

A STUDY ON THE ROLE OF ARTIFICIAL INTELLIGENCE IN E-RECRUITMENT IN IT INDUSTRIES CHENNAI

Submitted in partial fulfillment of the requirements for the award of

MASTER OF BUSINESS ADMINISTRATION

by

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SCHOOL OF MANAGEMENT STUDIES

SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

**Accredited with Grade "A" by NAAC | 12B Status by UGC | Approved by AICTE
JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI - 600 119**

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BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **ASHWITH ILAVARASI F 40410027** who carried out the project entitled "**A Study on the Role of Artificial Intelligence in E-Recruitment IT Industry of Chennai**" under my supervision from January 2022 to March 2022.

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Submitted for Viva voce Examination held on _____

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DECLARATION

I **ASHWITH ILAVARASI F (40410027)** hereby declare that the Project Report entitled **“A Study on the Role of Artificial Intelligence in E-Recruitment IT Industry of Chennai”** done by me under the guidance of **DR.J.RANI** is submitted in partial fulfillment of the requirements for the award of Master of Business Administration degree.

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ASHWITH ILAVARASI F

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ABSTRACT

In the competitive world Diligence, collect the accurate data and anatomized the collected data for the use of companies growth and daily working is essential. Artificial Intelligence helps the assiduity to work in briskly way and effective way to complete the work. Artificial Intelligence is entering into colorful department like mortal resource department, finance department, marketing and product department. With using AI system Association can suitable to inform the being performance and day-to- day functions. In business pressure has been adding, tough directors understood the significance of artificial intelligence at plant. The exploration paper is descriptive in nature. The experimenter was used secondary data where the data was collected from exploration papers, publications, websites, HR blogs, check reports etc. The core Ideal of the study was examine the part of artificial intelligence in mortal resource department and understand the challenges in HR department. The exploration study has concluded that a part of AI is larger into colorful functions carried out in mortal resource department where by robotics companies can handle reclamation, hiring, as saying the data, collecting the data, reducing workload at plant and enriching Plant effectiveness.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Artificial Intelligence is a remarkable advance in technology proliferation. Indeed, the term AI isn't confined to just a single description, but also it's defined and interpreted else by different fields. It's programmed in such a way that it can suppose and act like mortal beings (logic) do. This simple description of AI mentioned above fits any machine or device that can suppose and bear like mortal intelligence while learning and working a specific problem. In other words, AI can be described as technologies that emulate natural intelligence, yet the term AI is much broader than it's complicated to explain what's meant by it, what value AI brings, and how it can be applied.

The part of technologies in operation has been honored for quite some time. Innovation in operation practices is ineluctable and decreasingly significant for associations to attain a competitive edge and sustain rapid-fire changes in the terrain. Present- day association deal with the massive size of data and information, and the associations must transfigure them tone digitally and calculate upon technology like AI. Due to this reason, AI currently has come a mainstream element in the operation of companies, which has not only changed the way people work but has wholly shifted the business models. The Human Coffers sphere isn't vulnerable to this script, and it must also jump on the crusade of disruptive technologies or be disintegrated.

To manage with capability and knowledge challenges associated with AI technologies, new strategic and holistic mortal resource operation are demanded in associations. The purpose of man- machine collaboration in the HR department isn't to put humans out of work; rather brings a radical functional shift in the way associations retain, learn & develop people and restructure daunting HR processes high- speed and fluently. We're witnessing major displacing and revolutionizing in worker's job nature and skillset needed within associations. AI acts as a significant player in transubstantiating the HR functions, which have backed the HR people, workers, and associations. AI technologies are being

employed by associations to automate repetitious tasks and help in complex strategic opinions fleetly and more directly through prophetic algorithms. Only in recent days, an increased number of associations are showing interest in applying AI technologies in HR practices, similar as Reclamation, Seeker Webbing, and Selection. Leading and well- established companies are formerly using AI technologies to enhance effective decision- making and give prophetic analytics to all the workers. In simple words, AI- equipped associations can sustain the ferocious competition in the request, and also, the associations can enjoy functional excellence overall.

Technology is one of the major influential factors in an Assiduity. Since the 19th century, the part of robot has been replacing workers in product department. In third revolution began in the time of 1970s particular computers and the internet entered into working life and mortal labor were replaced by the machines. Now a day digital technologies like machine language (ML) and artificial intelligence (AI) both are entering into day to day working at plant and which will lead metamorphosis in business. Artificial intelligence is defined as “an ideal intelligent machine that's flexible agent that perceives its terrain and takes conduct that maximize its chance of success at something.” Artificial intelligence is an intelligence that demonstrated by machine, in discrepancy to the natural intelligence done by humans. Artificial intelligence was chased first time in academics in 1956. Artificial intelligence is helpful in colorful business functions where it can help to reduce the workload and work pressure on the workers at plant. Rapid changes in business requirements fast response.

With using AI system association can suitable to inform the being performance and day to day function. In business pressure has been adding, tough directors understood the significance of artificial intelligence at plant. Now a days artificial intelligence has entering into the overall system of an association and one of the area is mortal resource department where by using AI system mortal replaced the mortal and all functions in mortal resource department is carried like seeker webbing, reclamation, alignment of mortal resource activates and performance operation etc.

1.1.1 Recruitment types

For any association, reclamation is a pivotal part of developing and maintaining an effective and effective platoon. A good reclamation strategy will cut down the destruction of time and plutocrat, which would have incurred for expansive training and development of unqualified coffers. Babe use different styles to source, screen, shortlist, and elect the coffers as per the conditions of the association. Reclamation types explain the means by which an association reaches implicit job campaigners.

Sources of Recruitment

In this chapter, we will exfoliate some light on the secrets of hiring and retaining styles, used by the babe. Reclamation is astronomically classified into two different orders – Internal Sources and External Sources.

Internal Sources of Recruitment

Internal sources of reclamation relate to hiring workers within the association internally. In other words, aspirants seeking for the different positions are those who are presently employed with the same association. At the time reclamation of workers, the original consideration should be given to those workers who are presently working within the association. This is an important source of reclamation, which provides the openings for the development and application of the being coffers within the association. Internal sources of reclamation are the stylish and the easiest way of opting coffers as performance of their work is formerly known to the association. Let us now bandy more on the colorful internal sources of reclamation.

Promotions

Promotion refers to upgrading the skeleton of the workers by assessing their performance in the association. It's the process of shifting an hand from a lower position to a advanced position with further liabilities, remuneration, installations, and status. Numerous associations fill the advanced vacant positions with the process of elevations, internally.

Transfers

Transfer refers to the process of changing from one job to another without any change in the rank and liabilities. It can also be the stirring of workers from one

department to another department or one position to another position, depending upon the demand of the position. Let's take an illustration to understand how it works. Assume there's a finance company called ABC Ltd. Having two branches, Branch-A and Branch-B, and an hand from Branch-A abnegated from his job liabilities. Hence, this position has to be filled for the durability of the design in Branch-A.

In this script, rather of searching or sourcing new campaigners, which is time consuming and precious, there's a possibility of shifting an hand from Branch-B to Branch-A, depending upon the design conditions and the capabilities of that separate hand. This internal stirring of an hand from one branch to another branch is called as Transfer.

Recruiting Former Employees

Recruiting former workers is a process of internal sources of reclamation; wherein theex-employees are called back depending upon the demand of the position. This process is cost effective and saves plenitude of time. The other major benefit of retaining former workers is that they're veritably well clued with the places and liabilities of the job and the association needs to spend lower on their training and development.

