



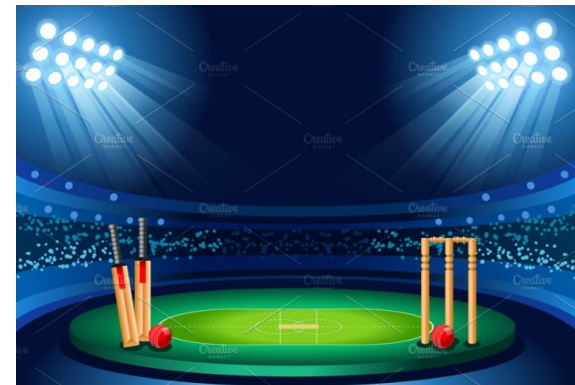
Capstone Project Presentation

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

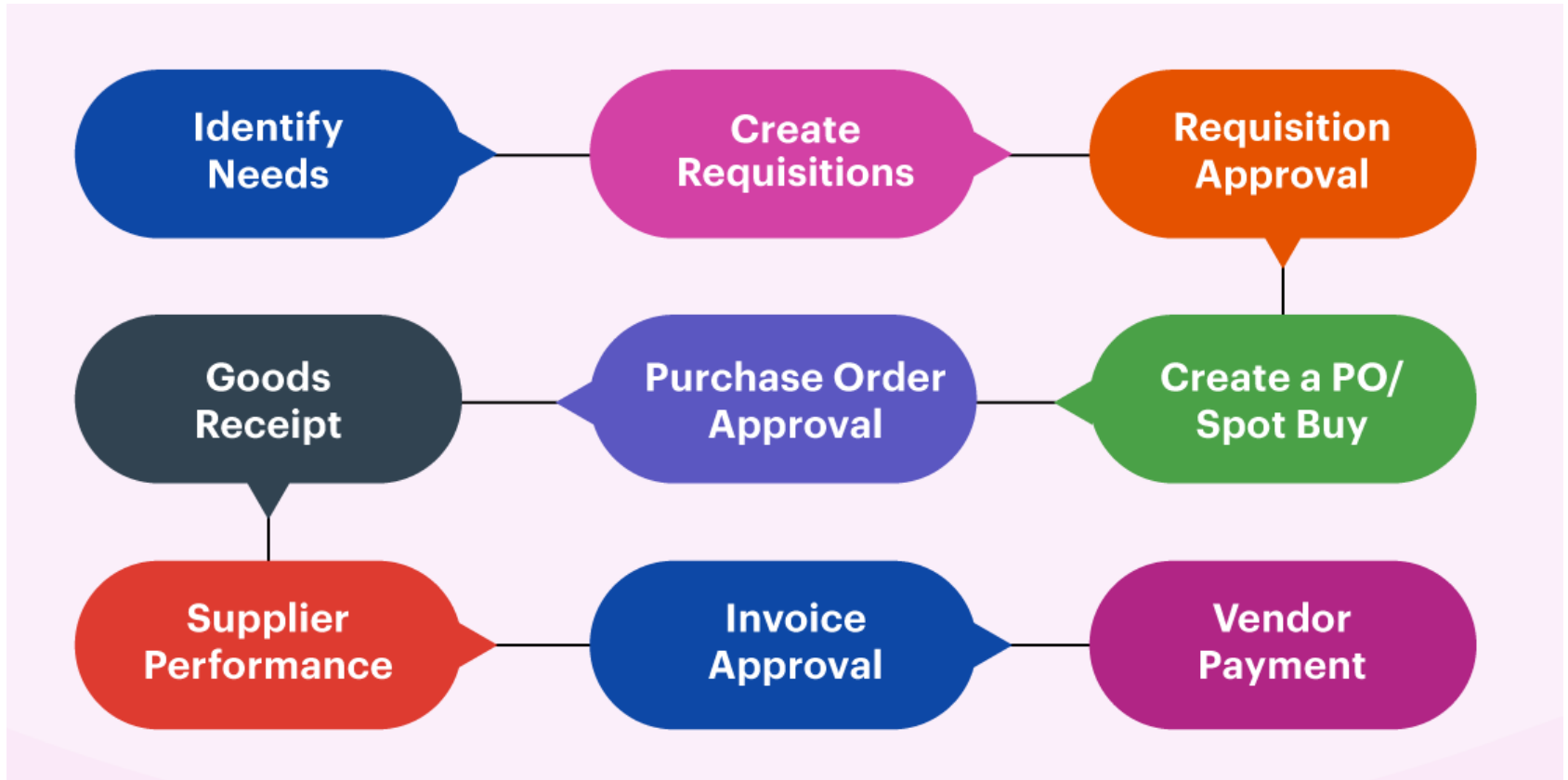


Phase I:

