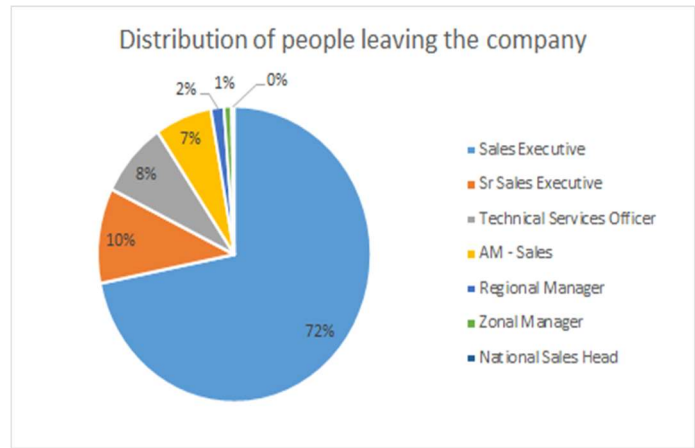


# Intelliqo IIT Guwahati

## Report Round 2

### Overview of Attrition in the company-

#### 1.) Designation Wise-



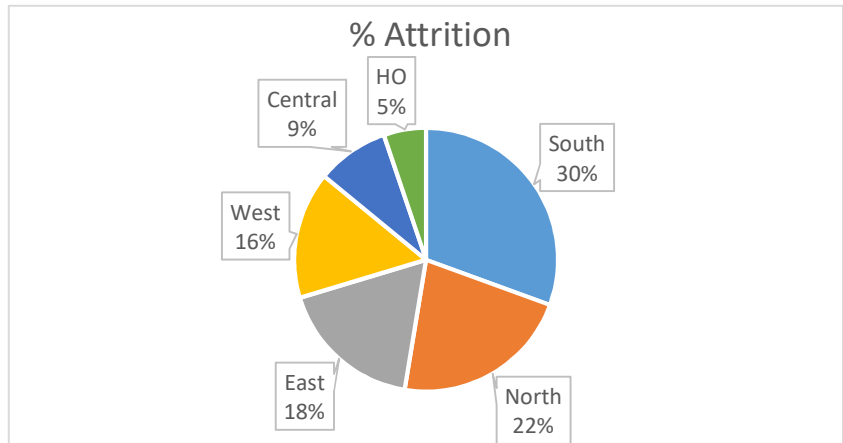
It is clearly visible from the above chart that attrition decreases with the increasing level of position in hierarchy of the company.

The below table gives us the exact details of number of people leaving the company hierarchy wise: -

Designation	No. of People Leaving	Age Range	Income Range
Sales Executive	235	24-28	25010-26995
Sr Sales Executive	34	27-35	30041-39112
AM - Sales	27	35-45	50003-54550
Technical Services Officer	22	30-40	52009-56633
Regional Manager	5	35-39	54583-59615
Zonal Manager	3	40-45	75248-91388
National Sales Head	1	54	233954

#### 2.) Zone Wise-

The company operates in 131 locations in India with an average of 2.5 attritions per location. These locations are clustered into their respective Zones.



The above chart shows that the maximum percentage of attrition is taking place in the South Zone.

The details of attrition rate, number of location along with the number of employee of a given designation leaving in each zone is given in table below-

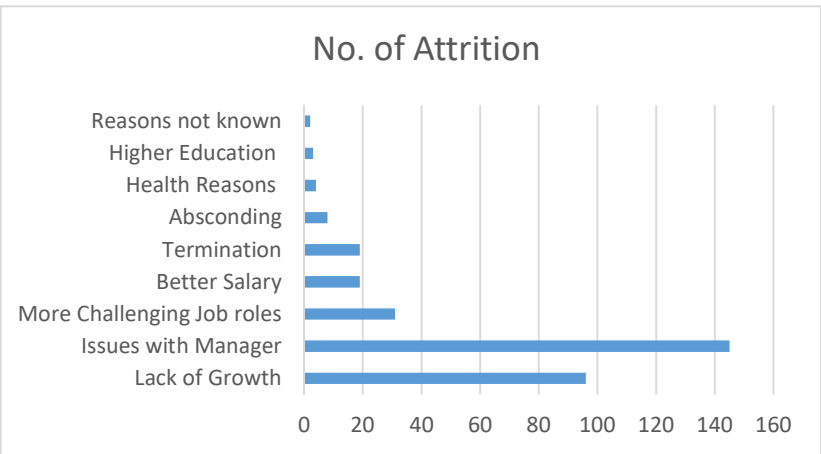
Zone	Attrition Rate	No. of Locations	Sales Executive	Sr Sales Executive	AM - Sales	Technical Services Officer
South	3.7	27	69	9	6	15
East	2.32	25	45	9	2	2
North	2	36	61	6	4	1
Central	1.93	15	23	1	3	2
West	1.88	27	35	5	4	7

