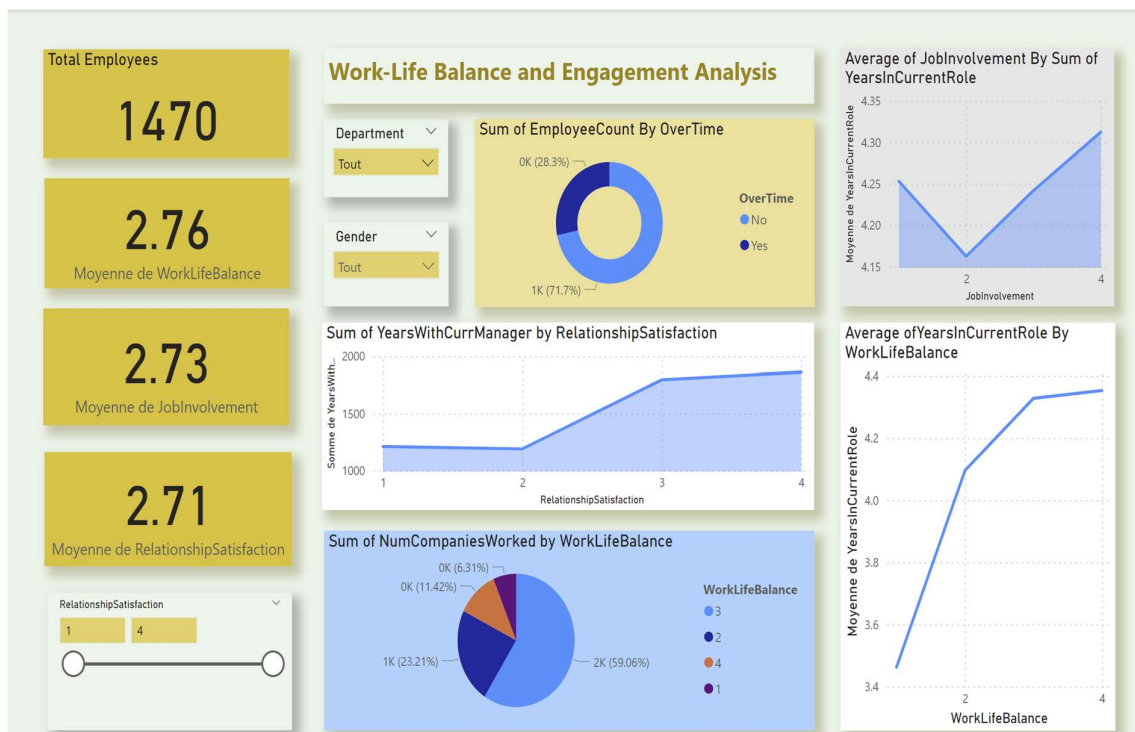


REPORT OF DASHBOARD

WORK-LIFE BALANCE AND ENGAGEMENT ANALYSIS



Done By: El Omari Kaoutar

Plan :

Introduction	3
Getting data ready for cleaning.....	4
Cleaning data	5
Visualizing it in PowerBI	6
Important Results.....	8
Conclusion.....	16

Introduction:

In today's fast-paced and competitive business environment, maintaining a healthy work-life balance and high levels of employee engagement are critical factors for organizational success. Employees who feel balanced and engaged are more likely to be productive, satisfied, and committed to their roles, which ultimately benefits the organization as a whole. Recognizing the importance of these factors, this report delves into a comprehensive analysis of work-life balance and engagement metrics within our organization.

This analysis is driven by the need to understand how our employees perceive their work-life balance, their level of involvement in their jobs, and their satisfaction with workplace relationships. Additionally, we examine the distribution of overtime work to identify any patterns that might affect these metrics. By leveraging data analytics and visualization tools, specifically Power BI, we aim to gain valuable insights into these key areas.

The aim of this report is to provide a clear and actionable understanding of the current state of work-life balance and employee engagement within the organization. By identifying trends and discrepancies, we can develop targeted strategies to enhance overall employee satisfaction and productivity.

I. Getting data ready for cleaning

After getting data from the email, I opened it in excel

Technocolabs-Accessing the Data File for Our Project Inbox x



Technocolabs Softwares

to contact, bcc: me ▾

Hi Team,

I hope this email finds you well.

We have noticed that some of you are having difficulties accessing the data file for our project via the GitHub repository. We have decided to share the data file directly to this email.

Please download the attached file and use it for your current tasks. In our next meeting, we will discuss and guide you on the issues in the future.

