

A Study on Modern Paradigm Techniques in Recruitment Process in a Printing and Packaging Company

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ABSTRACT

The use of modern paradigm methods spurred by shifting organizational needs and technological advancements has resulted in a significant transformation of the employment process in recent years. This study investigates the shift from traditional hiring methods to more flexible and data-driven approaches, such as applicant tracking systems (ATS) for passive candidates, social media recruitment, and predictive analytics. This study looks at how these modern technologies improve the candidate experience, reduce biases, and boost productivity in order to understand how they impact recruiting outcomes. The study evaluates the effectiveness of current practices in various industries and looks at the challenges that come with putting these tactics into practice. The findings show that, despite their many benefits, modern recruitment paradigms are only as good as their proper use, continuous evaluation, and alignment with business goals.

Keywords: Applicant tracking system, mobile optimization, modern recruitment process, passive candidates through cold outreach.

INTRODUCTION

The term "modern paradigm techniques" in recruitment refers to creative, tech-driven strategies that go beyond conventional techniques like job boards and print advertisements to draw in and choose talent. Time and money are saved during the hiring process by using modern techniques like applicant tracking systems (ATS) and AI-powered solutions. Social media, online job boards, and industry events are just a few of the venues that modern recruitment uses to reach a wider spectrum of possible candidates. In order to facilitate data-driven decision-making, contemporary recruitment technologies offer useful information on applicant profiles, application sources, and hiring results.

Objectives

- 1) To study the effectiveness of applicant tracking system.
- 2) To assess the role of mobile optimization (social media) in modern recruitment process.
- 3) To identify the importance of engaging passive candidates through cold outreach.
- 4) To suggest the implementation of an AI tool.

Scope Of The Study

This study will explore the evolution of recruitment processes, focusing on the integration of advanced technologies. The research will assess the efficiency, cost-effectiveness, and candidate experience improvements resulting from these innovations while addressing the challenges such as security risks, resistance to change. The study will examine key tools like Applicant Tracking Systems (ATS), mobile optimization, passive candidates, talent pool, in recruitment. The study will analyze how these technologies enhance efficiency, reduce bias, and improve candidate experience while considering challenges such as security concerns and ethical issues. The research will also offer insights into emerging trends, the future of recruitment, and provide recommendations for organizations.

REVIEW OF LITERATURE

M Parveen, G Suganya, Mrs L Noorul Ayisha, Ms R Pooja Batt, 2025 Rapid technological development has led to research focused on combining recruitment and information technology (IT). Typically, the focus has been on how to make the recruitment and selection process smoother and optimized using IT or on technological advances that offer a new, smart, digital context for human resource management (HRM) practices. Moreover, time, effort, and repeating daily tasks are transformed into computer driven ones, which gives recruiters enough room to focus on more important



issues related to performance improvement and development. AI algorithms are only as good as the data on which they are trained, and if that data is biased, so are the algorithms (Danks & London, 2017). This study explores job applicants' perceptions of AI-powered recruitment tools, focusing on factors such as trust, fairness, transparency, and effectiveness. A descriptive research design was employed to examine these perceptions comprehensively. Convenience sampling was used to select a sample of 181 respondents. Data analysis techniques included ANOVA and regression analysis to uncover insights into applicants' attitudes toward AI-driven recruitment systems. The findings reveal that applicants generally hold positive perceptions of AI technology in hiring processes, recognizing its potential to enhance the efficiency of recruitment systems when integrated with human involvement.

Hassen Altalhi, 2024 The study collected data from employees and employers in business organizations located in Yanbu Industrial City, Kingdom of Saudi Arabia. An internet-mediated approach was used, and a survey questionnaire was designed. The sample size was determined to be 328 using an unknown population sample size formula. Data were gathered from 103 employees and 53 employers. Descriptive statistical analysis was conducted, and Chi-square was used to analyze the approaches of Traditional and erecruitment for the job application process.

RESEARCH METHODOLOGY

The sampling method which is used for this study is convenience sampling. Number of eligible workers in the company is 250.based on the morgan's table a sample size of 152 has been taken for this study. Mann-whitney u-test, kruskal-walli's h-test, correlation. In this research, various percentages are identified in the analysis and they are presented periodically by way of bar diagram and pie diagram so as possess a better quality.

