

G.S. Mandal's
Maharashtra Institute of Technology
Chhatrapati Sambhajiagar (An Autonomous Institute)

Event type:- Workshop

Event Title:- Data visualisation Tools and Techniques

Event Date: 4th March to 9th March 2024

Gist of the Event:

Department of Emerging Science and Technology, MIT Aurangabad had organized workshop on **“Data visualisation Tools and Techniques ”** on 4th March to 9th March 2024, at 10.00 am to 12:15pm.

The conference was Inaugurated by Dr Kavita Bhosale HOD of the Dept of Emerging Science and Technology, MIT Aurangabad, addressed by Prof. N.G Patil, Director General, MIT Aurangabad, Dr Kavita Bhosale discussed the preamble & objective of the workshop. Vote of thanks by Aniket Andhale. The workshop aimed to introduce participants to various data visualization tools and techniques, with a focus on practical applications. The sessions were conducted by Ms. Remaya R S, a seasoned Technical Trainer with expertise in PowerBI, Python, Machine Learning, and Data Science. Her dynamic training approach and extensive experience in the field ensured that participants gained valuable insights and practical skills in data visualization.

The workshop revolved around enhancing participants' skills in utilizing data visualization tools and techniques effectively. The primary focus was on Tableau and PowerBI, two prominent platforms widely used in the industry for data visualization. With the exponential growth of data, the ability to extract actionable insights and communicate them visually has become crucial for professionals in various fields. Through this workshop, participants were equipped with the necessary skills to transform complex data into visually appealing and understandable representations. This workshop was particularly important for students as it provided them with a competitive edge in the job market and prepared them for real-world data analysis and presentation challenges.

Data visualization is a powerful tool that aids in comprehending and communicating complex information effectively. By mastering tools like Tableau and PowerBI, participants gained the ability to create visually impactful and interactive dashboards, reports, and presentations, which are highly sought after in industries such as finance, marketing, healthcare, and more.

The first two days of the workshop provided participants with an introduction to data visualization tools such as Tableau and Power BI. By providing a historical overview and real-life case studies of their applications, participants gained a better understanding of the

importance of data visualization in today's world. Moreover, they learned how to install Tableau and Power BI software on their computers, preparing them for the workshop's subsequent sessions. Lastly, they were trained on how to create basic charts and graphs using Tableau, setting the foundation for the more advanced visualizations.

On day three, the workshop shifted its focus to various charts and functions in Tableau. Moreover, participants gained insights on the importance of representing data effectively. On day four of the workshop, participants were introduced to PowerBI with a focus on its interface and how to take data from various sources and combine different files, such as websites, cloud, text, and sheets. They also learned how to transform data and how PowerBI already provides the data with required attributes smartly. Participants were also taught how to perform EDA on the data and how to use the PowerBI workbook efficiently.

With a focus on data cleaning, day five began with a session introducing the process of web scraping, data cleaning of various sheets with anomalies, and transformations on data, specifically cleaning in PowerBI. Participants gained knowledge on how to merge columns, clean excel sheets, and how to use different functions in PowerBI. Day six was dedicated to a case study on Zomato data analysis. Participants learned how to create visuals, give shapes and design them, create visual reports on Zomato.

In conclusion, the six-day online workshop provided participants with a comprehensive understanding of data visualization tools and techniques, with a focus on Tableau and Power BI. A total of 199 attendees participated in the workshop, enhancing its impact and reach. The workshop successfully covered the historical background, comparison, and real-life applications of these tools. Participants also gained hands-on experience through practical sessions on data insertion and creating charts, graphs, dashboards, and stories using Tableau. The positive response from the faculty, students, and participants, along with a vote of thanks from Aniket Andhale, added to the overall success and collaborative spirit of the workshop.

Power Query Editor interface showing a data table with columns: Id, Customer Id, Product Id, Quantity, Date, and Amount. The table contains 30 rows of data. The interface includes a ribbon with tabs like Home, Transform, and View. The bottom status bar shows the file path: remyarsjob@gmail.com (External).

Power Query Editor interface showing a data table with columns: Team, City, State, Home ground, Captain, and Head coach. The table contains 10 rows of data. The interface includes a ribbon with tabs like Home, Transform, and View. The bottom status bar shows the file path: remyarsjob@gmail.com (External).

