

Portfolio Project

Developer Name: Sadman Rahman Bhuiyan

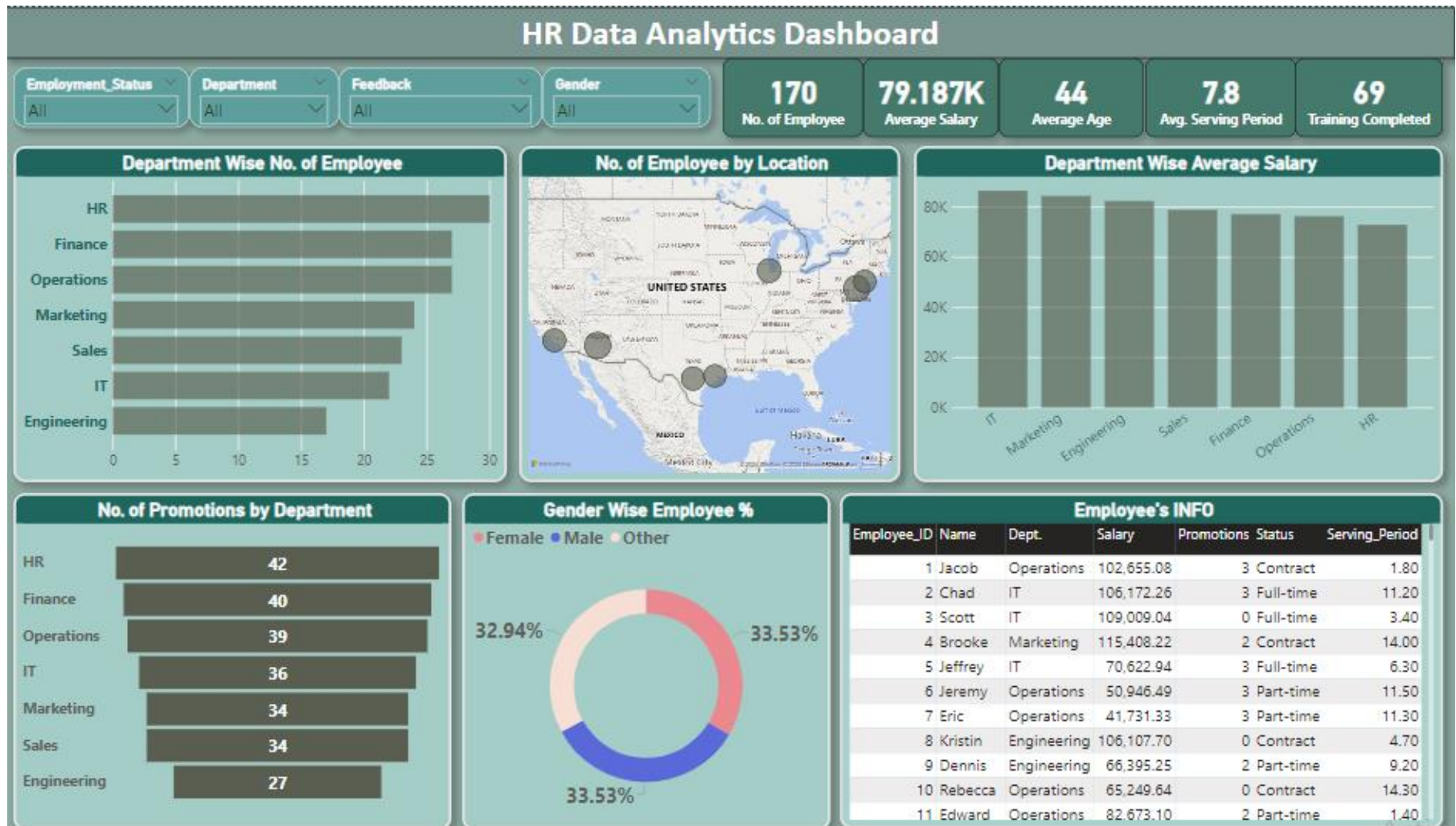
Project: HR Data Analytics Dashboard

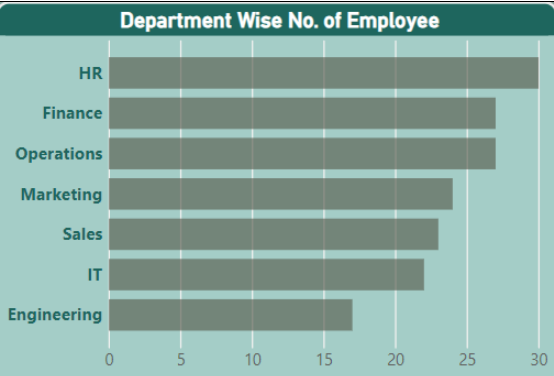

Development Tools: MySQL, Power BI

Data Source: Open AI

Completion Date: 22/09/2024

Dashboard Developed by Power BI



SL	Insight	SQL Query	SQL Result	Power BI Report	Result																																								
1	Department Wise Employee	<pre>select department, count(employee_id) Total_employee from employee_information group by Department order by total_employee desc;</pre>	<table><thead><tr><th></th><th>department</th><th>Total_employee</th></tr></thead><tbody><tr><td>▶</td><td>HR</td><td>30</td></tr><tr><td></td><td>Operations</td><td>27</td></tr><tr><td></td><td>Finance</td><td>27</td></tr><tr><td></td><td>Marketing</td><td>24</td></tr><tr><td></td><td>Sales</td><td>23</td></tr><tr><td></td><td>IT</td><td>22</td></tr><tr><td></td><td>Engineering</td><td>17</td></tr></tbody></table>		department	Total_employee	▶	HR	30		Operations	27		Finance	27		Marketing	24		Sales	23		IT	22		Engineering	17	 <table><caption>Department Wise No. of Employee</caption><tr><th>Department</th><th>No. of Employee</th></tr><tr><td>HR</td><td>30</td></tr><tr><td>Finance</td><td>27</td></tr><tr><td>Operations</td><td>27</td></tr><tr><td>Marketing</td><td>24</td></tr><tr><td>Sales</td><td>23</td></tr><tr><td>IT</td><td>22</td></tr><tr><td>Engineering</td><td>17</td></tr></table>	Department	No. of Employee	HR	30	Finance	27	Operations	27	Marketing	24	Sales	23	IT	22	Engineering	17	Exact
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2	Location Wise Employee	<pre>select Location, count(employee_id) as Total_Employee from employee_information group by location order by Total_Employee desc;</pre>	<table><thead><tr><th></th><th>Location</th><th>Total_Employee</th></tr></thead><tbody><tr><td>▶</td><td>Phoenix</td><td>30</td></tr><tr><td></td><td>Philadelphia</td><td>29</td></tr><tr><td></td><td>Chicago</td><td>24</td></tr><tr><td></td><td>San Antonio</td><td>23</td></tr><tr><td></td><td>Los Angeles</td><td>22</td></tr><tr><td></td><td>Houston</td><td>21</td></tr><tr><td></td><td>New York</td><td>21</td></tr></tbody></table>		Location	Total_Employee	▶	Phoenix	30		Philadelphia	29		Chicago	24		San Antonio	23		Los Angeles	22		Houston	21		New York	21	 <table><caption>No. of Employee by Location</caption><tr><th>Location</th><th>No. of Employee</th></tr><tr><td>Phoenix</td><td>30</td></tr><tr><td>Philadelphia</td><td>29</td></tr><tr><td>Chicago</td><td>24</td></tr><tr><td>San Antonio</td><td>23</td></tr><tr><td>Los Angeles</td><td>22</td></tr><tr><td>Houston</td><td>21</td></tr><tr><td>New York</td><td>21</td></tr></table>	Location	No. of Employee	Phoenix	30	Philadelphia	29	Chicago	24	San Antonio	23	Los Angeles	22	Houston	21	New York	21	Exact