According to a survey, companies located in the southern cities of Bangalore, Hyderabad and Chennai are finding it difficult to hold on to their young employees as attrition levels in these cities are the highest in the country during last 12 months.

Reference - [Link](#)

This is true in case of our dataset as well, as we saw that top locations with most number of attrition are from South.

#### 3.) Remarks Wise-



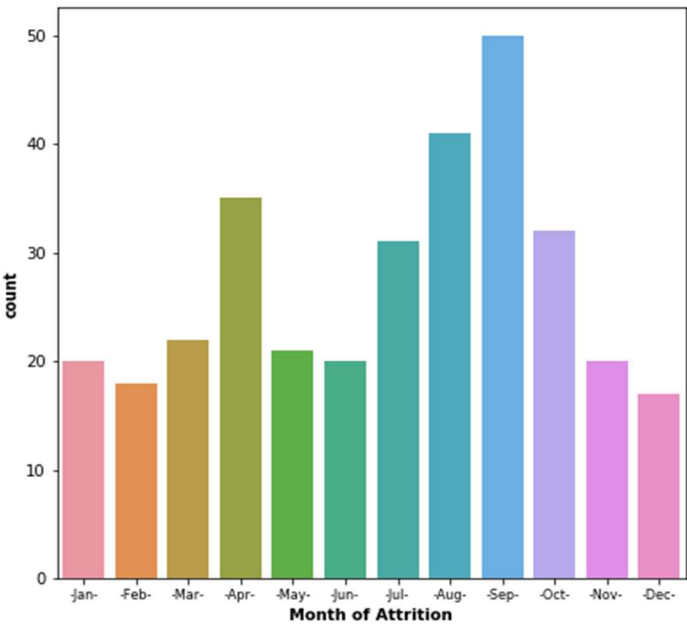
Remarks	South	North	East	West	Central	HO
Lack of Growth	27	18	18	22	7	4
Issues with Manager	38	38	32	21	13	3
More Challenging Job roles	12	4	1	3	2	9
Better Salary	13	6	0	0	0	0
Termination	6	3	4	2	3	1
Absconding	1	3	1	2	1	0
Health Reasons	2	0	1	1	0	0
Higher Education	1	0	0	0	2	0
Reasons not known	0	0	1	0	1	0

It is observed that Issues with manager and issues relating to higher aspirations are the major reasons for people to leave the company and its distribution over different regions is shown in the table above

It is to be noted that employees who are from region East, West, Central and HO are happy with their salaries.

#### 4.) Month Wise-

It is visible from the plot below that the months of Apr, Aug and Sep see comparatively higher attrition than the other months where it is almost uniform.



It is seen that in

- April - 12 leave due to Issue with manager  
21 leave due to Higher Aspirations
- Aug - 22 leave due to Issue with manager  
18 leave due to Higher Aspirations
- Sep - 22 leave due to Issue with manager  
27 leave due to Higher Aspirations

5.) Education / Marital Status Wise-

Designation	Bachelors	MBA	Married	Divorced	Single
Sales Executive	235	0	76	86	73
Sr Sales Executive	34	0	13	12	9
AM -Sales	22	0	3	13	6
Technical Services Officer	14	13	6	8	13
Regional Manager	3	2	2	2	1
Zonal Manager	1	2	2	0	1
National Sales Head	0	1	1	0	0

For the last three positions in the hierarchy, the company hires Bachelors and for rest of the positions they consider both Bachelors and MBA.

Those who are MBA are leaving the company only because of higher aspirations and better opportunities (lack of growth, more salary, more challenging roles).

