

# HR Analytics: A Tool for Strategic Workforce Planning

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## Abstract

This research paper aims to analyze and find out the present status of Human resource professionals who are an importance source for Human Capital Investment, to also act as strong competitive advantage for organizations which helps them in surviving in long run. The role played by Human Resource is critical in any industry. This study aims in providing clear insights in understanding the role played by Human Resource at IT industry. So as to prove their talent an IT employee should possess strong technical skills, interpersonal skills, creativity, determination, leadership skills, presentation skills, multi tasking etc. If talented are not equipped with sufficient talent that can create lot of impact towards organizational outcomes. If labor market has an aim in recruiting talented professionals only then there would be shortage of qualified, suitable and prospective employees. Majority of population in Hyderabad has their graduation in engineering but then most of them are unemployed. Hence selecting talented candidates, retaining them is a tough task for HR Professionals. So recruiting, selection of talented candidates through written test followed by interview will not be enough in present competitive scenario. Creativity and advancements are the toughest task to employers to face the competitors. This demands the organizations in mastering the art & science of HR analytics by implementing statistical techniques. With help of various analytics techniques human resource plan can be made in systematic and strategic way by organizations as Human resource are important for the employers to be successful.

**Keywords:** Human Resource professionals, HR Analytics, Organizations, Talented & qualified candidates, Strategic Workforce.

## Introduction

HR analytics is an area in the field of analytics that mainly deals with people analysis and applying analytical process to the human capital within the organization to improve employee performance that leads to employee retention. The main important goal of HR Analytics is to reach business goals efficiently and effectively.

Human Resource professionals are positioned to impact business results by leading and supporting change initiatives, fact-based decision making, and systematic processes and programs. Identifying the specific challenges in one's own organization, then measuring and

evaluating the best metrics to measure successful change are optimal ways to build business acumen and drive positive business results.

Today most of the companies are facing complex workforce questions like how to hire right candidate, how to engage and retain talented employees, how to offer unique developmental opportunities and whom to promote. Organizations are much more willing now to offer great learning and developmental experience for human resource now. But in understanding the needs, to meet the expectations need for HR Analytics is really essential.

One of the challenge of HR Analytics is not only to gather the database of employees but also how to make utmost use of the data that will be collected, model it, to predict their level of performance so that the organizations gain maximum return on investment on its human capital.

Human Resource analytics opens door to a new era of human resources. We should not reinvent the wheel, but we should foster exchange and knowledge transfers with other business functions. Combining data-driven insights with a human touch, we can reimagine the smart workplace of the future and gain valuable insights on how to hire the right candidates, how to engage and retain employees, who to promote, and how to offer unique development opportunities. A lot of HR challenges can be resolved by becoming more data-driven and analytical savvy.

### **Example questions include**

- How high is your annual employee turnover?
- How much of your employee turnover consists of regretted loss?
- Can you identify which employees are most likely to leave your company within a year?

Most HR Professionals can easily answer the first question. But to answer the second question HRIS & Performance Management systems. To answer third question HR Professionals need more data and should also extensively analyse it well. HR analytics is just not to deal with data but also to make relevant decisions on how to improve the existing processes and systems. Establishing a relationship between what HR does & organizational output hence creating strategies based on the information gathered all about HR Analytics.

### **Literature Review**

Because HR Analytics is a fairly novel topic, it is still left unexplored during the times of scientific literature. According to (Heuvel & Bondarouk, 2016), “HR Analytics is a systematic identification, quantification of the human resource motives of organizational output.” In other words it is data driven approach towards Human Resource Management.

Over the past 100 years Human Resource Management has changed and that moved from an operational discipline towards more tactical discipline. Popularity of the term Strategic Human Resource Management exemplifies this. The data driven approach that characterizes HR analytics is in line with this development.

HR analytics guides human resources by tracking projects, absenteeism, monitoring and managing schedule assignment, and tracking performance of each employee. (Bartels S, Jay Richey J,2008). Workforce Analytics is the ultimate tool for making strategic workforce plan. HR Analytics today is targeting critical workforce metric that links workforce strategy to business results that finally provides HR a seat at the table and the integrity to make business and workforce strategy decisions by identifying cost saving opportunities, improving retention of key talent thereby increasing employee productivity, efficiency (Higgins J., Cooperstein G and Peterson M, 2011). Organizations that are capable of leveraging in data driven decision making for the workforce not only out perform their contenders, but also profit higher value among shareholders, to be in better place so as to meet employee and business requirements for future.

Google has reached extraordinary success among marketplace by focusing on strategic focus on people management (Sullivan J, 2013). In the article “How Google is using people analytics to completely re-invent HR” explains how Google has reinvented their focus to people management which has in turn helped them to become No. 1 spot in the list of top successful ten companies. It also explains how by re-aligning their HR strategy Google has changed its face of productivity.

