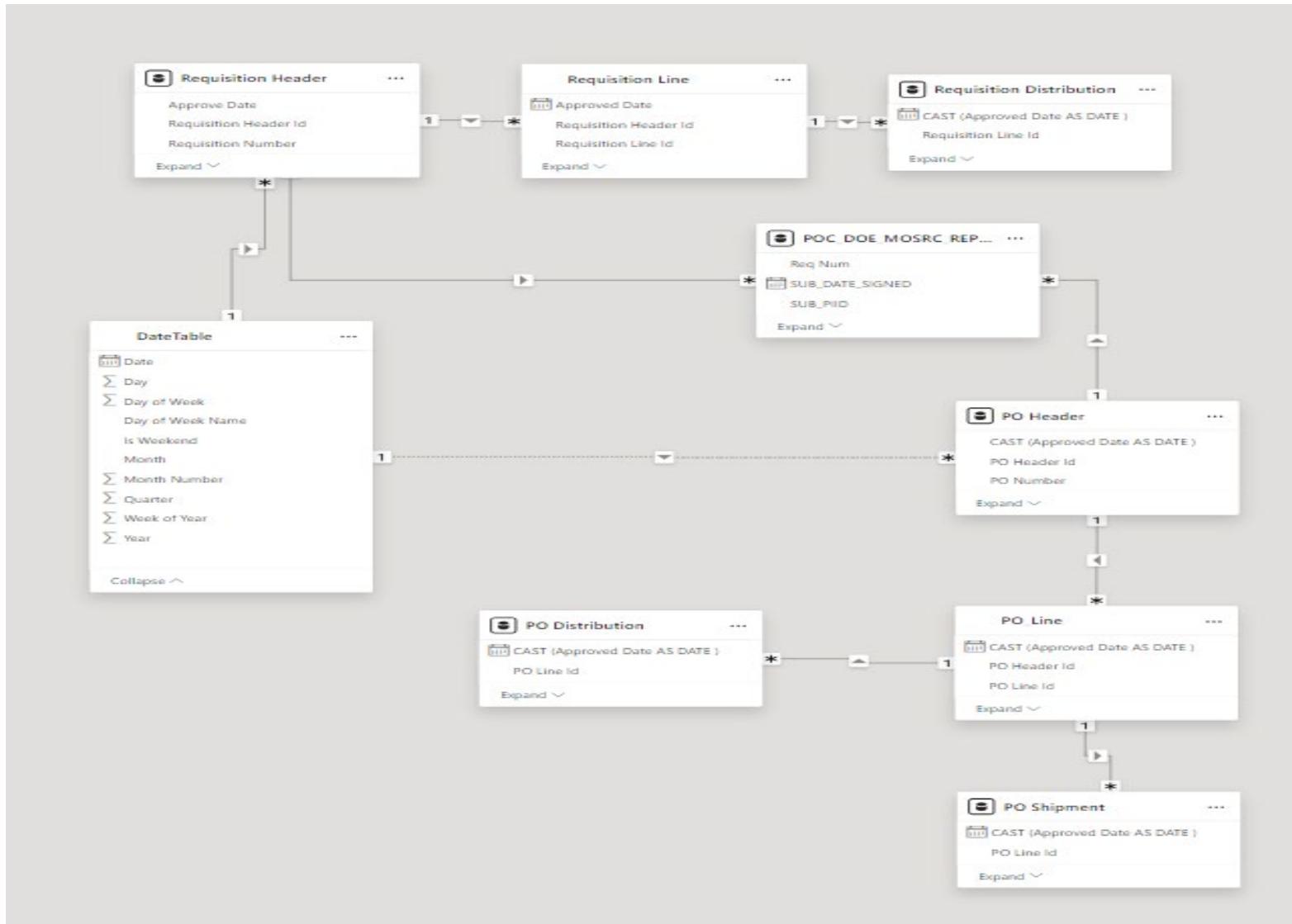
| D | E | F | G |
|-------------|-------------------------|-----------------|-----------------------|
| SUB_PIID | SUB_MODIFICATION_NUMBER | SUB_DATE_SIGNED | SUB_OBLIGATED_DOLLARS |
| 689044-9331 | 0 | 4282023 | 39.31 |
| 689044-9331 | 0 | 4282023 | 183.76 |
| 689044-9331 | 0 | 4262023 | 222.75 |
| 689044-9331 | 0 | 4282023 | 141.27 |
| 689044-9331 | 0 | 4282023 | 580.6 |
| 689044-9331 | 0 | 4282023 | 4263 |
| 689044-9331 | 0 | 4282023 | 207.07 |
| 689044-9331 | 0 | 4282023 | 86.99 |
| 689044-9331 | 0 | 4282023 | 476.15 |
| 689044-9331 | 0 | 4282023 | 207.07 |
| 689044-9331 | 0 | 7142023 | 131.98 |
| 689044-9331 | 0 | 5042023 | 0 |
| 689044-9331 | 0 | 5152023 | 25.02 |
| 689044-9331 | 0 | 5172023 | 319.1 |
| 689044-9331 | 0 | 5172023 | 376 |
| 689044-9332 | 0 | 5172023 | 93.93 |
| 689044-9332 | 0 | 5172023 | 379.9 |