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3	Department Wise Avg. Salary	<div>with cte as (select e. employee_id, e. department, c. salary from employee_information e inner join compensation c on e. Employee_ID= c. Employee_ID) select department, round(avg(salary)) as avg_salary from cte group by department order by avg_salary desc ;</div>	<table><thead><tr><th></th><th>department</th><th>avg_salary</th></tr></thead><tbody><tr><td>▶</td><td>IT</td><td>86397</td></tr><tr><td></td><td>Marketing</td><td>84331</td></tr><tr><td></td><td>Engineering</td><td>82310</td></tr><tr><td></td><td>Sales</td><td>78817</td></tr><tr><td></td><td>Finance</td><td>77057</td></tr><tr><td></td><td>Operations</td><td>76292</td></tr><tr><td></td><td>HR</td><td>72821</td></tr></tbody></table>		department	avg_salary	▶	IT	86397		Marketing	84331		Engineering	82310		Sales	78817		Finance	77057		Operations	76292		HR	72821	<div>Department Wise Average Salary</div> <table><thead><tr><th>Department</th><th>Avg. Salary</th></tr></thead><tbody><tr><td>IT</td><td>86397</td></tr><tr><td>Marketing</td><td>84331</td></tr><tr><td>Engineering</td><td>82310.332</td></tr><tr><td>Sales</td><td>78817</td></tr><tr><td>Finance</td><td>77057</td></tr><tr><td>Operations</td><td>76292</td></tr><tr><td>HR</td><td>72821</td></tr></tbody></table>	Department	Avg. Salary	IT	86397	Marketing	84331	Engineering	82310.332	Sales	78817	Finance	77057	Operations	76292	HR	72821	Exact
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4	Department Wise Promotions Achieved	<div>with cte as (Select e. employee_id, e. department, p. promotions from employee_information as e inner join performance_evaluation as p on e. Employee_ID = p.Employee_ID)</div>	<table><thead><tr><th></th><th>department</th><th>No_of_Promotions</th></tr></thead><tbody><tr><td>▶</td><td>HR</td><td>42</td></tr><tr><td></td><td>Finance</td><td>40</td></tr><tr><td></td><td>Operations</td><td>39</td></tr><tr><td></td><td>IT</td><td>36</td></tr><tr><td></td><td>Marketing</td><td>34</td></tr><tr><td></td><td>Sales</td><td>34</td></tr><tr><td></td><td>Engineering</td><td>27</td></tr></tbody></table>		department	No_of_Promotions	▶	HR	42		Finance	40		Operations	39		IT	36		Marketing	34		Sales	34		Engineering	27	<div>No. of Promotions by Department</div> <table><thead><tr><th>Department</th><th>No. of Promotions</th></tr></thead><tbody><tr><td>HR</td><td>42</td></tr><tr><td>Finance</td><td>40</td></tr><tr><td>Operations</td><td>39</td></tr><tr><td>IT</td><td>36</td></tr><tr><td>Marketing</td><td>34</td></tr><tr><td>Sales</td><td>34</td></tr><tr><td>Engineering</td><td>27</td></tr></tbody></table>	Department	No. of Promotions	HR	42	Finance	40	Operations	39	IT	36	Marketing	34	Sales	34	Engineering	27	Exact
