

# HR ANALYTICS

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# Agenda

- What is HR analytics and Attrition
- Impact of Attrition
- Data Overview and Analysis
- Detailed analysis
  - City Index
  - Education level & relevant experience
  - Education Level Vs company
  - Training & last change
- Suggestions based on Analysis
- Questions



# HR analytics & attrition

## HR analytics

HR analytics (also known as people analytics) is **the collection of talent data to improve critical talent and business outcomes**. HR analytics enable HR leaders to develop data-driven insights to inform talent decisions, improve workforce processes and promote positive employee experience

## Attrition and Impact

Percentage of employee leaving an organization within year .



**Critical project delivery**  
If a person with knowledge leaves the company it will not only impact the business continuity but can also have an impact on critical projects



**Brand Image of the company**  
If there are more attrition this may tarnish the image of company in social media which will impact the overall brand image of company



**Acquired Knowledge**  
There is a significant investment in terms of knowledge that company does on an employee to get him up to speed, with employee leaving all is gone



**Team Dynamics**  
If a critical team member leaves the team this impacts the overall dynamic in term of coordination , momentum and environment



**Culture**  
There is always a risk of cultural mis fitment when a new employee is recruited. With high attrition this becomes more critical

# Data Overview

enrollee_id	city	city_development_index	gender	relevant_experience	training_hours	enrolled_university	education_level	major_discipline
8949	city_103-0.92		Male	Has relevant experience	36	no_enrollment	Graduate	STEM
39734	city_46-0.7700000000000000		Male	No relevant experience	47	no_enrollment	Graduate	STEM
12945	city_21-0.624		Male	No relevant experience	83	Full time course	Graduate	STEM
35041	city_115-0.788			No relevant experience	32		Graduate	Business Degree
844	city_181-0.747		Male	Has relevant experience	8	no_enrollment	Graduate	STEM
11852	city_174-0.794			Has relevant experience	34	Part time course	Graduate	STEM
38858	city_183-0.92		Male	Has relevant experience	34	no_enrollment	High School	STEM
652	city_86-0.742		Male	Has relevant experience	14	no_enrollment	Graduate	STEM
27207	city_105-0.92		Male	Has relevant experience	44	no_enrollment	Graduate	STEM
698	city_180-0.60			Has relevant experience	112	no_enrollment	Graduate	STEM
39435	city_21-0.624			No relevant experience	82	Full time course	High School	
33823	city_105-0.92		Male	Has relevant experience	108	no_enrollment	Graduate	STEM
24414	city_41-0.6120000000000000		Male	Has relevant experience	13	no_enrollment	Graduate	STEM
5816	city_21-0.624		Male	No relevant experience	24			
8722	city_21-0.624			No relevant experience	26	Full time course	High School	
4448	city_124-0.6200000000000000		Male	Has relevant experience	14	no_enrollment	Graduate	STEM
4267	city_105-0.92			Has relevant experience	108	no_enrollment	Graduate	STEM
2764	city_21-0.624			Has relevant experience	7	no_enrollment	Graduate	STEM
2208	city_21-0.624			Has relevant experience	23	no_enrollment	Graduate	STEM
11299	city_13-0.6270000000000000		Female	Has relevant experience	112	no_enrollment	Graduate	Arts
11472	city_109-0.863		Male	Has relevant experience	44	no_enrollment	Graduate	STEM
19061	city_134-0.6200000000000000		Male	Has relevant experience	50	no_enrollment	Master's	STEM
9465	city_180-0.804			Has relevant experience	46	no_enrollment	Master's	STEM



enrollee_id	0
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city_development_index	0
gender	4508
relevant_experience	0
enrolled_university	386
education_level	460
major_discipline	2813
experience	65
company_size	5938
company_type	6140
last_new_job	423
training_hours	0
target	0
dtype: int64	

Data cleanup

enrollee_id
city
city_development_index
gender
relevant_experience
training_hours
enrolled_university
education_level
major_discipline
experience
company_size
company_type
last_new_job
target

