SHRI VAISHNAV INSTITUTE OF MANAGEMENT INDORE(M.P.)

Choosing the Right Tool: Power BI vs. Tableau for Data Insights

In partial Fulfillment of the degree of

Master of Business Administration

(FULL TIME)

Session:2022-2024

Submitted To: **Submitted By:**

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MBA (III) SEM "A"

What is Power BI And Tableau

Power BI and Tableau are two important Business Intelligence (BI) technologies for the collection, integration, analysis, and presentation of business information. They help you perform data analysis, data manipulation, and data visualization to make sense of business data and draw insights.

When was Power Bi and Tableau launched?

Power BI was first released to the general public on 24 July 2015.

Tableau was first released to the general public on 2003.

Why do you use Power bi and Tableau

Microsoft Power BI and Tableau is used to find insights within an organization's data. Power BI can help connect disparate data sets, transform and clean the data into a data model and create charts or graphs to provide visuals of the data. All of this can be shared with other users within the organization.

Uses Of Power BI and Tableau

Power BI is a business analytics service provided by Microsoft that can analyze and visualize data, extract insights, and share it across various departments within your organization.

While Tableau is a powerful Business Intelligence tool that manages the data flow and turns data into actionable information.

Microsoft Power Bi and Tableau is used to find insights within an organization data.

- Finance
- Sales
- HR Manager
- Marketing
- Operation & Production
- Hospitality etc.

How is Power BI and Tableau Used in Finance?

Power BI and Tableau is a data analytics tool that is used by financial professionals to manage and analyze financial-related data, charts, and financial KPI.

Here are some ways Power BI and Tableau is used in finance:

- To monitor sales and overhead expenditures
- To implement fund management strategies
- For reporting
- For sales monitoring
- For cash control

Turtle Co. Profit & Loss Statement
For the year end 31 Dec 2020

Region
All

Country
All

Quarter
- ✔ Qtr 1
- ✔ Qtr 2
- ✔ Qtr 3
- ✔ Qtr 4

Gross Profit

2018	2019	2020
7,751,604	10,724,588	6,163,810

Month
All

Operating Profit

2018	2019	2020
7,751,604	10,724,588	6,163,810

EBITDA

2018	2019	2020
7,751,604	10,724,588	6,163,810

Net Profit

2018	2019	2020
7,751,604	10,724,588	6,163,810

PBIT

2018	2019	2020
7,751,604	10,724,588	6,163,810

Profit $ Loss Statement

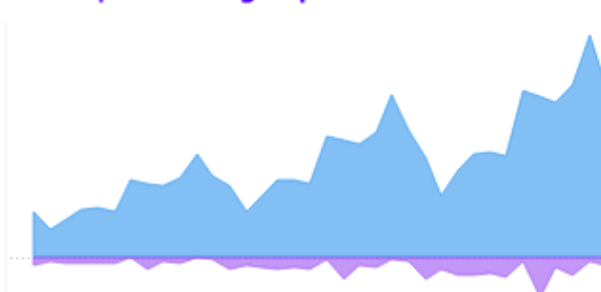|				2018	2019	2020
Trading account	Sales	Sales	Sales	3,694,374	5,856,210	8,005,347
			Sales Return	-118,946	-158,365	-169,978
	Cost of Sales	Cost of Sales	Cost of Sales	-1,192,182	-1,729,299	-2,494,009
	Total			2,383,246	3,968,546	5,341,360
Operating account	Operating Expenses	Administration	Entertainm..	-135,167	-214,247	-345,168
			Office Supp..	-63,921	-101,655	-163,552
			Other Expe..	-123,158	-195,259	-314,548
			Profession..	-88,439	-141,053	-226,663
			Telephone	-76,018	-120,765	-194,380
			Travel	-94,728	-151,157	-242,865
			Utilities	-50,918	-81,331	-130,614
		Marketing	Advertisem..	-52,539	-83,555	-134,431
			Commissio..	-290,549	-497,368	-824,697
		Sales & Distribut..	Staff Costs	-260,004	-374,412	-527,436
	Depreciatio..	Amortization	Amortizati..	-19,008	-15,456	-15,960
		Depreciation	Equipment	-387,996	-516,600	-698,880
	Total			-1,642,445	-2,492,858	-3,819,194
Non-oper..	Dividend In..	Dividend Income	Dividend In..	15,917	21,751	30,030
	Exchange L..	Exchange Loss/G..	Exchange L..	2,214	3,705	5,016
	Gain/Loss o..	Gain/Loss on Sal..	Gain/Loss o..	4,850	5,085	6,351

