

A Study of Applicant Tracking System (ATS) In Minimizing Human Intervention in Recruitment

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ABSTRACT- This paper examine the role of Applicant Tracking Systems(ATS) in improving the reclamation efficiency by reducing mortal intervention. It analyzes the effect of the ATS on the speed, delivery, decision- timer and cost- effectiveness of hiring process. Structured questionnaires, interviews and conversations were used to collect data of 100 HR professionals. Conventional recruiting process is very time consuming and biased because of the high human intervention. ATS automates the hiring process, enhances efficiency, fairness and cost-effectiveness, yet there are still issues with integration, reduction of bias and balancing automation with human judgment. The results indicate that ATS is important in automating repetitive tasks. Human intervention (e.g., resume screening, interview scheduling) during the initial stages is being slowly removed by automation via ATS.

The conclusion of the study is that although ATS may not be able to completely overtake human interference, it is a very essential instrument in modernizing recruitment. Such recommendations as system customization, adequate training and mix of automation and human participation to fulfill ATS implicit are recommended.

KEYWORDS: Applicant Tracking System(ATS), Reclamation robotization, HR Technology, Talent Acquisition, Reduction in Bias in Hiring.

I. INTRODUCTION

Human Resource management (HRM) is a key factor in determining the workforce of an organization. One of the most essential functions of an organization, recruitment is a very expensive undertaking by organizations. Historically, the organization has been depending much on manual processes as it does in screening of resumes, scheduling of interviews, and grading of candidates. It is also lengthy, inefficient and biased. To address these issues, companies have been shifting towards the use of Applicant Tracking Systems (ATS) software solutions that seek to automate and streamline different steps of the hiring process.

ATS helps in running a vast pool of applicants easily through automating some of the features such as resume parsing, filtering by key words, scheduling and updating of interviews. This does not only minimize the administrative workload, but also makes the hiring decisions more consistent, data-driven and objective. Nowadays the

competitive world is also fast-paced and requires the recruitment landscape to be time limited and to be fair the addition of ATS is a bonus.

A. Objective

- To examine the improvement of ATS on recruitment efficiency.
- To examine the effects of ATS in automation of recruitment functions.
- To determine the effect of ATS in minimizing human interaction in the recruitment process.
- To examine the financial gains and savings made by use of ATS in the recruitment process.

B. Significance

This research paper brings to the fore the manner in which ATS enhances the recruitment process, through increased efficiency, enhanced candidate experience as well as reduced costs. It minimizes the labor of hands, enhances equity in the hiring process and enlarges the range of strategic HR activities.

To human resource practitioners, an ATS minimizes the process of hiring and liberates time to make strategic decisions. It makes it more cost-effective and lessens the administrative burden plus a fair hiring process by reducing bias on the part of an organization.

On balance, ATS can help organizations to build efficient, transient, and inclusive recruitment systems.

II. LITERATURE REVIEW

Ankitha K [1], Reported that Applicant Tracking (ATS) are more effective in recruitment as they automate the resume parsing, screening of applicants based on keywords, schedule interviews, and communicate with the candidates. ATS can assist organizations to deal with many applications in a short period of time, enable better qualified candidates to be shortlisted, minimize the chances of making errors in administration, and improve the experience of the candidates with prompt feedback. It also assists in data security and compliance as well as providing better hiring decisions with the help of analytics. On the whole, the paper emphasizes that the ATS is an effective way of enhancing the hiring process through time savings, cost reduction, and recruitment organization, and operationalization.

As explained by Dr. Bala Koteswari [2], Applicant

Tracking Systems (ATS) are now critical in contemporary talent acquisition, as they automate most of the recruitment activities including job posting, resume collection, screening, interview scheduling, and multiple interactions with the candidate. ATS assists organizations to process large pools of applications in a cost-effective manner, save on hiring time and cost, maintain uniformity, and enhance coster experience to the candidate. The paper emphasizes that ATS can also be used in legal compliance, reduce human bias, and offer beneficial analytics to enhance the recruitment decisions. In general, the research comes to the conclusion that the ATS enhances the talent acquisition process, accelerating and streamlining it and focusing on the necessity to overcome the problems concerning the system utilization and automation.