Inferences / Insights:

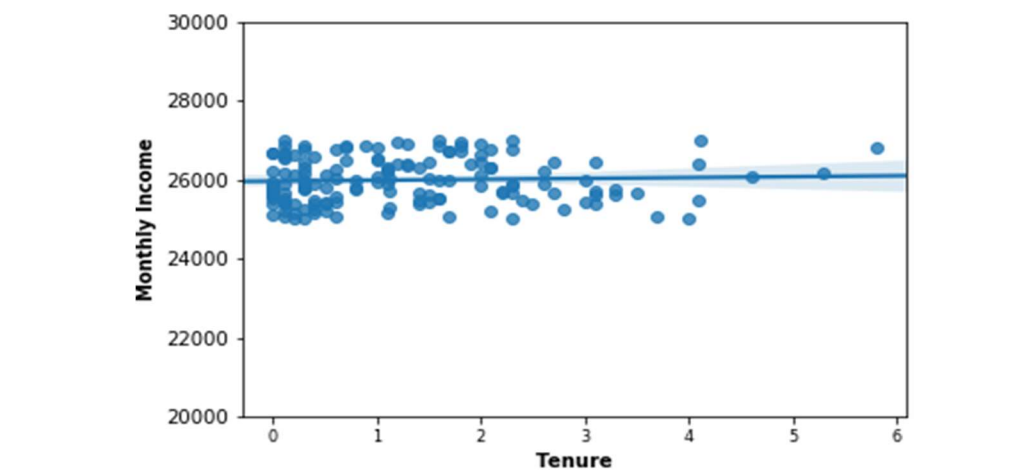
a.) There is a lack of growth in the company due to saturated Income

Hypothesis Testing

For Sales Executive-

- The mean of tenure distribution for them was observed to be 1.467
- We sampled the Sales Executive into two parts on the basis of mean tenure. Group A(mean tenure<1.467) and Group B(mean tenure>1.467)
- For getting an inference we defined a **Null Hypothesis** as the mean of the income of population of Group A is equal to the mean of the income of the population of Group B and **Alternate Hypothesis** as not equal.
- Since size of both the groups is greater than 30 and independent of each other we can directly apply the Z test with 5% confidence.
- Our null was accepted by Z test with a p-value of 0.2(>0.05)

So from this we infer that there is no growth in income of employee with respect to their tenure.



Note- For other posts we have very less sample points so we cannot apply z test there.