Sales | GP Margin | NP Margin
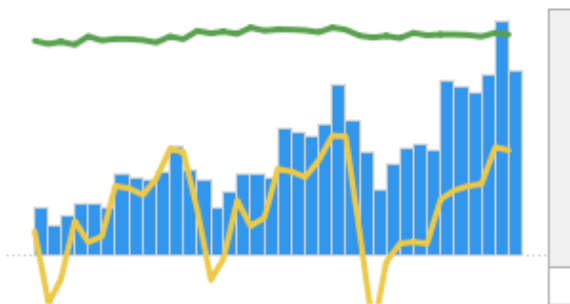
Sales | Gross Profit | Net Profit
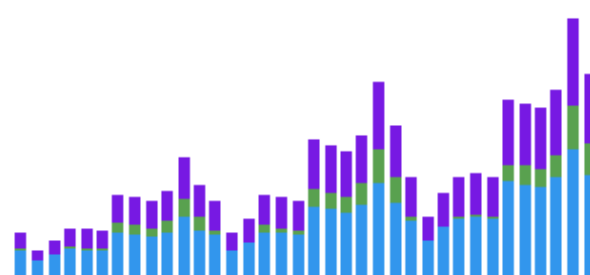
Sales | Marketing Expense

Gross Profit | EBIDA | Operating Profit

https://public.tableau.com/views/FinancialReport_16995478131860/Dashboard1?:language=en-US&:display_count=n&:origin=viz_share_link
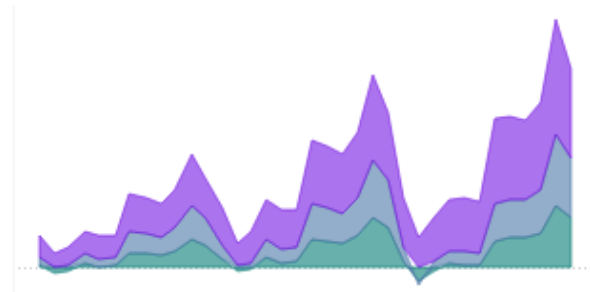
How is Power BI and Tableau Used in Sales?

Sales analysis using Power BI and Tableau is a process of creating reports and dashboards that show the performance and trends of sales data

Here are some ways Power BI and Tableau is used in Sales

- Power BI and Tableau can also display sales metrics, such as sales growth, budget, segments, representatives, and account details, in various charts and tables.
- Sales analysis using Power BI and Tableau can help businesses to monitor and improve their sales strategies and outcomes.