Internal Advertisements (Job Posting)

Internal Announcements is a process of advertisement/ advertising jobs within the association. This job advertisement is an open assignation to all the workers inside the association, where they can apply for the vacant positions. It provides equal openings to all the workers working in the association. Hence, the reclamation will be done from within the association and it saves a lot of cost.

Employee Referrals

Employee referrals are an effective way of sourcing the right campaigners at a low cost. It's the process of hiring new cofferers through the references of workers, who are presently working with the association. In this process, the present workers can relate their musketeers and cousins for filling up the vacant positions.

Associations encourage hand referrals, because it's cost effective and saves time as compared to hiring campaigners from external sources. Utmost associations,

in order to motivate their workers, go ahead and award them with a referral perk for a successful hire.

Previous Applicants

Here, the hiring platoon checks the biographies of former aspirants from the organizational reclamation database. These aspirants are those who have applied for jobs in the history. These coffers can be fluently approached and the response will be positive in utmost of the cases. It's also an affordable way of filling up the vacant positions.

Pros and Cons of Internal Sources of Recruitment

An internal source of reclamation, i.e., hiring workers within the association, has its own set of advantages and disadvantages. The advantages are as follows

- It is simple, easy, quick, and cost effective.
- No need of induction and training, as the campaigners formerly know their job and liabilities.
- It motivates the workers to work hard, and increases the work relationship within the association.
- It helps in developing hand fidelity towards the association.

The downsides of hiring campaigners through internal sources are as follows

- It prevents new hiring of implicit coffers. Occasionally, new coffers bring innovative ideas and new thinking onto the table.
- It has limited compass because all the vacant positions can not be filled.
- There could be issues in between the workers, who are promoted and who are not.
- If an internal resource is promoted or transferred, also that position will remain vacant.
- Workers, who aren't promoted, may end up being unhappy and demotivated.

External Sources of Recruitment

External sources of reclamation relate to hiring workers outside the association externally. In other words, the aspirants seeking job openings in this case are those who are external to the association. External workers bring ingeniousness and fresh

studies to the association. Although hiring through external sources is a bit precious and tough, it has tremendous eventuality of driving the association forward in achieving its pretensions. Let us now bandy in detail the colorful external sources of reclamation.

Direct Recruitment

Direct refers to the external source of reclamation where the reclamation of good campaigners is done by placing a notice of vacancy on the notice board in the association. This system of sourcing is also called as plant gate reclamation, as the blue-collar and specialized workers are hired through this process.

Employment Exchanges

As per the law for certain job vacuities, it's obligatory that the association provides details to the employment exchange. Employment exchange is a government reality, where the details of the job campaigners are stored and given to the employers for filling the vacant positions. This external reclamation is helpful in hiring for unskilled, semi-skilled, and professed workers.

Employment Agencies

Employment are a good external source of reclamation. Employment agencies are run by colorful sectors like private, public, or government. It provides unskilled, semi-skilled and professed coffers as per the conditions of the association. These agencies hold a database of good campaigners and associations can use their services at a cost.

Advertisements

Advertisement is the most popular and veritably important preferred source of external source of reclamation. The job vacancy is blazoned through colorful print and electronic media with a specific job description and specifications of the conditions. Using announcements is the stylish way to reference campaigners in a short span and it offers an effective way of screening the campaigners' specific conditions.

Let's take an illustration. Assume that there's a Deals Company called XYZ Ltd which has got a new design of dealing a product in a short span of time, as the competition is veritably high. In this script, choosing the specific reclamation plays a vital part.

Then the ideal type of reclamation which should be chosen is Announcement. Announcement is the stylish suitable practice for this kind of hiring, because a large volume of hiring in a short span can be done through Announcement only. Announcement is one of the dear way to retain campaigners, but when time and number are important, also announcement is the stylish source of reclamation.

Professional Associations

Professional associations can help an organization in hiring professional, technical, and managerial personnel; however they specialize in sourcing mid-level and top-level resources. There are many professional associations that act as a bridge between the organizations and the job-seekers.

Campus Recruitment

Campus recruitment associations can help an association in hiring professional, specialized, and directorial help; still they specialize in sourcing mid-level and top- position coffers. There are numerous professional associations that act as a ground between the associations and the job- campaigners.

Word of Mouth Advertising

Word of mouth is an impalpable way of sourcing the campaigners for filling up the vacant positions. There are numerous reputed associations with good image in the request. Similar associations only need a word-of- mouth advertising regarding a job vacancy to attract a large number of campaigners.

Pros and Cons of External Sources of Recruitment

An external source of reclamation, i.e., hiring workers outside an association, has both its benefits and downsides. The benefits are as follows

- It encourages new openings for job campaigners.
- Organization imprinting increases through external sources.
- There will be no biasing or partiality between the workers.
- The compass for opting the right seeker is more, because of the large number campaigners appearing.

The disadvantages of retaining through external sources are as follows –

- This process consumes further time, as the selection process is veritably lengthy.

- The cost incurred is veritably high when compared to retaining through internal sources.
- External campaigners demand further remuneration and benefits.
- To conclude, the HR department should be flexible enough to choose between internal or external styles of reclamation, depending upon the demand of the association.

1.1.2 Role of Artificial Intelligence in HR

Now a days HR department heading towards the digital revolution and using colorful system to simplify the coffers by using big data analysis, artificial intelligence, and pall computing. Utmost of the association has been using artificial intelligence or digital technologies in HR like chatbot, machines learning, and robot process robotization in mortal resource operation which support in reclamation, webbing, onboarding, and canvassing etc. Following are the part of artificial intelligence in mortal resource operation;

Reclamation

Associations like SAT, Facebook, GE are using digital technologies in webbing, interview, and identify the new gift for the reclamation process in an organizational. Through AI reclamation director can examine the operation and seeker can get quick response. Converse box system or automated answering machine plays essential part to break the quires and problems regarding the process of reclamation in an association.

Webbing and Interview Process

Artificial intelligence is helpful in automating the interview process by examining them with word or speech patterns examinations. Through Ay software digital interview can take place and AI also helps to ameliorate the seeker experience. Tools like Amy and Clara are used to scheduling interviews, working meetings.

Reduce Executive burden

In an association HR have to play multitasking places where using technology and Artificial intelligence companies try to reduce workload. AI provides results of problems and it helps to increase the effectiveness of HR in an association.

Opting

The experimenter has examined that through AI mortal resource director can suitable to trace right seeker in short time of span and technology will helps out to identify the suitable campaigners as per needed chops sets.

Reduce Demarcation

Currently, AI is being used to reduce the favoritism and will help to increase the translucency at plant. In such a way association can suitable to elect the capsule. AI operations can be used to dissect job descriptions.

Increase Effectiveness

Artificial Intelligence will helpful to reduce the redundancy of workers at plant. Colorful robotic task has been carried out to increase the effectiveness at plant. Robotic task includes collecting data, filing reports, copying data, relating needed data from available data, processing, collecting data for HR and payroll systems etc.

Enrich plant literacy

Now a day, computers and digital technology can do the behind the scenes part in assiduity. Through computers and ultramodern technology diligence can suitable to manage data analysis and give real- time feedback during training, revision of course of conduct grounded on progress and responses which diligence got. To save a time companies used Microsoft 365 which helps workers to work and increase the effectiveness at plant. AI tools like Engazify (To Give feedback), Obie and Niles (For knowledge sharing), Wade & Wendy (For Career advancement), and Duolingo (Learning sphere) are used.

1.1.3 Current Application of Artificial Intelligence

The acceptance of this innovative technology has been spreading its magic across numerous diligence. Incipency companies feel to be a colonist in exploiting the graces of this technology to produce an avenue to their business. Some of the

companies formerly enforced AI in the reclamation process have been dis- cursed below.