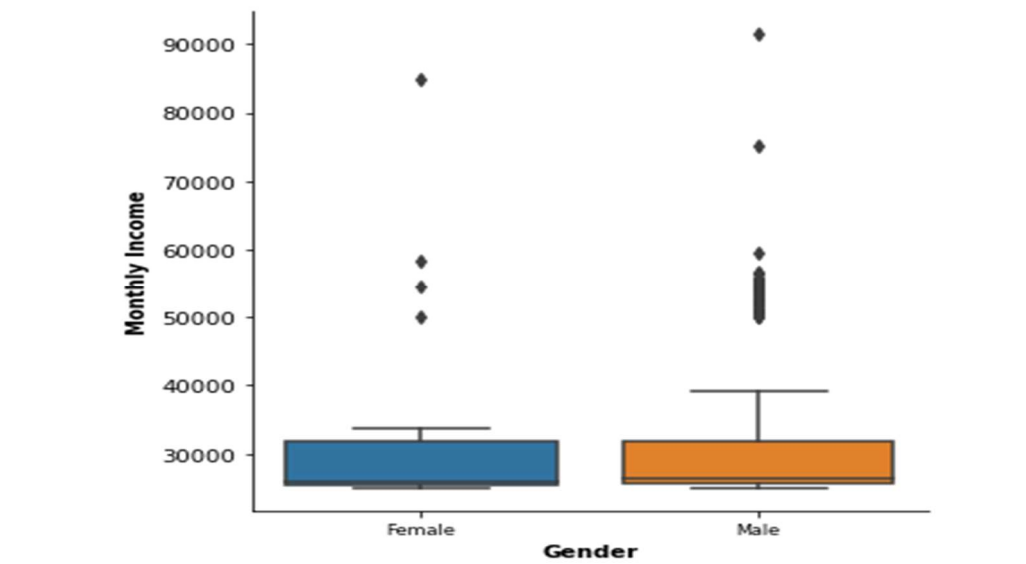
b.) Low Female Attrition in Company

Overall Attrition % by Gender-

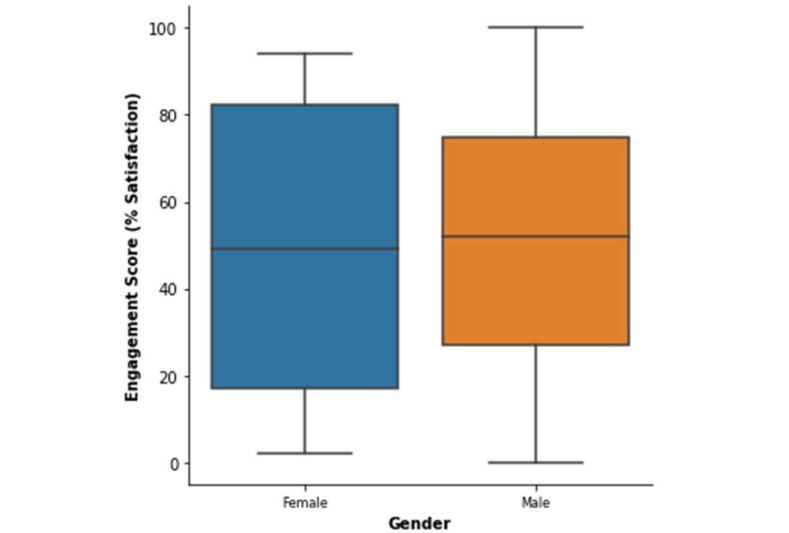
- Female - 5.5%
- Male - 94.5%

Low attrition in the company can be explained in two possible ways:

- 1) Either there is a drastic difference in the number of female and male staff working in the company.
- 2) There is actual low female attrition.



This box plot shows that both Male and Female has almost equal pay distribution for a particular role.



The above plot proves that both the genders have almost similar engagement score distribution.

So our data and real life study on this (Ref - [Link](#)) also support the 2<sup>nd</sup> argument that female attrition is actually low.

C.) HO Scenario

It is observed that most of the employee with higher roles are in HO as most of their attrition are from there only. In HO there are two locations with 7 & 10 respectively, 76% of the employees leave the company in search for more challenging and rapid growing jobs, Head offices are usually situated in happening cities like Hyderabad, Bangalore etc where there are umpteen number of job opportunities and rapid growth that is why most of the employees here leave the company if they feel that there is no growth or if they get a better job at a better salary.

d.) Employee Efficiency and Attrition rate do not depend on Marital Status

Hypothesis Testing – Using one-way ANOVA

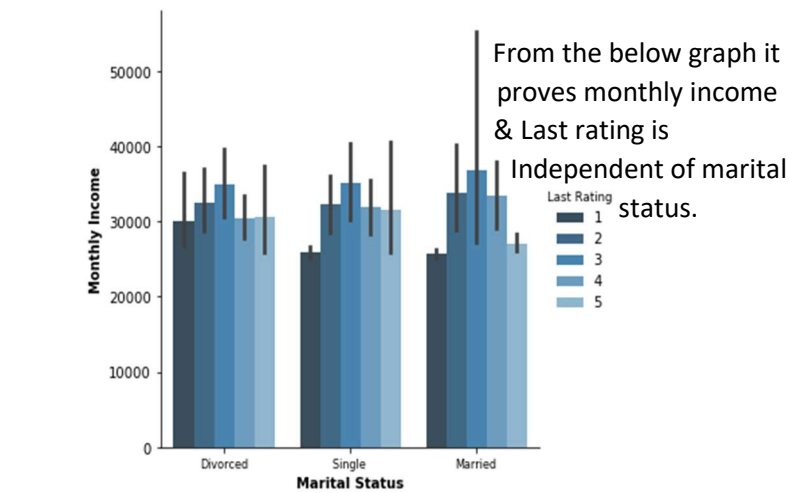
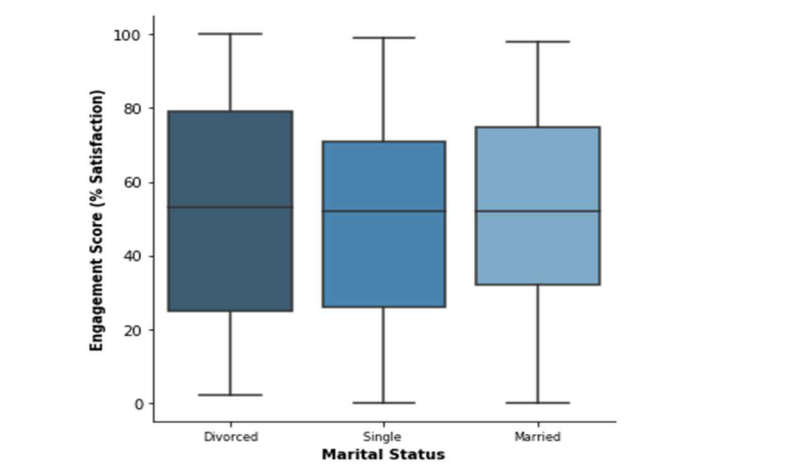
The entire population is distributed into three parts on the basis of Marital Status.