Katarina Drucker [3] examined the problem of how Applicant Tracking Systems (ATS) may be very discriminatory with their strict algorithms and screening based on keywords, eliminating applicants who are qualified. It points out that ineffective ATS rules, the inability to match keywords, excessive automation can cause qualified candidates to be eliminated, particularly applicants whose resumes are unusual or whose experience descriptions are non-standard. The study highlights the importance of better system design, frequent audits, and human controls in order to maintain fairness, decrease bias and eliminate the potential of ignoring qualified candidates.

In their research article, Monika.L, Dharani Haribabu [4] explored the digital tools and technologies applied in the recruitment and selection process by substituting the time-consuming and manual process with e-recruitment practices, which are automated, faster, and more efficient. It emphasizes how recruitment technologies such as ATS, job boards, chatbot, social media, AI, VR, gamification, CRM system cut down on every part of the hiring process including attracting and recruiting candidates, screening and evaluation, and onboarding. These technologies increase time savings, costs, quality of candidates, candidate experience and facilitate data-driven decisions. In general, the paper concludes that digitalization will enhance the recruitment process, make it more effective, convenient, and efficient to both employers and job seekers.

Miroslava Peicheva [5] examined the role of Applicant Tracking Systems (ATS) in producing valuable data that assist the recruiter to make quicker and more prudent hiring choices. It emphasizes the kind of ATS data, including the sources of candidates, the rate of selection, the rate of acceptance of offers and the yield ratio, and indicates that these reports enhance recruitment efficiency. The researchers conclude that ATS saves time spent doing manual work, lowers errors, accelerates screening via automation, and redirects the attention of recruiters to data-driven decision-making after which the overall hiring process is made stronger.

Nikolina Novakovic et al. [6] investigated the way Applicant Tracking Systems (ATS) can make the recruitment process faster and more contemporary through automation of job ads, resume handling, interviewing, and correspondence with the candidates. ATS can speed up the hiring process, minimize manual labor, and improve the experience of hiring with its AI capabilities such as smart filtering and suggestions of candidates. Although very

useful, the researcher observes that applicants need to format the resumes according to ATS and doubts the ability of technology to completely take the human factor out of recruitment.

Stutty Srivastava [7] highlighted that AI is transforming HRM where recruitment is quicker, more efficient and data-driven with the tools such as automated resume screening, predictive analytics and chatbots. The technologies assist in minimizing the human factor in decision-making and enhancing it, though they also introduce the issue of fairness, transparency, and data privacy. The paper highlights the necessity to strike a balance between the advantages of AI and ethical values and requests future research to enhance transparency and comprehend the long-term effects of AI on organizational culture.

III. METHODOLOGY

The study is descriptive in nature, which is appropriate in this study because the researcher assessed the current recruitment practices, determined trends, and researched the correlation between ATS use and such variables as automation, efficiency, cost-effectiveness.

Data Collection Methods:

Primary Data: The Structured Online Questionnaire was used to gather primary data directly related to the HR professionals, recruiters and hiring managers. An online survey was administered through Google Forms with close-ended Likert questions, to describe quantitative data of the ATS characteristics like speed, accuracy, automation and influence on human intervention.

Secondary Data: Credible sources were used to get secondary data and they included Published research papers, articles, case studies on ATS, Market reports and insights provided on LinkedIn, SHRM and HR technology providers.

A. Analytical Techniques

The data has been arranged and summarized through Tabular Analysis, Graphical representation and Percentage Analysis to compare and interpret the results, visualizing important findings, identifying trends and determining the proportion of the responses on ATS effectiveness.

