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## A study on application of Artificial Intelligence and its challenges in HR

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### ABSTRACT

Artificial Intelligence is replication of human intelligence where it thinks like a human. it is also known as Machine learning. Artificial intelligence in Human Resource creates an opportunity for an organization personnel to improve their working involvement. The effective implementation of artificial intelligence application is innovative technology development in the organization. The primary objective of this research paper is to study the application of artificial intelligence and to measure the impact of artificial intelligence in HR. Artificial intelligence in Human resource is innovative technique which can helps to handle the different kinds of activities easily namely recruiting, retaining and so on,. This paper will give overview of artificial intelligence application in HR and challenges which were facing by the organization for the its effective implementation by collecting the data both from primary source as well as secondary source and gives suggestion for the better performance of artificial intelligence in HR.

### Introduction

Artificial intelligence is imitation of human intelligence in machine which are planned to act like humans and imitate their action. Human resource management is a process of managing the workers, working traditions and maintaining of working environment. Primarily, the Human Resource department spotlight on recruitment, hiring and training and development programmes of employees. So, the application of artificial intelligence in HR helps human resource manager to work easily and cost effectively and it also saves time and manpower. Now days the application of Artificial intelligence is becoming trend setter in all over the sectors namely, financial institutions (banking), telecommunications, Educational institutions and

Corporation sectors. In recent days the most of the corporate sectors focusing on application of Artificial Intelligence in HR department for effective work performance. Application of artificial intelligence in human resource department makes the work easier, simple and smoother. Implementation of artificial intelligence is not easy task. Adoption of artificial intelligence is one of challenging task at work place. For the application of artificial intelligence in HR requires skilled manpower to deal with it and for its effective usage one should have knowledge of technology and way of using it. Sometimes lack of technology knowledge, lack of data privacy and lack of security issues may impact negatively on the HR department and it becomes costly too. Hence for the effective usage of artificial intelligence in HR, organization must recruit the person one who has required skill for better performance.

### Review of Literature

- According to **Martincevic and Kozina (2019)** “paper has shown the variety of challenges which are facing after adoption of artificial intelligence. This paper also revealed that company should train employees to work with automation of machines”.
- According to **Buzko et.al (2016)** “Artificial Intelligence in human resource development paper revealed that the application of artificial intelligence in HR facilitates organizations to work effectively and it also provides accurate data”.
- According to **Vivek yawalkar (2019)** “this researcher used secondary data and the paper concluded that application of artificial intelligence helps human resource department to work effectively and it also helps in the human resource activity like recruiting, hiring, training and development programme”.
- **According to villain (2018)** “Artificial Intelligence is art of learning, reasoning, perceiving and critical thinking which aims to imitate human intelligence using programme of computer”.
- **According to daceport (2019)** “Artificial intelligence helps to minimize the work being done in HR function it is still far away from replacing the HR personnel completely because of persistent need for human intervention while dealing with employees”.

### Objectives

1. To know the Concept of Artificial Intelligence in HR.
2. To study the application of Artificial Intelligence and its impact on HR department.
3. To study the challenges of application of Artificial intelligence.
4. To measure the performance of artificial intelligence in HR.

### Scope of the study

This Research paper titled “**A study on application of Artificial Intelligence and its challenges in HR**” limits its scope to the HR professionals and Company employees in Bangalore city. Further this study restricted to the companies which are following artificial intelligence in HR.

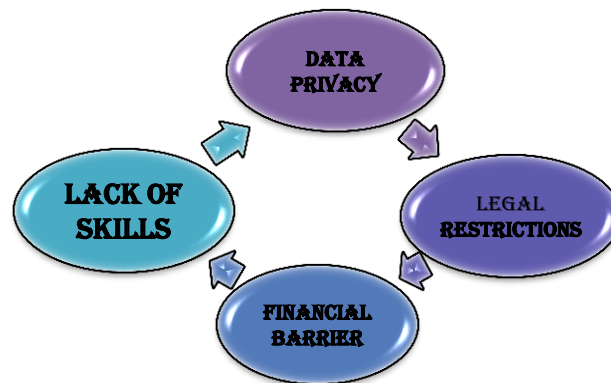
### Need for the study

This study analyses the need of Artificial Intelligence in administrating activities in the area of training and development, recruitment, automation of research and development and so on. It also aims to study the influence of artificial intelligence and its impact in HR department. AI has created a break through innovation in which it helps in real time decision making and also helps HR department to analyse their resources skills and recommended training module based on their job.