DATA ANALYSIS AND INTERPRETATION

Percentage analysis

Table 1: Demographics details of the respondents

Categories	Sub categories	No. Of respondents	Percentage
Age	Below 20 years	4	2.6
	21 – 30 years	43	28.3
	31 – 40 years	71	46.7
	Above 40 years	34	22.4
Gender	Male	109	71.7
	Female	43	28.3
Marital status	Unmarried	43	28.3
	Married	109	71.7
Work experience	Below 1 year	6	3.9
	1 -5 years	29	19.1
	6 - 10 years	60	39.5
	Above 10 years	57	37.5
Total	All categories	152	100

Findings:

From the table it is found that the largest age group is 31–40 years (46.7%), a smaller proportion falls in the 21–30 (28.3%) and above 40 (22.4%) brackets. The sample is male-dominated, which could indicate a gender imbalance in the company surveyed. 71.7% of respondents are married, 28.3% are unmarried. 39.5% have 6–10 years of experience, 37.5% have more than 10 years, 19.1% have 1–5 years, only 3.9% have less than 1 year.

Inference:

From the table the majority of respondents are in their prime working age, indicating a workforce that is likely to be experienced and professionally active. The sample is male-dominated, which could indicate a gender imbalance in the industry or organization surveyed. A high proportion of married individuals suggests a stable, family-oriented demographic, which could influence work-life balance expectations and job stability. The majority of respondents are seasoned professionals, indicating a mature and potentially skilled workforce. The low number of respondents with less than 1 year of experience implies limited new hiring or representation of fresh graduates.

MANN WHITNEY TEST

MANN WHITNEY U-TEST BASED ON GENDER

HYPOTHESIS:

Null Hypothesis (H0): There is no significant difference between the mean rank of male and female with respect to those 3 Dimensions.



Alternative Hypothesis (H1): There is significant difference between the mean rank of male and female with respect to those 3 Dimensions.

Table 2: Showing Mann Whitney Test

Ranks

	gender	N	Mean Rank	Sum of Ranks
Mobile optimization	male	109	73.38	7998.50
	female	43	84.41	3629.50
	Total	152		
Passive candidates	male	109	75.55	8234.50
	female	43	78.92	3393.50
	Total	152		

Table 3: Showing test statistics of U test

Test Statistics^a

		Passive candidates		
Mann-Whitney U	2003.500	2239.500		
Wilcoxon W	7998.500	8234.500		
Z	-1.421	430		
Asymp. Sig. (2-tailed)	.155	.667		

a. Grouping Variable: gender

Interpretation

The p-values for the mobile optimization (0.155) and passive candidates (0.667) are greater than 0.05. This test indicate that there are no statistically significant differences between the two independent groups across the following recruitment metrics:

- **Mobile Optimization** (U = 2003.5, p = 0.155), and
- **Passive Candidates** (U = 2239.5, p = 0.667).

It does not meet the conventional threshold of p < 0.05, and thus we fail to reject the null hypothesis for the two dimensions. These findings may suggest that gender-related factors are not a major concern when designing strategies or making decisions related to mobile optimization or targeting passive candidates, thereby allowing a more universal approach to be taken in these areas.

Suggesting that there is no significant difference in these areas.

KRUSKAL WALLIS TEST

KRUSKAL-WALLIS H-TEST BASED ON AGE

HYPOTHESIS:

Null Hypothesis (H0): There is no significance difference between the mean rank of age group with respect to those 3 dimensions.

Alternative Hypothesis (H1): There is significance difference between the mean rank of age group with respect to those 3 dimensions.

Table 4: Showing Kruskal Wallis Test

Ranks

	age	N	Mean Rank
ATS	below 20 years	4	104.25
	21-30 years	43	63.20
	31-40 years	71	83.47
	above 40 years	34	75.50



	Total	152	
Mobile optimization	below 20 years	4	107.12
	21-30 years	43	62.60
	31-40 years	71	82.90
	above 40 years	34	77.10
	Total	152	
Passive candidates	below 20 years	4	117.25
	21-30 years	43	63.10
	31-40 years	71	84.93
	above 40 years	34	71.04
	Total	152	

Table 5: Showing test statistics of H test

Test Statistics^{a,b}

		Mobile optimization	Passive candidates	
Chi-Square	7.546	8.068	10.751	
df	3	3	3	
Asymp. Sig.	.056	.045	.013	

- a. Kruskal Wallis Test
- b. Grouping Variable: age

Inference

A statistically significant difference was found across age groups for:

- Mobile Optimization (p = 0.045)
- Passive Candidates (p = 0.013)
- For ATS Efficiency the result was not statistically significant at the 0.05 level (p = 0.056), but it was close to significance, suggesting a possible age-related trend worth further investigation.

These results suggest that age has a significant influence on how individuals perceive mobile optimization and the ability to attract passive candidates in recruitment systems. Perceptions of ATS efficiency showed marginal variation by age but did not reach statistical significance.