If you have any questions or face any issues with the attached file, feel free to reach out.

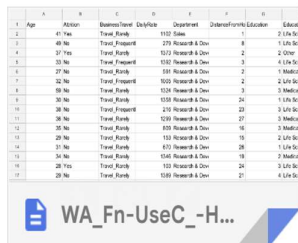
Best regards,

Technocolabs Team



<https://www.linkedin.com/company/technocolabs/>

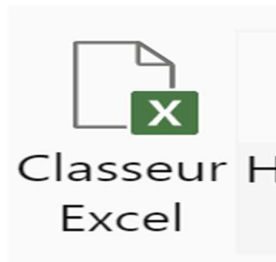
One attachment • Scanned by Gmail ⓘ



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ				
1	Age	Mariton	Business	DailyRate	Departmen	Distance	Education	Education	Employee	Employee	Environme	Gender	HourlyRate	Jobinvoles	JobLevel	JobTitle	JobStatus	MaritalSta	Stat	MonthlyInc	MonthlyRa	NumComp	Over18	OverTime	PercentSa	Performan	Relationship	StandardH	StockOptic	TotalWork	TrainingIn	WorldFea	Years4Co	YearsinCo	YearsinCo	YearsinCo	YearsinCo	YearsinCo		
2	41	Yes	Travel_Ran	1102	Sales	1	2	Life Science	1	1	2	Female	94	3	2	Sales Exec	4	Single	5983	19479	8 Y	Yes	11	3	1	80	0	8	0	1	6	4	0	5						
3	49	No	Travel_Fri	279	Research	8	1	Life Science	1	2	3	Male	61	2	2	Research	2	Married	5130	24907	1 Y	No	23	4	4	80	1	10	3	3	10	7	1	7						
4	37	Yes	Travel_Ran	1373	Research	2	2	Other	1	4	4	Male	92	2	1	Laboratory	3	Single	2090	2396	6 Y	Yes	15	3	2	80	0	7	3	3	0	0	0	0						
5	33	No	Travel_Fri	1382	Research	3	4	Life Science	1	5	4	Female	56	3	1	Research	3	Married	2909	23159	1 Y	Yes	11	3	3	80	0	8	3	3	8	7	3	0	0					
6	27	No	Travel_Ran	591	Research	2	1	Medical	1	7	1	Male	40	3	1	Laboratory	2	Married	3488	16532	9 Y	No	12	3	4	80	1	6	3	3	2	2	2	2	2					
7	32	No	Travel_Fri	1005	Research	2	2	Life Science	1	8	4	Male	79	3	1	Laboratory	4	Single	3088	11864	0 Y	No	13	3	3	80	0	8	2	2	7	7	3	6	0	0				
8	59	No	Travel_Ran	1324	Research	3	3	Medical	1	10	3	Female	81	4	1	Laboratory	1	Married	2670	9964	4 Y	Yes	20	4	1	80	3	12	3	2	1	0	0	0	0	0				
9	30	No	Travel_Ran	1358	Research	24	1	Life Science	1	11	4	Male	67	3	1	Laboratory	3	Divorced	2693	13335	1 Y	No	22	4	2	80	1	1	2	3	1	0	0	0	0	0				
10	38	No	Travel_Fri	216	Research	23	3	Life Science	1	12	4	Male	44	2	3	Manufactu	3	Single	9526	8787	0 Y	No	21	4	2	80	0	10	2	3	9	7	1	8	0	0				
11	36	No	Travel_Ran	1299	Research	27	3	Medical	1	13	3	Male	94	3	2	Healthcare	3	Married	5237	16577	6 Y	No	13	3	2	80	2	17	3	2	7	7	7	7	7	7				
12	35	No	Travel_Ran	809	Research	16	3	Medical	1	14	1	Male	84	4	1	Laboratory	2	Married	2426	16479	0 Y	No	13	3	3	80	1	6	5	3	5	4	0	3	0	0				
13	29	No	Travel_Ran	153	Research	15	2	Life Science	1	15	4	Female	49	2	2	Laboratory	3	Single	4193	12892	0 Y	Yes	12	3	4	80	0	10	3	3	9	5	0	8	0	0	0			