### Research methodology

The data required for this study is gathered from using both primary and secondary source. This study takes up under descriptive method of research. The primary data for the study collected through the set questionnaire with open ended and close ended questions and secondary data for the study collected from the various sources like journals, research papers and website and sample size limited to descriptive research.

### Challenges of AI in HR



**1. Lack of skilled employees:** Implementation of artificial intelligence in human resource department is not an easy task. As it is new technology it requires skilled and trained personnel in HR department for the effective result and for better performance. So, organizations must consider this factor at the time of implementation of Artificial Intelligence in HR.

**2. Financial barrier:** Another challenge in implementation of artificial intelligence is finance. For effective implementation of AI, an organization needs large amount of funds for its implementation and for effective operation in HR and its possible only in medium and large-scale companies. In case of small-scale business its highly impossible due lack of finance.

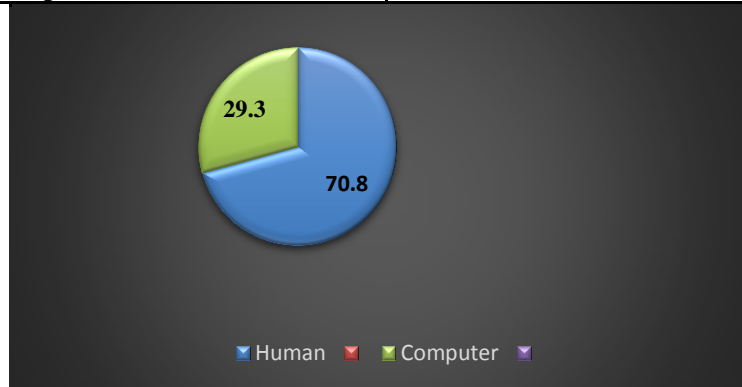
**3. Data privacy:** Another challenge of adoption of AI is data Privacy. HR professionals must pay utmost attentions towards maintaining secrecy or privacy of data of the employees. A small amount of negligence in marinating secrecy of data may cause massive damages. Hence an organization recruits a person one who has very good experience with technical skills.

**4. Legal restrictions:** One cannot adopt artificial intelligence very easily. It requires to meet some of legal conditions before implementation of artificial intelligence and it must follow the ethics also.

### Analysis of data

**Table 1 : showing the interview process preferred by respondents**

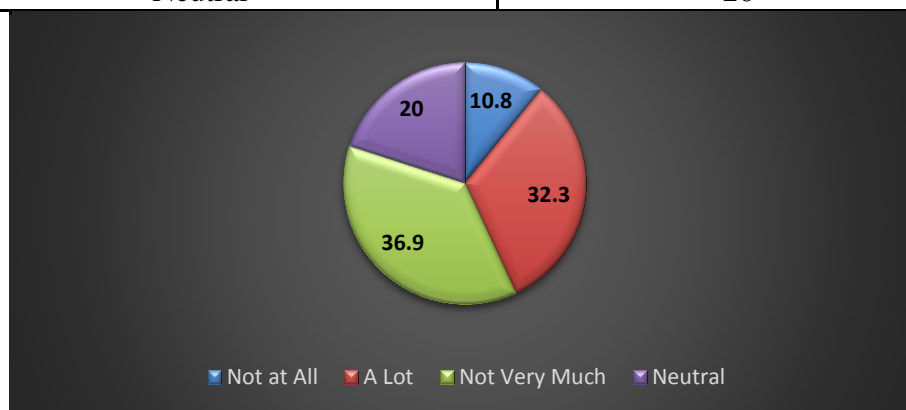
Respondents	Percentage
Human	70.8
Computer	29.3



The above chart Depicts that majority i.e., 70.88% of the respondents prefer Human based Interview & 28.13% likes computer Interview. It clearly states that Human Interview has less tendency of making errors than computers-based interview.

**Table 2: . showing that how has Artificial Intelligence impacted on Job?**

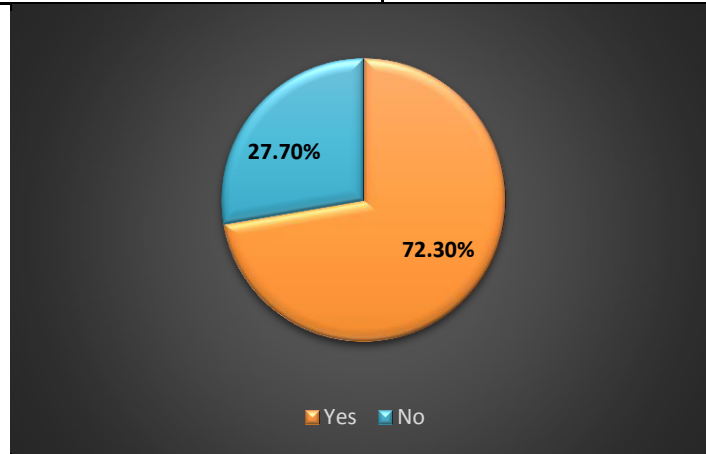
Respondent	Percentage
Not at All	10.8
A Lot	32.3
Not Very Much	36.9
Neutral	20