IV. DATA ANALYSIS

A. ATS Keyword Based Candidate Filtering

Table 1 : ATS Keyword Based Candidate Filtering
Keyword-Based Candidate Filtering

Sr. No.	Response	No. of Respondent	Percentage (%)
1	Yes	92	92%
2	No	8	8%
	Total	100	100%

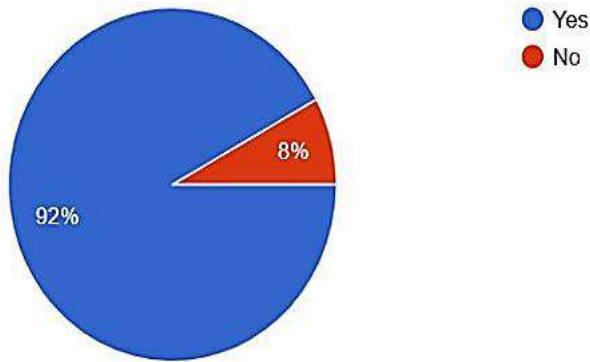


Figure 1: ATS Keyword-Based Candidate Filtering

INTERPRETATION:

In the above table 1 and figure 1, we shows the most of the respondents (92) attested to the fact that ATS automatically filters through the candidates using the keywords, which shows that there is a lot of awareness of this important feature. The response was only a little (8 per cent).

B. Applicant Tracking System (ATS) has minimized the need for manual resume screening

Table 2: ATS Impact on Manual Resume Screening

Sr. No.	Response	No. of Respondent	Percentage (%)
1	Strongly Agree	56	56%
2	Agree	29	29%
3	Strongly Disagree	06	06%
4	Disagree	09	09%
	Total	100	100%

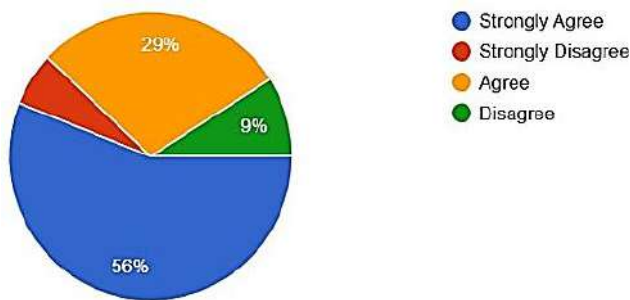


Figure 2: ATS Impact on Manual Resume Screening

INTERPRETATION:

Table 2 and figure 2 are showing the vast majority of the respondents (85) say that the Applicant Tracking System (ATS) has reduced the necessity of manually screening the resumes, and 56 agree with this notion strongly. It was found that only 15% of people did not agree, which means that the efficiency of ATS in terms of resume screening automation is generally recognized.

C. ATS and External Agency impact on Cost

Table 3 : ATS and External Agency Cost Reduction

Sr. No.	Response	No. of Respondent	Percentage (%)
1	Yes	93	93.00%
2	No	7	7.00%
	Total	100	100%

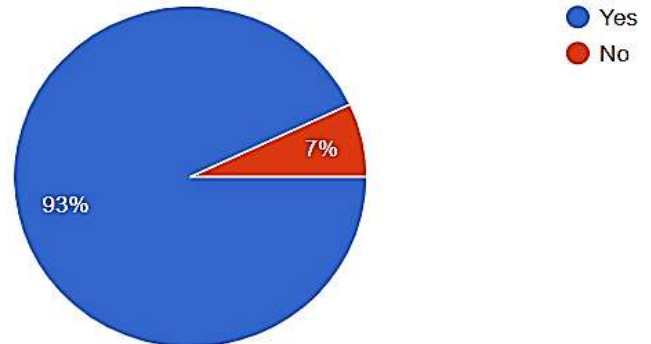


Figure 3: ATS and External Agency Cost Reduction

INTERPRETATION:

In the above table 3 and figure 3, Nine out of ten people (93 percent) are of the view that ATS has made the external recruitment agencies cheaper, which means that the ATS is highly efficient in ensuring that external hiring assistance is minimized. The percentage of disagreement was only 7% as it is clear that there is a high level of consensus regarding the cost-saving effect of ATS.