- Null Hypothesis** – The mean of the engagement score for the the three populations Divorced, Married and Single are equal.
- Alternate Hypothesis** – It assumes means to be not equal.

Testing the assumptions of ANOVA-

- We test the equality of variance among group by Levene’s test we got p-value 0.12 which is greater than 0.05 so we infer that variances are equal for the three groups.
- We check the normality of residuals of engagement score by Shapiro-Wilk test and got p-value greater Than 0.05 hence normality is inferred.
- It is a known fact that groups are independent of each other

So all our assumptions are verified so on proceeding towards one-way ANOVA we found out the p-value to to be 0.88 which is greater than 0.05 so our Null hypothesis is accepted.



e.) Inferences related to Tenure

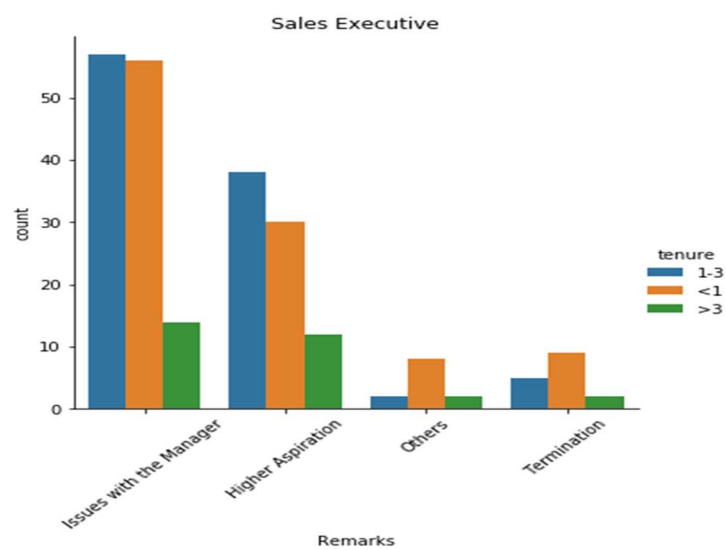
There are different trends for different designations with respect to tenure of the employees.

We have clubbed some issues in groups in order to visualize properly such as-

Higher Aspirations (include lack of growth, more challenging Jobs/higher design., higher salary, higher studies)

Others include all the remaining issues not mentioned.

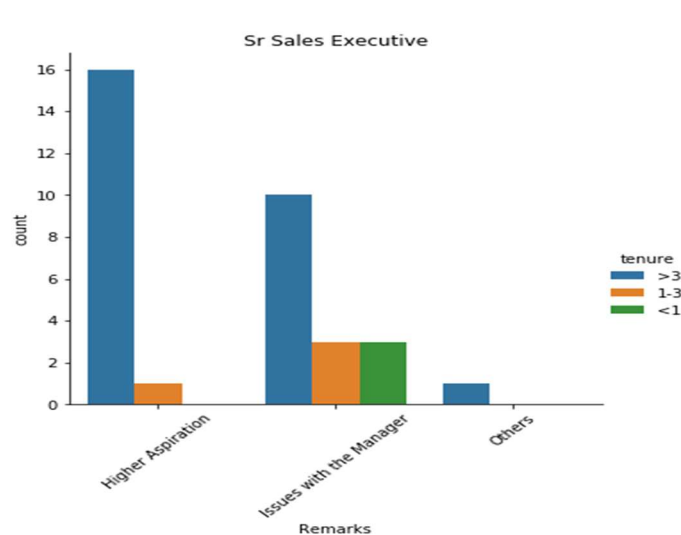
1. Sales Executive



-From above it is clear that Sales Executive don't wait for long to leave the company if they have higher aspirations.