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5	Gender Wise Percentage	<pre>SELECT gender, COUNT(gender) AS gender_count, ROUND((COUNT(gender) / (SELECT COUNT(*) FROM employee_information)) * 100, 2) AS percentage FROM employee_information GROUP BY gender;</pre>	<table><tr><th></th><th>gender</th><th>gender_count</th><th>percentage</th></tr><tr><td>▶</td><td>Female</td><td>57</td><td>33.53</td></tr><tr><td></td><td>Other</td><td>56</td><td>32.94</td></tr><tr><td></td><td>Male</td><td>57</td><td>33.53</td></tr></table>		gender	gender_count	percentage	▶	Female	57	33.53		Other	56	32.94		Male	57	33.53	<div><div>Gender Wise Employee %</div><div>● Female ● Male ● Other</div><table><tr><th>Gender</th><th>Percentage</th></tr><tr><td>Female</td><td>33.53%</td></tr><tr><td>Male</td><td>33.53%</td></tr><tr><td>Other</td><td>32.94%</td></tr></table></div>	Gender	Percentage	Female	33.53%	Male	33.53%	Other	32.94%	Exact																																																																																																																																																																																			
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6	Employee's INFO Table	<pre>SELECT e.employee_id, e.first_name, e.department, c.salary, p. promotions, e. Employment_Status, ROUND(TIMESTAMPDIFF(YEAR, hire_date, CURDATE()) +</pre>	<table><tr><th>employee_id</th><th>first_name</th><th>department</th><th>salary</th><th>promotions</th><th>Employment_Status</th><th>serving_period</th></tr><tr><td>▶ 1</td><td>Jacob</td><td>Operations</td><td>102655.08</td><td>3</td><td>Contract</td><td>1.9</td></tr><tr><td>2</td><td>Chad</td><td>IT</td><td>106172.26</td><td>3</td><td>Full-time</td><td>11.2</td></tr><tr><td>3</td><td>Scott</td><td>IT</td><td>109009.04</td><td>0</td><td>Full-time</td><td>3.4</td></tr><tr><td>4</td><td>Brooke</td><td>Marketing</td><td>115408.22</td><td>2</td><td>Contract</td><td>14.0</td></tr><tr><td>5</td><td>Jeffrey</td><td>IT</td><td>70622.94</td><td>3</td><td>Full-time</td><td>6.3</td></tr><tr><td>6</td><td>Jeremy</td><td>Operations</td><td>50946.49</td><td>3</td><td>Part-time</td><td>11.6</td></tr><tr><td>7</td><td>Eric</td><td>Operations</td><td>41731.33</td><td>3</td><td>Part-time</td><td>11.4</td></tr><tr><td>8</td><td>Kristin</td><td>Engineering</td><td>106107.7</td><td>0</td><td>Contract</