

A Magic Wand to Captivate Talent: Artificial Intelligence

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Abstract

Nowadays, technology has taken over the world. Every organization is under the control of technology. Technology has become an inevitable source in this era. As time goes by, every organization wants them to be updated. For example, traditional recruitment to modern recruitment and then from modern recruitment to e-recruitment. One of the major reason to keep them updated is they find hard to overcome the challenges with their traditional method. Artificial Intelligence played one of the major roles in technology updation. Artificial intelligence is revamping the HR Field. Most of the organization has adopted artificial intelligence to reduce the burden of a recruiter. Artificial Intelligence reduces the cost and time of the recruitment process. This research paper is an attempt to analyze the relationship between usage of artificial intelligence and talent acquisition, the impact of artificial intelligence in talent acquisition and the major challenges organizations face in building artificial capabilities in the organization with particular reference to Chennai. IT/ITES Sector employers are the respondents. The descriptive survey research design was used in this research. The research hypothesis was tested using statistical tools such as multiple correlations, multiple regression, and Weighted mean average. 245 respondents were chosen using a simple random sampling technique. The findings revealed that Screening candidates, post-offer acceptance, career development re some of the main usage of artificial intelligence on talent acquisition. Decreases human biases and diversity hiring has a strong impact of artificial intelligence on talent acquisition. The scarcity of field specialists and skepticism of new technology played a major role in building artificial intelligence in the organization.

Keywords: *Artificial Intelligence, Strategy, Talent Acquisition.*

1. Introduction

In this contemporary world, everything becomes instant. Technology has grown to achieve all the needs immediately. With the use of technology, every individual achieves their desire. In an organization, the traditional method been updated to the modern method in all sectors. In the field of HR, Organization faces a Himalayan challenge to acquire and retain top talented employees. In older days, the recruitment process has taken a larger amount of time as well as cost which implies a large amount of paperwork (O'Donovan, 2019). After the arrival of technology, all this work has been taken care of easily. With the help of technology, employers easily identified a talented employee, as well as the recruitment process, has become smoother and unbiased (Galanaki, Lazazzara & Parry, 2019). Artificial Intelligence is considered one of the best technology updations for the recruitment process. Due to artificial intelligence, human touch in talent acquisition is becoming lessened (Bondarouk & Brewster, 2016). This adoption of artificial intelligence in the HR field and recruitment can be called "the new age of HR". Usage of artificial intelligence has been increased after the year of 2018. So it is clear that Artificial

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Intelligence has replaced the routine tasks in recruitment which is conducted by a human (Upadhyay & Khandelwal, 2018). Artificial Intelligence helps the employer to identify whether a candidate is a good fit or not. Artificial Intelligence replaces most of human work in the recruitment process. Due to its replacement of human, artificial intelligence has been named as human-level Artificial Intelligence (Nilsson, 2005). In the process of talent acquisition, artificial intelligence extracts the relevant information from the process of resume by scanning (Kaczmarek, Kowalkiewicz & Piskorski, 2005). The applicant ranking system will be used by artificial intelligence and make the task more efficient (Faliagka, Ramantas, Tsakalidis & Tzimas, 2012). The ranking is purely human unbiased which helps in providing opportunities for all the candidates who have been applied. Artificial Intelligence-driven recruitment stay connected with the candidate through text messages, emails (Montuschi et al., 2014). Artificial Intelligence helps the candidate to solve the queries, post the application and engage them during the process of recruitment. This artificial intelligence breaks down the biggest problem of an organization. Through this method, the employer can easily identify and acquire the right talented employees for the organization.

2. Review of Literature

Paradox (2018) argued that artificial intelligence helps the employer in the recruitment process. This artificial intelligence assistant mainly focuses on candidate capture, scheduling coordination, screening, communication with the candidates and engagement.

Bullhorn (2018) stated that the usage of artificial intelligence in talent acquisition has increased the efficiency of 40% and increased engagement for 41%.

Okolie *et al.*, (2017) enumerated that artificial intelligence can be used in screening candidates, re-engagement, new hire onboarding, employee relations, career development, candidate engagement, and scheduling.

Schwartz *et al.*, (2017) analyzed the uses of artificial intelligence on talent acquisition. From the analysis, it was found that with the help of artificial intelligence, an employer can reduce their cost & time of their hiring. Some of the uses are decreases in human bias, candidate rediscovery, diversity hiring, and business competitiveness.

Parnas (2017) found that organization has some of the problems while implementing artificial intelligence in their organization. Some of the problems are artificial intelligence require a lot of data, skepticism of new technology and lack of understanding of Artificial Intelligence among technical employees.

Randstad (2018) identified that most of the organization faces a problem like scarcity of field specialist, lack of business alignment and integration challenges.

King *et al.*, (2017) delivered the major highlights of using artificial intelligence in talent acquisition. It is revealed that the usage of artificial intelligence decreases the time and cost of recruitment.

3. Research Methodology

3.1. Statement of the Problem

Florentine, S (2016) stated that employers face a lot of struggle in identifying the right talented employees for the job. Especially in this competitive world, acquiring a talented employee is very much difficult.

