

Assessing the Utilization of Applicant Tracking System and Recruitment Process in Niger State Civil Service

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Abstract

This paper assesses the utilization of Applicant Tracking System (ATS) and recruitment process in the Niger State Civil Service in addressing the critical need for modernizing the civil service recruitment process. The paper used mixed method techniques for data collection and analysis. Data obtained from 338 respondents was analysed using Structural Equation Modelling (SEM). Similarly, interviews were conducted with 5 respondents who were purposively selected in the Directorate and General Executive Cadre of the Niger State Civil Service Commission. The qualitative data were analysed using NVivo 15 software. The results revealed that, utilization of ATS has a significant effect on the civil service recruitment effectiveness with positive coefficient value of $\beta = 0.205$ and a p-value of 0.035. The qualitative findings not only corroborate, but also enrich the quantitative results, highlighting the essential role of integrating ATS in enhancing recruitment effectiveness in the Niger State Civil Service Commission. The paper concludes that the implementation of ATS significantly enhanced recruitment effectiveness. The paper recommends that, the Niger State Civil Service Commission should prioritize the implementation of ATS to streamline recruitment processes, enhance candidate management, and improve overall civil service operational efficiency and effectiveness.

Keywords: Applicant Tracking System, Civil Service, Recruitment, and Recruitment process.

1.1 Introduction

The civil service remains indispensable machinery for governance and development in any society, serving as the primary instrument for policy formulation, implementation, and administration of government programmes and projects for sustainable development. In Niger State, the civil service has historically played a crucial role in maintaining administrative continuity despite facing daunting challenges including economic instability and infrastructural deficits that disrupted normal governmental operations.

The recruitment function in the State Civil Service represents the critical entry point for skilled human resource, determining the quality, competence, and character of personnel who take on the State's development agenda. Overtime, traditional recruitment methods characterized by manual processes, paper-based applications, and physical screenings have created significant bottlenecks in attracting and selecting the best candidates efficiently. These challenges have been particularly acute in Niger State, where the civil service must rebuild institutional capacity while addressing urgent development needs.

The Applicant Tracking System (ATS) is a computer software programme that manages the hiring process. It does this by collecting and sorting thousands of resumes. The emergence of ATS revolutionized how the State Civil Service Commission attracts, assesses, and on-board talent. The ATS offers particular promise for addressing persistent challenges in the civil service recruitment, including bureaucratic delays, subjective decision-making and geographical barriers to talent acquisition, eliminating the inefficiencies and disorganization of paper-based files and spread sheets and reducing the need for physical submissions and travelling from individual locations for recruitment exercise.

In the context of the Niger State Civil Service Commission, an ATS serves as a centralized digital repository for all candidates. Its core function is to analyse resumes, filter applications based on predefined keywords and qualifications, and rank candidates, thereby significantly reducing the manual burden on human resource (HR) personnel and shortening the time-to-hire metric (Stone et al., 2020). The utilisation of ATS automates and organizes candidate management. However, despite the utilization of applicant tracking system, challenges still persist in terms of infrastructural deficits (unreliable internet connectivity) and low digital literacy among applicants, resistance to change among the bureaucrats constitute significant barriers to effectively harness full potentials of applicant tracking system adoption and optimal utilization of the digital tool particularly in rural areas, which hinder equitable participation of prospective candidates (Niger State Government, 2025).

In addition to these operational challenges, significant gap exists in the existing studies (Do & Ohlsson, 2018; Vedapradha et al., 2019; Stone et al., 2020; Adeyemi & Oluwaseun, 2020; Hosain & Liu, 2020; Ajayi & Udeh, 2024) largely focused on ICT's impact on corporate organizations known for technological adoption while neglecting civil service institutions like the Niger State Civil Service that are in critical need of digital transformation. Moreover, studies on Nigeria (Okafor & Eze, 2019; Esomonu et al., 2020; Adeyemi & Oluwaseun, 2020) have not sufficiently identified key metrics for assessing ATS-enabled recruitment, particularly in measuring aspects like processing time, efficiency, applicant satisfaction, and selection accuracy.

Notably, none of the existing studies (Stone et al., 2020; Musa et al., 2021) systematically examined ATS's role in civil service recruitment in the manner proposed by this study, which focuses specifically on the Niger State context. Taking these factors into account, this paper assesses the extent to which the utilization of ATS can affect the recruitment process in the Niger State Civil Service Commission covering the period from 2018 to 2024, gaining a deeper understanding of this relationship is essential, as it could yield valuable insights into how ATS can be effectively harnessed to enhance recruitment practices in the Niger State Civil Service Commission.