-Most of these people issues with the manager hence Indicating lack of proper communication.

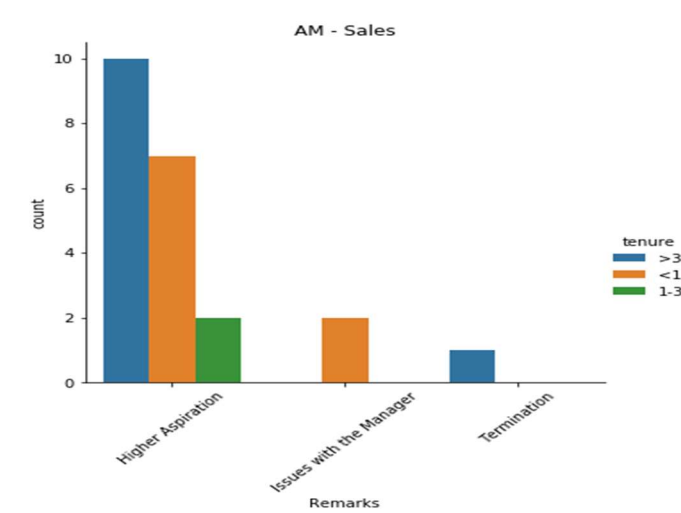
2. Sr Sales Executive



-These people exercise 'Wait & Watch' policy. Most of them wait for three years and still if not satisfied they leave to look out for better opportunities.

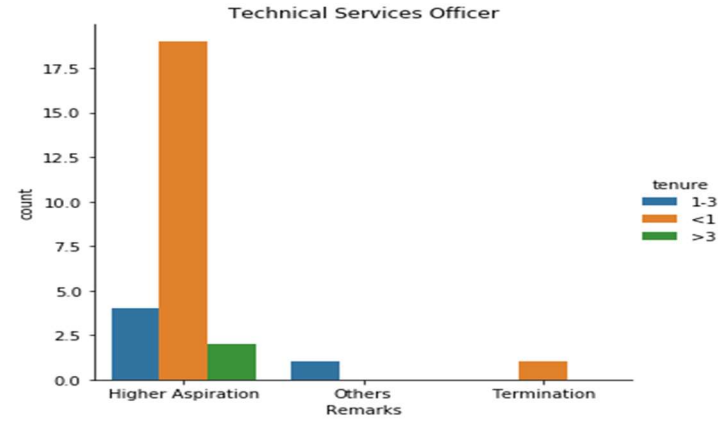
-It is also observed that maximum of employees having Issue with manager leave after 3 years.

3. AM – Sales



-AM- Sales mostly leave the company because of higher aspirations it is because they might go for higher studies or promoted job positions at a competitor company.

4. Technical Service Officers



-Almost all TSOs who have higher aspiration leave the company before completing a year.

-No TSOs have issues with manager.

Conclusion / Suggestions

- a. There is a certain Lack of Growth in the Company for Sales Executive so it is suggested to enhance recognition and rewards programs.
- b. It is observed that there are good gender equality policies in the as evident from drawn insights. The average last rating of females is 3.33 which is comparable to male so it is advisable to company to maintain and improve sex ratio in the company.
- c. Since all the employee who are MBA are leaving the company because of higher aspirations so it is advisable to not hire MBA for lower role.
- d. There is a dire need for establishing clear communication channels for employees especially Sales executives as there is a lot of attrition (144 in total) due to issues with manager as there are many employees with rating greater than 4 are leaving due to issues with manager.
- e. Tenure of different level employees was deeply studied and its insights are useful for HR to hire people with higher aspirations according to job roles. For example- since Sales Executive with higher aspirations do not wait for more than 1 year HR can keep in mind that they should not recruit people with high aspirations for Sales executive roles whereas for roles in which people 'Wait & Watch' can be hired even if they have higher aspirations.
- f. It is observed that Trivandrum has the maximum number of attritions which is 18, 81% Sales Executives have reported issues with manager as their reason, it is recommended that company look into this and question the managerial staff.