td><td>4.7</td></tr><tr><td>9</td><td>Dennis</td><td>Engineering</td><td>66395.25</td><td>2</td><td>Part-time</td><td>9.2</td></tr><tr><td>10</td><td>Rebecca</td><td>Operations</td><td>65249.64</td><td>0</td><td>Contract</td><td>14.3</td></tr><tr><td>11</td><td>Edward</td><td>Operations</td><td>82673.1</td><td>2</td><td>Part-time</td><td>1.4</td></tr><tr><td>12</td><td>Taylor</td><td>Finance</td><td>87816.31</td><td>1</td><td>Part-time</td><td>9.0</td></tr><tr><td>13</td><td>Jackie</td><td>IT</td><td>114475.21</td><td>0</td><td>Part-time</td><td>11.3</td></tr><tr><td>14</td><td>Kevin</td><td>Marketing</td><td>115974.54</td><td>2</td><td>Part-time</td><td>7.5</td></tr><tr><td>15</td><td>Omar</td><td>HR</td><td>70517.23</td><td>2</td><td>Full-time</td><td>7.5</td></tr><tr><td>16</td><td>Michael</td><td>Finance</td><td>66608.08</td><td>1</td><td>Part-time</td><td>2.4</td></tr></table>	employee_id	first_name	department	salary	promotions	Employment_Status	serving_period	▶ 1	Jacob	Operations	102655.08	3	Contract	1.9	2	Chad	IT	106172.26	3	Full-time	11.2	3	Scott	IT	109009.04	0	Full-time	3.4	4	Brooke	Marketing	115408.22	2	Contract	14.0	5	Jeffrey	IT	70622.94	3	Full-time	6.3	6	Jeremy	Operations	50946.49	3	Part-time	11.6	7	Eric	Operations	41731.33	3	Part-time	11.4	8	Kristin	Engineering	106107.7	0	Contract	4.7	9	Dennis	Engineering	66395.25	2	Part-time	9.2	10	Rebecca	Operations	65249.64	0	Contract	14.3	11	Edward	Operations	82673.1	2	Part-time	1.4	12	Taylor	Finance	87816.31	1	Part-time	9.0	13	Jackie	IT	114475.21	0	Part-time	11.3	14	Kevin	Marketing	115974.54	2	Part-time	7.5	15	Omar	HR	70517.23	2	Full-time	7.5	16	Michael	Finance	66608.08	1	Part-time	2.4	<div><div>Employee's INFO</div><table><tr><th>Employee_ID</th><th>Name</th><th>Dept.</th><th>Salary</th><th>Promotions</th><th>Status</th><th>Serving_Period</th></tr><tr><td>1</td><td>Jacob</td><td>Operations</td><td>102,655.08</td><td>3</td><td>Contract</td><td>1.80</td></tr><tr><td>2</td><td>Chad</td><td>IT</td><td>106,172.26</td><td>3</td><td>Full-time</td><td>11.20</td></tr><tr><td>3</td><td>Scott</td><td>IT</td><td>109,009.04</td><td>0</td><td>Full-time</td><td>3.40</td></tr><tr><td>4</td><td>Brooke</td><td>Marketing</td><td>115,408.22</td><td>2</td><td>Contract</td><td>14.00</td></tr><tr><td>5</td><td>Jeffrey</td><td>IT</td><td>70,622.94</td><td>3</td><td>Full-time</td><td>6.30</td></tr><tr><td>6</td><td>Jeremy</td><td>Operations</td><td>50,946.49</td><td>3</td><td>Part-time</td><td>11.50</td></tr><tr><td>7</td><td>Eric</td><td>Operations</td><td>41,731.33</td><td>3</td><td>Part-time</td><td>11.30</td></tr><tr><td>8</td><td>Kristin</td><td>Engineering</td><td>