2.1 Conceptual Review

2.1.1 Recruitment

Recruitment is strategically defined as the organizational process of generating a pool of qualified applicants who are interested in employment and from whom candidates can be selected to meet human resource requirements, with a contemporary emphasis on achieving person-organization fit and building a sustainable talent pipeline (Breaugh, 2013; Dineen & Allen, 2016 and Fodio & Hadiza, 2019). It functions as a critical, two-way advertising and signaling activity where organizations communicate their employer the job attributes to the labour market, while potential applicants assess their own fit, thereby serving as the foundational gateway for talent acquisition and directly impacting organizational competitiveness and human capital quality (Ployhart, 2006; Uggerslev et al., 2012).

2.1.2 Recruitment Process

The recruitment process is a systematic sequence of stages designed to move from an identified human resource need to a successfully integrated new hire. This process can be delineated into four key, interconnected stages:

- i) **Strategic Planning and Job Analysis:** This initial stage involves translating strategic business objectives into specific, actionable human resource plans through workforce forecasting and a rigorous analysis of the target role.

Contemporary job analysis emphasizes competency modeling to identify the essential knowledge, skills, abilities, and other characteristics (KSAOs) required for success, moving beyond mere task lists to define the behaviours and attributes that predict performance and cultural fit (Sánchez & Levine, 2009; Morgeson et al., 2020). The resulting job description and specification provide the legally defensible and strategic blueprint for all subsequent recruitment activities, ensuring alignment with organizational goals, compliance with employment laws, and the foundational criteria for unbiased assessment and selection (Cascio, 2018).

- ii) **Strategic Sourcing and Talent Acquisition:** This stage encompasses the proactive identification and attraction of potential candidates through targeted internal and external channels to build a robust and qualified applicant pool. Modern sourcing is characterized by digital transformation, leveraging social professional networks, programmatic job advertising, and AI-powered tools to engage both active and passive candidates, while a strong employer brand is critical for attracting talent by signaling a positive organizational identity (Theurer et al., 2018; van Esch et al., 2019). The candidate experience during this phase is paramount, as perceptions of procedural justice and application usability significantly influence an organization's attractiveness and its ability to secure top-tier applicants in a competitive market (Allen et al., 2007; Dineen & Allen, 2016).
- iii) **Candidate Assessment and Selection:** This critical evaluative phase involves the systematic measurement of candidates against the predefined KSAOs using valid, reliable, and fair assessment methods to predict future job performance and organizational fit. Modern practice advocates for a multi-method approach combining tools such as structured interviews, situational judgment tests, and work samples to maximize predictive validity while rigorously guarding against bias and ensuring legal defensibility (Ployhart, 2006). Innovations include gamified assessments and virtual simulations, though the use of AI-driven analytics raises important ethical considerations regarding transparency and algorithmic fairness that must be carefully managed (Langer et al., 2019).
- iv) **Organizational Socialization and Onboarding:** Onboarding is the formalized, strategic process of integrating a new hire into the organization's social fabric and operational systems, designed to reinforce the psychological contract established during recruitment and accelerate the journey to full productivity. An effective, structured onboarding program significantly enhances job satisfaction, organizational commitment, and retention by facilitating role clarity, social integration, and cultural acclimation over the first critical months of employment (Bauer & Erdogan, 2011; Klein & Polin, 2012).

2.2 Applicant Tracking System (ATS) and Recruitment Process

Applicant tracking system (ATS) is a computer software programme that manages the hiring process. It does this by collecting and sorting thousands of resumes (Henderson, 2022). It organizes information about job seekers and makes it searchable which tracks candidates through the hiring process. It helps with interview scheduling, issues notifications, and alerts, and sends automated emails to candidates and employees, such as recruiters and hiring managers. Consequently, an ATS is also used to reject applicants and recommend the top candidates. It may conduct a preliminary analysis of the applicants to find the best fits for a job. It may also look for keywords or use Artificial Intelligence type algorithms that run a deeper analysis of the job applicant. The goal is to speed Human Resource's review of job applications and resumes (St-Jean, 2022).

ATS is a user-friendly software which is helpful to the Civil Service Commission to perform various tasks like create job advertisement, collect resumes, shortlist the qualified candidates, schedule interview, and make job offer to the selected candidates. Moreover, it enables both the Commission and recruiting managers to look at the same data, such as the number of applicants, the status of applicants in the pool, etc., which enhances administrative cooperation. Due to these benefits Applicant Tracking System tool have become more important for recruiters and talent acquisition managers (Peicheva, 2022).

Classically, the main rudiments of an ATS includes job description, which provides information about the job title, desired skills, and work experience; online advertising of the vacant position; automatic submission of resumes; resume parsing; identifying the most qualified candidates; scheduling interviews; notifications to applicants; letter- a job offer that is sent to the most suitable candidate. The process-related reports are among the main rudiments that the ATS provides (Arunava, 2014).