Skillate

SAP Labs incubation has AI platform enables them in surveying the resumes of the campaigners from the database through social media to validate theirbio-data to match their skillsets with job positions.

Hirevue

US- grounded Company applies video intelligence to dissect videotapeinter-views of campaigners and give employers more perceptivity to babe easing briskly opinions.

Canvassed

San Francisco grounded company series of automated webbing tools for programming tests, personality assessments, language chops where they suffer simulations before selection.

Entelo

It browses social biographies using prophetic algorithms to determine the most probable seeker to leave their current job.

Koru

Automated online gift webbing uses prophetic analytics and AI to ameliorate hiring issues in Investment banks.

Drone & Montage

These are teleconferencing AI-powered software to ease the babe to choose the suitable seeker through videotape conferencing for their process where there's provision for screening campaigners for face to face across colorful rounds of interviews for the better understanding of the campaigners.

Textio

It's grounded on the prophetic data analysis with respect to the implicit campaigners applying to the high profile jobs in which the software analysis the meaningful and common language style of patterns from the documents posted marching towards the delicacy of the prognostications grounded on the announcements posted by the companies.

Panna

It's an AI hiring depository of dynamic questions, expert evaluation, establishing the canvassing, videotape conferencing, voice and face recognition which is designed on the machine literacy to validate the aspirants' videotape interviews to descry any malpractice or strange movements, probing if someone is helping the seeker through other electronic bias offering intuitive interface.

Harver

Algorithms calculate the score of the seeker with respect to job biographies in line with the company's conditions easing to prognosticate the chances of named seeker succeeding the part after being signed grounded on which the company can make wise opinions before hiring.

1.2 STATEMENT OF THE PROBLEM

- Attrition has always been a pain point to utmost the associations which causing a huge loss in terms of cost, coffers, quality workers and taking a reversal in knowledge sharing or downloading to the new workers.
- Hence the need of the hour is emphasizing the reduction in the cost of reclamation and adding productivity with better quality.
- This can be achieved by enforcing artificial intelligence in mortal resource reclamation.

1.3 INDUSTRY PROFILE

India is is the world's largest sourcing destination for the information technology (IT) assiduity, counting for roughly 67 per cent of the US\$ 124-130 billion request. The assiduity employs about 10 million workforces. More importantly, the assiduity has led the profitable metamorphosis of the country and altered the perception of India in the global frugality. India's cost competitiveness in furnishing IT services, which is roughly 3-4 times cheaper than the US, continues to be the dependence of its Unique Selling Proposition (USP) in the global sourcing request. Still, India is also gaining elevation in terms of intellectual capital with several global IT enterprises setting up their invention center in India. Information technology in India

is an assiduity conforming of two major factors-IT Services and business process outsourcing (BPO).

The major metropolises that regard for about nearly 90 of that sector's exports are Bengaluru (Bangalore), Pune, Mumbai, Noida, Chennai, Kolkata, Trivandrum, Hyderabad, Jammu & Kashmir. Bengaluru is considered to be Silicon Valley of India because it's the commanding IT exporter. Exports dominate the assiduity and constitute about 77 of the total assiduity profit. Still, the domestic request is also significant with a robust profit growth. The assiduity's share of total Indian exports (wares plus services) increased from lower than 4 in FY1998 to about 25 in FY2012. According to Gartner, the "Top Five Indian IT Services Providers" are Tata Consultancy services, Infosys, Conscious, Wipro and HCL Technologies. The IT assiduity has also created significant demand in the Indian education sector, especially for engineering and computer wisdom. The Indian IT and ITeS assiduity is divided into four major parts – IT services, Business Process Operation (BPM), software products and engineering services, and tackle.

India's IT Services assiduity was born in Mumbai in 1967 with the establishment of Tata Consultancy Services who in 1977 partnered with Burroughs which began India's import of IT services. The first software import zone, SEEPZ – the precursor to the ultramodern- day IT demesne – was established in Mumbai in 1973. Further than 80 percent of the country's software exports were from SEEPZ in the 1980s.

Within 90 days of its establishment, the Task Force produced an expansive background report on the state of technology in India and an IT Action Plan with 108 recommendations. The Task Force could act snappily because it erected upon the experience and frustrations of state governments, central government agencies, universities, and the software assiduity. Important of what it proposed was also harmonious with the thinking and recommendations of transnational bodies like the World Trade Organization (WTO), International Telecommunication Union (ITU), and World Bank. In addition, the Task Force incorporated the gests of Singapore and other nations, which enforced analogous programs. It was less a task of invention

than of sparking action on a agreement that had formerly evolved within the networking community and government.

In 1991 the Department of Electronics broke this impasse, creating a pot called Software Technology Parks of India (STPI) that, being possessed by the government, could give VSAT dispatches without violating its monopoly. STPI set up software technology premises in different metropolises, each of which handed satellite links to be used by enterprises; the original link was a wireless radio link. In 1993 the government began to allow individual companies their own devoted links, which allowed work done in India to be transmitted abroad directly. Indian enterprises soon induced their American guests that a satellite link was as dependable as a platoon of programmers working in the guests' office.

A common EU-India group of scholars was formed on 23 November 2001 to further promote common exploration and development. On 25 June 2002, India and the European Union agreed to bilateral cooperation in the field of wisdom and technology. From 2017, India holds an Associate Member State status at CERN, while a common India-EU Software Education and Development Center will be located in Bangalore.

CHAPTER 2

REVIEW OF LITERATURE

2.1 Review of Literatures

Gomez, (2020) The success of the recruitment activity is the ratio of the potential pool of candidates applied for the position to the total number of job offers received by the candidates. The assessment of candidates would be dependent on the category of job or occupation. The software provides almost all types of evaluation methods that can be simple to administer, user-friendly, and keeping records of the assessment. It also follows with the complete reports which can be easily interpreted eliminating the personal bias of the assessor.

Saenz, (2020) Human-based AI systems are those systems wherein humans and machines interact with each other continuously in the cycle where human act as an expert and have final authority.

Alexander & Smet, (2020) Today, in the pandemic setting, business decisions based on the trends and practices that were used to be quantitative studies or statistical-based are found to be unrewarding.

Van Esch et al., (2019) Contrasting positive job applicant feedbacks to their practices with artificial intelligence recruitment processes may generate a more massive acceptance rate of job offers and a more favorable position in relation to the hiring company.

Suen et al., (2019) Video interviews with (out) an artificial intelligence decision agent can be put into practice for successful candidate screening.

Shank et al., (2019) Emotions are frequently linked to artificial intelligences that generate significant outcomes, are established in pivotal social roles, and participate in anthropomorphic actions.

Chanda, (2019) AI in place, the enterprise can accrue the perfection of the recruitment process at a limited cost. It makes the recruiter's job easier, simpler, and more efficient.

Marteniz & Sevilla, (2019) The ATS software is a typical sourcing solution system that helps the recruiter to seek potential candidates all over the World Wide Web on social media platforms. It also checks for the probability of converting the

potential candidate by using the predictive analysis in terms of job switching history, the candidate's interests and aptitude, and objectives in the career.

Ryan, (2019) AI becomes handy in the overall procurement of manpower, at the same time most of the candidates interested in getting hired are not fully aware of AI or ATS software, thus recruiters might miss out on the potentially better candidate for the organization.

Markov, (2019) Artificial Intelligence systems applied in the recruitment process are not able to examine the soft skills and personality of the candidates.

Plastino and Purdy, (2018) Artificial intelligence is prepared to stimulate creativity by intensifying the advancement of groundbreaking products, assisting organizations in obtaining additional revenue streams more swiftly and cutting down superfluous expenses in the process, consequently raising cost-effectiveness.