14	31	No	Travel_Ran	670	Research	26	1	Life Science	1	16	1	Male	31	3	1	Research	3	Divorced	2911	15170	1 Y	No	17	3	4	80	1	5	1	2	5	2	4	3	0	0				
15	34	No	Travel_Ran	1346	Research	19	2	Medical	1	18	2	Male	93	3	1	Laboratory	4	Divorced	2681	8758	0 Y	No	11	3	3	80	1	3	2	3	2	2	1	2	2	1	2			
16	28	Yes	Travel_Ran	103	Research	24	3	Life Science	1	19	3	Male	50	2	1	Laboratory	3	Single	12847	5 Y	Yes	14	3	2	80	0	6	4	3	4	2	0	3	0	0	0				
17	29	No	Travel_Ran	1389	Research	21	4	Life Science	1	20	2	Female	51	4	3	Manufactu	1	Divorced	9980	10195	1 Y	No	11	3	3	80	1	10	1	3	10	9	8	8	0	0				
18	32	No	Travel_Ran	334	Research	5	2	Life Science	1	21	1	Male	80	4	1	Research	2	Divorced	15826	15053	0 Y	Yes	12	3	4	80	2	7	5	2	6	2	0	5	0	0	0			
19	22	No	Non-Travel	1123	Research	16	2	Medical	1	22	4	Male	96	4	1	Laboratory	4	Divorced	2635	7324	1 Y	Yes	13	3	2	80	2	1	2	2	1	0	0	0	0	0	0			
20	53	No	Non-Travel	1215	Sales	2	4	Life Science	1	23	1	Female	78	2	4	Manager	4	Married	15427	22021	2 Y	No	16	3	3	80	0	31	3	3	25	8	3	7	0	0	0			
21	38	No	Travel_Ran	371	Research	2	3	Life Science	1	24	4	Male	45	3	1	Research	4	Single	3944	4306	5 Y	Yes	11	3	3	80	0	6	3	3	3	2	1	2	1	2	2			
22	24	No	Non-Travel	673	Research	11	2	Other	1	25	1	Female	96	4	2	Manufactu	3	Divorced	4011	8232	0 Y	No	18	3	4	80	1	5	5	2	4	2	1	3	0	0	0			
23	36	Yes	Travel_Ran	1218	Sales	9	4	Life Science	1	27	3	Male	82	2	1	Sales Repr	1	Single	3407	6996	7 Y	No	23	4	2	80	0	10	4	3	5	3	0	3	0	0	0			
24	34	No	Travel_Ran	419	Research	7	4	Life Science	1	28	1	Female	53	3	3	Research	2	Single	11984	21283	0 Y	No	11	3	3	80	0	13	4	3	12	6	2	11	0	0	0	0		
25	21	No	Travel_Ran	391	Research	15	2	Life Science	1	30	3	Male	96	3	1	Research	4	Single	1232	19281	1 Y	No	14	3	4	80	0	0	6	3	0	0	0	0	0	0	0	0		
26	34	Yes	Travel_Ran	699	Research	6	1	Medical	1	31	2	Male	83	3	1	Research	1	Single	2980	17102	2 Y	No	11	3	3	80	0	8	2	3	4	2	1	3	0	0	0	0		
27	53	No	Travel_Ran	1282	Research	5	3	Other	1	32	3	Female	58	3	5	Manager	3	Divorced	19094	10735	4 Y	No	11	3	4	80	1	26	3	2	14	13	4	8	0	0	0	0		
28	32	Yes	Travel_Fri	1125	Research	16	1	Life Science	1	33	2	Female	72	1	1	Research	1	Single	3919	4681	1 Y	Yes	22	4	2	80	0	10	5	3	10	2	6	7	0	0	0	0		
29	42	No	Travel_Ran	691	Sales	8	4	Marketing	1	35	3	Male	48	3	2	Sales Exec	2	Married	6825	21173	0 Y	No	11	3	4	80	1	10	2	3	9	7	4	2	0	0	0	0		
30	44	No	Travel_Ran	477	Research	7	4	Medical	1	36	1	Female	42	2	3	Healthcare	4	Married	10248	2084	3 Y	No	14	3	4	80	1	24	4	3	22	6	5	17	0	0	0	0		
31	46	No	Travel_Ran	705	Sales	2	4	Marketing	1	38	2	Female	83	3	5	Manager	1	Single	18847	22822	3 Y	No	12	3	4	80	0	22	2	2	2	2	2	2	1	0	0	0		