Raw data

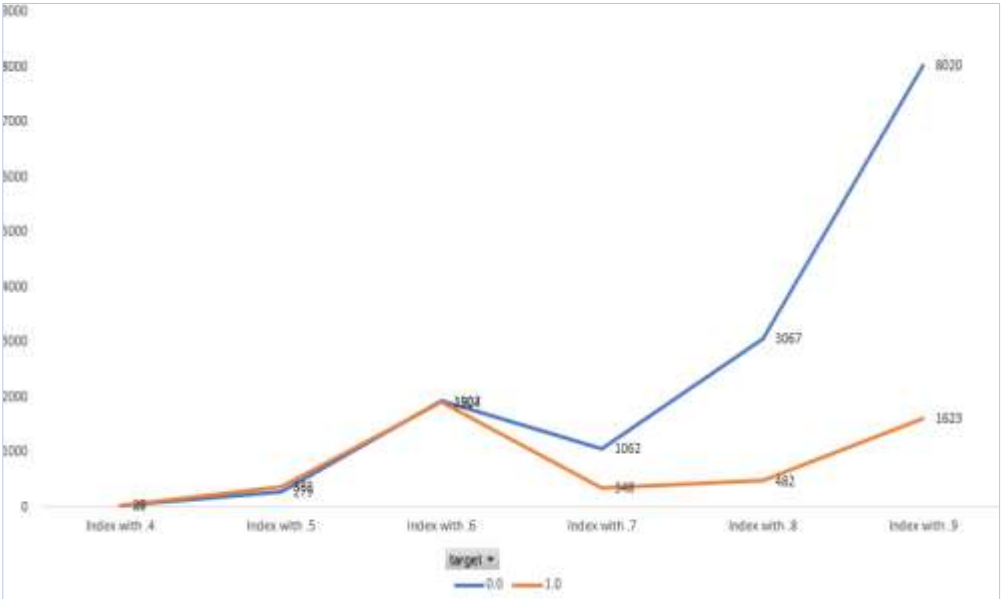
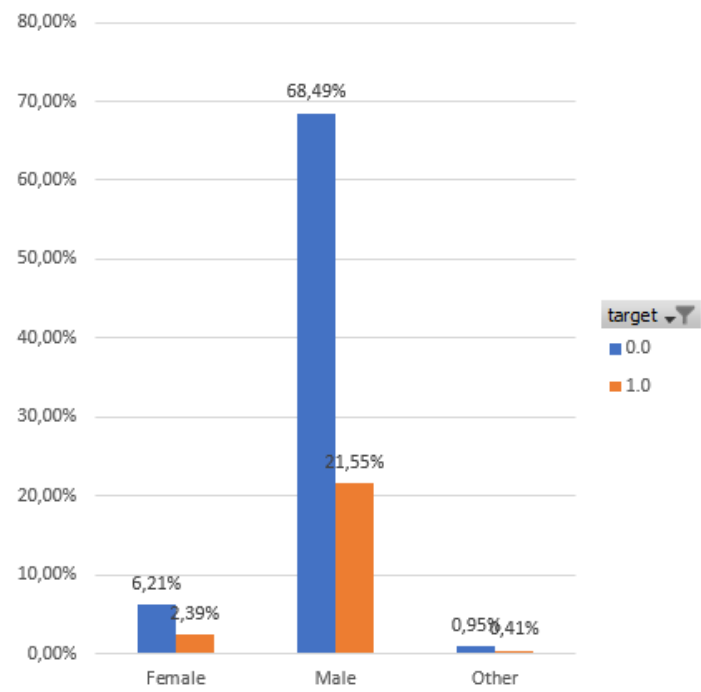


enrollee_id
city
city_development_index
Index Group
gender
relevant_experience
training_hours
Training Hrs (Range)
enrolled_university
education_level
major_discipline
experience
exp level
company_size
company_type
last_new_job
target

