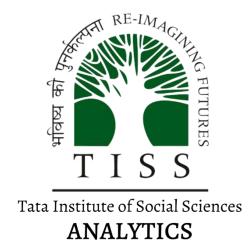


2nd SEMESTER

HR ANALYTICS – ASSIGNMENT: 1

Submitted on: 15-05-2022

Submitted to: Dr. Ashutosh Murti



Valuing Human Capital

Submitted by: ROHIT SUMAN - M2021ANLT027

ANUPAM SINHA - M2021ANLT005



VALUATION OF HUMAN CAPITAL

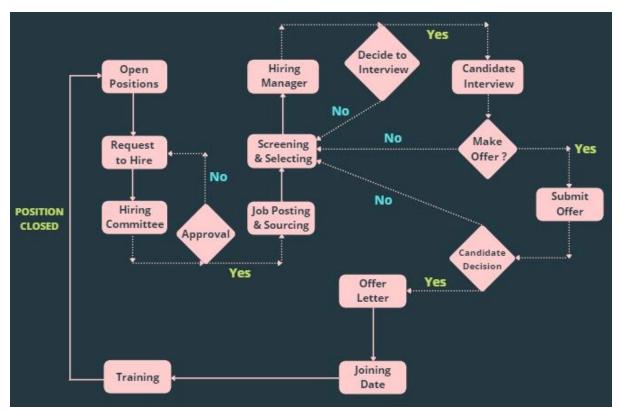
Human capital **allows an economy to grow**. When human capital increases in areas such as science, education, and management, it leads to increases in innovation, social well-being, equality, increased productivity, and improved rates of participation, all of which contribute to economic growth.

For an organization to grow, so we propose that organization may work on three areas to measure the return on their human capital investments:

Hiring	Time to Hire, Application Completion Rate, Cost per hire, Candidate			
	experience, Gender pay gap, Employee training			
Workforce Planning	Right people, Right place and time, Right Skills, Right Cost			
Attrition	Stress, Demographic, Indicators, Leadership, Job Satisfaction, Exit			
	Environment			

To start with 1st i.e. Hiring:

We are proposing: Hiring Model as below:



1. Time to hire:

The amount of time between when a company contacts a job candidate and when they accept the job offer is referred to as time-to-hire.

We considered that the time to hire depends on the issuing of the open positions, the request to employ the selection process, and the time the position got filled.

Positive Impacts:

- A low average TTH indicates a more effective recruitment procedure, which is more enticing to candidates.
- TTH varies by sector and workplace but is typically approximately 30 days.

Negative Impacts:

- If the time to hire is too long, job seekers will lose interest.
- Only a week following the interview, 23% of candidates are willing to wait, and also, 7 to 14 days is too long for 39% of people.

Weightage:

It is one of the most crucial recruitment metrics that depend on many factors, from filling out application forms to interviews and selection. So we have given a higher weightage to this parameter in our model, i.e., 20%.

2. Application completion rate

The Application Completion Rate measures how many candidates who begin an application for an open position at your organization complete it and submit it for review. It is combined with the career site data, tracking application completion rate that assists hiring managers in optimizing their recruitment procedures (for example, Page Views, Bounce Rate, etc.).

Positive Impacts:

 The higher application completion rate indicates that candidates are interested in your job opening.

Negative Impacts:

• There can be reasons like irrelevant questions, Personal questions, Unorganized application, technical error, slow UX (User experience), and Difficult UI (User interface).

Weightage:

It is one of the crucial metrics but has a lower weightage of 12.5% in our model.

3. Cost per hire

The cost per hire is a recruiting metric that calculates the cost of acquiring new personnel. These expenditures include sourcing and recruitment advertising, onboarding, and referral incentive program charges.

Positive Impacts:

- It helps in determining what cash resources you will require in the near future.
- Cost per hire metrics can be used to evaluate the recruiter's performance.

Negative Impacts:

• When determining cost per hire, a one-size-fits-all method does not work since numerous variables must be considered, including the role being recruited for, the demand for the talent, and the size of the business.

Weightage:

These metrics involve logistics and human resource cost, so it has a higher weightage of 25% in the proposed model.

4. Candidate experience

Candidates' perceptions and interactions with the hiring process are referred to as candidate experience. We have included the candidate experience metric, which is used to filter prospects, and the interview process are essential aspects of the candidate experience.

Positive Impacts:

- Candidates that have a pleasant recruiting experience are more likely to accept your job offer, reapply in the future, and refer people to your organization.
- It helps you expand your talent pool and boost your company brand.

Negative Impacts:

• A bad candidate experience can have a negative impact on both your recruiting process and the overall performance of your firm.

Weightage:

Candidate experience is essential to improve the recruitment process, which will help get a new talent pool in the future. So, we have assigned it a 12.5% weightage in our model.

5. Gender pay gap

The gender pay gap, often known as the wage gap, is the average disparity in income between working men and women. We have observed women are underpaid in comparison to men. In our model,

We try to maintain a minimum parity between the salary of men and women.