2.3 Civil Service

Civil Service is a vital institution in government responsible for implementing policies and delivering services. Olowu (2023) maintains that, an effective civil service is essential for governance, as it provides continuity and expertise that elected officials may lack. Olowu emphasizes that the civil service must be insulated from political pressures to maintain its integrity and effectiveness in serving the public interest. Akinyemi (2023) describes the civil service as the backbone of public administration, emphasizing its role in ensuring that government policies are executed efficiently. Akinyemi notes that, a professional civil service is characterized by merit-based recruitment, training, and promotion, which are crucial for fostering a culture of accountability and transparency within government operations. He argues that strengthening the civil service leads to improved governance and public trust.

2.4 Empirical Review

AL-Qassem et al. (2023) examine Impact of Leading Talent Management: Empirical investigation on Applicant Tracking System (ATS) on e-Recruitment Performance. The study aimed to empirically examine the impact on applicant tracking system on talent management with mediating role of e-recruitment. The data from 24 5-star hotels based in Dubai UAE were incorporated to assess the study hypothesis. 221 respondent's data were used to assess through Smart-PLS 4.0 software using PLS-SEM algorithm. The findings suggested hospitality sectors often face challenges in attracting and retaining top talent due to large demand of skilled and trained people. The study concludes that, an ATS can be a valuable tool for hotels management to increase their talent management efforts through e-recruitment. While the study explores ATS in hospitality sector hiring, it does not assess its potential in government employment. There is limited research on how ATS can improve civil service hiring efficiency and applicant management. This paper assesses ATS implementation for Niger State Civil Service Commission, proposing strategies to enhance government recruitment transparency, effectiveness, and workforce management.

Novakovic and Dražeta (2024) wrote on Applicant Tracking System: A Powerful Recruiters' Tool. The study explores the transformative impact of ATS on modern hiring processes. The study employed a content analysis methodology. The findings revealed that ATS platforms enable efficient job advertisement creation and distribution, resume collection from various sources, and tailored candidate screening. The software facilitates communication and transparency throughout the hiring process, enhancing the candidate experience. The study concludes that the integration of AI-driven solutions, like the Teamtailor AI robot, further automates candidate evaluation, significantly reducing manual work. Candidates must adapt to optimize their applications for ATS screening, emphasizing skills and job requirements. Although the study evaluates ATS efficiency in general hiring, but does not assess its role in optimizing civil service recruitment transparency and fairness. This paper analyzes ATS frameworks for Niger State Civil Service Commission, proposing AI-driven recruitment automation tailored to civil service hiring needs.

Jeske (2024) conducted study on Applicant Tracking System Requirements: An Organizational Role Perspective. A qualitative research approach was employed and 12 interviews were conducted to investigate the statements proposed. The collected data were analysed using qualitative content analysis. The results indicate that the role a user assumes has a significant impact on their PU, contingent on the availability of functionalities that facilitate the completion of tasks and achievement of goals. Furthermore, it was found that the PEU is positively correlated with the individual experience of the system and negatively correlated with the intensity and frequency of use. The study recommends ATS should facilitate user collaboration through the mapping of communication with all roles included in the process. Although the study assesses ATS usability from an organizational role perspective; it does not examine how ATS can be adapted to optimize civil service hiring processes. This paper employed mixed methods by utilizing quantitative and qualitative approach and recommend ATS usability improvements for Niger State Civil Service Commission, ensuring user-friendly recruitment systems that enhance effectiveness and collaboration in civil service hiring.

2.5 Theoretical Framework

This paper adopts an integrated theoretical framework combining the Technology-Organization-Environment (TOE) framework (Tornatzky & Fleischer, 1990) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) to analyze the adoption and impact of Applicant Tracking Systems (ATS) in the Niger State Civil Service. This synthesis is necessary because ATS implementation represents more than a technical upgrade it constitutes an organizational innovation whose success depends on both contextual factors and human acceptance. The TOE framework provides the macro-level structure to examine how three interlinked contexts shape adoption: the Technological context (the ATS's relative advantage, compatibility with bureaucratic procedures, and complexity), the Organizational context (the civil service's structure, staff readiness, and resources), and the critical Environmental context (federal e-government policies, infrastructure constraints, and Niger State's realities). These contexts collectively create the enabling or constraining conditions for ATS integration.