Certain attributes are group in range for better Analysis:

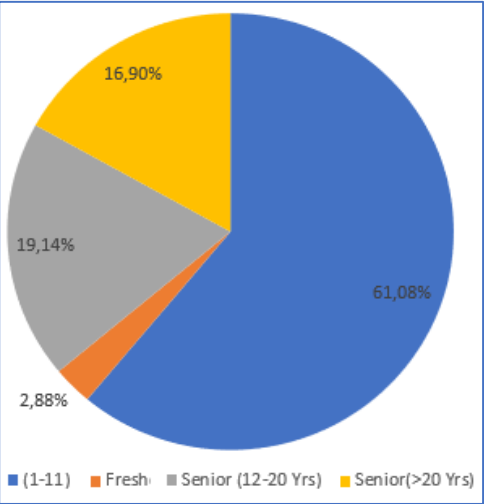
# Overview & Attrition ( City Index)

Leave/Stay	Number	%age
Stay	14381	75%
Leave	4777	25%
Total	19158	

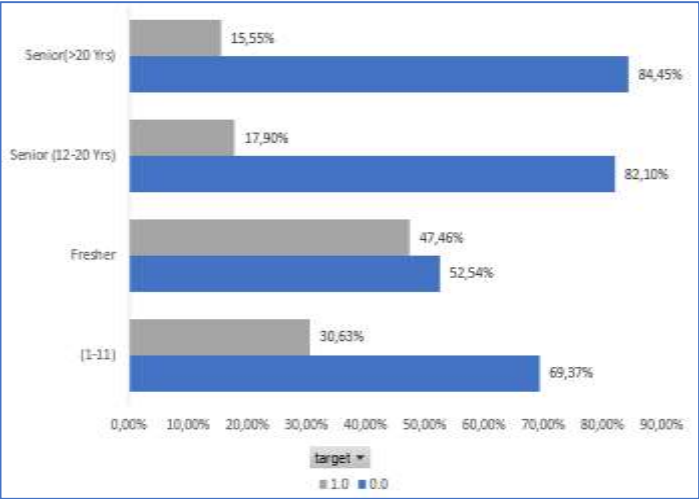


People leaving in cities with better quality of life are seen more stable in their job

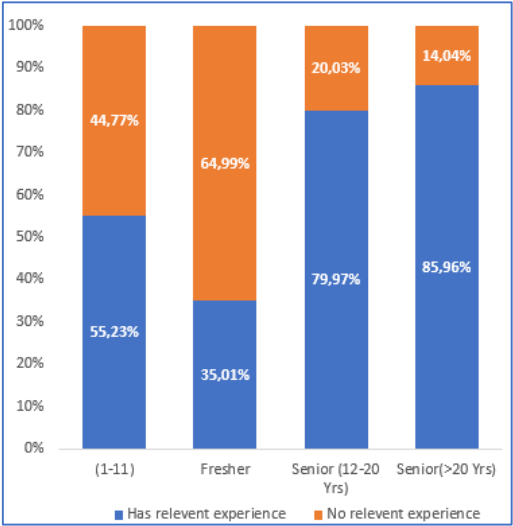
# Analysis – Experience & relevant experience



Out of total survey the critical mass is with Mid level (1-11yrs ) **61%** & more the 20 Yrs which is **19%**



Senior level is more stable with **84%** wants to stay while mid level is vulnerable for **30%** Attrition



Mid level the percentage of people leaving/stay with relevant experience is nearly same while senior about **85%** with relevant experience wants to leave the job

Inference :

1.

Mid level is a major proportion of working group also the attrition is more hence become critical mass for analysis

2.