### **Need and Importance of the Study**

Transferring and sharing of data has become easy in today’s technologically driven world. The amount of data collected increases overtime, but the collected data has to be effectively utilized and has to be transformed into effective information which helps in functioning of an organization. It helps in answering many valuable questions such as – No. of people to be recruited, Compensation to be paid. Human resource is considered as important assets for any company that cannot be replicated. Using HR analytics, HR manager can get necessary required information that helps him for analyzing futuristic decision-making purpose. Therefore, impact of human resource for an Organization can be easily analyzed through HR analytics.

### **Objectives of the Study**

- To identify factors impacting towards enhancing and improving productivity of a company.
- To evaluate by means of what HR analytics helps in reducing employee attrition in IT companies in Hyderabad.
- To understand overall employee satisfaction levels.

## Research Methodology

The data has been collected from across all the core HR processes – Job Analysis to off boarding.

## Research Design

The study is descriptive in nature. HR Professionals working across various IT Companies in Hyderabad. Random sampling method is chosen for the study.

## Sample Size

From the population, 10% of companies are chosen based on Random sampling. Due to availability & time constraint, the sample size is 500. The questionnaire is administered to HR professionals working for IT companies in Hyderabad.

## Data Analysis Tool

One Way ANOVA technique is used for analysis in this study.

## Hypothesis

H<sub>0</sub>: There is no significant difference between the respondent's opinion.

H<sub>1</sub>: There is significant difference between the respondent's opinion.

## Data Analysis

S. No.	Variable	P-value	Null Hypothesis
1	Process of recruitment	0.6122	Accepted
2	Job Security Threats	0.3277	Accepted
3	High Targeting	0.4861	Accepted
4	Targeting without assessing Employee potentials	0.6492	Accepted
5	Inefficiency in Scientific Training	0.9753	Accepted
6	Switching off Jobs	0.6118	Accepted
7	Lack of Role Clarity	0.6118	Accepted
8	Lack of Delegation	0.7474	Accepted

9	Criteria of Promotion	0.4759	Accepted
10	Grievance Redressal Mechanism	0.8544	Accepted
11	Poor relationship with supervisors	0.9753	Accepted

### Findings

An employee after entering into an organization look for job security that leads towards their quality of life otherwise their interest levels are not much towards the work. We can see that the human resource is given work assignments without assessing potentials that leads to decrease in their qualitative work along with dissatisfaction. Training provided to the human resource should match with the work profile.

### Conclusion

Increasing global competition and various changes in technology are forcing the organizations to change their strategies at various levels. There is need for every company to align their HR strategy with goals of the organization. The companies need to make an upper hand over their competitors need to establish HR analytics for gaining accurate and precise information. A well designed HR analytics facilitates various methods and techniques for understanding, linking and measuring on an employee level to key performance indicators, identify how HR strategies, policies, systems leads to improvement in organizational level. HR analytics also tries to identify gaps associated with present practices, future practices in a company so as to bridge the gap and hence leads in accountability in human resource management.

### Bibliography

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## Annexure

## Process of Recruitment

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	1666.8	3	555.6	0.619950904	0.61220594	3.238871522
Within Groups	14339.2	16	896.2			
Total	16006	19				

## Job Security Threats

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	792	3	264	1.240893	0.327699	3.238872
Within Groups	3404	16	212.75			
Total	4196	19				

## High Targeting

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	632.4	3	210.8	0.851373	0.486063	3.238872
Within Groups	3961.6	16	247.6			
Total	4594	19				

## Targeting without assessing Employee potentials

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	1282	3	427.3333	0.559703	0.649243	3.238872
Within Groups	12216	16	763.5			
Total	13498	19				

## Inefficiency in Scientific Training

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>

Between Groups	33.2	3	11.06667	0.06958	0.975348	3.238872
Within Groups	2544.8	16	159.05			
Total	2578	19				

**Switching off Jobs**

## ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	434.95	3	144.9833	0.620648	0.611787	3.238872
Within Groups	3737.6	16	233.6			
Total	4172.55	19				

**Lack of Role Clarity**

## ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	434.95	3	144.9833	0.620648	0.611787	3.238872
Within Groups	3737.6	16	233.6			
Total	4172.55	19				

**Lack of Delegation**

## ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	325.2	3	108.4	0.410839	0.747424	3.238872
Within Groups	4221.6	16	263.85			
Total	4546.8	19				

**Criteria of Promotion**

## ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	1023.4	3	341.1333	0.872352	0.475886	3.238872
Within Groups	6256.8	16	391.05			
Total	7280.2	19				

**Grievance Redressal Mechanism**

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	402.95	3	134.3167	0.258128	0.854443	3.238872
Within Groups	8325.6	16	520.35			
Total	8728.55	19				

**Poor relationship with supervisors**

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	33.2	3	11.06667	0.06958	0.975348	3.238872
Within Groups	2544.8	16	159.05			
Total	2578	19				