However, to understand how these conditions translate into actual use and impact, we nest the UTAUT model within TOE's Organizational context. UTAUT explains the micro-level behavioral mechanisms through four key determinants: Performance Expectancy (whether personnel believe the ATS improves recruitment efficiency), Effort Expectancy (perceived ease of use), Social Influence (pressure from superiors and peers), and Facilitating Conditions (availability of training and technical support). This integration creates a sequential analytical pathway: Environmental pressures and Technological characteristics are filtered through Organizational structures, which ultimately shape individual user perceptions and acceptance as defined by UTAUT. The actual impact of the ATS on recruitment efficiency, transparency, and challenges is therefore the end result of this mediated process.

Critics note the framework's complexity, which can make operationalization challenging. The TOE component is sometimes criticized for being overly broad and descriptive, lacking predictive specificity on how the contexts interact. UTAUT, while robust, focuses on individual adoption and may underweight deep-seated institutional and power structures that dictate technology use in a rigid bureaucracy. Furthermore, both theories were developed in stable, Western

organizational contexts and may not fully account for the unique infrastructural and socio-political realities of a State like Niger.

This integrated framework is particularly suited to analyzing ATS adoption in Niger State's Civil Service Commission for three compelling reasons. First, it moves beyond a simplistic technological determinism to acknowledge that the ATS's effectiveness depends on its alignment with bureaucratic workflows and resource constraints. Second, it explicitly centers Niger's unique environmental challenges infrastructure deficits and institutional fragility as fundamental constraints that differentiate this context from others. Third, it bridges policy intent with practical outcomes by highlighting that even well-designed systems fail without user acceptance, thereby explaining why ATS implementation might yield only ceremonial compliance rather than genuine process transformation. Through this lens, this paper systematically analyzes both the structural and human factors that determine whether the ATS becomes a tool for meaningful reform or merely a digital facade.

3.1 Methodology

This paper use mixed method as frame for both quantitative and qualitative approach to data collection techniques. Questionnaires and interviews instruments were used to complement the responses of the respondents and participants. The quantitative aspect involves gathering data through a structured questionnaire distributed to civil servants in the Directorate and General Executive Cadre, while the qualitative component consists of in-depth interviews with Officers' from the Directorate and General Executive Cadre of the Niger State Civil Service Commission, allowing for a comprehensive examination of the study topic.

The population for this paper comprises civil servants from the Directorate and General Executive Cadre of the Niger State Civil Service Commission, which, as of September 2024, had a total of 9,842 employees (Nominal Roll, 2024). To determine the sample size, the study utilized Krejcie and Morgan's (1970) Table. Based on this sampling design, a sample size of 368 was recommended. For the qualitative component, five (5) participants were purposively selected from the Director Cadre for semi-structured interviews. To ensure this representation, a stratified random sampling technique was used; the civil servants were divided into strata based on key administrative levels.

The primary data collection tools include a structured questionnaire which addressing various aspects of ATS efficiency and civil service recruitment effectiveness. The questionnaire utilized a five-point Likert scale to measure respondents' attitudes and opinions, allowing for robust statistical analysis of the data collected. Additionally, the qualitative phase involved conducting interviews with officers from the Directorate and General Executive Cadre, which provided deeper insights to support the quantitative findings and understand the effect of information and communication technology and recruitment process in the civil service.

Descriptive statistics were used to summarize the general properties of the collected data, while inferential statistics involved factor analysis through Structural Equation Modeling (SEM) to assess relationships among variables. The evaluation process also included tests for validity and reliability, such as convergent validity and discriminant validity, ensuring the robustness of the findings. The qualitative phase of the data was analysed through thematic analysis using NVivo 15 software and the data were visualization and presented using matrix coding queries.

4.1 Result and Discussion

4.1.1 Response Rate

The response rate determines the total number of responses received from the target respondents. Table 1 provides detailed information regarding the response rate.

Table 4.1: Response Rate

Categorization	Frequency	Percent
None Responses	30	8.15
Responses Received	338	91.85
Total	368	100.00

Source: Field Survey, 2026

Table 4.1 indicates that, 30 responses (8.15%) of the respondents could not be received while 338 representing 91.85% were duly filled and returned and considered adequate for the analysis. Therefore, this response rate is deemed appropriate for analysis, as recommended by Hair et al. (2010), who consider a response rate above 50% adequate for research purposes.

Table 4.2: Coefficient of Determination (R^2)

	R-square	R-square adjusted
Civil Service Commission Recruitment Effectiveness	0.575	0.546

Source: Smart-PLS 4 Output, 202

Table 4.2 displays the coefficient of determination score (R^2) which is commonly used to assess the model's predictive effect. This value (R^2) is found to be 0.575 which suggested that the entire applicant tracking system variables accounted for 57.5% variation in Civil Service Commission Recruitment Effectiveness. It also shows that the model is satisfactory as the predictive effect falls within the established threshold of 0.25-0.75 (Hair et al., 2019) which is greater than the threshold of 0.10 (Pirouze, 2006). It also signifies that the model has not failed in its capacity to measure the predictive power of the data.