3.2. Objectives of the Study

- ❖ To analyze the relationship between the usage of artificial intelligence and talent acquisition.
- ❖ To measure the impact of artificial intelligence on talent acquisition.
- ❖ To identify the major challenges organizations face in building artificial intelligence capabilities in the organization.

3.3. Statistical Tool

The research objectives were framed with a questionnaire and used a statistical tool to evaluate the prompt results.

S.NO	DESCRIPTION OF OBJECTIVES	STATISTICAL TOOLS FOR ANALYSIS
1	The relationship between the usage of artificial intelligence and talent acquisition	Multiple Correlation
2	The impact of artificial intelligence in talent acquisition	Multiple Regression
3	The major challenges organization face in building artificial intelligence capabilities in the organization	Weighted Average Mean

3.4. Research Design

The descriptive research design was adopted in this study with particular reference to Chennai. The sample size was 245. A simple random sampling technique was adopted to gather data with a structured questionnaire. Data were collected from HR managers. The secondary data was collected from the previously published records, journals, articles, websites, thesis, e-books, books, etc. The questions were framed in 5 points Likert scale method. (5 - *Strongly Agree*, 4 - *Agree*, 3 - *Partially Agree*, 2 - *Disagree*, 1 - *Strongly Disagree*).

4. Data Analysis

4.1. The relationship between the usage of artificial intelligence and talent acquisition

Table 1. Correlation

		Screening Candidates	Candidate Engagement	Re-engage ment	Post offer acceptance	New hire onboarding	Career Development	Employee relations	Scheduling
Screening Candidates	Pearson Correlation	1	.181	.255	.384	.361	.348	.335	.123
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.005
	N	245	245	246	245	245	245	245	245
Candidate Engagement	Pearson Correlation	.181	1	.291	.071	.029	.065	.080	.132
	Sig. (2-tailed)	.000		.000	.004	.005	.000	.005	.004
	N	245	245	246	245	245	245	245	245
Re-	Pearson	.256	.297	1	.223	.264	.199	.126	.088

engage ment	Correlat ion								
	Sig. (2- tailed)	.000	.000		.000	.000	.000	.005	.004
	N	245	245	246	245	245	245	245	245
Post offer acceptan ce	Pearson Correlat ion	.484	.071	.311	1	.729	.679	.692	.052
	Sig. (2- tailed)	.000	.005	.000		.000	.000	.000	.000
	N	245	245	246	245	245	245	245	245
New hire on- boarding	Pearson Correlat ion	.469	.029	.354	.739	1	.744	.679	.344
	Sig. (2- tailed)	.000	.005	.000	.000		.004	.005	.004
	N	245	245	246	245	245	245	245	245
Career Develop ment	Pearson Correlat ion	.477	.064	.195	.679	.633	1	.670	.042
	Sig. (2- tailed)	.000	.004	.005	.004	.008		.001	.000
	N	245	245	246	245	245	245	245	245
Employ ee relations	Pearson Correlat ion	.335	.080	.127	.692	.679	.760	1	.148
	Sig. (2- tailed)	.000	.005	.000	.000	.000	.000	.000	.005
	N	245	245	246	245	245	245	245	245
Scheduli ng	Pearson Correlat ion	.112	.136	.098	.054	.255	.083	.148	1
	Sig. (2- tailed)	.005	.002	.001	.000	.004	.005	.004	.002
	N	245	245	246	245	245	245	245	245

From table1, it was found that correlation of usage of artificial intelligence (Screening candidates, candidate engagement, re-engagement, post-offer acceptance, new hire onboarding, career development, employee relations, and scheduling) has a positive relationship with talent acquisition. A significant value is 0.000 which is <0.005 and this shows that usage of artificial intelligence and talent acquisition have a statistically linear relationship ($p < 0.005$). The direction of the relationship is positive (i.e., talent acquisition and the usage of artificial intelligence are positively correlated), which means that these two variables tend to increase together (i.e., greater the usage of artificial intelligence greater the talent acquisition). So there is a strong relationship between usages of artificial intelligence talent acquisition.

Table 2
Descriptive Statistics

	N	Std. Deviation
Screening candidates	245	10.10298
candidate engagement	245	.67029
re-engagement	245	.70661

post-offer acceptance	245	.34428
new hire on-boarding	245	9.73614
career development	245	9.51575
employee relations	245	9.70618
scheduling	245	.59832

From Table2, it is proven that screening candidates through artificial intelligence play an important role in talent acquisition. Usages of artificial intelligence in talent acquisition include Screening candidates, new hire onboarding, employee relations, career development, re-engagement, candidate engagement, scheduling, and post-offer acceptance.