=IF(LEN(A1) = 7, DATE(RIGHT(A1,4),
 LEFT(MID(A1,1,2),1), RIGHT(MID(A1,2,2),2)),
 IF(LEN(A1) = 8, DATE(RIGHT(A1,4), LEFT(A1,2),
 MID(A1,3,2)), "Invalid Date"))

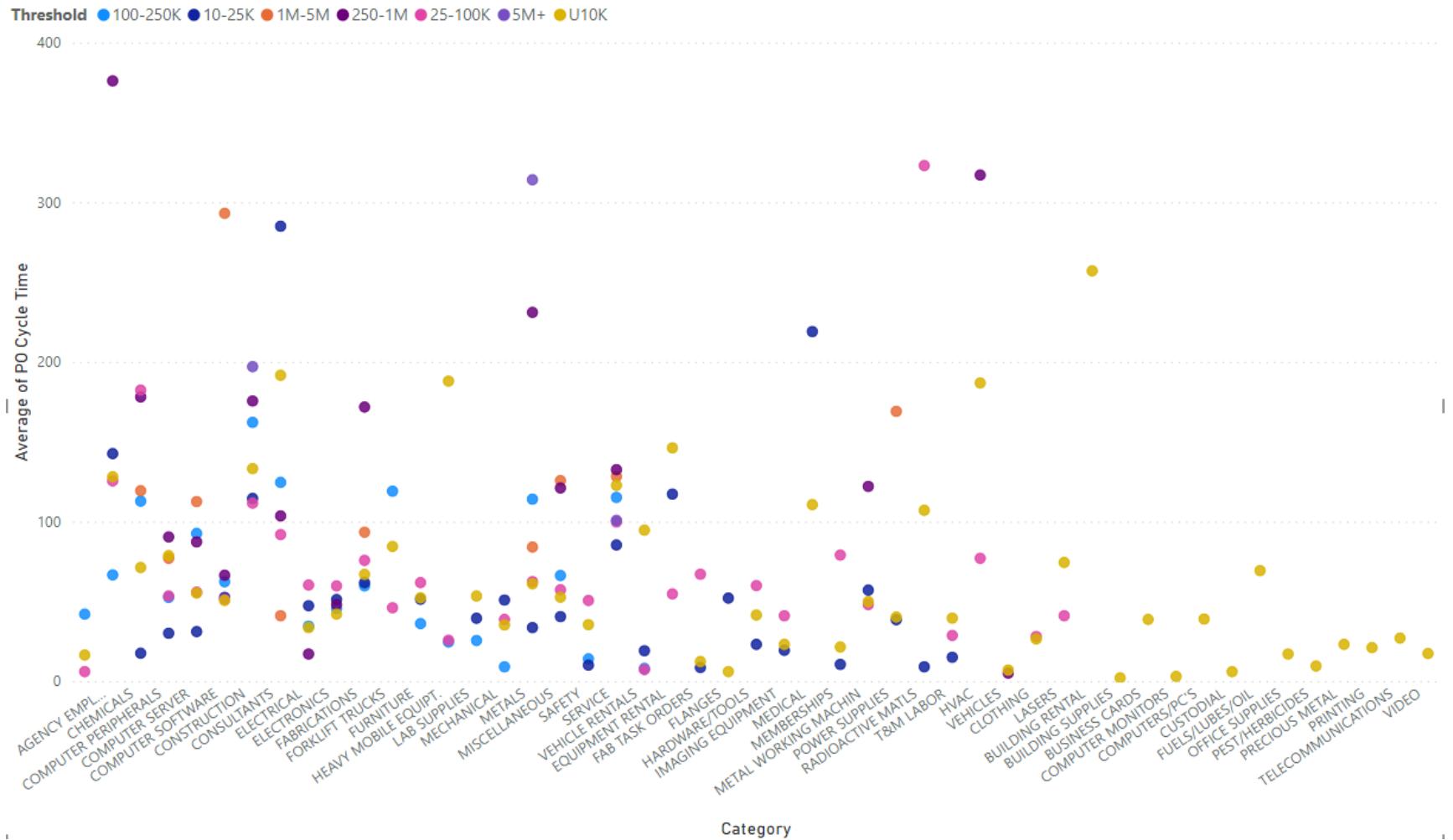


| PRIME_CONTRACT_PIID | SUB_DUNS | SUB_VENDOR_NAME | SUB_PIID | SUB_MODIFICATION_NUMBER | Column1 | SUB_OBLIGATED_DOLLARS |
|---------------------|----------|-----------------------|-------------|-------------------------|-----------|-----------------------|
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 4/28/2023 | 39.31 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 4/28/2023 | 183.76 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 4/26/2023 | 222.75 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 4/28/2023 | 141.27 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 4/28/2023 | 580.6 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 4/28/2023 | 4263 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 4/28/2023 | 207.07 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 4/28/2023 | 86.99 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 4/28/2023 | 476.15 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 4/28/2023 | 207.07 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 7/14/2023 | 131.98 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 5/15/2023 | 25.02 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 5/17/2023 | 319.1 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9331 | 0 | 5/17/2023 | 376 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9332 | 0 | 5/17/2023 | 93.93 |
| DEAC0207CH11359 | 1903111 | GRAYBAR ELECTRIC CO | 689044-9332 | 0 | 5/17/2023 | 379.9 |
| DEAC0207CH11359 | 1981133 | SOUTHERN METHODIST U | 658652 | 7 | 9/6/2023 | 100000 |
| DEAC0207CH11359 | 1981133 | SOUTHERN METHODIST U | 675328 | 7 | 1/4/2024 | 192400 |
| DEAC0207CH11359 | 1993369 | ASTM | 686898 | 2 | 5/4/2023 | 3900 |
| DEAC0207CH11359 | 2002210 | SUPERIOR TECHNICAL CE | 695789 | 0 | 4/19/2023 | 11405.2 |
| DEAC0207CH11359 | 2007870 | MYAT INC | 698534 | 0 | 3/8/2023 | 9118.8 |
| DEAC0207CH11359 | 2007870 | MYAT INC | 710172 | 0 | 1/30/2024 | 2997 |