Table 4.3: Effect Size (f^2)

	f-square
Application Tracking System -> Civil Service Commission Recruitment Effectiveness	0.086

Source: Smart-PLS 4 Output, 2026

The effect size, often denoted by f-square is depicted in Table 4.3 with effect size, the magnitude of the relationship or effect of independent variable on a dependent variable is measured in statistical analysis. In this study, Applicant tracking system with effect sizes of 0.086 and lies within 0.02, suggesting a small effect to Civil Service Commission recruitment effectiveness in this context (Cohen, 1988).

Table 4.4: Bootstrapping Results showing Path Coefficient for Structural Model

	Hypotheses	Original sample (O)	T statistics (O/STDEV)	P values	Remarks
Application Tracking System -> CSRE	H ₀₁	0.205	2.106	0.035	Rejected

CSRE: *Civil Service Commission Recruitment Effectiveness*

Source: Smart-PLS 4 Output, 2026

The bootstrap path coefficient analysis presented in Table 4.4 was conducted to test the formulated null hypothesis. The main purpose of bootstrapping in SEM is to test the null hypothesis as contained in Table 4.4. A null hypothesis would be rejected if the t-value is greater than ± 1.96 and p-value is less than 0.05. It would be otherwise accepted if the t-value is less than ± 1.96 and p-value greater than 0.05 (Wong, 2019).

4.2 Result of the Hypotheses Testing

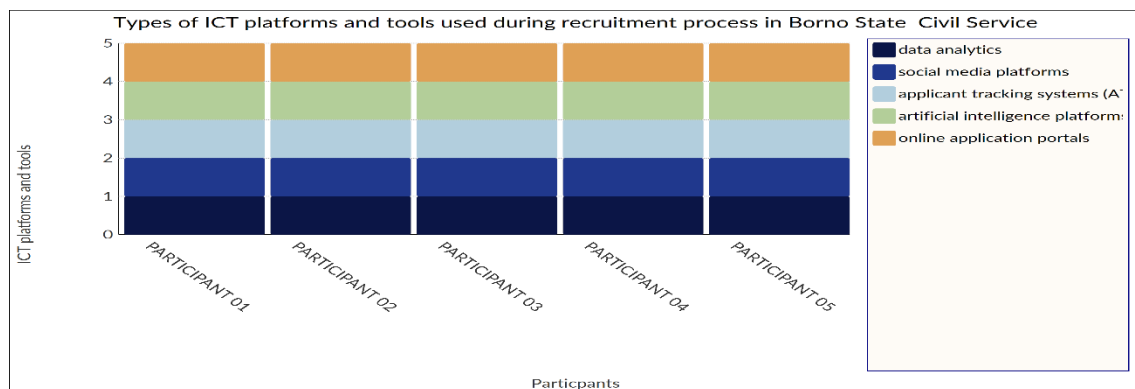
H₀₁: There is no significant relationship between utilization of Applicant Tracking System and the recruitment process in the Niger State Civil Service.

The hypothesis sought to verify whether utilization of ATS has a significant effect on the Civil Service Commission recruitment effectiveness in Niger State. The results revealed that utilization of ATS has a significant effect on the recruitment process. This result is evidenced by positive coefficient value of $\beta = 0.205$ which is greater than 10%, t-statistic value (2.106) of greater than ± 1.96 , p-value of 0.035 (3.5%) which is less than 5% level of significance. Hence, the null hypothesis was rejected and alternative hypothesis was accepted that, utilization of ATS has a significant effect on the recruitment process in the Niger State Civil Service Commission. This result implies that if, the Niger State Civil Service Commission fully streamlined its recruitment process with ATS, and it will significantly reduce administrative burdens, and enhance overall recruitment effectiveness.

4.3 Qualitative Result

Interview Question 1: What specific ICT platform do you currently used in the Niger State Civil Services Commission recruitment process?