Jain, (2018) the research paper identified the role of artificial intelligence in human resource management. The researcher has quoted that most of the companies has been adopting modern technology in various HR process like recruitment process, performance appraisal process, cloud-based HR systems.

R & D, (2018) The research paper title, Recruitment through artificial intelligence: A Conceptual Study. The researcher has narrated the role of AI in recruitment where artificial intelligence is played integral roll in recruitment process. Artificial intelligence helps in screening the candidates, auto-generated messages to candidates, employee's relations, scheduling the interviews etc.

Jarrahi, (2018) in his researcher paper title, Artificial Intelligence and the Future of work: Human- AI Symbiosis in Organizational Decision Making. The researcher papers talked about the usefulness of AI for human. Artificial intelligence has been supporting in decision making, dealing with uncertainty, and especially equivocality of decision-making in an organization. Still in an industry the role of human is essential and technologies have to depend on human when subconscious decisions are essential to evaluate and facilitate the outcomes of decisions.

Merlin.P & Jayam.R, (2018) In the research title, Artificial Intelligence in Human Resource Management, the researcher has insight the role of AI in human resource. An Author has concluded that AI is useful in workplace and help to HR professional to understand their working and to identify the problems and trends in advance.

A, Dimple , Josh Bersin, Gaurav Lahiri, Jeff Schwartz, (2018) Problem-solving and one data-driven function control and lead the automation of recruitment by using AI applications in human resources management (HRM).

Amla & Malhotra, (2017) Most of the organization has been using artificial intelligence or digital technologies in HR like chatbot, machines learning, and robot process automation in human resource management which support in recruitment, screening, onboarding, and interviewing etc.

Raviprolu, (2017) proposed the role, advantages and challenges of artificial intelligence, additionally, revealed that by implementation of artificial intelligence may gain quick problem solving, identification of team capabilities within the team in recruitment process.

Abhishek & Agarwal, (2017) Artificial intelligence, having several features of big data along with analytics, provides ultimate usability to recruiters It aids to automate and streamline the complicated workflow involving repetitive tasks in the recruitment process, removing the time consumption at each step of the process right from matching with error-free job description using the sentiments analysis to assessment for the selection of the candidate such as psychoanalytical tests, aptitude and analytical tests.

Leong, (2017) discussed on artificial intelligence usefulness in recruitment process including tracking of application, performance reviews, onboarding, compensation and career management.

Min, (2017) offered advantages of AI in recruitment process such as quality job post, wide range of source of applications, screening applications and in decreasing of unconscious bias

Buzko, et al., (2016) in paper title, Artificial Intelligence technologies in human resource development. The researchers ponder on hurdles of AI technologies in

human resource area where authors noted that AI not able to identify the effectiveness of training costs. In the research paper authors noted that artificial intelligence technologies facilitate the prompt analysis of data by human.

Dirican, (2015) A researcher in his research paper, title “The Impact of Robotics, Artificial Intelligence on Business and Economics” has studied that use of Robotics and Artificial intelligence in business may have negative impact on the overall functions of an organization like production, performance management, sale, strategic planning, customer relationship management, banking system, coaching, training, taxes etc.

Galhena & Liyanage, (2014) Recruitment, one of the most important functions of HR, is becoming more and more exposed to internet and many firms are using electronic recruitment system instead of conventional paper based employee recruitment.

Reiners & Alexander, (2013) the employer is using social media websites for recruitment purpose but most of the time they are unable to get new information as through candidates’ resume.

Faliagka and Ramantas, (2012) stated that by analyzing the linguistics used in the text, AI could map the emotional state of a person, there is a chance that If AI failed to be armed up with reliable algorithms to support the understanding of humans verbal and written patterns, the decisions would be untrustworthy

Kapoor, (2010) Researcher has examined the role of business intelligence and its use for human resource management. In this research article, a researcher investigated the leading business intelligence vendor to look into the business intelligence and data analytics features incorporated in human resource management modules.

Sylva and Mol, (2009) E-recruitment Candidate Perspective nowadays, it has been noticed the growth of new technology and this growth can be understanding for many things likewise online banking, online shopping, and no doubt online job searching. This behavior is adopted by the individual for two key reasons such as cost-effective and save time. There are certain negative impacts of e-recruitment on minority groups

Ahmed, Isa, Majid, Zin & Amin, (2017); Chapman et al., (2005) Job intention can be defined as a candidate intends to pursue a job, in this behavior various factors are covered such as applying for the vacant job, availability in interview and wish to be a part of this whole process.

Compton et al., (2009) and Torrington et al., (2004) The advantage to employer is that through social media the great pool of candidates can be obtained. The web process ensures the easy of research to demanded applicants via search process in shorter duration

Cober et al., (2003) The key challenge for the applicants' perception two words this emerging e-recruitment matter a lot. There are certain factors in regard to applicants' perception are derived from literature review such as user friendless, fairness perception, information provision and perceived efficiency

Bradley, Smith (2003) The software used in the recruitment process typically has a screening process that is cumbersome if performed manually. This software has readily useable filter options that can be applied to find out the matching candidates with the Job Description for the vacant position.

Smith et al.,(2001) The job search intention and to attract the applications is the first stage of the recruitment process. While in this stage individual perception matter a lot for the organization's success rate for effective recruitment.

CHAPTER 3

METHODOLOGY

3.1 RESEARCH METHODOLOG

Research in common parlance refers to a search for knowledge. One can also define research as a scientific and systematic search for pertinent information on a specific topic. In fact, research is an art of scientific investigation. The Advanced Learner's Dictionary of Current English lays down the meaning of research as "a careful investigation or inquiry especially through search for new facts in any branch of knowledge. Redman and Mory define research as a "systematized effort to gain new knowledge. Some people consider research as a movement, a movement from the known to the unknown. It is actually a voyage of discovery. We all possess the vital instinct of inquisitiveness for, when the unknown confronts us, we wonder and our inquisitiveness makes us probe and attain full and fuller understanding of the unknown. This inquisitiveness is the mother of all knowledge and the method, which man employs for obtaining the knowledge of whatever the unknown, can be termed as research.

3.2 NEED, SCOPE AND OBJECTIVES

- ▶ The e-recruitment has resolved the problems of the old method of recruitment and it is easy to find the right person for the right job. Most employers are not limited to their cities or countries for hiring the people according to their organizations' vision statement.
- ▶ The growing city with very limited pool of right candidates available for the employer to fill vacant positions into their respective organizations.
- ▶ This study will help firms which are operating in by using internet, they can advertise for their vacant position after understanding advantages or effectiveness of e-recruitment through this study.

Scope of the study

In this scientific era, E-Recruitment is preferred than the traditional modes of recruitment. Organization can post its available job vacancies online in just 20 minutes and receive resumes within minutes of the job going live. It helps to access an online pool of resumes on a 24X7 basis. E- Recruitment process allows the managers in the recruitment department to screen and eliminate candidates who does not match the job profile in an automated way, which saves over 65 percent of the hiring time. This helps the organization to reduce the processing time and cost in a considerable quantity. By implementing E-recruitment process organization can even track the progress of a candidate in various stages of his or her hiring process. A study on E-Recruitment portal will help the organization to identify and hire the best suitable employees matching its job profile.