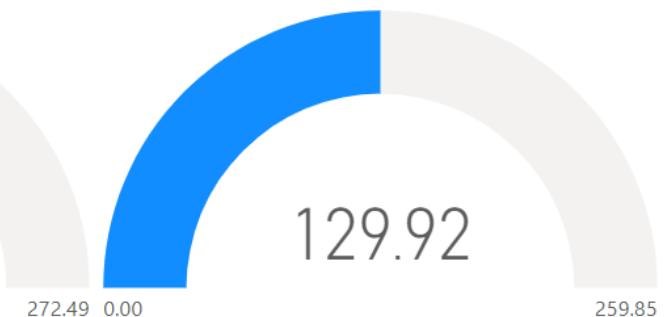
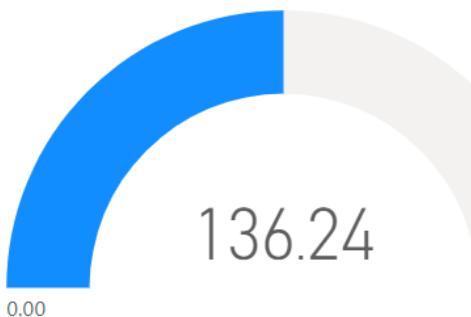
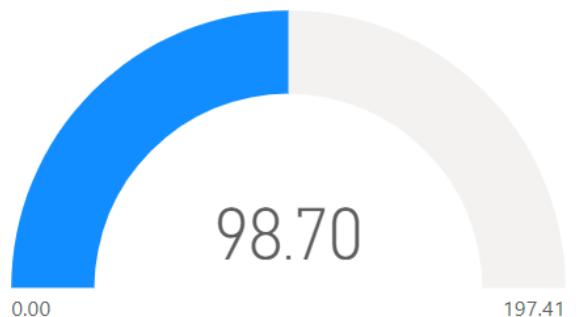
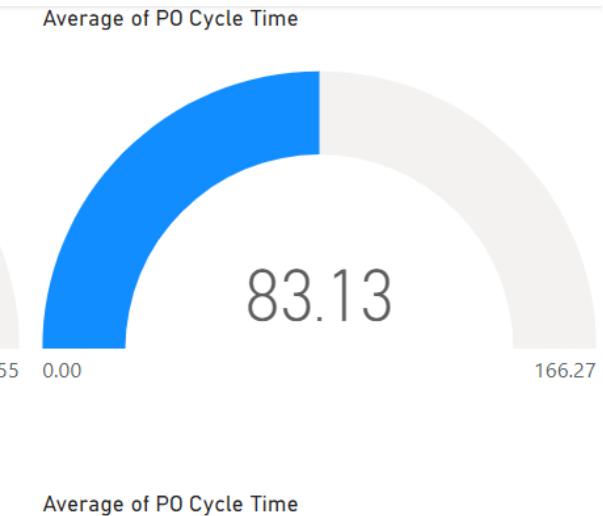
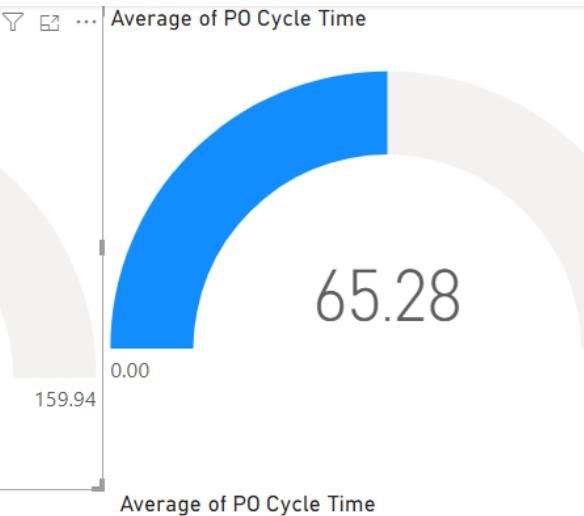
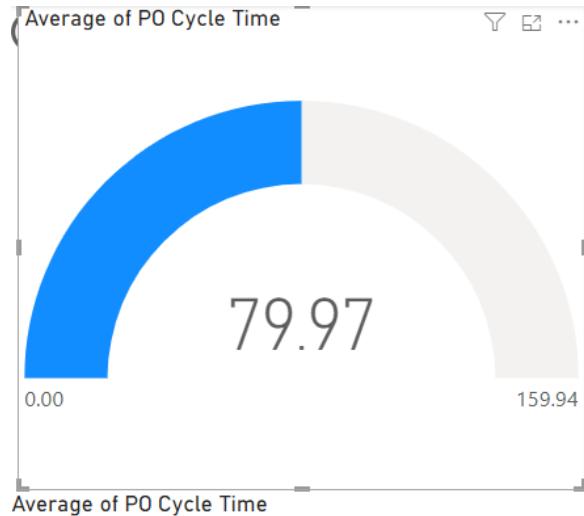
Data Model in Power BI:



Average PO Cycle Time by Threshold and Item Category



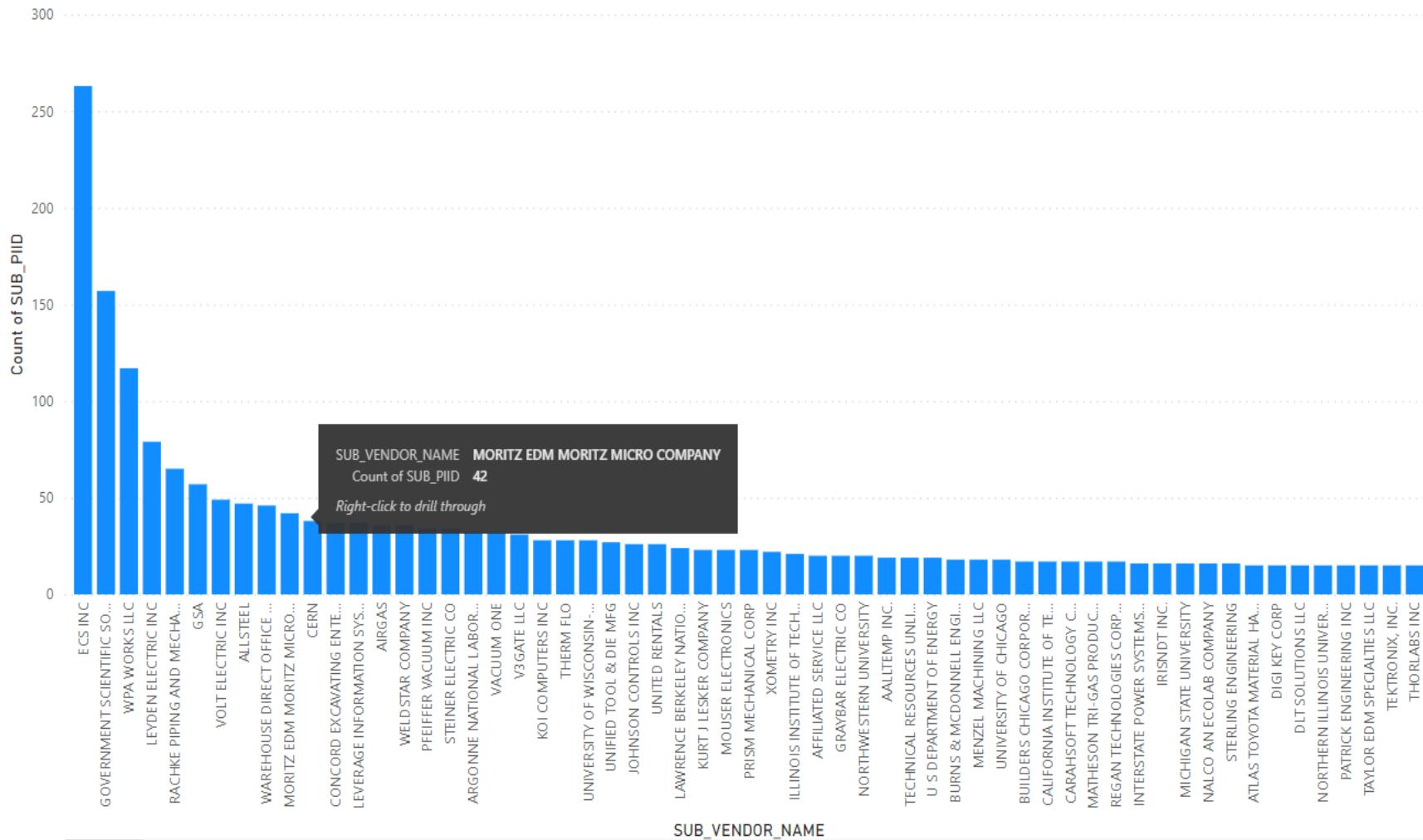
Average PO Cycle Time by Threshold



Count of SUB_PIID by Buyers and PO Cycle Time



Count of SUB_PIID by Sub-Vendor Name



IV. Takeaways:

- Improved my data handling skills in MS-Excel
- Working efficiently with the available resources
- Gained hands-on experience by working on tools like OBIEE, eBS, MS-Excel, Power BI
- Asking questions
- Learning by observing the people around me
- In this world, it is neither the smartest nor the strongest who will be successful, but those who can quickly adapt to the changes