32	33	No	Travel_Ran	924	Research	2	3	Medical	1	39	3	Male	78	3	1	Laboratory	4	Single	2496	6670	4 Y	No	11	3	4	80	0	7	3	3	1	1	0	0	0	0	0	0		
33	44	No	Travel_Ran	1459	Research	10	4	Other	1	40	4	Male	41	3	2	Healthcare	4	Married	6465	19121	2 Y	Yes	13	3	4	80	0	9	5	4	4	2	1	3	0	0	0	0		
34	30	No	Travel_Ran	125	Research	9	2	Medical	1	41	4	Male	83	2	1	Laboratory	3	Single	2206	16117	1 Y	No	13	3	1	80	0	10	5	3	10	0	1	8	0	0	0	0	0	
35	39	Yes	Travel_Ran	885	Sales	5	3	Technical	1	42	4	Male	56	3	2	Sales Repr	4	Married	2086	3335	3 Y	No	14	3	3	80	1	19	6	4	1	0	0	0	0	0	0	0		
36	24	Yes	Travel_Ran	813	Research	1	3	Medical	1	45	2	Male	61	3	1	Research	4	Married	2293	3020	2 Y	Yes	16	3	1	80	1	6	2	2	2	2	0	2	0	0	0	0	0	
37	43	No	Travel_Ran	1273	Research	2	2	Medical	1	46	4	Female	72	4	1	Research	3	Divorced	2645	21923	1 Y	No	12	3	4	80	2	6	3	2	5	3	1	4	0	0	0	0	0	
38	50	Yes	Travel_Ran	669	Sales	3	2	Marketing	1	47	1	Male	86	2	1	Sales Repr	3	Married	2683	3810	1 Y	Yes	14	3	3	80	0	3	2	3	3	2	0	2	0	0	0	0		
39	35	No	Travel_Ran	690	Sales	2	3	Marketing	1	49	4	Female	97	3	1	Sales Repr	4	Married	2014	9987	1 Y	No	13	3	1	80	0	2	3	3	2	2	2	2	2	2	2	2		
40	36	No	Travel_Ran	652	Research	5	4	Life Science	1	51	2	Female	82	2	1	Research	1	Married	3419	13072	9 Y	Yes	14	3	4	80	1	6	3	4	1	1	0	0	0	0	0	0		
41	33	No	Travel_Fri	1141	Sales	1	3	Life Science	1	52	3	Female	42	4	2	Sales Exec	1	Married	5376	3190	2 Y	No	19	3	1	80	2	10	3	3	5	3	1	3	0	0	0	0		
42	35	No	Travel_Ran	464	Research	4	2	Other	1	53	3	Male	75	3	1	Laboratory	4	Divorced	1991	10910	1 Y	No	12	3	3	80	1	1	3	3	1	0	0	0	0	0	0	0	0	
43	27	No	Travel_Ran	1240	Research	2	4	Life Science	1	54	4	Female	33	3	1	Laboratory	1	Divorced	2341	19715	1 Y	No	13	3	4	80	1	1	6	3	1	0	0	0	0	0	0	0	0	
44	26	Yes	Travel_Ran	1357	Research	25	3	Life Science	1	55	1	Male	48	1	1	Laboratory	3	Single	2293	10568	1 Y	No	12	3	3	80	0	1	2	2	1	0	0	0	1	0	0	0	0	0
45	27	No	Travel_Fri	994	Sales	8	3	Life Science	1	56	4	Male	37	3	3	Sales Exec	3	Single	8726	2975	1 Y	No	15	3	4	80	0	9	0	3	9	8	1	7	0	0	0	0	0	
46	30	No	Travel_Fri	721	Research	1	2	Medical	1	57	3	Female	58	3	2	Laboratory	4	Single	4011	10781	1 Y	No	23	4	4	80	0	12	2	3	12	8	3	7	0	0	0	0		
47	41	Yes	Travel_Ran	1360	Research	12	3	Technical	1	58	2	Female	49	3	5	Research	3	Married	19545	16280	1 Y	No	12	3	4	80	0	23	0	3	22	15	15	8	0	0	0	0	0	
48	34	No	Non-Travel	1065	Sales	23	4	Marketing	1	60	2	Male	72	3	2	Sales Exec	3	Single	4568	10034	0 Y	No	20	4	3	80	0</													