106,107.70</td><td>0</td><td>Contract</td><td>4.70</td></tr><tr><td>9</td><td>Dennis</td><td>Engineering</td><td>66,395.25</td><td>2</td><td>Part-time</td><td>9.20</td></tr><tr><td>10</td><td>Rebecca</td><td>Operations</td><td>65,249.64</td><td>0</td><td>Contract</td><td>14.30</td></tr><tr><td>11</td><td>Edward</td><td>Operations</td><td>82,673.10</td><td>2</td><td>Part-time</td><td>1.40</td></tr></table></div>	Employee_ID	Name	Dept.	Salary	Promotions	Status	Serving_Period	1	Jacob	Operations	102,655.08	3	Contract	1.80	2	Chad	IT	106,172.26	3	Full-time	11.20	3	Scott	IT	109,009.04	0	Full-time	3.40	4	Brooke	Marketing	115,408.22	2	Contract	14.00	5	Jeffrey	IT	70,622.94	3	Full-time	6.30	6	Jeremy	Operations	50,946.49	3	Part-time	11.50	7	Eric	Operations	41,731.33	3	Part-time	11.30	8	Kristin	Engineering	106,107.70	0	Contract	4.70	9	Dennis	Engineering	66,395.25	2	Part-time	9.20	10	Rebecca	Operations	65,249.64	0	Contract	14.30	11	Edward	Operations	82,673.10	2	Part-time	1.40	Exact
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7	Total No. of Employee	select count(employee_id) as Total_no_of_employee from employee_information;	<table><tr><td></td><td>Total_no_of_employee</td></tr><tr><td>▶</td><td>170</td></tr></table>		Total_no_of_employee	▶	170		170 No. of Employee	Exact								
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8	Employee Average Salary	select round(avg(salary)) as Avg_Salary from compensation;	<table><tr><td></td><td>Avg_Salary</td></tr><tr><td>▶</td><td>79187</td></tr></table>		Avg_Salary	▶	79187		79.187K Average Salary	Exact								
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	Other	44.1964																
	Male	42.8246																

		<div>date_of_birth, department, job_title, TIMESTAMPDIFF(YEAR, date_of_birth, CURDATE()) AS employees_age FROM employee_information)</div> <div>select gender, avg(employees_age) from cte group by gender ;</div>			
10	Employee Average Serving Period	<div>with cte as (SELECT employee_id, first_name, gender, hire_date, department, job_title, ROUND(TIMESTAMPDIFF(YEAR, hire_date, CURDATE()) + (MOD(TIMESTAMPDIFF(MONTH, hire_date, CURDATE()), 12) / 12), 1) AS serving_period FROM employee_information)</div>	<div><div></div><div>Avg_Serving_Period</div><div>▶ 7.80824</div></div>	<div>7.8 Avg. Serving Period</div>	Exact

		<pre>select avg(serving_period) from cte ;</pre>			
11	Training Completed	<pre>select count(completion_status) as training_completed from training_and_development where completion_status= 'completed' ;</pre>	<div><div></div><div>▶</div></div> <div>training_completed</div> <div>69</div>	<div>69</div> <div>Training Completed</div>	