

Making Hiring Process Effective through Application Tracking System (ATS)

Ankitha K
2nd Year MBA

Balu.L
Professor
Department of MBA
BMSIT & M, Bengaluru

Abstract

The process of recruiting and hiring the right talent has evolved significantly over the years, and the advent of technology has brought about transformative changes in this domain. In today's fast-paced job market, managing a high volume of job applications efficiently has become a challenge for both recruiters and hiring managers. This is where Application Tracking Systems (ATS) come into performance. An Application Tracking System is a software solution designed to streamline the process of sourcing, screening, and managing job applicants. It serves as a digital assistant to HR professionals, helping them sift through resumes, identify top candidates, and enhance the overall recruitment. ATS systems have revolutionized the way companies handle the influx of job applications. The ability of ATS to scan and rank resumes based on predefined criteria significantly reduces the time and effort spent on manual screening, enabling recruiters to make quicker and more informed decisions. In this paper authors have tried to present an overview of ATS and its role in increasing the effectiveness of hiring process. Organizations who have successfully hired through Application Tracking System to increase the effectiveness of human resource functions are captured and narrated in this piece of work by authors.

Keywords: *Application Tracking System, automation, resume parsing, keyword matching.*

Introduction

In today's competitive job market, organizations are constantly on the lookout for the best talent to drive their success and growth. However, the traditional methods of recruitment are proving to be increasingly inadequate in the face of the rapidly evolving workforce landscape. This is where Applicant Tracking Systems (ATS) come into play, revolutionizing the recruitment process by providing a powerful and efficient tool for managing and optimizing the hiring process. In this comprehensive exploration, we delve into the profound importance of ATS in making recruitment more effective and how it has become an indispensable asset for both employers and job seekers alike.

One of the major challenges in modern recruitment is the overwhelming volume of applications received for each job posting. Businesses and HR departments are inundated with resumes, cover letters, and job inquiries, making it increasingly difficult to sift through the information efficiently and

identify the most qualified candidates. This not only consumes significant time and resources but can also lead to missing out on top talent due to human error or oversight.

Moreover, job seekers have also adapted to the digital age. They have access to a wide array of online job boards and professional networking platforms, which means that a single job posting can receive applications from all over the world. This geographical dispersion of talent has further increased the complexity of recruitment. It's a two-way street; candidates have more choices, and employers have access to a larger talent pool.

In this context, the role of Applicant Tracking Systems becomes paramount. ATS has emerged as a comprehensive solution to address the challenges posed by the changing landscape of recruitment. It streamlines the hiring process, from job posting to candidate selection, making recruitment more efficient, cost-effective, and, most importantly, effective.

Applicant Tracking Systems (ATS)

An Applicant Tracking System is a software application designed to automate and streamline the recruitment process. It serves as a central hub for managing job postings, receiving, and storing applications, and tracking the progress of candidates throughout the hiring cycle. Here are some key functions and features of ATS:

Job Posting Management:

Resume Parsing:

Candidate Database:

Automated Screening:

Communication and Collaboration:

Data Analytics:

Compliance and Security:

Integration:

Overall, ATS is designed to enhance the efficiency and effectiveness of the recruitment process by reducing manual tasks, improving candidate management, and providing valuable insights into the recruitment strategy's success.

The Evolving Role of ATS in Recruitment

As technology and the job market continue to evolve, so do ATS systems. The role of ATS in recruitment is expanding and evolving in several ways:

AI and Machine Learning Integration: ATS is incorporating AI and machine learning to improve candidate matching, identify patterns in candidate data, and even predict future hiring needs.

Mobile-Friendly Applications: *With the proliferation of mobile devices, ATS systems are becoming more mobile-friendly, allowing candidates to apply for positions and recruiters to manage the process on the go.*

Diversity and Inclusion: *Many ATS systems are now equipped to support diversity and inclusion efforts by anonymizing candidate data to reduce unconscious bias and providing data insights on diversity in the hiring process.*

Objective of this research work: Outline Application Tracking System (ATS) role in increasing the effectiveness of hiring process.

Research Method

The research pattern for this paper is Qualitative, whereby analysed information and data was gathered from classic and current literature in the fields of Applicant Tracking System, whereby through the examination of literature the researchers sort to make sense of or interpret concepts or phenomena, whereby a content driven Desk research was undertaken. Given the approach taken to research, the authors acknowledge limitations to both the data collected and the resulting analysis. Desk research relies on secondary data, and this is limited to what is published or what is accessible.