The bigger percentage of people leaving w/o relevant experience is fresher which is not a near future threat and can be mitigated easily

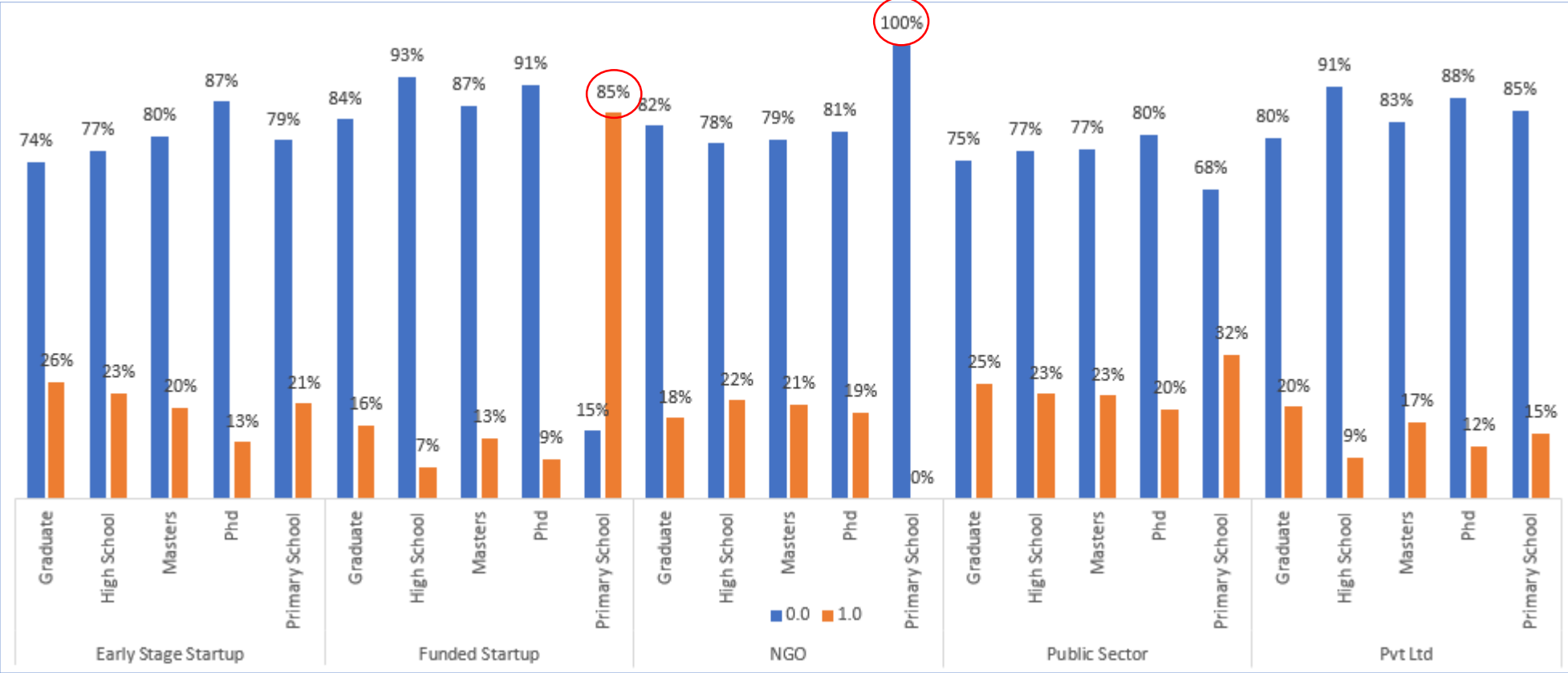
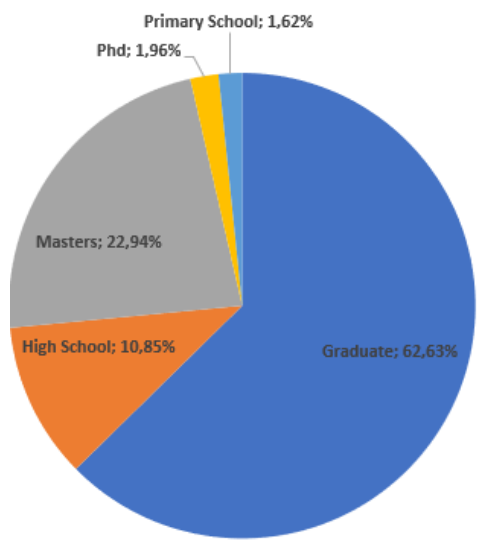
3.