Positive Impacts:

- It helps in improving overall working conditions for women
- Equal pay provides a better working environment where every individual can contribute equally.

Negative Impacts:

• The gender pay gap affects the motivation of the employee in work.

Weightage:

It is a reasonably necessary metric but has the most negligible effect on recruitment; therefore, we have assigned it 5% weightage.

6. Employee training:

Employee training is a program that aims to improve technical skills, knowledge, efficiency, and value creation so that employees can perform their jobs more effectively. We have included employee training in our hiring metrics, decreasing accidents, better productivity, improved employee morale, declining supervision, probability of promotion, etc.

Positive Impacts:

- It is crucial for increasing the job quality of employees at all levels of a business.
- More training is required when an individual is transferred from one assignment to another of a different type.

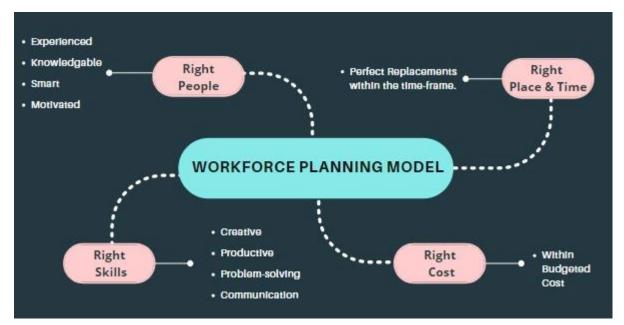
Negative Impacts:

• It requires high cost and time away from work.

Weightage:

It is one of the most critical metrics. When a new employee joins an organization, he needs to know the work culture, project, and tools on which they will work. We have assigned a weightage of 25% to this model.

2nd i.e. Workforce planning metric:



Workforce planning analyses existing employees and planning for future staffing requirements through talent gap assessment, developing employee management procedures, and setting recruitment strategies.

We have categorized the workforce planning into four categories:

• Right people:

In developing the workforce plan model, selecting the right sets of people is one of the most crucial factors. An organization can only benefit from the individual only when he is experienced, knowledgeable, motivated, and intelligent.

• Right place and time:

In our workforce model, we have ensured that organizations have available necessary hours to meet business requirements and have available resources when they are needed without any delay.

Right skills:

There is an emphasis on immediate and future anticipated right-skilled people for any requirements.

• Right cost:

Proper cost planning in an organization is drastically cutting resource-related expenses. It can be accomplished by assigning the proper resource to the project (no under/over skilled), using global resources from a low-cost location, avoiding over/under resource allocation, etc.

3rd i.e. Attrition:

Major attention required on these Attrition Metrics:

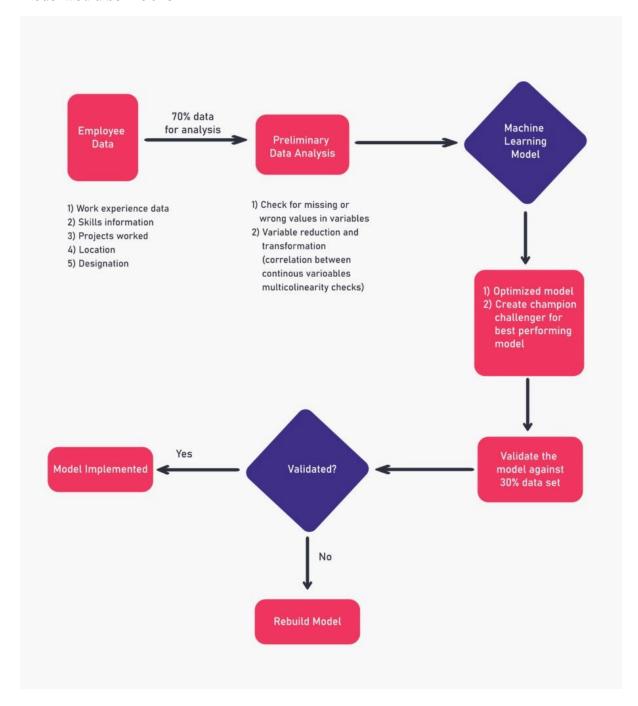


We have to carefully examines all the metrics and figure it out what are the most critical ones.

Just to explain the model we have taken these metrics for accessing the present working performance of the existing employees:

- Work experience data
- Skill Information
- Project worked
- Location
- Designation

Model would be like this:



The further steps involved are:

- 1. We import the raw data in the data frame form and filter out the necessary or working values in variables. We also try to make variable reduction by factor analysis using algorithms like PCA (Principal Component analysis).
- 2. Then, the next step is to apply a machine-learning algorithm to train our model, which can be used in the upcoming year to predict which employee has the higher score to leave the organization.

3. The test and train dataset is split into three are to seven ratios for optimal results.

4. Our model is ready to predict attrition.