Literature Review

(Pathinayake, 2021) This abstract explores the application of an Automatic Healthcare Tracking and Monitoring System (AHTMS), a cutting-edge solution that leverages a combination of sensors, wearable devices, and data analytics to enhance patient care, improve clinical outcomes, and streamline healthcare operations. This technology enables early detection of health issues and supports timely interventions, reducing hospital admissions and healthcare costs.

(Abeyrathne, D. 2018 This abstract provides an overview of the key components and benefits of a real-time recruitment system. The real-time recruitment system leverages cutting-edge technologies such as artificial intelligence, machine learning, and data analytics to automate various stages of the recruitment process.

(Amadoru, M., & Gamage, C. 2016 This abstract provides an overview of a comprehensive evaluation of the effective use of social networks for recruitment, focusing on the key metrics, strategies, and outcomes that shape this evolving practice. The advent of social networks has revolutionized the recruitment landscape, enabling employers to reach a vast pool of potential talent.

(Winter, A., & Cambou, M. C. 2010). This abstract explores how web-based platforms and tools have been harnessed for recruitment, screening, data management, and quality.

(Faliagka, E., Tsakalidis, A., & Tzimas, G. 2012). The integrated e-recruitment system for automated personality mining and applicant ranking is a cutting-edge solution designed to streamline the hiring process. This system combines advanced data analytics and artificial intelligence to assess applicant personalities and qualifications, making it easier for employers to identify the best candidates.

(Laumer, S., Maier, C., & Eckhardt, A. 2015 The study examines how the integration of BPM and ATS impacts key recruiting metrics, such as time-to-fill, cost-per-hire, analyzing data and surveying HR professionals, this research aims to reveal the extent to which these technologies improve the overall recruitment process.

(Maibe, F. 2010) The study's findings contribute to a better understanding of how ATS can optimize the recruitment process, helping organizations make informed decisions about their HR technology investments and improve their overall recruiting efficiency.

(Nawaz, N. 2020 It identifies key traits, such as emotional intelligence and cultural fit, aiding in candidate selection. Moreover, AI-based facial recognition can reduce unconscious bias by focusing solely on qualifications. It expedites the initial screening process, saving time and resources.

(Nikolaou, I. 2021) This abstract explores the role of technology in simplifying and improving these crucial aspects of human resources. Technology enables employers to reach a broader pool of candidates through online job portals, social media, and AI-driven applicant tracking systems.

(Pathinayake, Y. 2021) Overall, the Online Recruitment Management System revolutionizes the way companies find and hire talent in the digital age.

(Pentenrieder, K., Meier, P., & Klinker, G. (n.d) this paper tried to analyze the effectiveness of tracking objects utilizing square markers within a single-camera setup. (Stahl, G., Björkman, I., Farndale, E., Morris, S. S., Paauwe, J., Stiles, P., Trevor, J., & Wright, P. 2012) Effective global talent management involves six key principles that are crucial for the success of any organization operating on a global scale.

(Amadoru, M., & Gamage, C. 2016) The research aims to determine the impact of social media platforms in attracting and hiring talent. This investigation will contribute valuable insights for HR professionals and businesses looking to enhance their recruitment efforts and leverage the potential of online social platforms.

(Laumer, S., Maier, C., & Eckhardt, A. 2015) Business Process Management (BPM) and Applicant Tracking Systems (ATS) affect the efficiency of the recruitment process. BPM helps streamline and optimize recruitment workflows, making them more organized and transparent.

(Arab et al., 2010) (Nikolaou, 2021) (Amadoru & Gamage, 2016) ("THE IMPACT OF TECHNOLOGY ON RECRUITMENT PROCESS," 2020) technology has greatly simplified and expedited the recruitment process, allowing both employers and job seekers to benefit from its advances.

(Olshevska, T., & Pryimak, V. 2023). The integration of digital tools in recruitment selection simplifies the process, saves time, and facilitates a more inclusive and efficient hiring experience.

(Visa, A., Einolander, J., & Vanharanta, H. 2015) Social media platforms have become powerful tools for recruitment, helping companies reach a broader pool of talent. Overall, these new tools simplify and streamline the recruitment process, making it more efficient and effective for both employers and job seekers.