Objectives of the study

- To study the concept of artificial intelligence.
- To study the challenges of artificial intelligence in human resource department
- To know the impact of AI capabilities on Recruitment and Selection.
- To observe how artificial intelligence is used currently in recruiting process

Limitation of the study

- Small sample size
- Brief study duration time less
- Demographic variables effect on the depending variable were not studied
- Data was collected online than hands on guide

3.3 POPULATION, SAMPLING AND QUESTIONNAIRE SURVEY

Sampling is a vital strategy in a statistical analysis, which comprises a selection of a few portions of a potential population so as to assess or learn something from the population at a cheaper cost. Convenience sampling is a type of non-probability

sampling that involves the sample being drawn from that part of the population that is close to hand. This type of sampling is most useful for pilot testing. The questionnaire comprises close-ended and open-ended questions with multiple-choice options. The survey questionnaire is designed online, hosted in Google drive and shared in a Google form. Link to the Google form is shared on professional platforms such as LinkedIn and construction professionals' forums, as well as direct emails sent to the key players in the built environment. A total of 200 responses were received.

3.4 GOOGLE FORMS

Forms are among the internet's most versatile tools. Whether you need a contact form or a checkout page, a survey or a student directory, a form is all you need to easily gather that information. With Google Forms, it only takes a few minutes to make one for free. Google forms along with Docs, Sheets, and Slides is part of Google's online apps suite of tools to help you get more done in your browser for free. It's easy to use and one of the simplest ways to save data directly to a spreadsheet, and it's the best sidekick to Google Sheets' spreadsheets.

3.5 PERCENTAGE ANALYSIS

Percentage analysis is the method to represent raw streams of data as a percentage (a part in 100 - percent) for better understanding of collected data. A percent change analysis shows how two items changed as a percentage from one period to another period. Used on a balance sheet, a percent change analysis shows how a balance sheet account changes from year to year, or quarter to quarter. The balance sheet accounts are assets, liabilities and stockholders' equity. Percentage Statement Analysis is an analysis which highlights important relationships in the percentage statements. Percentage Statement analysis embraces the methods used in assessing and interpreting the results of past performance and current percentage position as they relate to particular factors of interest in investment decisions. It is an important means of assessing past performance and in forecasting and planning future performance.

Percentages are often used to express a proportionate part of a total. If 50% of

the total number of students, long before the existence of the decimal system, computations were often made in fractions. The term "percent" is derived from the Latin per centum, meaning "hundred" or "by the hundred". The Percentage increase and decrease, Due to inconsistent usage, it is not always clear from the context what a percentage.

Majorly the percentage error formula is used to determine how accurate the calculated value is by keeping in mind the actual value. I mentioned in a very rough language, it is the variation of the gap between the calculated value and the genuine value expressed in the form of a percentage. Commonly, the extent of the percentage error is expressed in the positive denominations, although having a negative percent error is not a wrong approach. Relying on the sign of the percentage error measure, it could be analyzed whether the calculated value is being paced below or higher to the actual value. The tool of percentage error formula is one of the most reliable and accurate tools in calculating the relative error by keeping the original measure as the basis.

3.6 STATISTICAL ANALYSIS

Statistical methods involved in carrying out a study include planning, designing, collecting data, analyzing, drawing meaningful interpretation and reporting of the research findings. The statistical analysis gives meaning to the meaningless numbers, thereby breathing life into a lifeless data.

The Statistical tools such as Percentage, Chi-square, Correlation and Anova were used to analyses the data collected from the respondents.

Statistical analysis is the science of collecting, exploring and presenting large amounts of data to discover underlying patterns and trends. Statistics are applied every day in research, industry and government to become more scientific about decisions that need to be made.

Importance

Statistical analysis is a study, a science of collecting, organizing,

exploring, interpreting, and presenting data and uncovering patterns and trends. Many businesses rely on statistical analysis and it is becoming more and more important. One of the main reasons is that statistical data is used to predict future trends and to minimize risks.

DESCRIPTIVE ANALYSIS

The descriptive statistic is used to describe the basic features of information and shows or summarizes data in a rational way. Descriptive statistics is a study of quantitatively describing. This type of statistics draws in all of the data from a certain population or a sample of it. Descriptive statistics can include numbers, charts, tables, graphs, or other data visualization types to present raw data. However, descriptive statistics do not allow making conclusions. We cannot get conclusions and make generalizations that extend beyond the data at hand. With descriptive statistics, you can simply describe what is and what the data present.

Inferential type

This type of statistical analysis is used to study the relationships between variables within a sample, and we can make conclusions, generalizations or predictions about a bigger population. In other words, the sample accurately represents the population. Moreover, inference statistics allows businesses and other organizations to test a hypothesis and come up with conclusions about the data. One of the key reasons for the existing of inferential statistics is because it is usually too hard to study an entire population of people or objects.

3.7 RESEARCH TESTS

ANOVA

ANOVA in SPSS is used as the test of means for two or more populations. ANOVA in SPSS must have a dependent variable which should be metric (measured using an interval or ratio scale). ANOVA in SPSS must also have one or more independent variables, which should be categorical in nature.

CHI-SQUARE

Chi-square is a non-parametric. It is gives to test a hypothesis this test is employed when nominal data is to be analysed. The chi-square is computer on the basis of frequencies in a sample.

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

χ^2 = Chi-Square

O = Observed frequency

E = Expected frequency

CORRELATION

A correlation is a statistical measure of the relationship between two variables. The measure is best used in variables that demonstrate a linear relationship between each other. The fit of the data can be visually represented in a scatterplot. Using a scatterplot, we can generally assess the relationship between the variables and determine whether they are correlated or not.

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

r = Correlation coefficient

n = Number of pairs of observations

3.8 RESEARCH DESIGN

From the objective we have studied the AI in recruitment of IT industry. To analyze this different data have to be collected from various stationery industries such as in what way the HR plays a vital role in their industry and what are the barriers to implement this concept also been discussed.

3.9 HYPOTHESIS TESTING

- H0: There is no relationship between recruitment and automation
H1 – There is a relationship between recruitment and automation
- H0 – There is no relationship between recruitment and natural language processing
H1 – There is a relationship between recruitment and natural language processing
- H0 – There is no relationship between recruitment and workforce
H1 – There is a relationship between recruitment and workforce

CHAPTER – 4
DATA ANALYSIS AND INTERPRETATION

4.1 PERCENTAGE ANALYSIS

TABLE 4.1.1 GENDER

S.NO	PARTICULARS	NO OF RESPONSE	PERCENTAGE
1	Male	94	47%
2	Female	106	53%
TOTAL		200	100%

TABLE 4.1.1 representing Gender of the Respondents

- Out of 200 respondents male respondents are 47.00 percentage and female respondents are 53.00 percentage

TABLE 4.1.2 AGE GROUP

S.NO	PARTICULARS	NO OF RESPONSE	PERCENTAGE
1	20-30	137	68.5%
2	31-40	24	12%
3	41-50	33	16.5%
4	50 above	6	3%
TOTAL		200	100%

TABLE 4.1.2 representing Age group of the respondents

- Out of 200 respondents, 68.5 percentages of the respondents are age between 20-30, 12.00 percentages of the respondents are aged between 31-40, 16.5 percentages of respondents are aged between 41-50 and 03.00 percentages of respondents are aged between 50 above.

TABLE 4.1.3 EDUCATIONAL QUALIFICATION

S.NO	PARTICULARS	NO OF RESPONSE	PERCENTAGE
1	Diploma	17	8.5%
2	Under graduate	123	61.5%
3	Post graduate	40	20%
4	Doctorate	20	10%
TOTAL		200	100%

TABLE 4.1.3 Representing Educational Qualification of the Respondents

- Out of 200 respondents, 8.5 percentages of respondents belong to diploma, 61.5 percentages of respondents belong to under graduation, 20.00 of the respondents belong to post-graduation and the remaining 10.00 percentage of the respondents are doctorates.

TABLE 4.1.4 OCCUPATION

S.NO	PARTICULARS	NO OF RESPONSE	PERCENTAGE
1	Student	170	85%
2	Employee	30	15%
TOTAL		200	100%

TABLE 4.1.4 Representing Occupation of the Respondents

- Out of 200 respondents, 85.00 percentages of the respondents were student and 15.00 percentages of the respondents were employees.

