

Gender-wise offers vis-à-vis group and grade

By Group : here the data resides in two different sets. Group\_data and ta\_offers\_data. We combine the two data sets to arrive at the output.

Query :

```
select * FROM group_data;

with results as

[Select group_name,
COUNT(DISTINCT CASE WHEN gender= 'M' THEN offer_ref_no END) AS male_offers,
COUNT(DISTINCT CASE WHEN gender= 'F' THEN offer_ref_no END) AS female_offers
FROM ta_offers_data
GROUP BY
group_name]

SELECT
g1.group_name,
g1.role_details,
r.male_offers,
r.female_offers
FROM group_data g1
JOIN
results r ON g1. group_name = r.group_name;
```

Output :

Data Output						Messages		Notifications	
	group_name character varying (30)	role_details character varying (50)	male_offers bigint	female_offers bigint					
1	B	Business Analyst	31	25					
2	E	Engineering	593	478					
3	U	User Experience	35	26					
4	P	Product and Project Management	37	19					

By Grade :

Query :

```
with results as(
  Select grade,
  COUNT(DISTINCT CASE WHEN gender= 'M' THEN offer_ref_no END) AS male_offers,
  COUNT(DISTINCT CASE WHEN gender= 'F' THEN offer_ref_no END) AS female_offers
  FROM ta_offers_data
  GROUP BY
  grade)

SELECT g1.grade, g1.role_name,
r.male_offers,
r.female_offers
FROM grade_data g1
JOIN
results r ON g1. grade = r.grade;
```

Output :

Data Output Messages Notifications					
	grade	role_name	male_offers	female_offers	
	character varying (50)	character varying (50)	bigint	bigint	
1	E1	Associate	352	288	
2	E2	Associate II	138	111	
3	E3	Senior Associate	95	63	
4	E4	Lead	60	55	
5	E5	Manager/Principal Engineer	27	23	
6	E6	Senior Manager/Senior Principal	47	23	
7	E7	Director/Staff Engineer	3	2	
8	E8	VP/Fellow	3	0	

Summary :

In summary, the data indicates a noticeable gender disparity in senior-level offers within the organization. Specifically, there is a higher proportion of offers extended to male candidates compared to their female counterparts. For roles categorized as Manager and above, female offers amount to 48, contrasting with 80 offers made to male candidates. Furthermore, the data underscores a predominance of male candidates in roles related to product and project management, reflecting a discernible gender bias in these areas.

Offer rolled out to the highest level of experience? How many offers rolled out at that experience?

Query :-

```
SELECT work_experience, count(offer_ref_no) as num_offers
FROM ta_offers_data
GROUP BY work_experience
ORDER BY work_experience DESC;
```

Output :-

Data Output				Messages	Notifications
	work_experience numeric		num_offers bigint		
1	19		13		
2	18		12		
3	17		11		
4	16		18		
5	15		5		
6	14		11		
7	13		4		
8	12		13		
9	11		13		
10	10		31		
11	9		34		
12	8		25		

Summary – 13 offers rolled out at 19+ Years of experience

Can we group the experience in buckets e.g. 0-3, 3-6, 6-9, 9-12, 12-15 and 15-20 ? further drill down the data genderwise, so the output will have 3 columns, experience\_group, male offers and then female offers?

Query -

```
Query Query History
10 WITH results as(
11 SELECT work_experience, count(offer_ref_no) as total_offers
12 FROM ta_offers_data
13 GROUP BY work_experience
14 ORDER BY total_offers DESC)
15 SELECT
16 CASE
17 WHEN work_experience BETWEEN 0 AND 3 THEN '0-3 years'
18     WHEN work_experience BETWEEN 3 AND 6 THEN '3-6 years'
19     WHEN work_experience BETWEEN 6 AND 9 THEN '6-9 years'
20     WHEN work_experience BETWEEN 9 AND 12 THEN '9-12 years'
21     WHEN work_experience BETWEEN 12 AND 15 THEN '12-15 years'
22     ELSE '15+ Years'
23 END AS experience_group,
24 sum(total_offers) as offer_total
25 FROM
26 results
27 GROUP BY experience_group
28 ORDER BY offer_total DESC;
```

Output :

Data Output			Messages	Notifications
	experience_group text	offer_total numeric		
1	0-3 years	849		
2	3-6 years	234		
3	6-9 years	76		
4	9-12 years	57		
5	15+ Years	54		
6	12-15 years	20		

Drill down data further gender-wise

Query -

```
11
12 SELECT
13     CONCAT(CASE
14         WHEN work_experience BETWEEN 0 AND 3 THEN '0-3'
15         WHEN work_experience BETWEEN 4 AND 6 THEN '4-6'
16         WHEN work_experience BETWEEN 7 AND 10 THEN '7-10'
17         WHEN work_experience BETWEEN 11 AND 15 THEN '11-15'
18         ELSE '16-20'
19     END, ' years') AS experience_group,
20     SUM(CASE WHEN gender = 'M' THEN 1 ELSE 0 END) AS male_count,
21     SUM(CASE WHEN gender = 'F' THEN 1 ELSE 0 END) AS female_count
22 FROM
23     ta_offers_data
24 GROUP BY
25     experience_group
26 ORDER BY
27     experience_group asc;
28
```

Output -

Data Output Messages Notifications			
	experience_group text	male_count bigint	female_count bigint
1	0-3 years	470	379
2	11-15 years	30	16
3	16-20 years	30	24
4	4-6 years	136	98
5	7-10 years	59	48

Summary –

The gender disparity exists across the board grade, group and experience level wise.

Now let's drill down even further and find out joined employees data based on experience group, male and female count

Query –

```
SELECT
    CONCAT(CASE
        WHEN work_experience BETWEEN 0 AND 3 THEN '0-3'
        WHEN work_experience BETWEEN 4 AND 6 THEN '4-6'
        WHEN work_experience BETWEEN 7 AND 10 THEN '7-10'
        WHEN work_experience BETWEEN 11 AND 15 THEN '11-15'
        ELSE '16-20'
    END, ' years') AS experience_group,
    SUM(CASE WHEN gender = 'M' THEN 1 ELSE 0 END) AS male_count,
    SUM(CASE WHEN gender = 'F' THEN 1 ELSE 0 END) AS female_count
FROM
    ta_offers_data
WHERE status = 'Joined'
GROUP BY
    experience_group
ORDER BY
    experience_group asc;
```

Output –

	experience_group text	male_count bigint	female_count bigint
1	0-3 years	55	37
2	11-15 years	10	2
3	16-20 years	10	6
4	4-6 years	11	16
5	7-10 years	12	8