(Gary, D. 2011). ATS can save time and reduce manual tasks by automatically filtering out unqualified applicants based on predefined criteria, such as qualifications and experience. They also enable HR teams to maintain a database of potential candidates for future positions. This technology not only increases the speed of recruitment but also ensures compliance with hiring regulations and equal opportunity employment.

(Peicheva, M. 2022). By delving into ATS data, businesses can streamline their hiring procedures, reduce time-to-fill, and ultimately make better hiring decisions. ATS data analysis is an invaluable tool for modern talent acquisition and can help companies stay competitive in their search for top talent.

(Faliagka, E., Tsakalidis, A., & Tzimas, G. 2012). An Integrated E-Recruitment System for Automated Personality Mining and Applicant Ranking approach streamlines the hiring process, saves time, and improves the chances of finding the right employee.

(The effects of information technology on recruitment — ProQuest. (n.d.). Retrieved October 29, 2023, The rapid advancement of information technology has significantly transformed the recruitment process making it more accessible, efficient, and adaptable to the changing job market.

Importance of ATS in Recruitment Effectiveness

Efficiency and Timesaving: Perhaps the most immediate and apparent benefit of ATS is its ability to drastically reduce the time and effort required for hiring. The automated screening and ranking of candidates based on predetermined criteria means that recruiters and HR professionals can focus their attention on the most promising applicants. This reduces the time-to-hire, which is crucial in securing the best talent, as top candidates are often off the market quickly.

Improved Candidate Quality: ATS systems allow organizations to define specific criteria for each job posting. This ensures that the candidates who make it to the interview stage are a better fit for the role, leading to a higher chance of hiring the right person. The automated parsing of resumes and applications also reduces the risk of overlooking top talent.

Enhanced Candidate Experience: A positive candidate experience is essential for attracting and retaining talent. ATS systems can provide automated responses to applicants, keeping them informed about the status of their application. Additionally, scheduling interviews and providing feedback becomes more streamlined, contributing to a more positive overall experience.

Reduced Administrative Errors: Manual recruitment processes are prone to administrative errors, such as lost applications, miscommunication, and data entry mistakes. ATS minimizes such errors, ensuring that no candidate falls through the cracks and that data accuracy is maintained throughout the process.

Centralized Data and Compliance: ATS centralizes candidate data and ensures that it is stored securely. This is crucial for maintaining compliance with data protection regulations, especially in an era of increasing scrutiny of data privacy.

Cost Reduction: By automating many aspects of the hiring process and reducing the need for physical paperwork, ATS systems contribute to cost reduction. The savings in terms of time, resources, and administrative expenses are significant.

Continuous Improvement: With the data analytics and reporting capabilities of ATS, organizations can continually analyse and refine their recruitment processes. They can identify bottlenecks, areas for improvement, and sources of top talent, making recruitment more effective over time.

Flexibility and Scalability: ATS systems are highly adaptable and can scale with the needs of an organization. Whether a company is hiring for a single position or expanding its workforce, ATS can accommodate the requirements.

Global Reach: As businesses seek talent beyond their local markets, ATS systems enable the management of applications from candidates worldwide. This broadens the talent pool and provides access to a diverse range of candidates.

Conclusion

Applicant Tracking Systems (ATS) play a pivotal role in enhancing the effectiveness of recruitment processes. Through the reviews authors can capture the relevance of automating the screening of resumes leads to multiple benefits. Starting with saving valuable time for recruiters, ATS ensures consistency in candidate evaluation by applying predefined criteria leading to fairer and more unbiased hiring decisions. Facilitates in building a talent pool by storing candidate data for future openings, reducing recruitment lead times, enhance collaboration among hiring teams, promotes better communication and decision-making, improve the candidate experience by providing timely updates and feedback, enhance data-driven decision-making through analytics, offering insights into recruitment

trends, contribute to cost savings by minimizing manual processes and errors. In review, ATS are integral in advanced recruitment, transforming the recruitment practice for proficiency, objectivity, and accomplishment.

References

A study of the application of automatic healthcare tracking and monitoring system in Saudi Arabia | Emerald Insight. (n.d.). Retrieved October 29, 2023, from <https://www.emerald.com/insight/content/doi/10.1108/IJPC-03-2014-0026/full/html>.