4.2 STATISTICAL ANALYSIS

4.2.1 CORRELATION

RECRUTMENT AND NATURAL LANGUAGE PROCESS

H0: There is no relationship between recruitment and natural language process.

H1: There is relationship between recruitment and natural language process.

Correlation				
			Recruitment	Natural language process
Spearman's rho	Recruitment	Correlation Coefficient	1.000	.402**
		Sig. (2-tailed)	.	.002
		N	100	100
	Natural language process	Correlation Coefficient	.402**	1.000
		Sig. (2-tailed)	.002	.
		N	100	100

** . Correlation is significant at the 0.02 level (2-tailed).

- From the table, it is interpreted that the significance value is 0.02 which is less than 0.05 and less than the critical value 1. So the null hypothesis rejected and alternative hypothesis got accepted. Thus, there is a relationship between recruitment and Natural language process

RECRUTMENT AND WORKFORCE

H0: There is no relationship between recruitment and workforce

H1: There is relationship between recruitment and workforce.

Correlation				
			Recruitment	Workforce
Spearman's rho	Recruitment	Correlation Coefficient	1.000	.502**
		Sig. (2-tailed)	.	.001
		N	100	100
	Workforce	Correlation Coefficient	.502**	1.000
		Sig. (2-tailed)	.001	.
		N	100	100
**. Correlation is significant at the 0.01 level (2-tailed).				

- From the table, it is interpreted that the significance value is 0.01 which is less than 0.05 and less than the critical value 1. So the null hypothesis rejected and alternative hypothesis got accepted. Thus, there is a relationship between recruitment and workforce.

RECRUTMENT AND AUTOMATION

H0: There is no relationship between recruitment and automation.

H1: There is relationship between recruitment and automation.

Correlation				
			Recruitment	Automation
Spearman's rho	Recruitment	Correlation Coefficient	1.000	.802**
		Sig. (2-tailed)	.	.000
		N	100	100
	Automation	Correlation Coefficient	.802**	1.000
		Sig. (2-tailed)	.000	.
		N	100	100
**. Correlation is significant at the 0.00 level (2-tailed).				

- From the table, it is interpreted that the significance value is 0.00 which is less than 0.05 and less than the critical value 1. So the null hypothesis rejected and alternative hypothesis got accepted. Thus, there is a relationship between recruitment and automation.

4.2.2 CHI SQUARE

RECRUTMENT AND NATURAL LANGUAGE PROCESS

H0: There is no association between recruitment and natural language process.

H1: There is association between recruitment and natural language process.

		Chi-square and df	Fishers Exact Test	Total
	Recruitment	Pearson	Sig 2 sided	
Natural language process	Strongly agree	5.0 and 5.5	.001	6
	Agree	5.0 and 5.5	.001	194
Total				200

- From the table, it is interpreted that the significance value is 0.001, which was less than 0.5. So the null hypothesis rejected and alternative hypothesis got accepted with the chi square value 5.0 and 5.5. Thus, there is an association between recruitment and natural language process.

RECRUTMENT AND WORKFORCE

H0: There is no association between recruitment and workforce

H1: There is association between recruitment and workforce.

		Chi-square and df	Fishers Exact Test	Total
	Recruitment	Pearson	Sig 2 sided	
Workforce	Strongly agree	7.5 & 6.5	.001	20
	Agree	7.5 & 6.5	.001	180
Total				200

- From the table, it is interpreted that the significance value is 0.001, which was less than 0.5. So the null hypothesis rejected and alternative hypothesis got accepted with the chi square value 7.5 and 6.5. Thus, there is an association between recruitment and workforce.

RECRUTMENT AND AUTOMATION

H0: There is no association between recruitment and automation.

H1: There is association between recruitment and automation.

		Chi-square and df	Fishers Exact Test	Total
	Recruitment	Pearson	Sig 2 sided	
Automation	Strongly agree	6.0 & 4.8	.001	110
	Agree	6.0 & 4.8	.001	90
Total				200

- From the table, it is interpreted that the significance value is 0.001, which was less than 0.5. So the null hypothesis rejected and alternative hypothesis got accepted with the chi square value 6.0 and 4.8. Thus, there is an association between recruitment and automation.

4.2.3 ANOVA

RECRUITMENT		Sum of Squares	df	Mean Square	F	Sig.
Natural language process	Between Groups	1.739	111	.580	5.108	.002
	Within Groups	56.283	89	.113		
	Total	58.022	200			
Workforce	Between Groups	1.783	120	.594	5.312	.001
	Within Groups	55.505	88	.112		
	Total	57.288	200			
Automation	Between Groups	1.739	111	.580	5.108	.002
	Within Groups	56.283	89	.113		
	Total	58.022	200			

- Results state that, there is a relationship between dependent variable and independent variable because of the strong F value, which was greater than the significance value.
- Natural language process $5.108 > 0.002$, workforce $5.312 > 0.001$, automation $5.108 > 0.002$.
- So the null hypothesis rejected and alternative hypothesis got accepted.

CHAPTER – 5

RESULTS AND DISCUSSION

5.1 FINDINGS

- Out of 200 respondents, majority (53%) of the respondents are female,
- Out of 200 respondents, majority (68.5%) of the respondents falls in category of 20-30 years of age.
- Out of 200 respondents, majority (61.5%) of the respondents are under graduation.
- Out of 200 respondents, majority (85%) of the respondents are students.
- The significance value is 0.02 which is less than 0.05 and less than the critical value 1. So the null hypothesis rejected and alternative hypothesis got accepted. Thus, there is a relationship between recruitment and Natural language process
- The significance value is 0.01 which is less than 0.05 and less than the critical value 1. So the null hypothesis rejected and alternative hypothesis got accepted. Thus, there is a relationship between recruitment and workforce.
- The significance value is 0.00 which is less than 0.05 and less than the critical value 1. So the null hypothesis rejected and alternative hypothesis got accepted. Thus, there is a relationship between recruitment and automation.
- The significance value is 0.001, which was less than 0.5. So the null hypothesis rejected and alternative hypothesis got accepted with the chi square value 5.0 and 5.5. Thus, there is an association between recruitment and natural language process.
- The significance value is 0.001, which was less than 0.5. So the null hypothesis rejected and alternative hypothesis got accepted with the chi square value 7.5 and 6.5. Thus, there is an association between recruitment and workforce.
- The significance value is 0.001, which was less than 0.5. So the null hypothesis rejected and alternative hypothesis got accepted with the chi

square value 6.0 and 4.8. Thus, there is an association between recruitment and automation.

- The strong F value, which was greater than the significance value. Natural language process $5.108 > 0.002$, workforce $5.312 > 0.001$, automation $5.108 > 0.002$. So the null hypothesis rejected and alternative hypothesis got accepted.

5.2 SUGRESSION

- The robotization of HR processes and conditioning can boost the overall effectiveness and professional enhancement of HR professionals in the association perpetration of AI can make the sourcing and webbing processes can get indeed more independent and intelligent.
- There are great capabilities for IT companies and staffing companies working together and designing better- integrated products and services.
- The present study outgrowth supports that AI has changed the reclamation assiduity's geography, the part of AI in the reclamation and selection process, whether AI can help exclude unconscious bias during the reclamation and selection process.
- The babe agreed to the benefits of AI software used for retaining like saving cost and time to reach out to different people from different backgrounds by hunt machines.
- They could communicate the implicit campaigners fluently, hold the interviews, and record their reports fluently.
- The study demonstrated the impact of AI technologies only on the Recruitment and Selection process. This study can extend by concentrating on other HRM practices like Training and Development or Performance management.
- That AI can boost the process of identifying talents. It is always a challenge for organizations to attract and to hire talented candidates. Hiring talents is one of the most important hiring targets.