Correlation

Pearson Rank Correlation

Table 6: Showing Correlation

Correlations

	-	ATS	Mobile optimization	Passive candidates
ATS	Pearson Correlation	1	.601**	.502**
	Sig. (2-tailed)		.000	.000
	N	152	152	152
Mobile optimization	Pearson Correlation	.601**	1	.599**
	Sig. (2-tailed)	.000		.000
	N	152	152	152
Passive candidates	Pearson Correlation	.502**	.599**	1
	Sig. (2-tailed)	.000	.000	
	N	152	152	152



Correlations

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	N	152	152	152
Passive candidates	Pearson Correlation	.502**	.599**	1
	Sig. (2-tailed)	.000	.000	
	N	152	152	152

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Interpretation

All variables are positively and significantly correlated at the 0.01 level, which indicates strong associations among them:

- ATS efficiency is moderately positively correlated with both:
 - \circ Mobile optimization (r = 0.601), and
 - \circ Passive candidate attraction (r = 0.502).
- Mobile optimization also shows a moderately strong positive correlation with passive candidate attraction (r = 0.599).

This means that improvements in one area (e.g., mobile optimization) are statistically associated with higher perceived efficiency in ATS use and a greater ability to attract passive candidates.

SUMMARY OF FINDINGS

- ➤ Majority of the respondents are male which has a percentage of 71.7% and others are all female.
- ➤ 2.60% of the respondents belongs to the age group of below 20 years, 28.30% are found to be in the age of 21 30 years, 46.70% of respondents are found to be between 31 40 years, 22.40% are found to be above 40 years.
- Most of the respondents are married with a percentage of 71.7%.
- ➤ 3.90% of the respondents have the work experience below 1 year, 19.10% are found to have work experience between 1-5 years, 39.50% of respondents are found to have work experience between 6-10 years and 37.50% are found to have work experience be above 10 years.
- > The findings suggest that gender-related factors are not a major concern when designing strategies or making decisions related to mobile optimization or targeting passive candidates, thereby allowing a more universal approach to be taken in these areas.
- > The results suggest that age has a significant influence on how individuals perceive mobile optimization and the ability to attract passive candidates in recruitment systems. Perceptions of ATS efficiency showed marginal variation by age but did not reach statistical significance.
- ➤ Improvements in one area (e.g., mobile optimization) are statistically associated with higher perceived efficiency in ATS use and a greater ability to attract passive candidates.

SUGGESTIONS

- ➤ Based on the study findings, it is recommended that organizations invest in Applicant Tracking Systems (ATS) to streamline their recruitment processes, improve screening efficiency, and enhance candidate tracking accuracy.
- > Companies should prioritize mobile optimization of job postings to attract a larger number of applicants and strengthen their employer branding through social media platforms. It is crucial for recruiters to leverage social media not only for posting vacancies but also for building a strong employer brand and reducing the overall time-to-hire.
- ➤ In addition, organizations should focus on engaging passive candidates through structured cold outreach strategies, as passive candidates often possess stronger skills and contribute to a robust talent pipeline. Providing training to hiring teams on the effective use of ATS and social media recruitment tools is also essential.



Moreover, systematizing cold outreach efforts can help in building trust with passive candidates and establishing long-term relationships. Lastly, companies should consistently review and update their social media recruitment strategies to stay aligned with changing market trends and candidate expectations.

CONCLUSION

The survey makes it abundantly evident that social media, technology, and proactive talent finding tactics are all having a major impact on modern recruitment. The results confirm the importance of Applicant Tracking Systems (ATS) and other tools in improving the effectiveness, precision, and strategic value of the hiring process. In addition to reducing time-to-hire, their incorporation into recruitment processes makes data-driven decision-making possible. In a similar vein, social media's influence in hiring is growing beyond employer branding; it is now crucial for luring talent, shortening the hiring process, and assessing candidates' cultural fit.

The growing significance of cold outreach to passive prospects is another important finding from the study. Businesses are seeing the method's potential as significant and cost-effective, especially when it comes to creating a robust, long-term talent pipeline. The transition to quality-focused hiring procedures is highlighted by the belief that passive candidates frequently have superior talents.

To summarize, the recruitment environment is changing from conventional techniques to contemporary, candidate-centered, technology-enabled strategies. Businesses that adopt these contemporary paradigms—using digital tools, making the most of mobile material, and aggressively contacting top talent—will be in a better position to draw in, evaluate, and keep the best candidates in a market that is becoming more and more competitive.

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