III. Visualizing it in PowerBI :

After getting the data connected to PowerBi bu clicking on



Then choosing the excel file we will be able to see it in here :

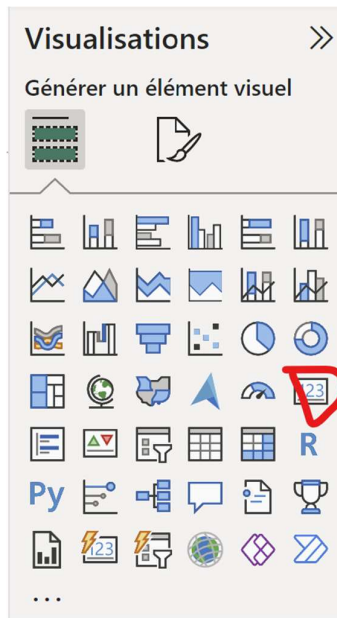


Then we choose the visualization element and the columns we want to use

For this one for example:



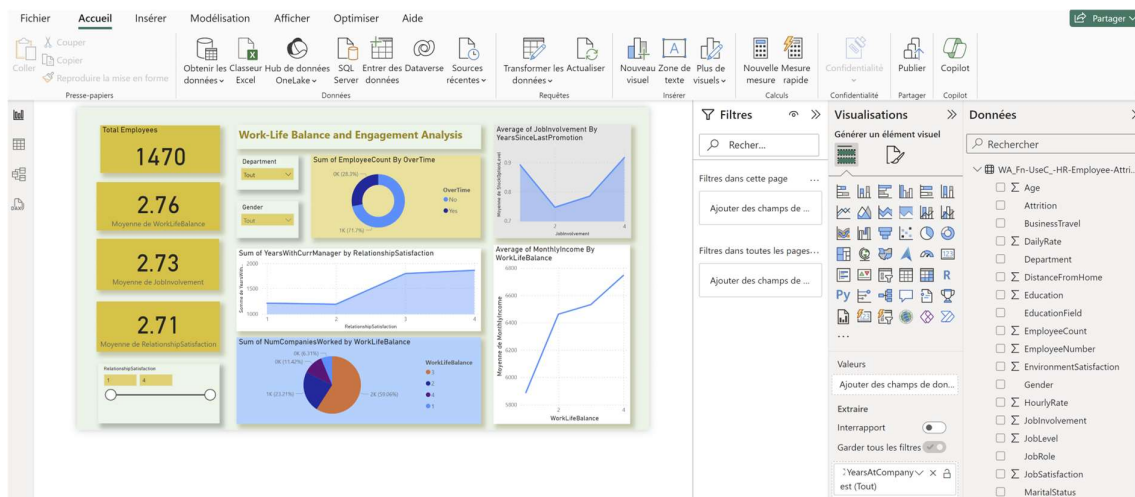
We choose this in the visualization element

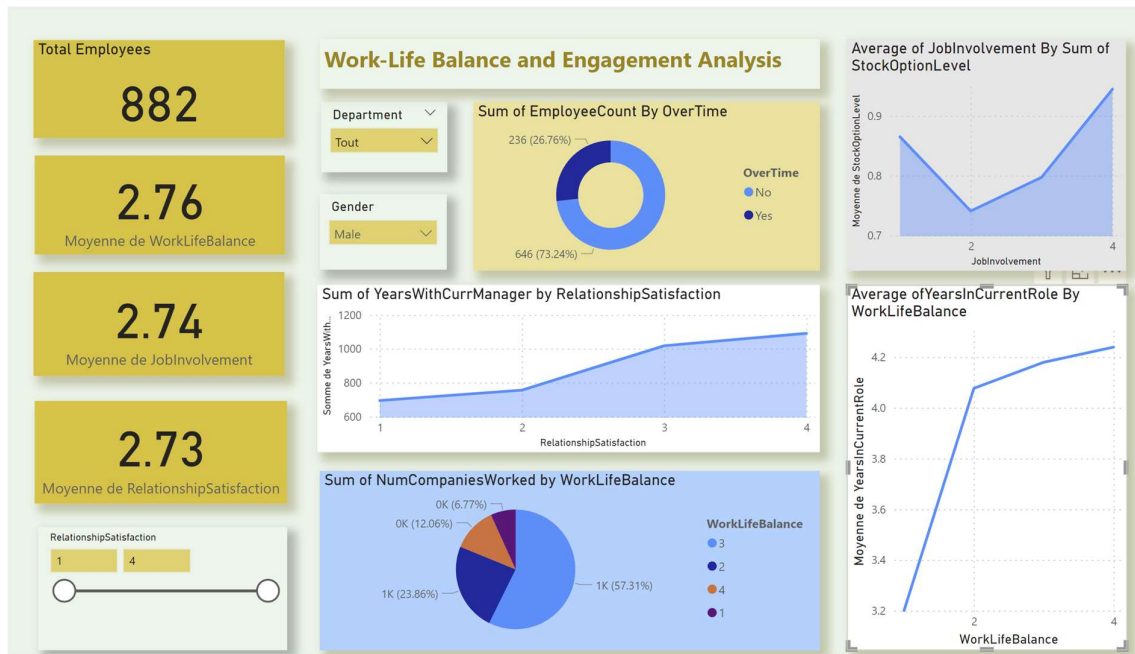


Then we choose the column we want to show the average of:



By doing the same thing with different visualization styles and different columns we get the final result wich is :

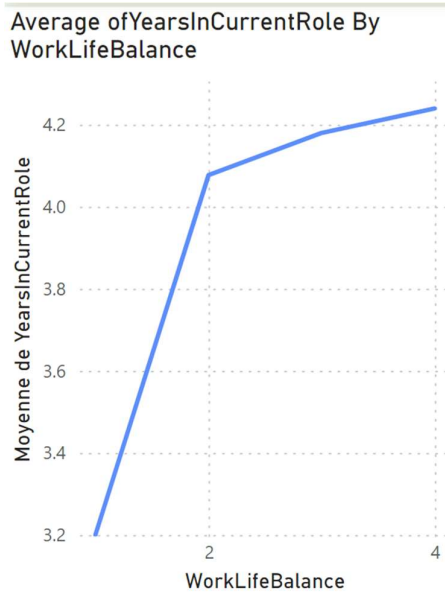




IV. Important Results:

1. Review the Work-Life Balance Rating:

- The average work-life balance rating across the organization is **2.76**. This indicates a slightly above average level of work-life balance among employees.
- The Human Resources department has the highest average work-life balance of **2.92** followed by the Sales department with an average of **2.82** and the lowest is the Research and Development department with an average of **2.73**
- Both genders have the same work-life balance average



- We conclude from the “Average of YearsInCurrentRole By WorkLifeBalance” chart that the higher the years spent in the same role is the higher the work life balance

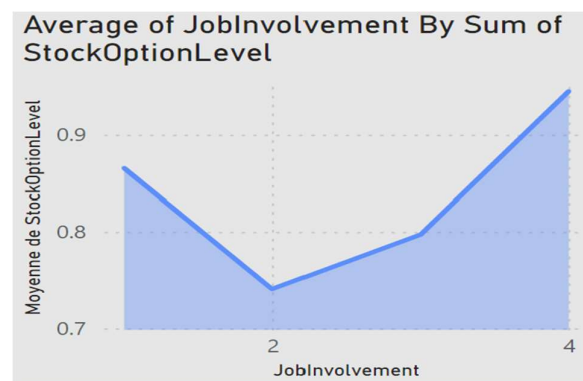


- We conclude from the “Average of MounthlyIncome By WorkLifeBalance” chart that the higher the monthly income is the higher the work life balance

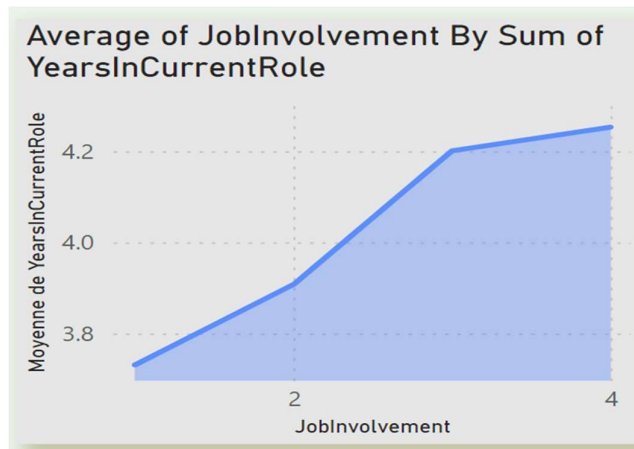
- We can conclude that the stability inside work either by staying in the same role or under the same manager or by having a high monthly income are reasons for a better work-life balance

2. Assess Job Involvement:

- The average job involvement rating is **2.73**. This suggests a moderate level of job involvement among employees.
- The Human Resources department has the highest Job Involvement of **2.75** followed by the Research and Development department with an average of **2.74** and the lowest is the Sales department with an average of **2.70**
- Male Employees have a higher Job Involvement average of **2.74** than Female employees that have an average of **2.71**