4.2. Impact of artificial intelligence

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std.error of the Estimate
1	.917(a)	.786	.676	.175

aPredictors: (Constant). Time & Cost saving, mapping of talents, Decreases in human bias, Query redressing, Candidate Rediscovery, Diversity hiring, Business Competitiveness

From the above table 3, the Model summary can be multiple correlation coefficient. R can be considered to be one measure of the quality of the prediction of the dependent variable (Talent acquisition). A value of 0.917, indicates a good level of prediction. The “R Square” column represents the R Square value, which is the proposition of variance in the dependent variable (Talent acquisition) that can be explained by the independent variable (Time & Cost saving, mapping of talents, Decreases in human bias, Query redressing, Candidate Rediscovery, Diversity hiring, Business Competitiveness). R square value is 0.786 that our independent variables explain 78.6% of the variability of the dependent variable (Talent acquisition).

Table 4: Anova(B)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	33.785	1	5.078	68.941	.000(a)
	Residual	17.351	244	.051		
	Total	51.136	245			

a Predictors: (constant), Time & Cost saving, mapping of talents, Decreases in human bias, Query redressing, Candidate Rediscovery, Diversity hiring, Business Competitiveness b Dependent Variable: Talent Acquisition

Above Table 4, shows that independent variables statistically significantly predict the dependent variable, $F(1,245) = 68.941$, $p < 0.005$ (i.e., the regression model is a good fit of the data).

Table 5: Coefficients (A)

Model		Unstandardized Coefficients		Unstandardized Coefficients	T	Sig
		B	Std. Error	Beta		
1	(Constant)	40.913	7.099		5.763	.000
	Time & Cost Saving	.489	.123	.497	3.971	.000
	Mapping of	.444	.114	.451	3.890	.000

	Talents					
	Decreases in human bias	.406	.130	.363	3.130	.003
	Query redressing	.385	.043	.677	8.877	.003
	Candidate Rediscovery	.118	.032	.252	3.667	.004
	Diversity hiring	.165	.063	.175	2.633	.001
	Business Competitive	.175	.085	.078	2.785	.002

a Dependent Variable: Talent Acquisition

The above Table 5, explains unstandardized coefficients indicate how much the dependent variable (Talent acquisition) varies with an independent variable (Time & Cost saving, mapping of talents, Decreases in human bias, Query redressing, Candidate Rediscovery, Diversity hiring, Business Competitiveness).

Multiple Regression equation is:

$$\text{Talent Acquisition} = 40.913 + (0.489 * \text{Time \& Cost Saving}) + (0.444 * \text{mapping of talents}) + (0.406 * \text{Decreases in human bias}) + (0.385 * \text{Query redressing}) + (0.118 * \text{Candidate Rediscovery}) + (0.165 * \text{Diversity hiring}) + (0.175 * \text{Business Competitiveness})$$

Time & Cost saving, mapping of talents, Decreases in human bias, Query redressing, Candidate Rediscovery, Diversity hiring, Business Competitiveness significant value is <0.05. Hence the alternative hypothesis has been accepted. It is clear that artificial intelligence has a strong influence on talent acquisition

When an employer uses artificial intelligence in talent acquisition, an employer can achieve (save Time & Cost, mapping of talents, Decreases in human bias, Query redressing, Candidate Rediscovery, Diversity hiring, Business Competitiveness) with the help of artificial intelligence.

4.3. Major Challenges organization face in building artificial intelligence capabilities in the organization

Table 6

	N	Mean	Rank
AI requires a lot of data	245	2866.81	I
Skepticism of new technology	245	457.73	IV
Lack of understanding of AI among non-technical employees	245	647.62	II
Scarcity of field specialists	245	610.21	III
Lack of business alignment	245	38.41	V
Integration Challenges	245	72.98	VI
Difficulty assessing vendors	245	32.46	VII

From table6, it is clearly shown that most of the organization faces problems while implementing artificial intelligence in their organization. Among all the problems one of the basic challenges the organization faces is that artificial intelligence requires a lot of

data (Rank I). The mean value is relatively high for Lack of understanding of AI among non-technical employees (Mean of 647.62). Employers find it difficult to find the specialist in this particular field (Mean of 610.21) which falls under III rank. Skepticism of new technology and Lack of business alignment falls under rank IV and rank V. Integration challenges becomes one of the challenges while implementing artificial intelligence in an organization that falls under rank VI (Mean of 72.98). Lastly using artificial intelligence gives difficulty in assessing vendors (Mean of 32.46). These are the challenges organizations face in implementing artificial intelligence in the organization. A standard deviation close to zero indicates that the mean is reliable and that there is very little volatility in the sample. From the above table, it can be observed that the standard deviation for all the factors is less than 1, which indicates that the dispersion of the data is low.

5. Conclusion

In this technology world, everyone becomes techno-geek. As everyone becomes techno-geek, employers should catch them wisely with the usage of technology. Every organization needs a talented employee to be on top. One of the best methods to be at the top, is by using the technology to acquire the right talented employees for the right job. Every organization should use artificial intelligence during talent acquisition. Artificial intelligence helps in Screening candidates, candidate engagement, re-engagement, post-offer acceptance, new hire onboarding, career development, employee relations, and scheduling. Usage of artificial intelligence in an organization reduces the Time & Cost of recruitment, mapping the right talents, Decreases in human bias, Query redressing, Candidate Rediscovery, Diversity hiring, Business Competitiveness. Even though an organization struggles to adopt artificial intelligence, it is necessary to use artificial intelligence.

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