- With the help of AI and its implementation, it has made it possible for the systems and applications to acquire automation and cognitive insights as well as cognitive engagement in the recruitment process.
- These technologies would make the system work similar to the human brain in terms of data analysis and the ability to build an effective systematic engagement to process the data in an efficient and fast way.
- With the development of technologies used in the recruitment process, it has become a target for big organizations to adapt to be competitive in selecting talents from the market pool.

5.3 CONCLUSION

The current study conducted on the impact of Artificial Intelligence technologies on the Reclamation and Selection process made a study on crucial AI capabilities and their influence on the reclamation and selection process, and implicit issues of applying AI capabilities in the Reclamation and Selection Process.

The babe revealed that exercising AI technologies in the reclamation process can speed up the reclamation process and cost-effective. Applying AI technologies in the reclamation process can enhance the reclamation process's quality with a high delicacy position and reduced mortal bias. The operation of AI in the reclamation process can make it possible for the beginner to get the right seeker with the right skill set for the right job with ease.

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A STUDY ON THE ROLE OF ARTIFICIAL INTELLIGENCE IN E-RECRUITMENT IN IT INDUSTRIESCHENNAI

40410027_ ASHWITH ILAVARASI F

***Required**

1. GENDER *

Mark only one oval.

- ☐ MALE
- ☐ Female

2. AGE *

Mark only one oval.

- ☐ 20-30
- ☐ 31-40
- ☐ 41-50
- ☐ ABOVE 50

3. EDUCATION QUALIFICATION *

Mark only one oval.

- ☐ DIPLOMA
- ☐ UG
- ☐ PG
- ☐ PHD

4. OCCUPATION *

Mark only one oval.

☐

STUDENT

☐

EMPLOYEE

5. Natural Language Processing in Recruitment (NPL) *

Mark only one oval per row.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Identifying personal traits	☐	☐	☐	☐	☐
Identifying gaps in record	☐	☐	☐	☐	☐
Identifying fraud	☐	☐	☐	☐	☐
Deep information extraction					
Removing human biasness	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

6. The effect of artificial intelligence on the workforce (WORKFORCE) *

Mark only one oval per row.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Organizational level Existing workers will need to change their skill sets	☒	☐	☐	☐	☐
Organizational level our organization's productivity will improve	☐	☐	☐	☐	☐
Organizational level our organization's workforce will be reduced	☐	☐	☐	☐	☐
Organizational level Workers' current skill sets will be augmented	☒	☐	☐	☐	☐
Personal level I hope that artificial	☐	☐	☐	☐	☐

7. Use of artificial intelligence and automation in interviewing and assessment of candidates (AUTOMATION) *

Mark only one oval per row.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Understand candidate wants	☐	☐	☐	☐	☐
Predict candidate success	☐	☐	☐	☐	☐
Assess talent supply and demand	☐	☐	☐	☐	☐
Compare talent metrics to competitors'	☐	☐	☐	☐	☐
Forecast hiring demands	☐	☐	☐	☐	☐

8. Top recruitment priorities for organizations (RECRUITMENT) *

Mark only one oval per row.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Sourcing candidates directly	☐	☐	☐	☐	☐
Building talent pools for the future	☐	☐	☐	☐	☐
Investing in tools to speed up the hiring process	☐	☐	☐	☐	☐
Establishing a strong employer brand	☐	☐	☐	☐	☐
Succession planning	☐	☐	☐	☐	☐

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Annexure - 2

A STUDY ON THE ROLE OF ARTIFICIAL INTELLIGENCE IN E-RECRUITMENT IN IT INDUSTRIES CHENNAI

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ABSTRACT

In the competitive world Diligence, collect the accurate data and anatomized the collected data for the use of companies growth and daily working is essential. Artificial Intelligence helps the assiduity to work in briskly way and effective way to complete the work. Artificial Intelligence is entering into colourful department like mortal resource department, finance department, marketing and product department. With using AI system Association can suitable to inform the being performance and day-to- day functions. In business pressure has been adding, tough directors understood the significance of artificial intelligence at plant. The exploration paper is descriptive in nature. The experimenter was used secondary data where the data was collected from exploration papers, publications, websites, HR blogs, check reports etc. The core Ideal of the study was examine the part of artificial intelligence in mortal resource department and understand the challenges in HR department. The exploration study has concluded that a part of AI is larger into colourful functions carried out in mortal resource department where by robotics companies can handle reclamation, hiring, as saying the data, collecting the data, reducing workload at plant and enriching Plant effectiveness.

.Keyword: Artificial Intelligence, Machine languages, mortal resource operation

I. INTRODUCTION

Artificial Intelligence is a remarkable advance in technology proliferation. Indeed, the term AI isn't confined to just a single description, but also it's defined and interpreted else by different fields. It's programmed in such a way that it can suppose and act like mortal beings (logic) do. This simple description of AI mentioned above fits any machine or device that can suppose and bear like mortal intelligence while learning and working a specific problem. In other words, AI can be described as technologies that emulate natural intelligence, yet the term AI is much broader than it's complicated to explain what's meant by it, what value AI brings, and how it can be applied.

The part of technologies in operation has been honored for quite some time. Innovation in operation practices is ineluctable and decreasingly significant for associations to attain a competitive edge and sustain rapid-fire changes in the terrain. Present-day association deal with the massive size of data and information, and the associations must transfigure them tone digitally and calculate upon technology like AI. Due to this reason, AI currently has come a mainstream element in the operation of companies, which has not only changed the way people work but has wholly shifted the business models. The Human Coffers sphere isn't vulnerable to this script, and it must also jump on the crusade of disruptive technologies or be disintegrated.

To manage with capability and knowledge challenges associated with AI technologies, new strategic and holistic mortal resource operation are demanded in associations. The purpose of man-machine collaboration in the HR department isn't to put humans out of work; rather brings a radical functional shift in the way associations retain, learn

& develop people and restructure daunting HR processes high-speed and fluently. We're witnessing major displacing and revolutionizing in worker's job nature and skillset needed within associations. AI acts as a significant player in transubstantiating the HR functions, which have backed the HR people, workers, and associations. AI technologies are being employed by associations to automate repetitious tasks and help in complex strategic opinions fleetly and more directly through prophetic algorithms. Only in recent days, an increased number of associations are showing interest in applying AI technologies in HR practices, similar as Reclamation, Seeker Webbing, and Selection. Leading and well-established companies are formerly using AI technologies to enhance effective decision-making and give prophetic analytics to all the workers. In simple words, AI-equipped associations can sustain the ferocious competition in the request, and also, the associations can enjoy functional excellence overall.

II. REVIEW OF LITERATURE

Gomez, (2020) The success of the recruitment activity is the ratio of the potential pool of candidates applied for the position to the total number of job offers received by the candidates. The assessment of candidates would be dependent on the category of job or occupation. The software provides almost all types of evaluation methods that can be simple to administer, user-friendly, and keeping records of the assessment. It also follows with the complete reports which can be easily interpreted eliminating the personal bias of the assessor.

Van Esch et al., (2019) Contrasting positive job applicant feedbacks to their practices with artificial intelligence recruitment processes may generate a more massive acceptance rate of job offers and a more favorable position in relation to the hiring company.

Jarrahi, (2018) in his researcher paper title, Artificial Intelligence and the Future of work: Human- AI Symbiosis in Organizational Decision Making. The researcher papers talked about the usefulness of AI for human. Artificial intelligence has been supporting in decision making, dealing with uncertainty, and especially equivocality of decision-making in an organization. Still in an industry the role of human is essential and technologies have to depend on human when subconscious decisions are essential to evaluate and facilitate the outcomes of decisions.