India Diwali Sales

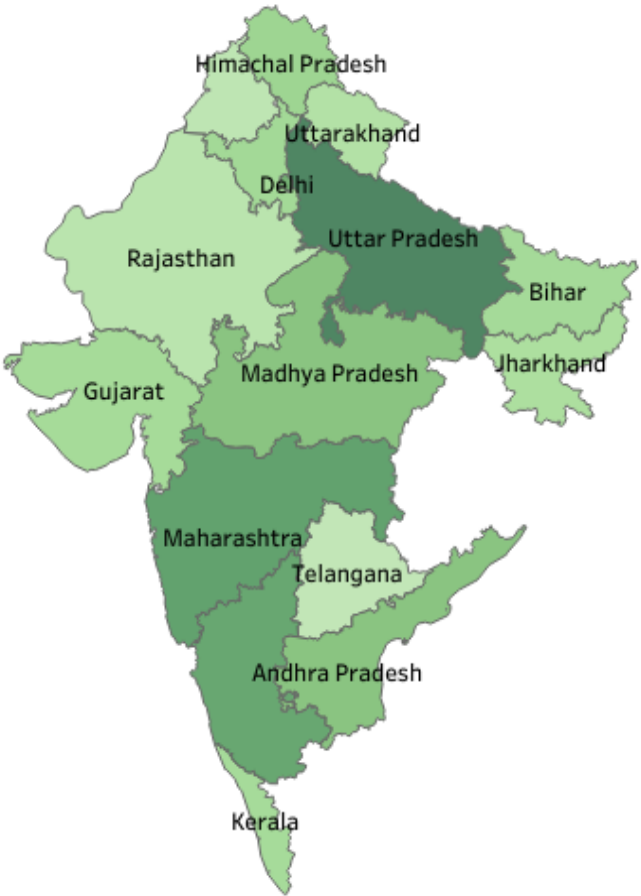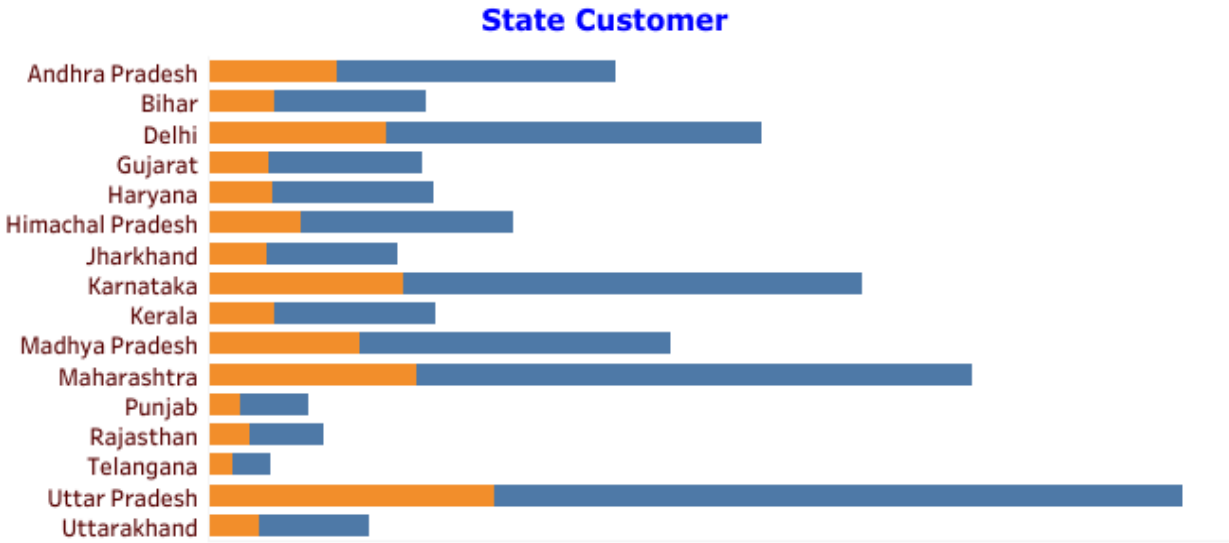Total Order 28,007
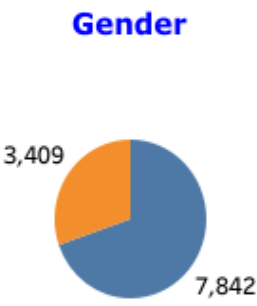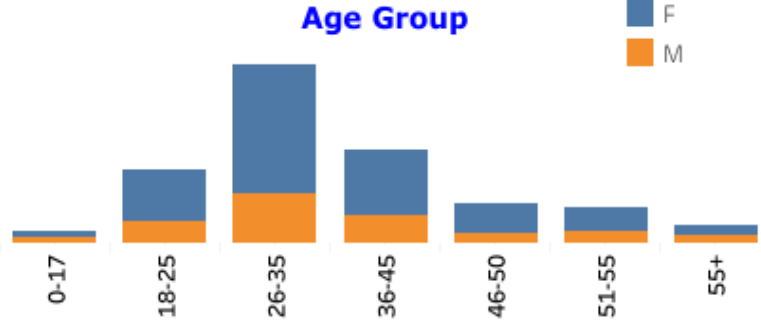Total Customer 11,251
Total Revenue 106,249.13K

India Map

How is Power BI and Tableau Used in HR Manager?

Power BI can be used to bring together data from other systems and transform it in ways that are useful to employees

Here are some ways Power BI and Tableau is used in HR Manager

- HR teams can quickly import and analyze data using Excel.
- They can use the Get & Transform function to import data from multiple HR systems, then use formatting, charts, and graphs to filter data and understand the variables they need to present.
- The Power BI service also provides a Human Resources sample report that can be used to analyze HR data.

HR ANALYTICS DESHBOARD

| Human Resources | Research & Development | Sales |

Attrition by Education

Male	Female
150	87

Count Of Employee ID	Count Attrition	Attrition Rate	Average Age	Average Salary	Average Year
1470	1470	16,1 %	37	6,5K	7,0

Attrition by Education

- Technical... 14%
- Hum... 3%
- Marketing 15%
- Life Sciences 38%
- Medical 27%

Attrition by Age Group

Age Group	Count
26-35	116
18-25	44
36-45	43
46-55	26
55+	8
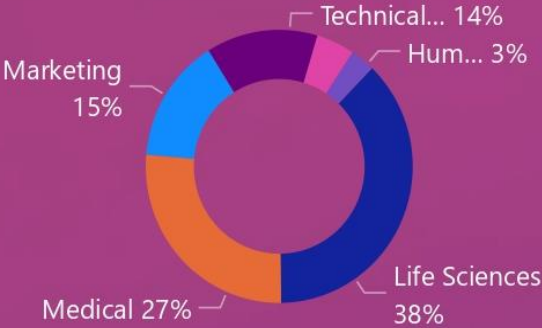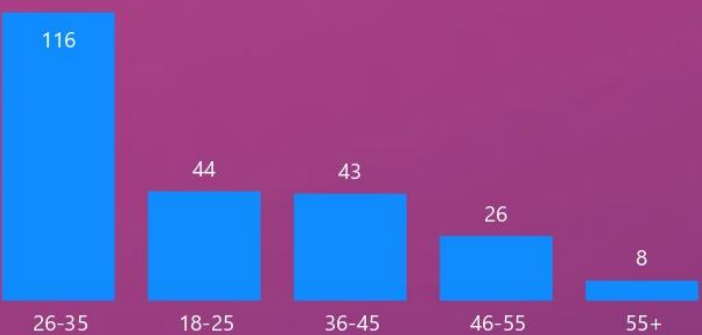
JobRole	1	2	3	4	Total
Laboratory Technician	20	8	21	13	62
Sales Executive	16	9	18	14	57
Research Scientist	13	10	15	9	47
Sales Representative	7	10	9	7	33
Human Resources	5	2	3	2	12
Manufacturing Director	2	2	4	2	10
Healthcare Representative	2	2	1	4	9
Manager	1	2	1	1	5
Research Director	0	1	1	0	2
Total	**66**	**46**	**73**	**52**	**237**