Power Query Editor interface showing a table with columns: OrderDate, OrderNumber, ProductCategory, ProductSubcategory, ProductName, OrderQuantity, and OrderTotal. The table contains 38 rows of data. The interface includes a ribbon with tabs like Home, Transform, and View, and a sidebar with a list of queries and a Properties pane.

OrderDate	OrderNumber	ProductCategory	ProductSubcategory	ProductName	OrderQuantity	OrderTotal
1/1/2013	8/12/2001	SO40080	352	24957	1	1
2/1/2013	12/8/2001	SO40079	312	28235	4	1
3/1/2013	10/26/2001	SO40082	350	11455	9	1
4/1/2013	11/16/2001	SO40081	318	26782	6	1
5/1/2013	12/15/2001	SO40083	312	24947	10	1
6/1/2013	10/12/2001	SO40084	310	28143	4	1
7/1/2013	12/28/2001	SO40086	314	18747	9	1
8/1/2013	10/9/2001	SO40085	312	18748	9	1
9/1/2013	10/10/2001	SO40090	312	18904	9	1
10/1/2013	8/28/2001	SO40090	310	28170	4	1
11/1/2013	12/11/2001	SO40088	340	11398	10	1
12/1/2013	10/24/2001	SO40092	312	18889	9	1
1/2/2013	12/10/2001	SO40086	312	25977	4	1
2/2/2013	10/26/2001	SO40091	314	18908	9	1
3/2/2013	8/12/2001	SO40087	350	11388	10	1
4/2/2013	8/11/2001	SO40094	310	22783	6	1
5/2/2013	10/30/2001	SO40096	312	12483	7	1
6/2/2013	10/10/2001	SO40097	310	28151	4	1
7/2/2013	8/15/2001	SO40098	312	28167	1	1
8/2/2013	12/17/2001	SO40095	344	11394	10	1
9/2/2013	12/20/2001	SO40099	312	28174	1	1
10/2/2013	8/18/2001	SO40101	310	22748	6	1
11/2/2013	11/21/2001	SO40100	326	19428	8	1
12/2/2013	11/24/2001	SO40102	310	28274	4	1
1/3/2013	10/17/2001	SO40104	310	28142	1	1
2/3/2013	10/10/2001	SO40108	310	22979	9	1
3/3/2013	11/21/2001	SO40105	312	22785	6	1
4/3/2013	8/24/2001	SO40103	310	28140	1	1
5/3/2013	11/12/2001	SO40106	348	10987	6	1
6/3/2013	12/14/2001	SO40107	312	28275	4	1
7/3/2013	11/20/2001	SO40109	312	24957	10	1
8/3/2013	9/17/2001	SO40112	324	20558	10	1
9/3/2013	11/8/2001	SO40111	328	25713	9	1
10/3/2013	12/5/2001	SO40110	312	18710	9	1
11/3/2013	10/17/2001	SO40118	314	18740	9	1
12/3/2013	11/21/2001	SO40117	342	14727	1	1
1/4/2013	11/24/2001	SO40118	312	28034	1	1
2/4/2013	11/1/2001	SO40114	310	28146	1	1
3/4/2013	8/30/2001	SO40111	348	79084	4	1

Power BI Desktop interface showing a dashboard with three visualizations: a bar chart titled 'Sum of ProductPrice by Category', a horizontal bar chart titled 'Sum of OrderQuantity by ProductName', and a donut chart titled 'Sum of ProductCost by SubcategoryName'. The interface includes a ribbon with tabs like File, Home, Insert, Modeling, View, and Optimize, and a sidebar with a list of visualizations and a Properties pane.