The above chart reveals that most of the respondents were satisfied with Artificial Intelligence i.e. 37% and 10.9% of respondents were not all happy with Artificial Intelligence on their job because on one hand application of AI reduces times, cost and manpower. on other hand application of AI in HR is costly and requires skilled workers.

**Table 3: Will Artificial Intelligence make Recruiting Cheaper**

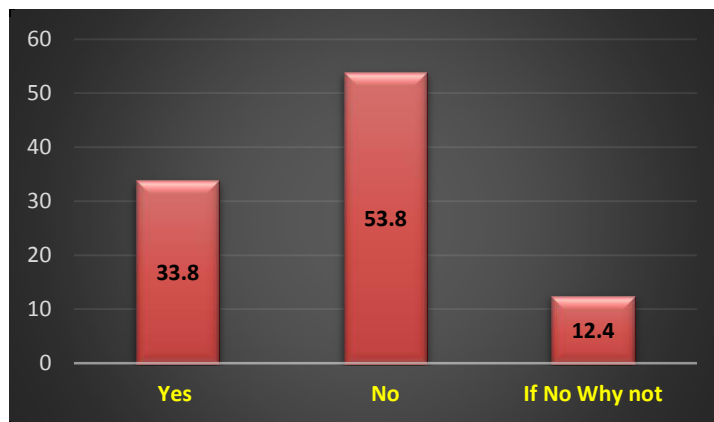
Respondents	Percentage
Yes	72.30%
No	27.70%



The above table and chart depict that most of the respondents i.e. 72.30% opined that recruitment process becomes cheaper when HR department starts to use Artificial Intelligence as it reduces the other miscellaneous expenses of the HR department in the organization.

**Table 4 : Do you think that AI will substitute HR Jobs completely**

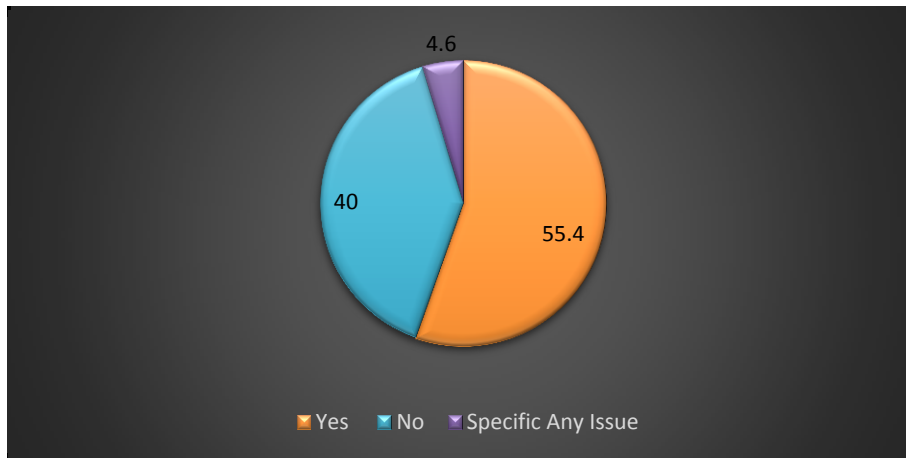
Respondent	Percentage
Yes	33.8
No	53.8
If No Why not	12.4



The above chart reveals that around 53.8% of respondents felt that AI cannot replace HR jobs completely because human interaction is required to understand the situation and emotions of employees which computers cannot do. but application of Artificial Intelligence in HR makes recruitment and training function easier as well as smoother.