- 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

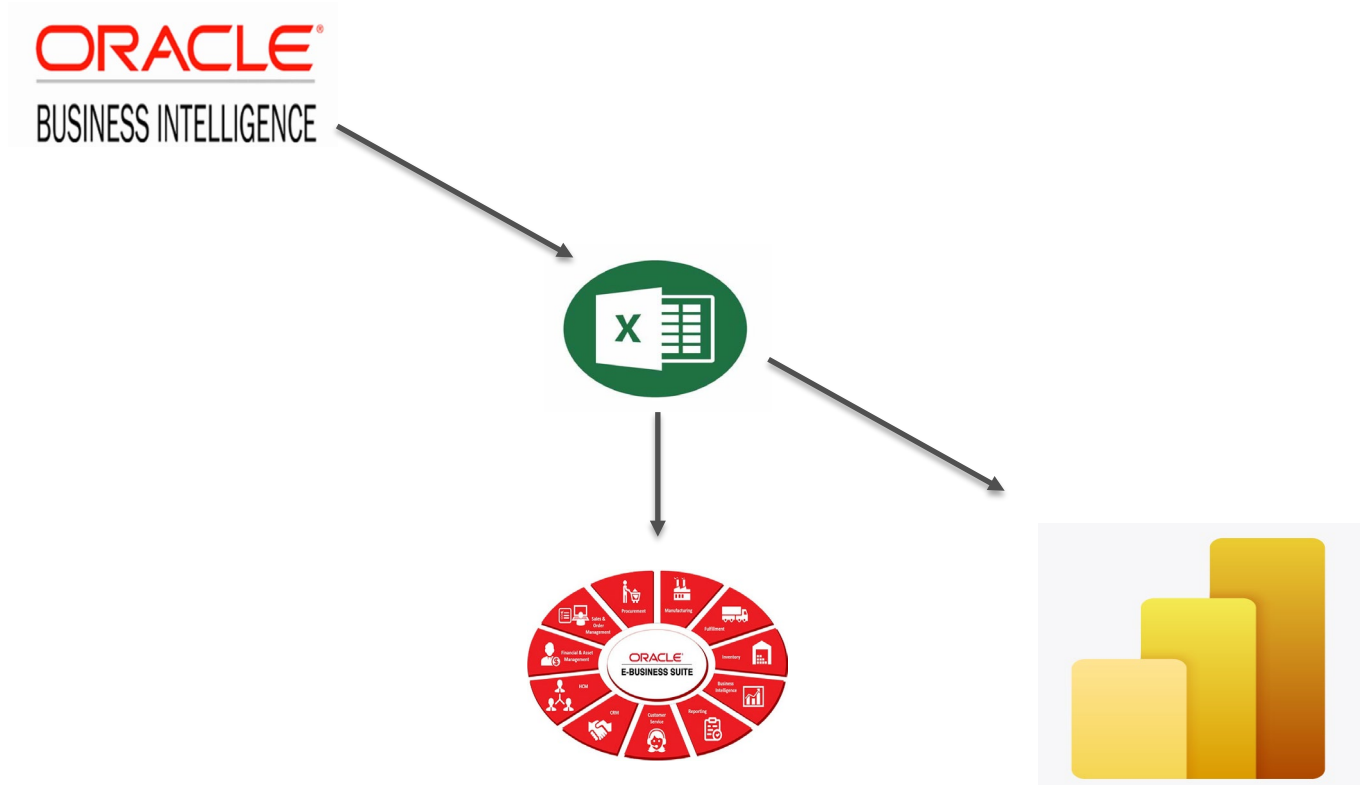


Procurement Process:

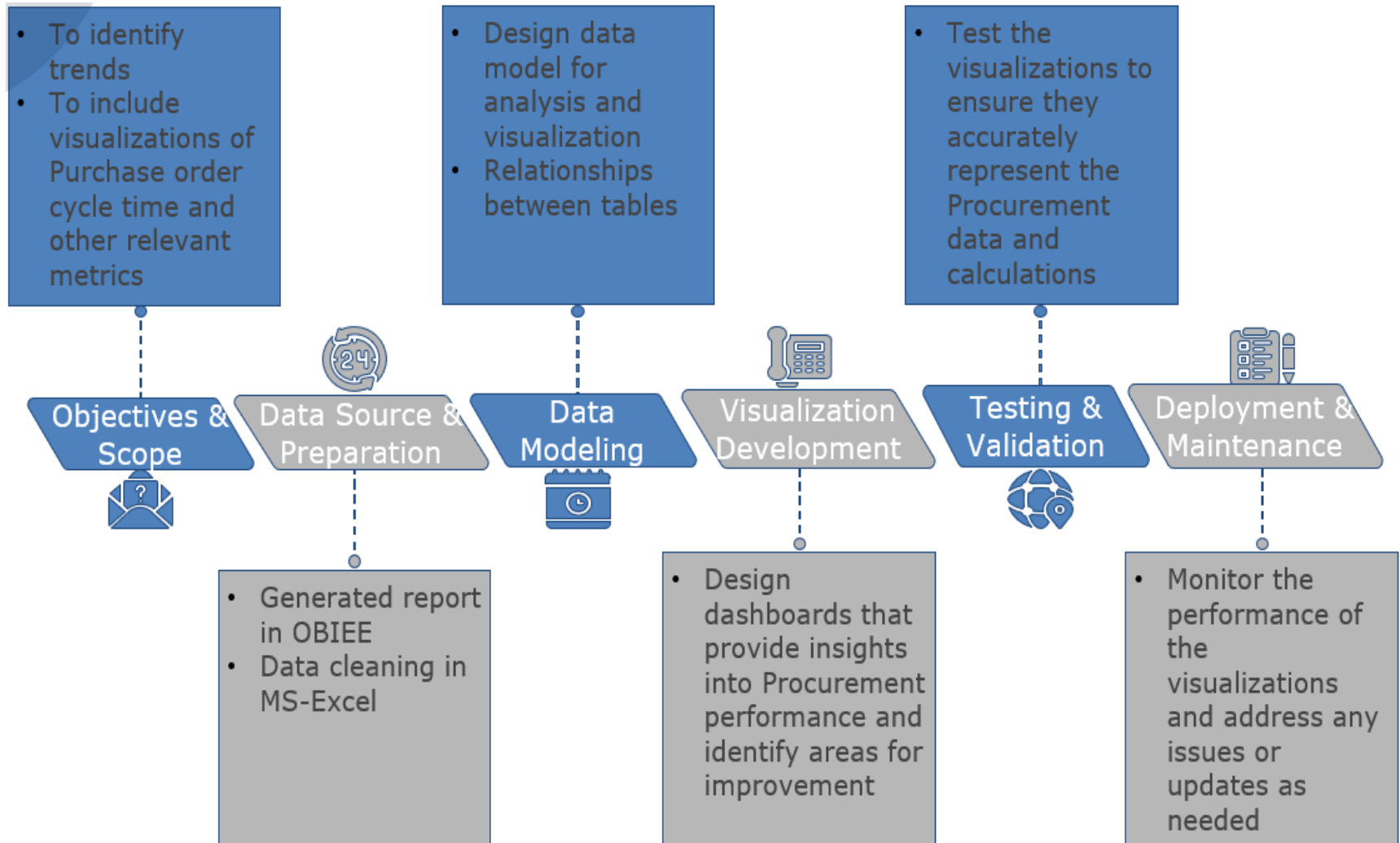


Phase II (Project Overview):