Out of 40% of senior (12-20 &>20) about 80% with relevant experience wants to leave the job which can be a potential issue.

4.

Out of 60% of Mid level executives 30% wants to leave, in this 44% has no relevant experience

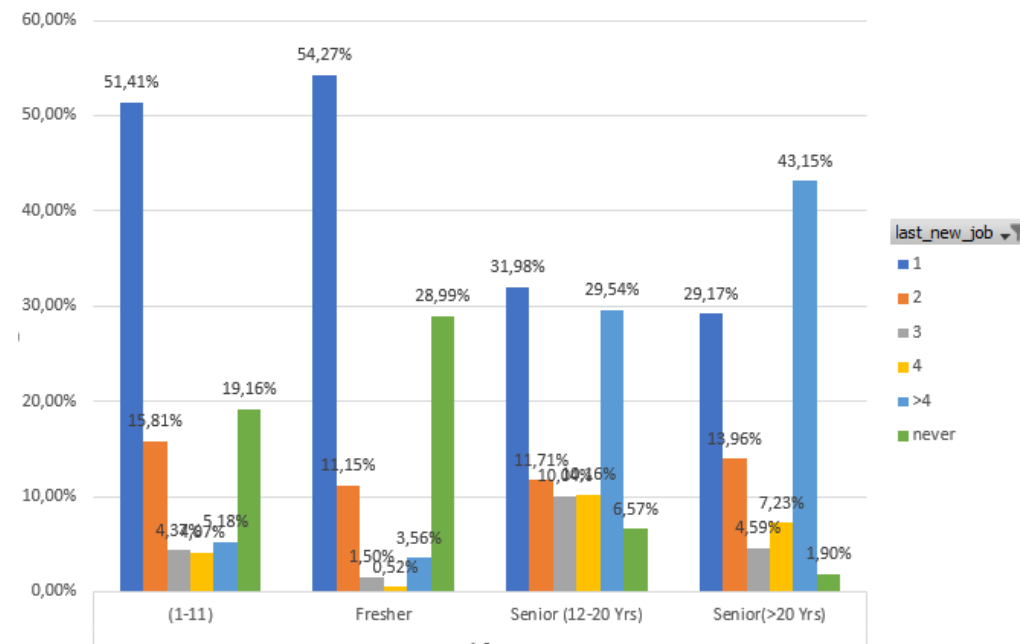
# Reason for Attrition – Edu Level Vs Company type



