

ATTRITION ANALYSIS

POWER BI REPORTS

Create Table

create table attrition

```
(  
    emp_number int8 PRIMARY KEY,  
    gender varchar(50) NOT NULL,  
    marital_status varchar(50),  
    age_group varchar(50),  
    age int8,  
    department varchar(50),  
    education varchar(50),  
    education_field varchar(50),  
    job_role varchar(50),  
    business_travel varchar(50),  
    employee_count int8,  
    attrition varchar(50),  
    job_satisfaction int8,  
    active_employee int8  
)
```

Import Data in Table Using Query

```
COPY hrdata FROM 'D:\hrdata.csv' DELIMITER ',' CSV HEADER;
```

Employee Count:

```
select sum(employee_count) as Employee_Count from hrdata;
```

Attrition Count:

```
select count(attrition) from hrdata where attrition='Yes';
```

Attrition Rate:

```
select  
round (((select count(attrition) from hrdata where attrition='Yes')/  
sum(employee_count)) * 100,2)  
from hrdata;
```

Active Employee:

```
select sum(employee_count) - (select count(attrition) from hrdata where attrition='Yes')  
from hrdata;
```

Average Age:

```
select round(avg(age),0) from hrdata;
```

Attrition by Gender

```
select gender, count(attrition) as attrition_count from hrdata  
where attrition='Yes'  
group by gender  
order by count(attrition) desc;
```

Department wise Attrition:

```
select department, count(attrition), round((cast (count(attrition) as numeric) /  
(select count(attrition) from hrdata where attrition= 'Yes')) * 100, 2) as pct from hrdata  
where attrition='Yes'  
group by department  
order by count(attrition) desc;
```

No of Employee by Age Group

```
SELECT age, sum(employee_count) AS employee_count FROM hrdata  
GROUP BY age  
order by age;
```

Education Field wise Attrition:

```
select education_field, count(attrition) as attrition_count from hrdata
where attrition='Yes'
group by education_field
order by count(attrition) desc;
```

Attrition Rate by Gender for different Age Group

```
select age_band, gender, count(attrition) as attrition,
round((cast(count(attrition) as numeric) / (select count(attrition) from hrdata where attrition = 'Yes'))
* 100,2) as pct
from hrdata
where attrition = 'Yes'
group by age_band, gender
order by age_band, gender desc;
```

Job Satisfaction Rating

-Run this query first to activate the crosstab() function in postgres

```
CREATE EXTENSION IF NOT EXISTS tablefunc;
```

-Then run this to get o/p-

```
SELECT *
FROM crosstab(
'SELECT job_role, job_satisfaction, sum(employee_count)
FROM hrdata
GROUP BY job_role, job_satisfaction
ORDER BY job_role, job_satisfaction'
) AS ct(job_role varchar(50), one numeric, two numeric, three numeric, four numeric)
ORDER BY job_role;
```