Attrition by Salary

Salary	Count
Upto 5k	163
5k-10k	49
10k-15k	20
15k+	5

Attrition By Years At Company

Attrition by Job Role

Job Role	Count
Laboratory ...	62
Sales Execu...	57
Research Sc...	47
Sales Repre...	33
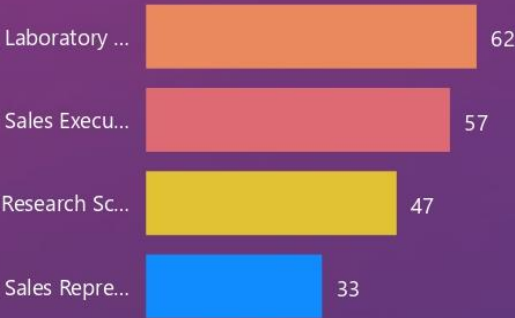
Difference Between Power BI and Tableau

Power BI   Vs   +ableau

1. Number of Function Available

 Vs

1300 +   180 +

2. Types of function Available

Power BI **Vs** tableau

M Language	Dax Function	LOD (Level of Expression)
Data Cleaning	Data Modeling	• Number functions
900+	**400 +**	• String functions
		• Date functions and time function
		• Logical functions
		• Aggregate functions

3. Data Visulization

Vs

41 Default Visuals

24 Default Visuals

4. Advance Visuals

Vs

521 Adv. Visuals

50 + Adv. Visuals

5. Number Of Data Sources

Power BI

Vs

tableau

185
Data
Sources

80 +
Data
Sources

6. Getting Data From Websites

Power BI **Vs** tableau

Getting Data from multiple Websites

Getting Data from single Websites

amazon

snapdeal

Flipkart

Shop online

amazon

7. Getting Data from E-mail

Vs

**1000 Email Attachment
power Automate**

**Diffcult to pickup
Email Attachment**

- **Open**
- **Clean**
- **Combine**

**Other Software
Use Tableau**

8. Microsoft Compatibility

Power BI

Vs

tableau

salesforce

Can Connect with Microsoft product like

SharePoint

PowerPoint

Microsoft Teams

Outlook

Microsoft PowerApps

Power Automate

9. Data Cleaning

What is Data Cleaning

- **Empty cells**
- **Blank Records**
- **Duplicates**
- **Error Messages**

- **Null Values**
- **Values changing the structure of data**
- **Pivoting**
- **Unpivoting**

Vs

Already inbuilt

Other Software

  Free

10. Artificial Intelligence

Vs

Multiple Options in AI

AI is not that Great

Type a Questions

- **Top 3 States by profit**
- **Get Quick Insights**

11. User Interface

Vs

Difficult   **Very Easy**

12.MacBook Compatibility

Power BI

Vs

tableau

**Compatible with
Windows**

**Compatible with
Windows & MacBook**

13. Mobile User Interface

Power BI   **Vs**   tableau

- **One User Interface**
- **One Layout**
- **All Mobile Phones**

- **Different Mobile Phone**
- **Different Structure and layouts**
- **All Mobile Phones**

14. Data Size

Power BI

Vs
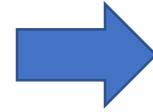
tableau

Max 100 TB

Unlimited Data Set

15. Performance

Vs

- **Same Data Set**
- **Same number of Columns & Row**
- **Same User interface**

20 – 30 % Faster Comperision with Power BI

16. Software Updates

Power BI **Vs** **tableau**

Every Month Update

⬇

**5 – 10 – 15 Features
Every Mounth
Update**

**Software Update Every
2 – 3 – 6 Months**

17. Costing

Power BI

Vs

tableau

**20 Usd / User
Per Month**

**70 Usd / User
Per Month**

18. Sources

Power BI Desktop

Free

Vs

Free

19. Dashboard Publish

Free

Vs

File **Url** **File** **Url**

Thankyou