## Inference

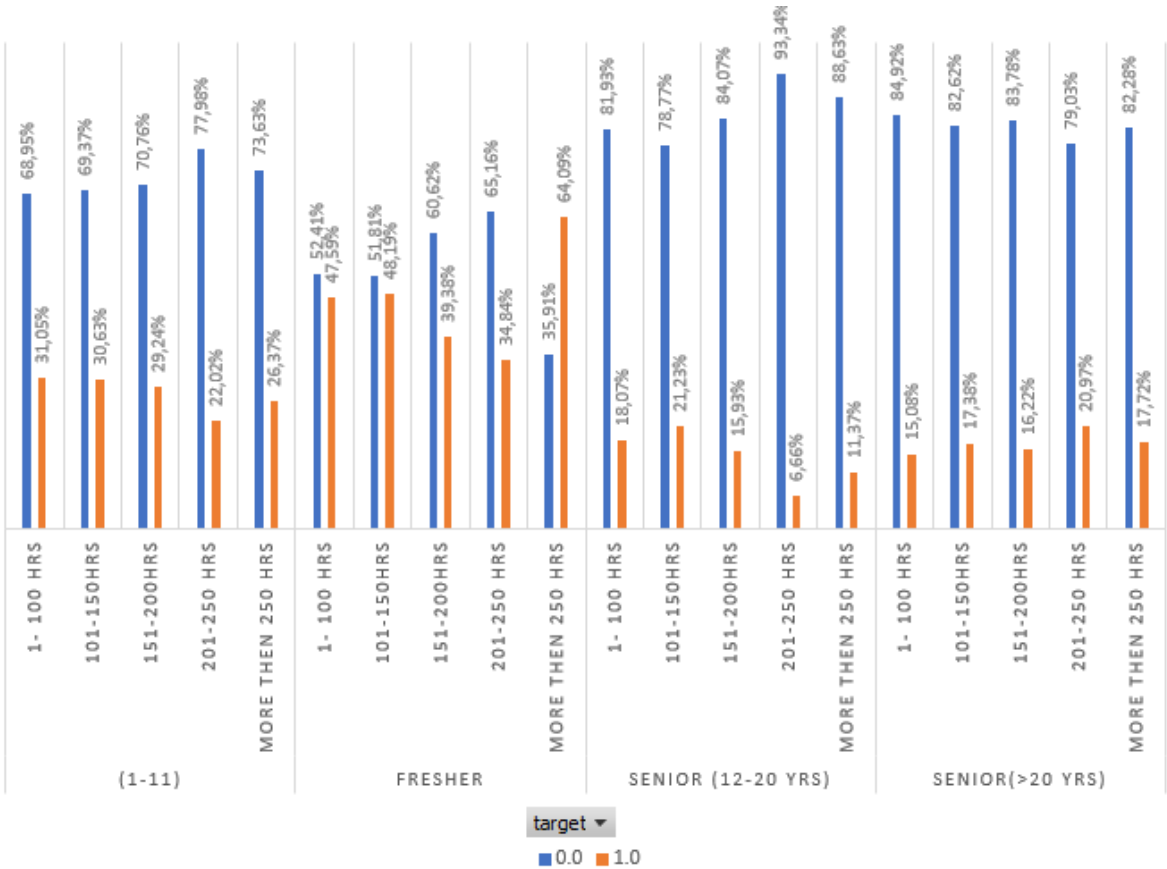
- Primary education comprises of least number of people while they are no so good fit in Funded startup they do enjoy working in NGOs
- The NGOs compared to other sector have more stability
- The high school enjoy more in Funded startup (93% not leaving) and Pvt Sector (91% not leaving)
- People with Masters degree rate fairly in All type of Job sector

# Reason for Attrition – Training & Last change



## Last change Vs Experience (Attrition)

- Between Fresher and 1-11 Yrs About 51% people who have change the job last 1 year are likely to leave the job again
- More seniors who have not change the job oin last 4 years (about 40%) or have change th ejob in last 1 year (about 30%) are likely to leave the job



## Training vs Attrition

- In 1-11 and senior and fresher group the training between 201-250 Hrs seems to be idle to encourage people to stay.
- Seniors with experiance more then 20 Yrs training doesnt seem to create any impact.
- For fresher with more then 250 Hrs training the attrition is more



## Possible suggestions



- A balance should be kept while recruitment where the critical people should be kept in cities with better living conditions
- The mid level is a critical mass and for the people without relevant experience should be trained to lower the attrition
- Although the number of seniors leaving is low however 85% have a relevant experience . Steps should be taken to stop them to leave the organization
- The departure of senior member can also trigger more attrition on freshers as they also act as mentor and without mentor a fresher can be lost ( we have seen inverse graph)
- The recruitment within all type of job sectors should be done carefully, for example people with primary education are better fit in NGOs...
- The ideal training hrs is between 200-250 Hrs. The training modeule should be carfully designed with respect to job level (example: for any fresher with more then 250 hrs training and agreement or alignment should be done to protect the investment

Questions?