**Table 5: Do you think trust issue may arises after implementation of Artificial Intelligence in HR**

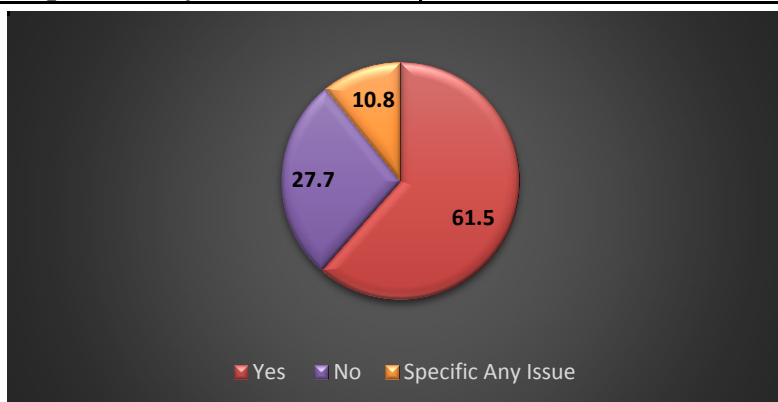
Respondent	Percentage
<b>Yes</b>	<b>55.4</b>
<b>No</b>	<b>40</b>
<b>Specific Any Issue</b>	<b>4.6</b>



The above charts depicts that the respondents (55.38% ) feels that there will be chances of arising trust issues inside the organization among the employees. because there is a chances of data hacking, cyber theft and so on ., hence organization must recruit skilled HR Professional to deal with things.

**Table: 6 DO you think Application of AI is beneficial in HR functions**

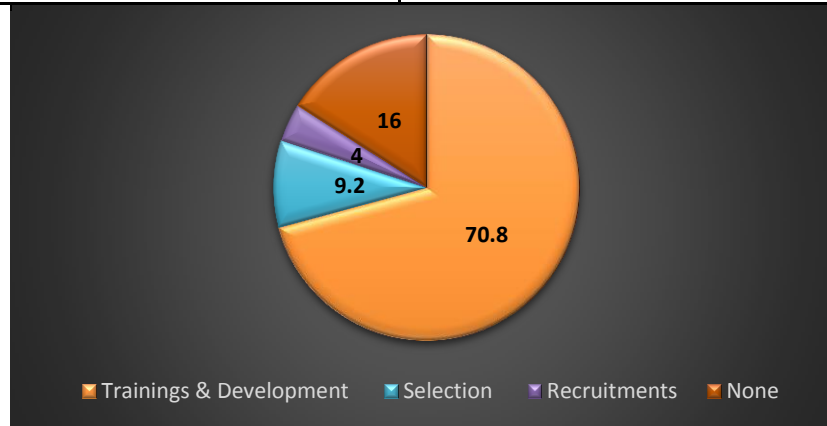
Respondents	Percentage
<b>Yes</b>	<b>61.5</b>
<b>No</b>	<b>27.7</b>
<b>Specific Any Issue</b>	<b>10.8</b>



The above chart reveals that 61.54% of respondents agreed that application of AI is beneficial to the organization in various manner. Remaining 27.7 % of respondents are not agreed with the statement as it reduces manpower in organization and create less job opportunity. .

**Table 7 :In what area are you currently using Artificial Intelligence**

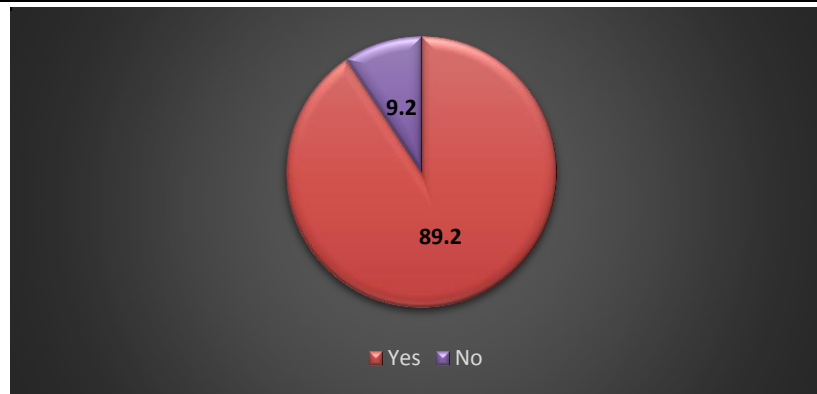
Respondents	Percentage
Trainings & Development	70.8
Selection	9.2
Recruitments	4
None	16



The above chart depicts that around 70.77% of the respondents are using Artificial Intelligence in the area of Training & Development, 9.23% uses for area of selection , 6.15% of respondents are using AI for recruitment and others making use of Artificial Intelligence for automation, warehouse & R & D.