Response:

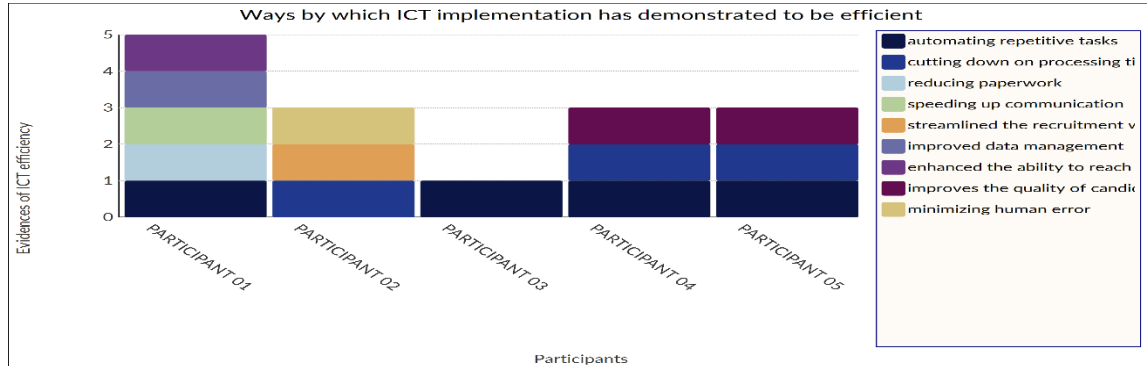


Source: NVivo 15 Output, 2026

The qualitative feedback highlighted the effectiveness of Applicant Tracking System (ATS) in optimizing the recruitment process in the Civil Service Commission. Respondents pointed out that ATS streamlines application management, significantly reduces administrative workloads, and enhances the overall efficiency of recruitment efforts. This observation resonates with the quantitative results, which demonstrated a significant positive relationship ($\beta = 0.205$, $p\text{-value} = 0.035$). Previous research substantiates this perspective, indicating that ATS not only automates various stages of hiring but also improves overall recruitment effectiveness by facilitating better candidate tracking and communication (Cappelli, 2021).

Interview Question 2: In your opinion how has the implementation of Applicant Tracking System affected the overall efficiency and effectiveness of the recruitment process in the Civil Service Commission?

Response:



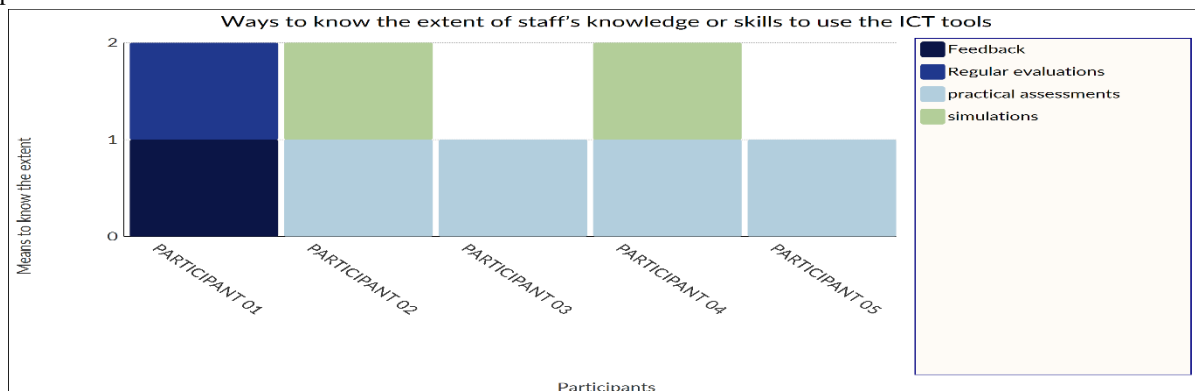
Source: NVivo 15 Output, 2026

In response to inquiries regarding the effect of the Applicant Tracking System on the overall efficiency and effectiveness of the recruitment process within the Civil Service Commission, four out of the five participants underscored the pivotal role that automating repetitive tasks plays in this transformation. This automation not only streamlines various workflows but also leads to a significant reduction in processing times, thereby enhancing the overall recruitment experience. Furthermore, three participants observed that the quality of candidates selected for interviews and subsequent hiring has markedly improved, demonstrating the positive ramifications of utilizing technology in recruitment efforts. One participant specifically pointed out that the recruitment workflow has been significantly streamlined, effectively minimizing the potential for human error throughout the process. Another participant noted the reduction in paperwork and highlighted the accelerated communication capabilities that have emerged as a result of these technological advancements.

These insights resonate with the findings presented by Matt et al. (2015) which articulate how digital transformation in human resource management processes can lead to improved administrative efficiency, enhanced accessibility, and ultimately better performance outcomes. The transition to using ATS has evidently fostered a more productive recruitment environment, aligning with contemporary best practices in the field.

Interview Question 3: How do you determine if personnel have the required skills to use Applicant Tracking System in the recruitment process?