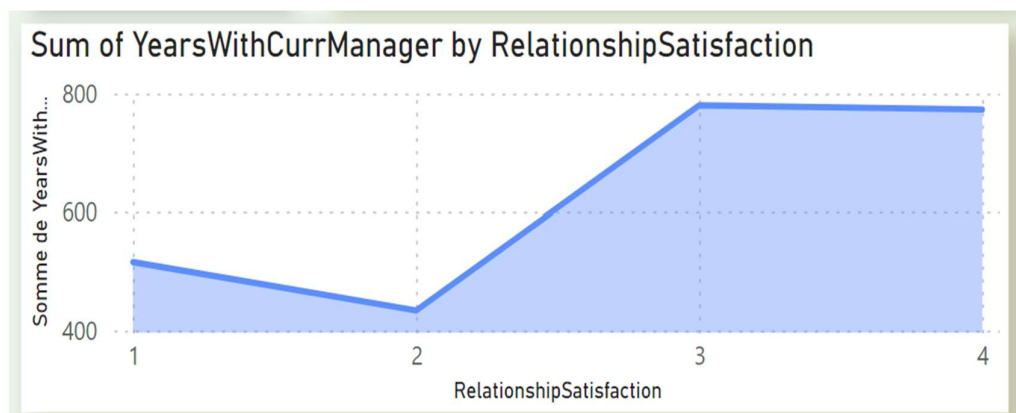
- The line chart titled "Average of JobInvolvement by Sum of StockOptionLevel" shows that job involvement tends to increase with the number of stocks option level. This implies that employees who have more stock options tend to be more involved in their job. This could be because stock options provide a financial incentive that aligns the employees' interests with the company's success, motivating them to be more engaged and committed to their work.



- The line chart titled "Average of JobInvolvement By Sum of YearsInCurrentRole" shows that job involvement tends to increase with the number of years spent in current role which implies that the more experienced the employees are the more likely the higher their job involvement is

3. Evaluate Relationship Satisfaction:

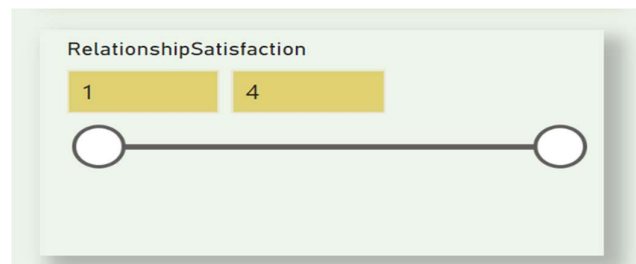
- The average relationship satisfaction rating is **2.71**. This indicates a moderate level of satisfaction with workplace relationships.
- The Human Resources department has the highest average relationship satisfaction of **2.89** followed by the Research and Development department with an average of **2.71** and the lowest is the Sales department with an average of **2.70**
- Male Employees have a higher Job Involvement average of **2.73** than Female employees that have an average of **2.68**



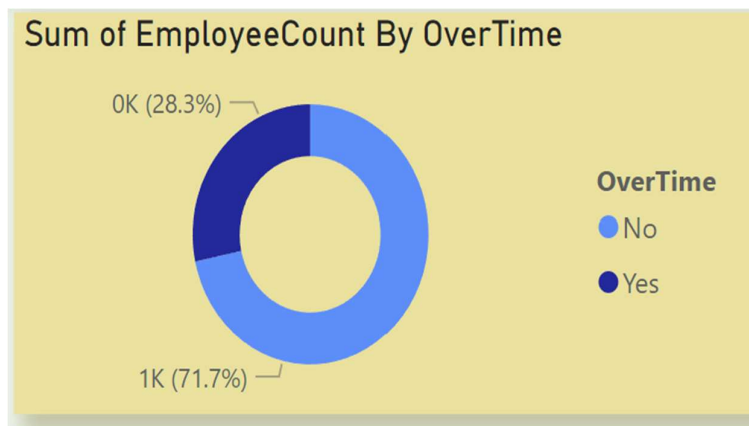
- The line chart titled "Sum of YearsWithCurrManager by RelationshipSatisfaction" shows that relationship satisfaction tends to increase with the number of years with the current manager.

This might suggest that longer tenure with the same manager is associated with higher relationship satisfaction, possibly due to increased familiarity and trust.