Sum of ProductPrice by Category

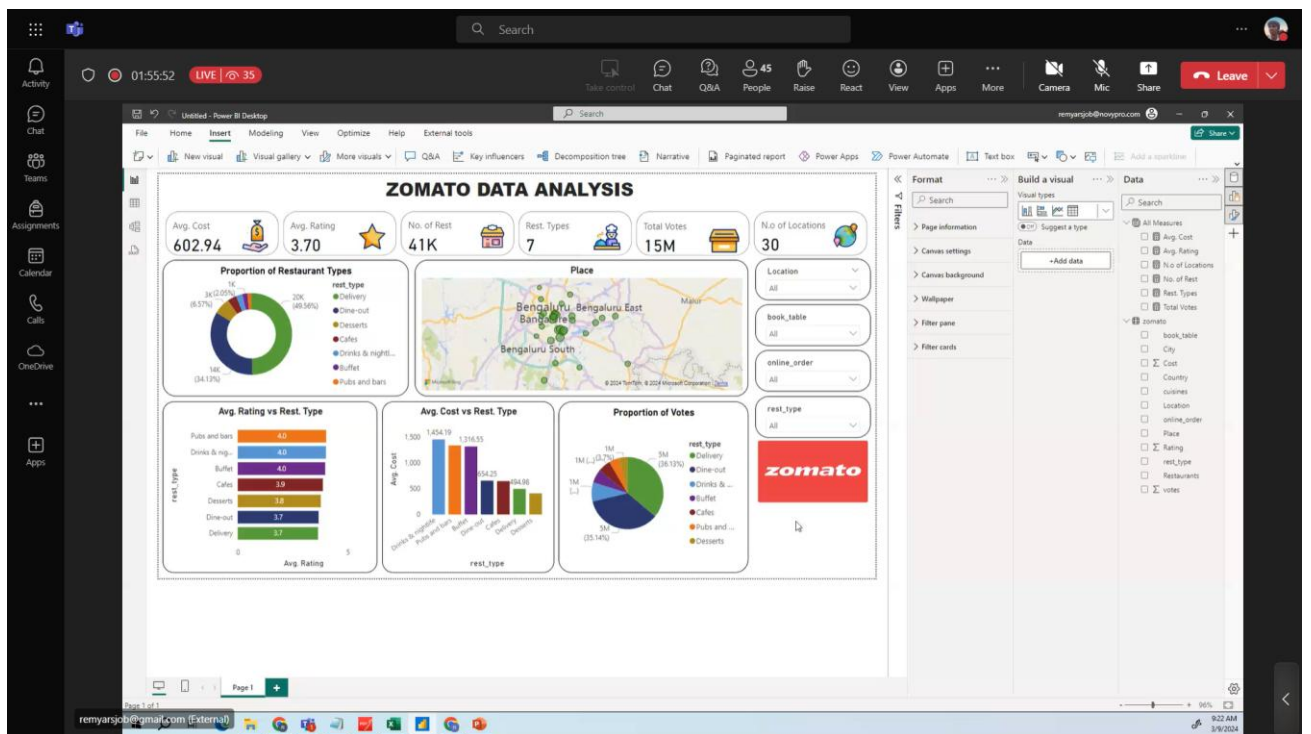
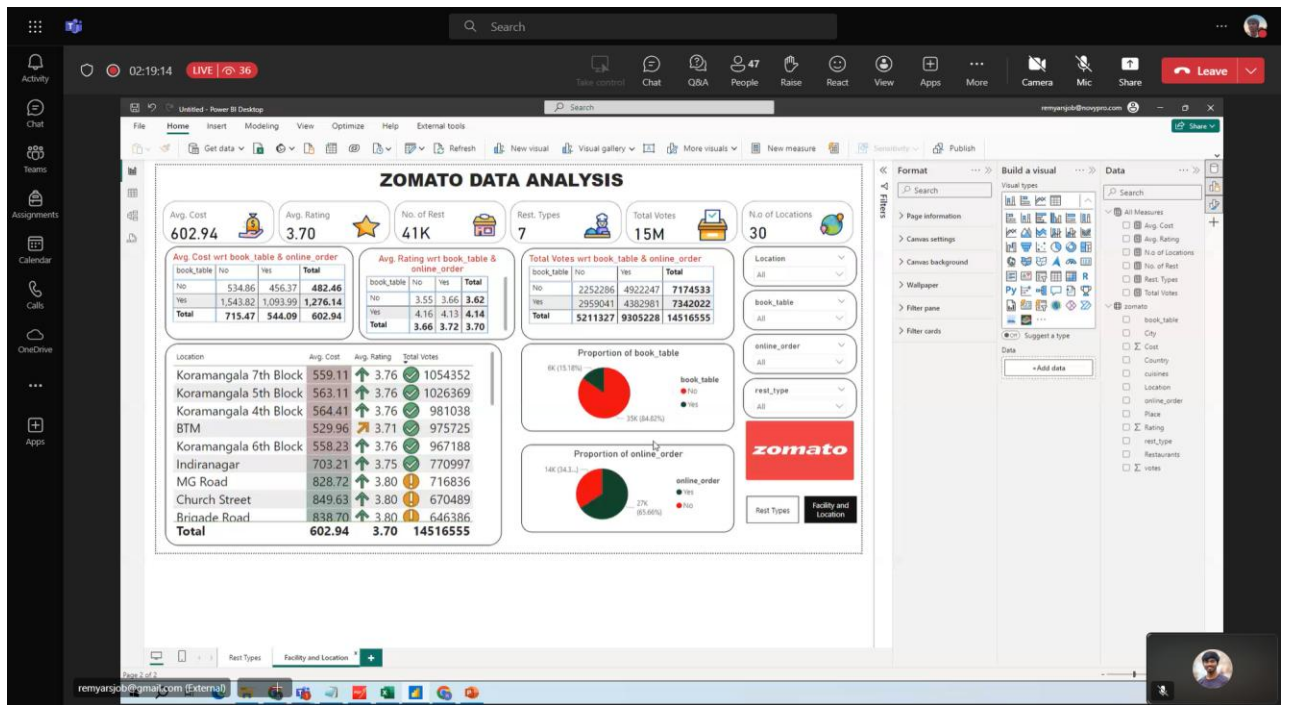
Category	Sum of ProductPrice
Bikes	140,514
Components	17,004
Clothing	1,776
Accessories	8,996