Response:



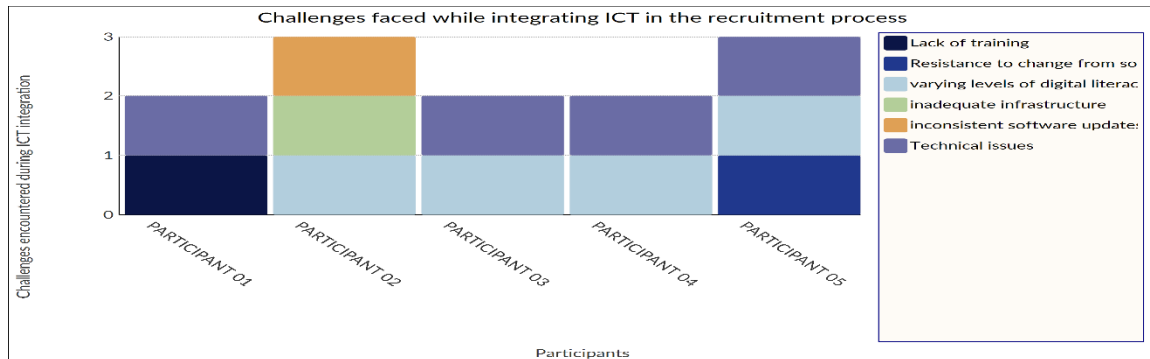
Source: NVivo 15 Output, 2026

When asked to evaluate the skills levels of personnel involved in the recruitment process, four out of the five participants emphasized the significance of practical assessments as a means to assess these competencies effectively. This feedback underscores that, while quantitative data can offer insights into the efficiency of ATS, qualitative insights reveal a critical

need for on-going skill development among recruitment personnel. The mention of simulations and feedback mechanisms by participants highlights the necessity for fostering an administrative culture that prioritizes skills enhancement in effectively utilizing technology. This notion is in harmony with the findings reported by Matt et al. (2015) which illustrate how digital transformation in human resource (HR) processes compels HR managers to adapt and cultivate skills that leverage new technologies. Such adaptations lead to streamlined operations and ultimately improve overall efficiency within the Civil Service Commission.

Interview Question 4: What challenges do you face integrating Applicant Tracking System into the process?

Response:

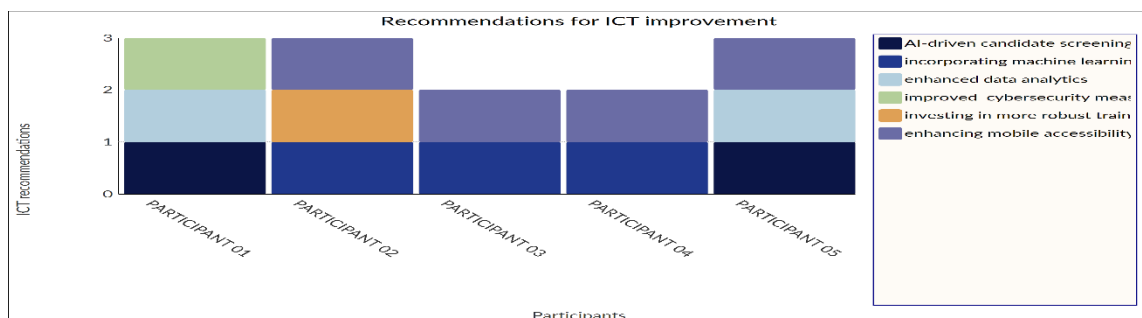


Source: NVivo 15 Output, 2026

In addressing the challenges encountered during the integration of Applicant Tracking System into the recruitment processes, four respondents pointed out the varying levels of digital literacy among staff and the technical difficulties they face. Additionally, issues such as inadequate infrastructure and inconsistent software updates were raised. Resistance to change from certain personnel and a lack of training were also noted as significant barriers. These observations are consistent with the findings of Matt et al. (2015) that emphasize that while digital transformation has the potential to enhance HR operations; it requires a comprehensive understanding of the current technological environment and the capabilities of its users. By proactively tackling these challenges, the Niger State Civil Service Commission can more effectively harness Applicant Tracking System, thereby reducing delays and improving the overall efficiency of the recruitment process.

Interview Question 5: What improvements or advancements in Applicant Tracking System do you believe could further enhance the recruitment process in the Niger State Civil Service Commission?