**Table 8 Do you think that, has technology reduce time**

Respondents	Percentage
Yes	89.2
No	9.2

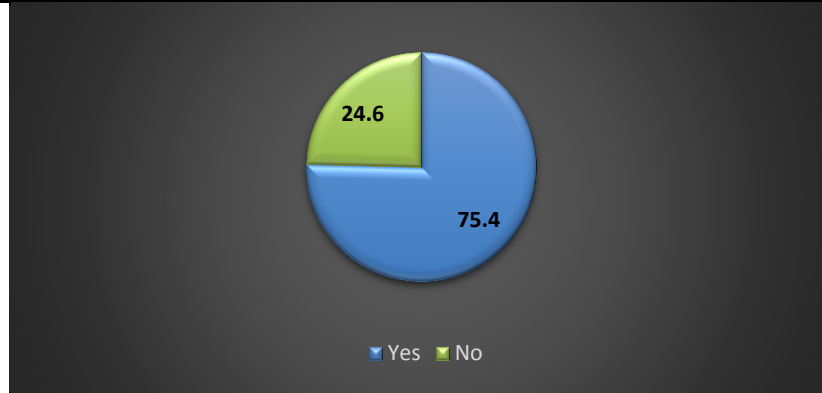


The above table and chart depicts that majority of the respondents feels that the amount of time spend on unnecessary task and Human errors can be reduces by upgrading new technology and others not agreed with this statement.

**Table 9 Have you noticed any kind of discrimination using Artificial Intelligence in your Origination ?**

Respondents	Percentage
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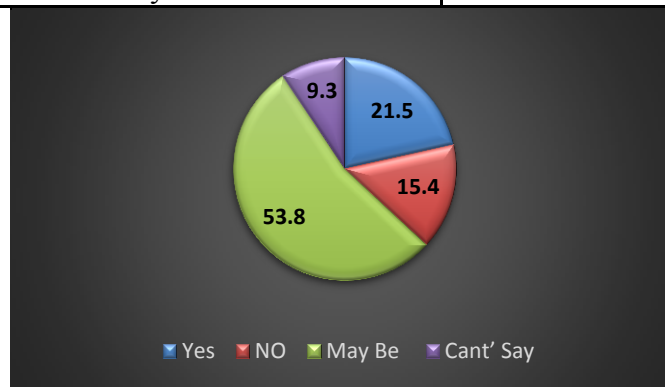
Yes	75.4
No	24.6



The chart tells that, we can easily interpret that working people in the organization are finding kind of discrimination after application of AI particularly respondents felt that Artificial Intelligence has discriminated employees specially women, to open up new carrier prospect. 75.4% of respondents as shifted inevitability of Artificial Intelligence in organization.

**Table 10: Do you that company would need less HR Professional If, AI implemented in HR ?**

Respondents	Percentage
Yes	21.5
NO	15.4
May Be	53.8
Cant' Say	9.3



The above chart tells that 53.8% of respondents agrees that the company would require less HR Professionals when Artificial Intelligence is implemented in organization.

**Findings**

1. Most of the respondents prefer human interview than computer
2. Majority of the respondents felt that application of Artificial Intelligence not very much impacted on job.
3. Most of them feels that Artificial Intelligence makes recruitment cheaper.
4. This study reveals that Artificial Intelligence will not substitute or replace HR jobs completely
5. The research paper reveals that there is chances of arising of trust issue among



working employees in the organization after implementation of Artificial Intelligence in HR.

6. More numbers of respondents opined that an HR department as well as an Organization can enjoy the benefits of Artificial Intelligence in the HR department.
7. Through the research of this study we found that Artificial Intelligence is using more in training & development area.
8. Yes, most felt that the technology has reduced time.
9. Most of the respondents have noticed the discrimination in their organization using Artificial Intelligence.
10. Application of Artificial Intelligence in HR makes less requisition of HR professionals in the organization.

### **Suggestions**

1. This study suggested that Artificial Intelligence can also be used in Automotive and Warehouse department other than training and development department
2. On one hand using of Artificial Intelligence in HR can enjoy the benefits but on other hand it will violate privacy of data. Hence Organization must take precautionary measures to overcome from privacy issues before implementation of AI
3. Artificial Intelligence cannot be used in all sectors as it leads to social economic inequality.
4. This study would like to suggest that an organization must recruit well trained and skilled employees for better performance of artificial intelligence.
5. It is not always possible to implement Artificial Intelligence in HR as it leads to Human Bias.
6. The effective implementation of AI in HR enhances employees' engagement at work place.

### **Conclusion**

From the above study we can conclude that application of Artificial Intelligence in HR improves productivity, activity of analysing resources and also helps the HR department to save time as most of the work can be performed through AI. The effective implementation of AI makes the employees to engage more in the work. AI plays an important role in the area of recruitment, training and development, hiring, collecting of data of employees' performance and also an important role in analysing the performance of employees.

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