Abhishek & Agarwal, (2017) Artificial intelligence, having several features of big data along with analytics, provides ultimate usability to recruiters. It aids to automate and streamline the complicated workflow involving repetitive tasks in the recruitment process, removing the time consumption at each step of the process right from matching with error-free job description using the sentiments analysis to assessment for the selection of the candidate such as psychoanalytical tests, aptitude and analytical tests.

Dirican, (2015) A researcher in his research paper, title “The Impact of Robotics, Artificial Intelligence on Business and Economics” has studied that use of Robotics and Artificial intelligence in business may have negative impact on the overall functions of an organization like production, performance management, sale, strategic planning, customer relationship management, banking system, coaching, training, taxes etc.

III. OBJECTIVES

- To study the concept of artificial intelligence.
- To study the challenges of artificial intelligence in human resource department
- To know the impact of AI capabilities on Recruitment and Selection.

- To observe how artificial intelligence is used currently in recruiting process

IV. METHODOLOGY

RESEARCH DESIGN

From the objective we have studied the human resource management of IT industry. To analyze this different data have to be collected from various IT industries such as in what way the AI plays a vital role in their industry and what are the barriers to implement this concept also been discussed.

SAMPLING DESIGN

The population for the study was made up of job seekers of artificial intelligence in e-recruitment in IT industries in Chennai, and convenience sampling methods were used. Samples of 200 are job seekers were questioned and the data has been collected.

DATA COLLECTION METHODS

Primary data collection method comprised survey method while primary data collection instruments was structured questionnaire namely ARTIFICIAL INTELLIGENCE IN E-RECRUITMENT IN IT INDUSTRIES CHENNAI QUESTIONNAIRE in forms such as recruitment, natural language process, workforce, automation.

STATISTICAL TOOLS

The main tools used for statistical analysis were percentages, anova, chi square and correlation.

AREA OF RESEARCH

The research design consists of population size of 200 people in the location of Chennai, targeted people are the job seekers, who are looking for jobs.

CONCEPTUAL FRAMEWORK

The conceptual framework of artificial intelligence in e-recruitment IT industry was based upon research gaps and

exhaustive review of literature into 4 variables of the study such as,

- Recruitment
- Natural language process
- Workforce
- Automation

HYPOTHESIS QUESTIONS

- **H0:** There is no relationship between recruitment and automation
H1 – There is a relationship between recruitment and automation
- H0 – There is no relationship between recruitment and natural language processing
H1 – There is a relationship between recruitment and natural language processing
- H0 – There is no relationship between recruitment and workforce
H1 – There is a relationship between recruitment and workforce

LIMITATIONS

Small sample size Brief study duration time less Demographic variables effect on the depending variable were not studied Data was collected online than hands on guide

iv. DATA ANALYSIS

Technologies shaping the artificial intelligence in IT especially in E recruitment.

The respondents were rate the technologies which create the satisfaction to job seekers. The attributes comprise of

- Recruitment
- Natural language process
- Workforce
- Automation

The rating table comprises of 5 points with the 1 for lowest rating and 5 for highest rating. The responses statistical analysis is represented in table 1 to table 4.

TABLE. 1 RECRUTMENT AND NATURAL LANGUAGE PROCESS

Correlation				
			Recruitme nt	Natural language process
Spearman's rho	Recruitment	Correlation Coefficient	1.000	.402**
		Sig. (2-tailed)	.	.002
		N	100	100
	Natural language process	Correlation Coefficient	.402**	1.000
		Sig. (2-tailed)	.002	.
		N	100	100
**. Correlation is significant at the 0.02 level (2-tailed).				

Source: Primary Data

Result: From the table, it is interpreted that the significance value is 0.02 which is less than 0.05 and less than the critical value 1. So the null hypothesis rejected and alternative hypothesis got accepted. Thus, there is a relationship between recruitment and Natural language process

TABLE. 2 RECRUTMENT AND WORKFORCE

Correlation				
			Recruitment	Workforce
Spearman	Recruitment	Correlation Coefficient	1.000	.502**
		Sig. (2-tailed)	.	.001

	N	100	100
Workforce	Correlation Coefficient	.502**	1.000
	Sig. (2-tailed)	.001	.
	N	100	100
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Primary Data

Result: From the table, it is interpreted that the significance value is 0.01 which is less than 0.05 and less than the critical value 1. So the null hypothesis rejected and alternative hypothesis got accepted. Thus, there is a relationship between recruitment and workforce.

TABLE.3 RECRUTMENT AND AUTOMATION

			Recruitme nt	Automation
Spearman's rho	Recruitm ent	Correlation Coefficient	1.000	.802**
		Sig. (2-tailed)	.	.000
		N	100	100
	Automatio n	Correlation Coefficient	.802**	1.000
		Sig. (2-tailed)	.000	.
		N	100	100
	**. Correlation is significant the 0.00 level (2-tailed).			

Source: Primary Data

Result: From the table, it is interpreted that the significance value is 0.00 which is less than 0.05 and less than the critical value 1. So the null hypothesis rejected and alternative hypothesis got accepted. Thus, there is a relationship between recruitment and automation.

TABLE 4. COMPARISON OF THE RECRUITMENT, NATURAL LANGUAGE PROCESS, WORKFORCE, AUTOMATION

Recruitment		Sum of Squares	df	Mean Square	F	Sig.
Natural language process	Between Groups	1.739	111	.580	5.108	.002
	Within Groups	56.283	89	.113		
	Total	58.022	200			
Workforce	Between Groups	1.783	120	.594	5.312	.001
	Within Groups	55.505	88	.112		
	Total	57.288	200			
Automation	Between Groups	1.739	111	.594	5.108	.002
	Within Groups	56.283	89	.112		
	Total	58.022	200			

Source: Primary Data

Result: Results state that, there is a relationship between dependent variable and independent variable because of the strong F value, which was greater than the significance value Natural language process $5.108 > 0.002$, workforce $5.312 > 0.001$, automation $5.108 > 0.002$. So the null hypothesis rejected and alternative hypothesis got accepted.

VI. Summary of finding

- The significance value is 0.02 which is less than 0.05 and less than the critical value 1. So the null hypothesis rejected and alternative hypothesis got

accepted. Thus, there is a relationship between recruitment and Natural language process

- The significance value is 0.01 which is less than 0.05 and less than the critical value 1. So the null hypothesis rejected and alternative hypothesis got accepted. Thus, there is a relationship between recruitment and workforce.
- The significance value is 0.00 which is less than 0.05 and less than the critical value 1. So the null hypothesis rejected and alternative hypothesis got accepted. Thus, there is a relationship between recruitment and automation.
- The strong F value, which was greater than the significance value. Natural language process $5.108 > 0.002$, workforce $5.312 > 0.001$, automation $5.108 > 0.002$. So the null hypothesis rejected and alternative hypothesis got accepted.

VII. CONCLUSION

The current study conducted on the impact of Artificial Intelligence technologies on the Reclamation and Selection process made a study on crucial AI capabilities and their influence on the reclamation and selection process, and implicit issues of applying AI capabilities in the Reclamation and Selection Process.

The babe revealed that exercising AI technologies in the reclamation process can speed up the reclamation process and cost-effective. Applying AI technologies in

the reclamation process can enhance the reclamation process's quality with a high delicacy position and reduced mortal bias. The operation of AI in the reclamation process can make it possible for the beginner to get the right seeker with the right skill set for the right job with ease.

VIII. REFERENCES

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