Response:

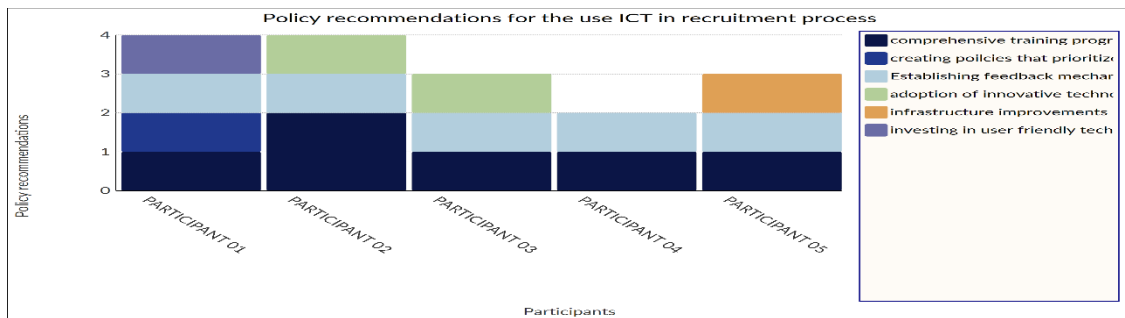


Source: NVivo 15 Output, 2026

In discussing potential advancements in ATS that could further improve the recruitment process, four participants emphasized the need to enhance mobile accessibility for applicants. Others suggested the incorporation of machine learning algorithms and AI-driven candidate screening tools. This feedback aligns with the research conducted by Lopez et al. (2018) which indicates that organizations that embrace digital HR practices are likely to achieve higher levels of performance. By prioritizing these technological advancements, the Niger State Civil Service Commission could broaden its talent pool and facilitate more effective evaluations of candidates.

Interview Question 6: Based on your experience, what policy recommendations would you suggest optimizing the use of ICT in the recruitment process of the Niger State Civil Service Commission?

Response:



Source: NVivo 15 Output, 2026

The policy recommendations put forth by participants highlighted the critical importance of establishing robust feedback mechanisms alongside comprehensive training programmes. This perspective aligns with the recommendations of Roberta et al. (2019) who advocate for a proactive involvement of HR in shaping the digitalization strategy. By developing policies that emphasize data security, user-friendly technology, and the adoption of innovative solutions, the Niger State Civil Service Commission can optimize its use of applicant tracking system in recruitment process. This commitment to improvement can ultimately lead to more favourable outcomes and foster a more engaged and capable workforce.

4.4 Discussions of Findings

The findings from this paper reveal that the implementation of an ATS significantly affects the effectiveness of the recruitment process in the Niger State Civil Service Commission. Specifically, the regression analysis yielded a positive coefficient value of $\beta = 0.205$, alongside a t-statistic of 2.106 and a p-value of 0.035. These statistical indicators strongly support the rejection of the null hypothesis, leading to the acceptance of the alternative hypothesis which posits that ATS utilization enhances recruitment effectiveness. This is consistent with the study conducted by Lindström (2018), which highlights the role of ATS in bolstering employer branding by facilitating improved external communication and streamlining internal recruitment processes. Furthermore, a study by Do and Ohlsson (2018) emphasize the importance of user experience within ATS, indicating that systems designed with user performance in mind can lead to increased operational effectiveness.

The qualitative feedback highlighted the effectiveness of ATS in optimizing the recruitment process in the civil service. Respondents pointed out that ATS streamlines application management, significantly reduces administrative workloads, and enhances the overall effectiveness of recruitment efforts. This observation resonates with the quantitative results, which demonstrated a significant positive relationship ($\beta = 0.205$, p-value = 0.035). Previous research substantiates this perspective, indicating that ATS not only automates various stages of hiring but also improves overall recruitment effectiveness by facilitating better candidate tracking and communication (Cappelli, 2021).

The qualitative findings not only corroborate, but also enrich the quantitative results, highlighting the essential role of integrating ATS in enhancing recruitment effectiveness in the Niger State Civil Service Commission. The combined insights from both quantitative and qualitative analyses advocate for a comprehensive and integrated approach to recruitment, positioning the State Civil Service Commission to effectively meet the demands of a competitive hiring landscape. This underscores the importance of leveraging ATS to create a more effective, efficient, responsive, and candidate-friendly recruitment process, ultimately enhancing the capacity of the Niger State Civil Service Commission to attract, select and retain top talent in a dynamic and evolving environment.

5.1 Conclusion and Recommendations

Based on the objective, findings and discussions, this paper submits that ATS significantly influences recruitment processes in the Niger State Civil Service Commission. This has profound impact on the theory and practice of HR management. In view of this, the following recommendations are offered:

- i) Niger State Civil Service Commission should prioritize the implementation of an ATS to streamline recruitment processes, enhance candidate management, and improve overall working efficiency and effectiveness.
- ii) The Niger State Civil Service Commission should focus on continuous training programmes that will enhance the digital competencies of recruitment personnel, ensuring they are well-equipped to effectively utilize ATS, improving the candidate experience by providing timely application updates, user-friendly interfaces, and responsive communication throughout the recruitment process subsequently, Robust data security protocols, including encryption and regular security audits should be implemented to safeguard applicants' information and ensure compliance with data protection regulations.

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