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

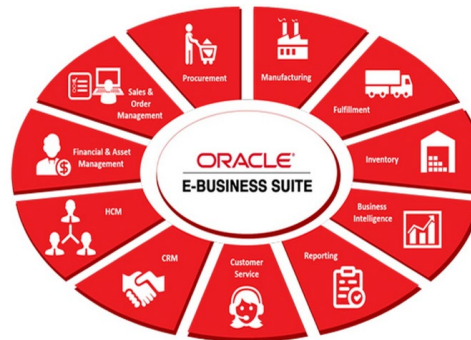


I. Steps Involved in the Project



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

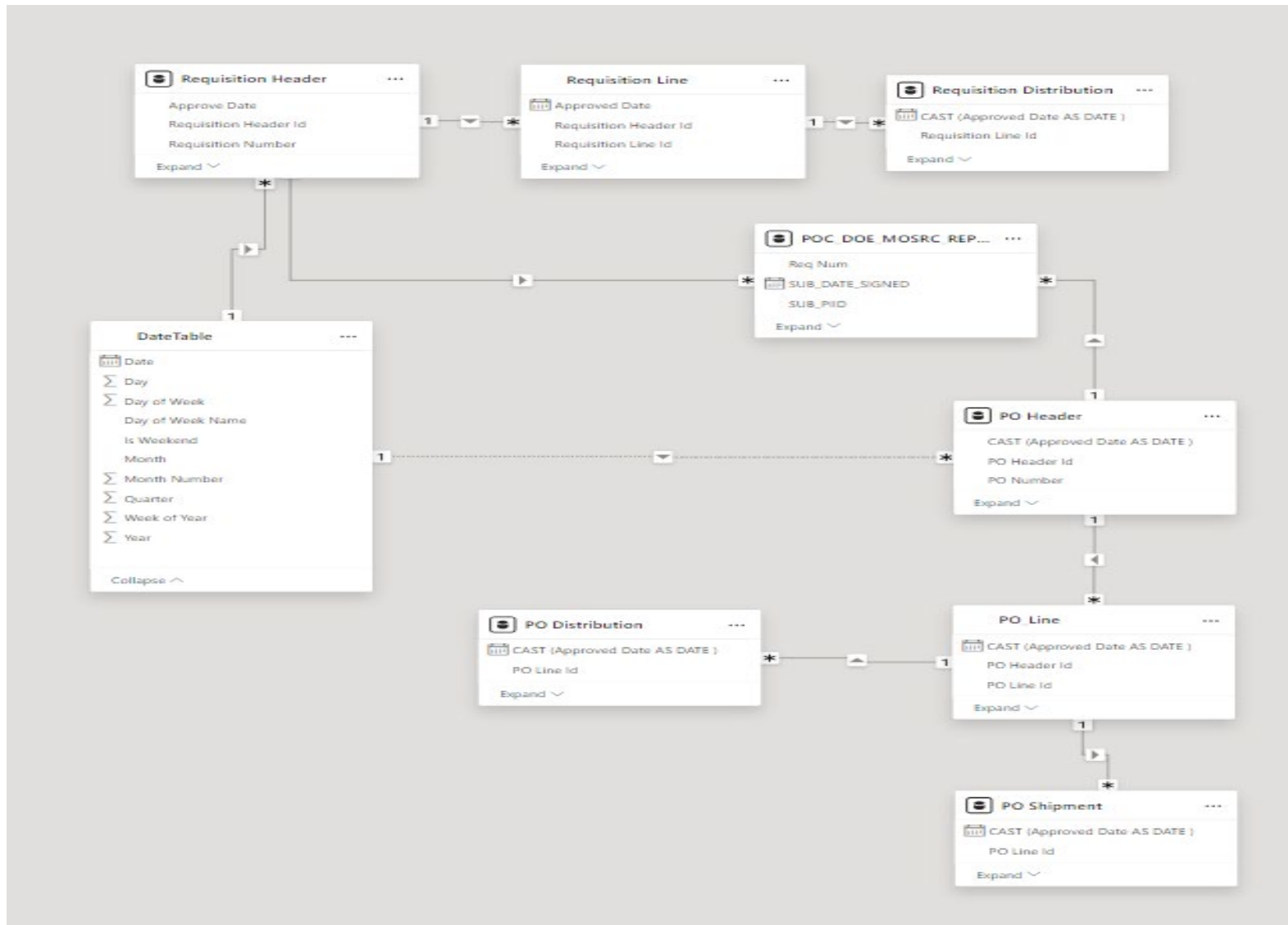
Converting Raw Date to Short Date