Sum of OrderQuantity by ProductName

ProductName	Sum of OrderQuantity
Road-150 Red, 48	48
Road-150 Red, 52	52
Road-150 Red, 44	44
Road-150 Red, 42	42
Road-250 Black, 52	52
Mountain-200 Black, 48	48
Road-250 Red, 38	38
Mountain-200 Silver, 48	48
Road-250 Black, 48	48
Road-250 Red, 52	52
Mountain-200 Silver, 42	42
Mountain-200 Silver, 48	48
Mountain-100 Black, 48	48
Road-250 Black, 44	44
Mountain-100 Silver, 42	42
Mountain-200 Black, 48	48
Mountain-100 Silver, 40	40

Sum of ProductCost by SubcategoryName

SubcategoryName	Sum of ProductCost	Percentage
Road Bikes	1,374	13.74%
Mountain Bikes	45,134	45.13%
Touring Bikes	12,046	12.04%
Road Frames	19,496	19.49%
Mountain Frames	296	2.96%
Whoots		
Chankbats		
Jerseys		



Activity

Chat

Items

Assignments

Calendar

Calls

OneDrive

...

Apps

02:32:02

LIVE

35

Search

Chat

Q&A

46 People

Raise

React

View

Apps

More

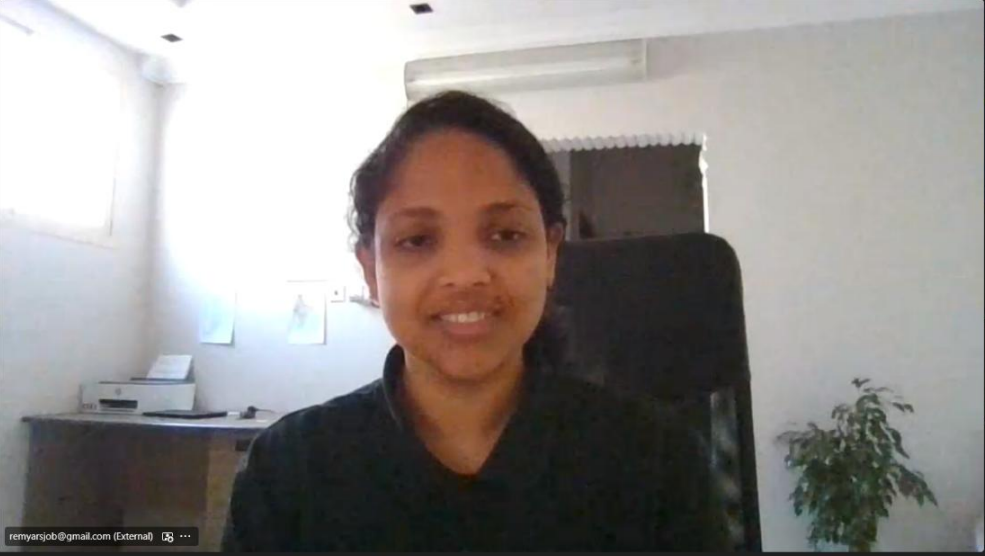
Camera

Mic

Share

Leave

remyarsjob@gmail.com (External)



dipa dharmadhikan (Unverified)

Ram Kanhe

HS

habeeba siddique (Unverified)

Kavita Bhosle

< 1/13 >