D. Hiring Speed and ATS

Table 4: Improved the overall speed of the hiring process

Sr. No.	Response	No. of Respondent	Percentage (%)
1	Strongly Agree	46	46%
2	Agree	40	40%
3	Strongly Disagree	4	4%
4	Disagree	10	10%
	Total	100	100%

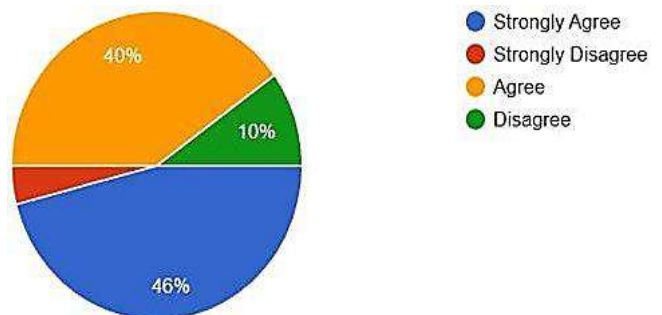


Figure 4: Improved the overall speed of the hiring process

INTERPRETATION:

In the above table 4 and figure 4 are showing a huge percentage of the respondents (86%), say that Applicant Tracking System (ATS) has made the hiring process much faster with 46% saying strongly agree. The percentage on which they disagreed was only 14 percent, meaning that

there was a general positive perception of ATS in efficiency in the recruitment process.

V. RESULTS AND DISCUSSION

A significant percentage of respondents respond that Applicant Tracking Systems (ATS) simplify the process of handling a large volume of applications. Having 32% that agreed and 56% that strongly agreed, 88% of the people had a positive opinion about the effectiveness of the system. Comparatively, there is a minimal opposition to this as only 9% strongly disagree and 3 percent disagree. These findings suggest that ATS is a rather acceptable approach to increasing productivity in the staffing process. Most of the interviewees feel that Applicant Tracking System (ATS) has been pivotal in speeding up the process of hiring. Having 46% having a strongly agree and 40% having an agree, a total of 86% have a positive opinion on the effect of the system on the speed of hiring. The percentage of those who disagree and strongly disagree is only 10 and 4, respectively, which means that a very small number of the participants consider ATS to be ineffective in this aspect. These findings indicate that ATS is more or less seen as an effective solution in saving time-to-hire and improving the efficiency of the recruitment process in general.

A vast majority (92 percent) of the respondents confirm that Applicant Tracking Systems (ATS) automatically filter out applicants on a key word basis. This is indicative of a high level of awareness of the screening features of ATS tools that are based on the use of keywords. This is a very low percentage (8 percent) of those who are not or do not believe. The results indicate that keyword filtering is an established and well-known functionality of ATS that can be used to shortlist applicants in the early recruitment phases.

Applicant Tracking System (ATS) has lessened the obligation of searching through the resumes. Eighty five percent (57% strongly agree and 28% agree) believe that ATS assists in resume screening. It is perceived that only 15% (6% strongly disagree and 9% disagree) believe it still needs manual labor. This indicates that most people consider ATS as a handy resource in ensuring that the process of screening resumes is easy and faster.

A big percentage of the respondents (93) agree that the Applicant Tracking System (ATS) has saved the cost of employing the external recruitment agency to recruit. Only 7% do not share this view. It means that ATS is commonly considered an inexpensive resource enabling the companies to maintain the process of recruitment within their premises and reduce the reliance on third-party recruitment services.

VI. CONCLUSION AND RECOMMENDATIONS

A. Conclusion

Applicant Tracking Systems (ATS) are highly efficient in enhancing the process of hiring people, as they help to eliminate human interaction and maximize efficiency. They automate such vital processes as resume management, responding to resumes, arranging interviews, and managing applications. The implementation of ATS will result in faster hiring decisions, improved accuracy of

data management, and reduced administrative load.

The ability to improve cost-efficiency and save time is an essential asset of the system in the current hiring practices. The advantages of better workflow, the improved cooperation within the HR departments, and the improved experience of the recruiters and the applicants are enjoyed by the organizations.

B. Recommendations

- Promote the slow process of introducing ATS into small and medium businesses to determine its value and scalability.
- Review and revise system algorithms on a periodic basis to align system requirements with hiring objectives and system optimum performance.
- Regular training related to the ATS usage and keeping in touch of recent features should be conducted to help HR professionals to use it efficiently.
- Make the ATS mobile compatible so that it is accessible and easy to use by both the recruiter and the candidate.
- Ensure the proper data security levels and compliance in the ATS to safeguard the information about the candidates.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

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