Abeyrathne, D. (2018). Real time recruitment system [PhD Thesis]. <http://dl.lib.uom.lk/handle/123/13972>

Amadoru, M., & Gamage, C. (2016). Evaluating Effective Use of Social Networks for Recruitment. Proceedings of the 2016 ACM SIGMIS Conference on Computers and People Research, 125–133. <https://doi.org/10.1145/2890602.2890604>

Arab, L., Hahn, H., Henry, J., Chacko, S., Winter, A., & Cambou, M. C. (2010). Using the web for recruitment, screen, tracking, data management, and quality control in a dietary assessment clinical validation trial. *Contemporary Clinical Trials*, 31(2), 138–146.

Breaugh, J. A., & Starke, M. (2000). Research on employee recruitment: So many studies, so many remaining questions. *Journal of Management*, 26(3), 405–434. [https://doi.org/10.1016/S0149-2063\(00\)00045-3](https://doi.org/10.1016/S0149-2063(00)00045-3)

Chong, K. K., & Wong, C. W. (2009). General formula for on-axis sun-tracking system and its application in improving tracking accuracy of solar collector. *Solar Energy*, 83(3), 298–305. <https://doi.org/10.1016/j.solener.2008.08.003>

Faliagka, E., Tsakalidis, A., & Tzimas, G. (2012). An integrated e-recruitment system for automated personality mining and applicant ranking. *Internet Research*, 22(5), 551–568.

Gary, D. (2011). *Human Resource Management*. Pearson Education India.

Laumer, S., Maier, C., & Eckhardt, A. (2015). The impact of business process management and applicant tracking systems on recruiting process performance: An empirical study. *Journal of Business Economics*, 85(4), 421–453. <https://doi.org/10.1007/s11573-014-0758-9>

Maibe, F. (2010). An Evaluation of Applicant Tracking Systems for Recruiting Efficiency. https://digitalcommons.du.edu/ucol_hra/14/

Nawaz, N. (2020). Artificial intelligence applications for face recognition in recruitment process. *Journal of Management Information and Decision Sciences*, 23, 499–509.

Nikolaou, I. (2021). What is the Role of Technology in Recruitment and Selection? *The Spanish Journal of Psychology*, 24, e2.

Okolie, U. C., & Irabor, I. E. (2017). E-Recruitment: Practices, Opportunities and Challenges. *European Journal of Business and Management*.

Pathinayake, Y. (2021). Online Recruitment Management System for SiLex Solutions (Pvt) Ltd [PhD Thesis]. <https://dl.ucsc.cmb.ac.lk/jspui/handle/123456789/4405>

Pentenrieder, K., Meier, P., & Klinker, G. (n.d.). Analysis of Tracking Accuracy for Single- Camera Square-Marker-Based Tracking.

Peicheva, M. (2022). DATA ANALYSIS FROM THE APPLICANT TRACKING SYSTEM.

Shamsuzzoha, A., & Helo, P. T. (n.d.). Real-time Tracking and Tracing System: Potentials for the Logistics Network.

Stahl, G., Björkman, I., Farndale, E., Morris, S. S., Paauwe, J., Stiles, P., Trevor, J., & Wright, P. (2012). Six principles of effective global talent management. *Sloan Management Review*, 53(2), 25–42.2023, from <https://www.igi-global.com/article/evolution-recruiting-content-analysis-fortune/3461>

THE IMPACT OF TECHNOLOGY ON RECRUITMENT PROCESS. (2020). *Issues In Information Systems*. https://doi.org/10.48009/4_iis_2020_9-17

THE IMPORTANCE OF RECRUITMENT IN JOB CHOICE: A DIFFERENT WAY OF LOOKING - RYNES - 1991 — *Personnel Psychology* — Wiley Online Library. (n.d.). Retrieved October 29, 2023, <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.17446570.1991.tb02402.x>

Tracking Systems in Team Sports: A Narrative Review of Applications of the Data and Sport Specific Analysis | *Sports Medicine—Open* | Full Text. (n.d.). Retrieved October 29, 2023, from <https://sportsmedicine-open.springeropen.com/articles/10.1186/s40798-022-00408-z?ref=mind-map-coaching>

White, W., & McDonald Jr, C. L. (2008). E-Recruitment. *Journal of Organizational Leadership & Business*. Texas A&M University.