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

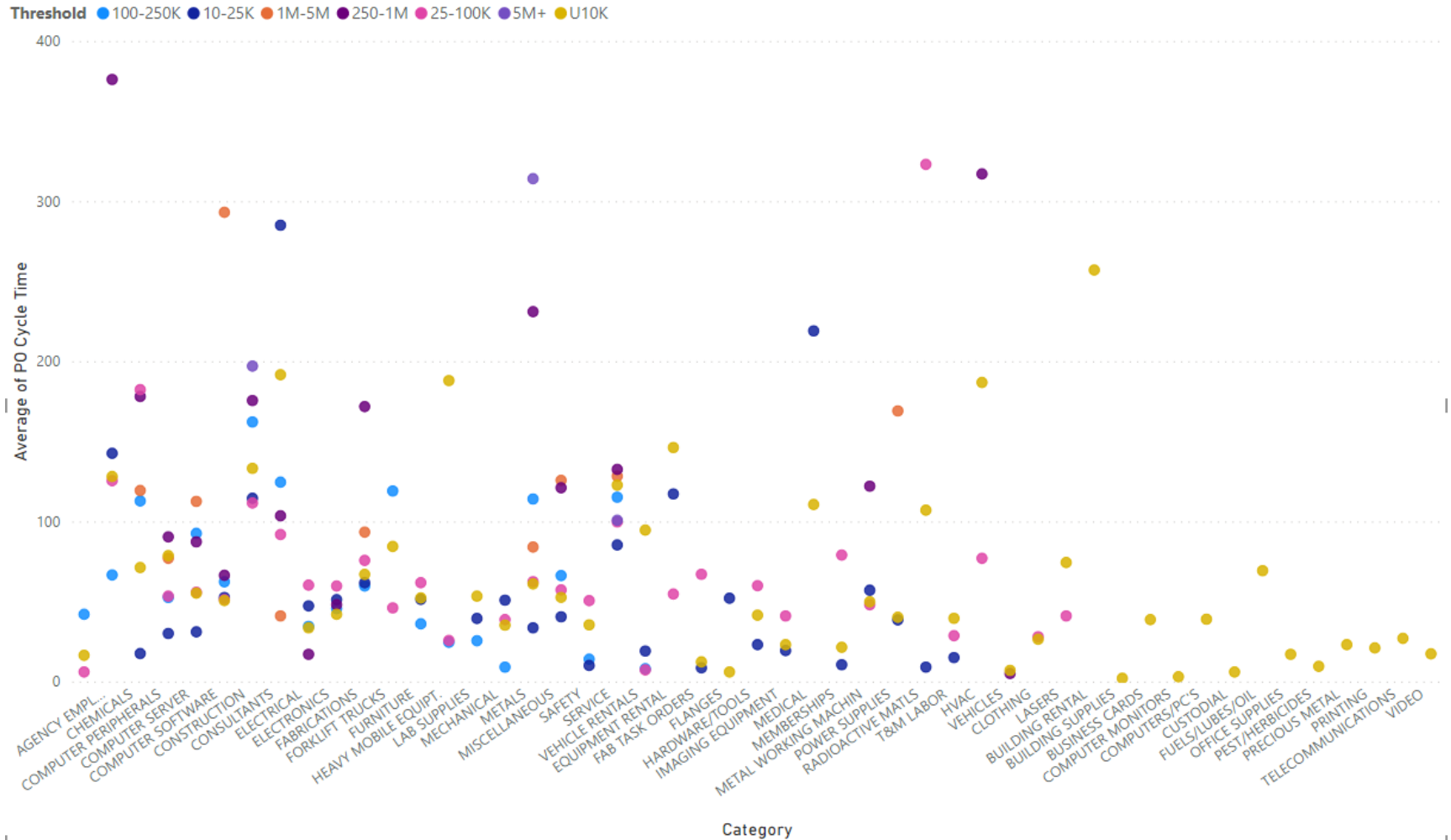
=IF(LEN(A1) = 7, DATE(RIGHT(A1,4),
LEFT(MID(A1,1,2),1), RIGHT(MID(A1,2,2),2)),
IF(LEN(A1) = 8, DATE(RIGHT(A1,4), LEFT(A1,2),
MID(A1,3,2)), "Invalid Date"))