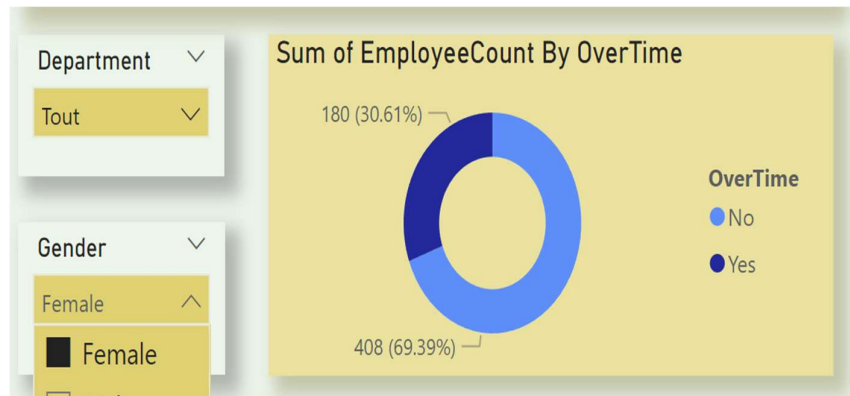
- By using this we can spot the average of relationship satisfaction and other metrics related to it faster



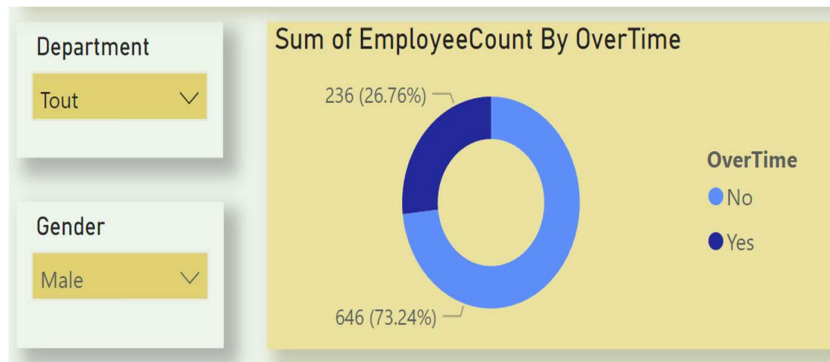
4. Examine Overtime Work Distribution:



- The distribution of employees who work overtime versus those who don't is displayed in a donut chart titled "Sum of EmployeeCount By OverTime." It shows that approximately **71.7%** of employees do not work overtime, while **28.3%** do.



- More than **30%** of females work overtime





- More than **26%** of males work overtime
- The Sales department has the highest overtime of **28.7%** followed by the Research and Development department with **28.2%** and the lowest is the Human Resources department department with an average of **26.98%**
- This indicates that a significant minority of employees are working overtime, which could impact their work-life balance and job satisfaction.


5. Identify Areas for Improvement:

- ✚ **Work-Life Balance:** The average rating of 2.76 suggests there is room for improvement.

Consider initiatives to promote a better work-life balance, such as flexible working hours or wellness programs.

 **Job Involvement:** With an average rating of 2.73, there is potential to enhance job involvement. Implementing career development opportunities and recognition programs could help increase engagement.

 **Relationship Satisfaction:** The average rating of 2.71 indicates that workplace relationships could be strengthened. Focus on team-building activities and effective communication training.

 **Overtime Work:** Since 28.3% of employees work overtime, it's important to manage workload effectively to prevent burnout and maintain a healthy work-life balance.

6. Take Action:

Using the insights gained from the Dashboard stakeholders need to implement changes such as flexible working hours, wellness programs, career development opportunities, and team-building activities and regularly review the impact of these initiatives on the ratings.

Conclusion:

The analysis presented in this report underscores the importance of continuous monitoring and improvement of work-life balance and engagement metrics within the organization. The key findings reveal that while there are moderate levels of work-life balance, job involvement, and relationship satisfaction, there is substantial room for improvement.

The data indicates that employees with higher stock options tend to show increased job involvement, suggesting that financial incentives play a crucial role in employee engagement. This insight highlights the potential benefits of offering stock options or similar incentives to enhance employee commitment and productivity. Moreover, the distribution of overtime work shows that a significant portion of employees are working overtime, which could negatively impact their work-life balance and overall satisfaction.

By addressing the areas identified for improvement, such as reducing overtime work and enhancing

workplace relationships, the organization can foster a more supportive and engaging work environment. Specific recommendations include implementing flexible working hours, promoting wellness programs, and offering career development opportunities to increase job involvement and satisfaction.

Furthermore, regular monitoring and adjustments will be essential to sustain these improvements and respond to evolving employee needs. The use of tools like Power BI for ongoing data visualization and analysis will enable the organization to track progress, identify emerging issues, and make data-driven decisions to enhance work-life balance and employee engagement continuously.

In conclusion, the insights gained from this analysis provide a robust foundation for developing strategies that promote a healthier work-life balance and higher levels of employee engagement. By taking proactive steps to address the identified areas for improvement, the organization can achieve greater employee satisfaction, which will, in turn, drive higher productivity and long-term success.