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	699789	0	4/19/2023	11405.2
DEAC0207CH11359	2007870	MYAT INC	698534	0	3/8/2024	9118.8
DEAC0207CH11359	2007870	MYAT INC	710172	0	1/30/2024	2997

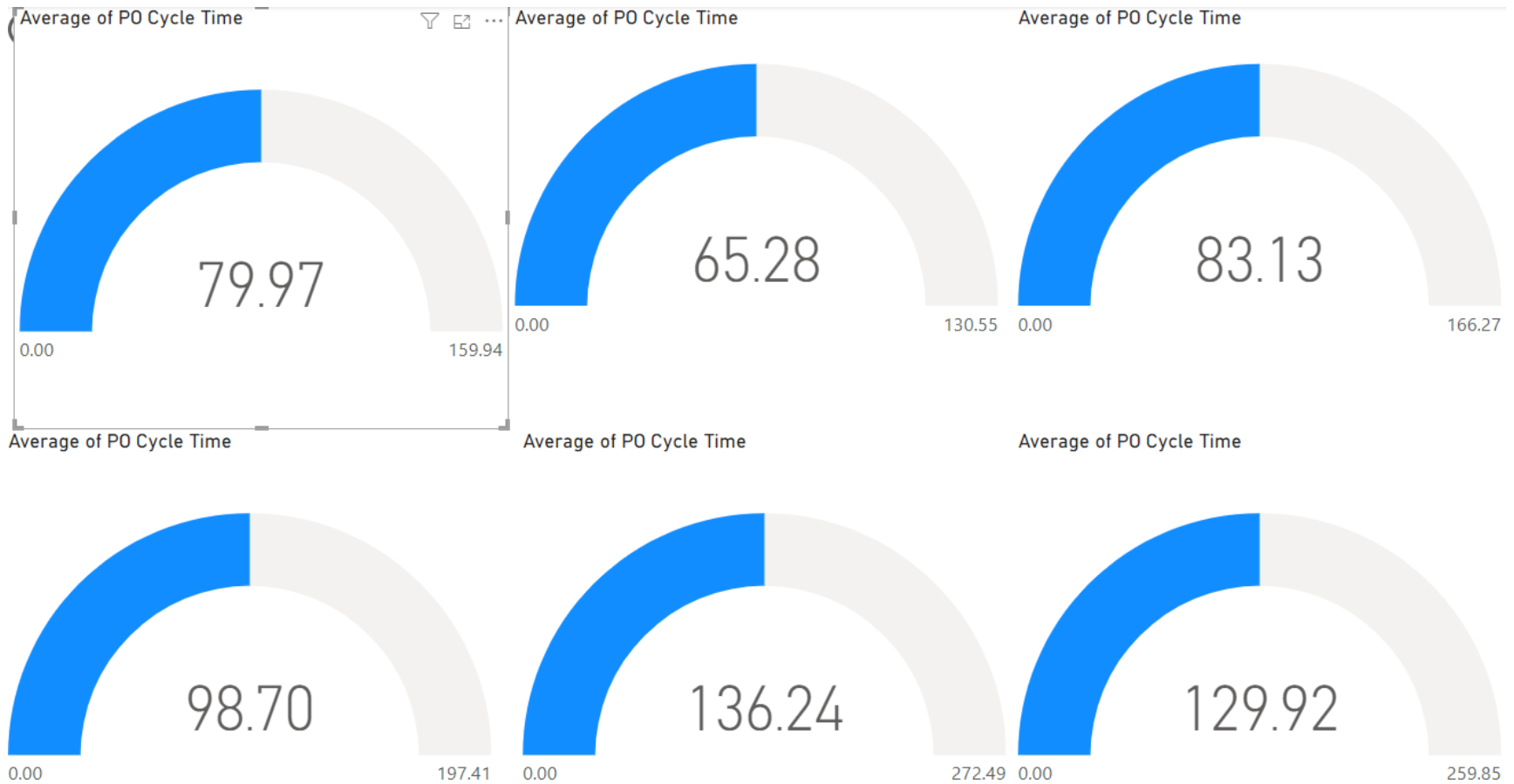
Data Model in Power BI:



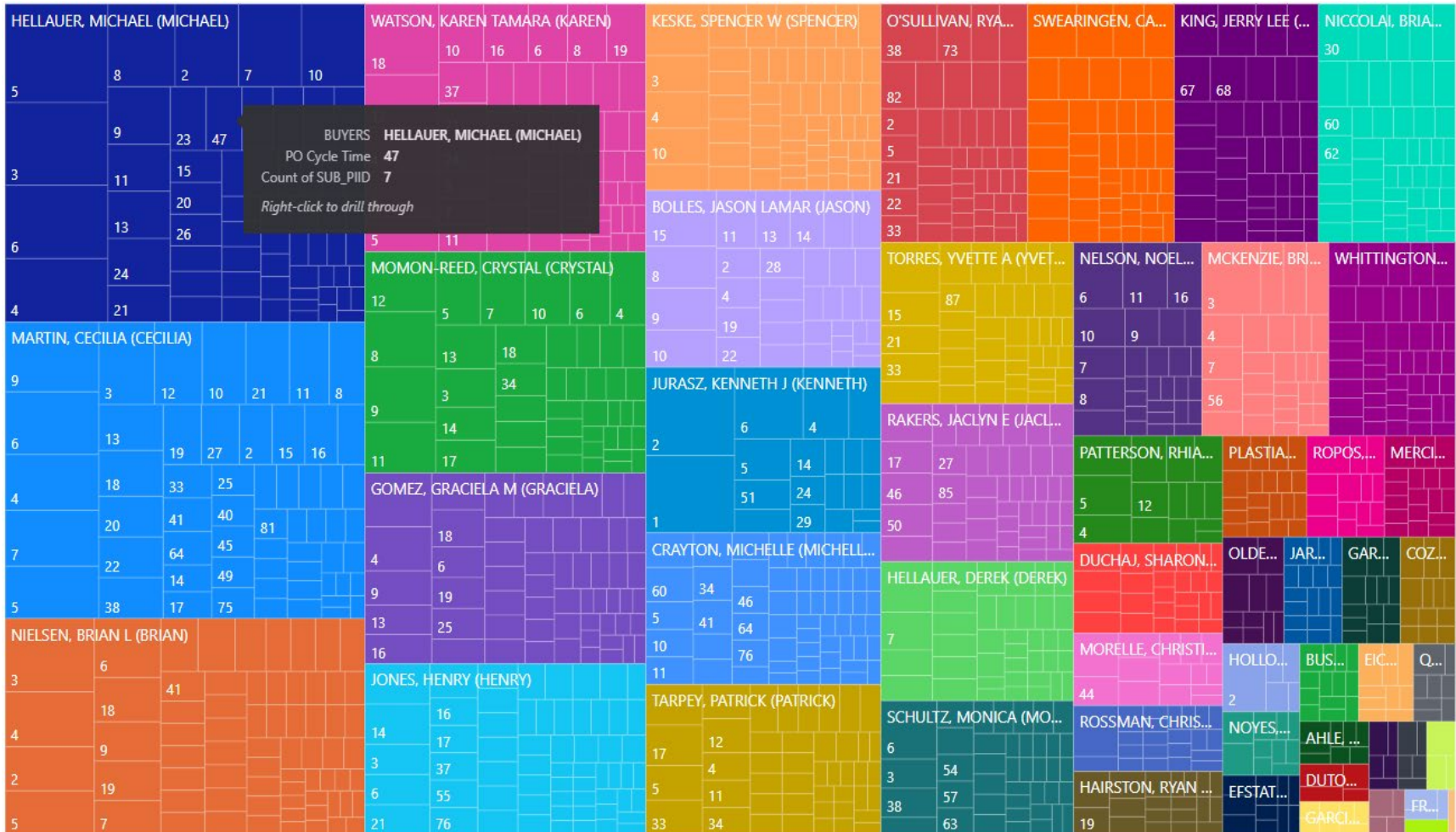
Average PO Cycle Time by Threshold and Item Category



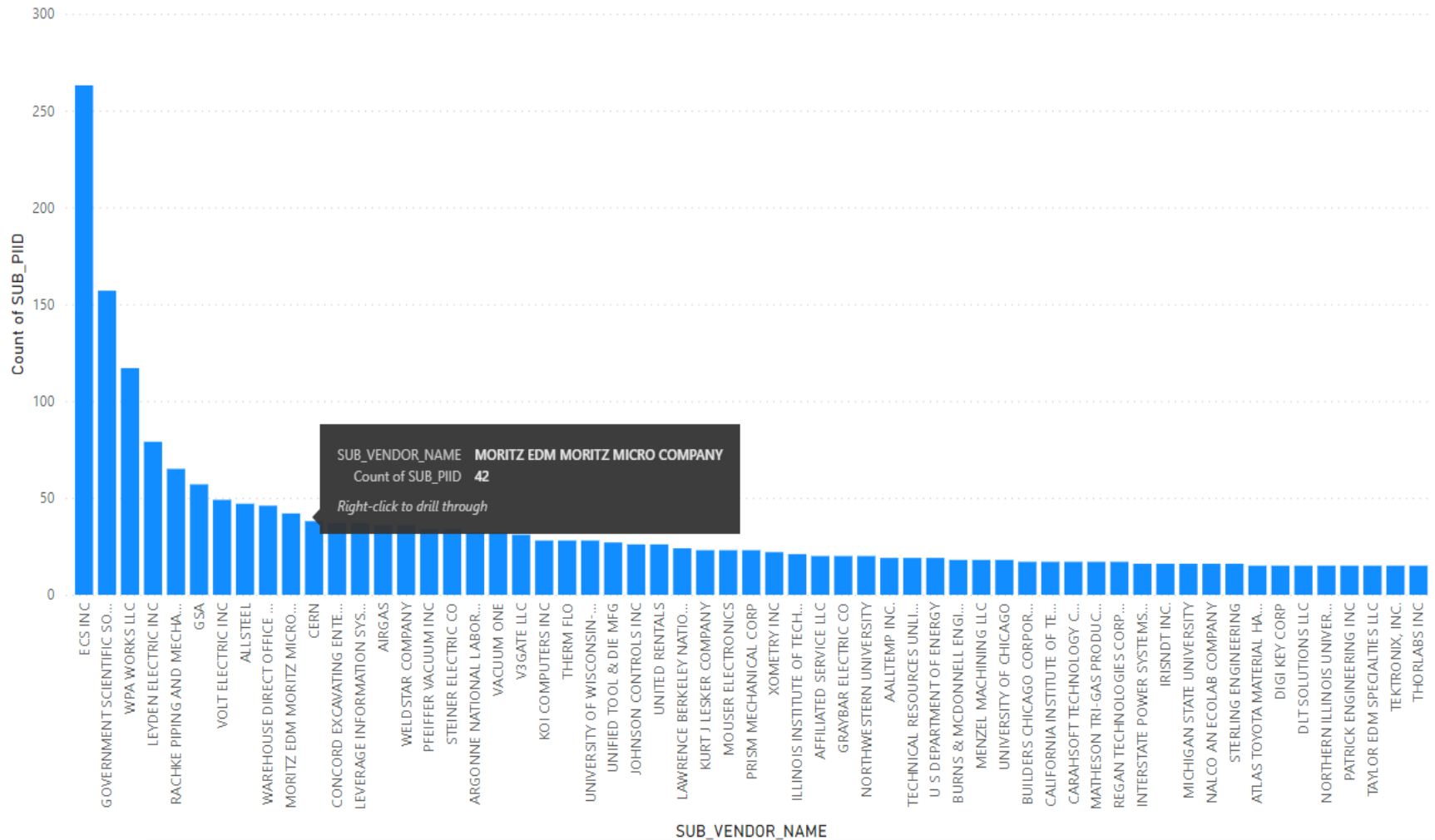
Average PO Cycle Time by Threshold



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

