



Enhancing candidate quality: E-recruitment in the Public Service Recruitment Secretariat, Tanzania

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ABSTRACT

The advent of online recruitment and selection in the Tanzanian public service was a strategy to reduce bureaucratic challenges in the recruitment process. This could create equal access to public service employment opportunities for all people. The extant studies did not specifically explain how the adoption of e-recruitment systems improved the quality of public service recruitment processes in Tanzania. Thus, this study assessed the effectiveness of e-recruitment and selection processes in Tanzania's public sector, with a specific focus on the Public Service Recruitment Secretariat (PSRS) in Dodoma. Sociotechnical Theory (STT) guided this research. A qualitative research approach was employed to gain in-depth insights into the experiences, perceptions, and challenges associated with e-recruitment. Data were collected through semi-structured interviews with HR personnel directly involved in recruitment processes, as well as job applicants who had used the PSRS online platform to apply for public sector positions. The findings of this study indicate that e-recruitment has significantly improved recruitment effectiveness by automating various aspects of the hiring process. The system has helped reduce administrative burdens, minimise paperwork, and accelerate candidate shortlisting. The study concludes that while e-recruitment offers substantial advantages in candidate quality, recruitment and selection effectiveness, and transparency in the public sector recruitment process, several structural and technological challenges must be addressed to optimise its effectiveness. Hence, the need to increase investment in digital infrastructure and comprehensive training for both HR personnel and job applicants. This shows the significance of e-recruitment and civil service reforms for quality recruitment and selection in Dodoma, Tanzania, and other regions with similar environments. Conclusively, despite the challenges, e-recruitment at the Public Service Recruitment Secretariat (PSRS) is a valuable tool that plays an important role in improving the quality of human resources in Tanzania's public sector. Tanzania. There is a need to improve e-government infrastructure nationwide, train staff to use e-recruitment systems effectively and efficiently, and fill the e-recruitment gap by having HR personnel assess soft skills.

Keywords: Candidate Quality, E-Recruitment, Effectiveness, Public Service Recruitment Secretariat, Tanzania

I. INTRODUCTION

In the digital era, the global emphasis on identifying potential human capital has become paramount. With an estimated 1.8 billion young people worldwide, 85% of whom reside in developing countries, mainly in Africa (Africa Development Bank, 2022). This situation highlights the urgent need for quality job creation through e-recruitment. It can leverage Information and Communication Technology (ICT) to attract skilled workers (Akoyo, 2022). E-recruitment, a key application of ICT, is revolutionising recruitment by offering faster, more cost-effective, and more widespread hiring processes than traditional methods (Mshanga, 2020; Malekano, 2021). It enhances workforce quality by attracting skilled candidates and streamlining recruitment workflows through automation (Okolie & Irabor, 2017). Countries in Africa, such as Morocco, Kenya, and South Africa, have cut costs and expanded talent pools using e-recruitment, addressing the urgent need for candidate qualities. However, despite these advantages, challenges such as limited internet access and digital skill gaps still affect its full efficiency and effectiveness (Marcel & Tefurukwa, 2024; Kucherov & Tsybova, 2022). Moreover, organisational reputation depends heavily on well-managed e-recruitment systems. Poor implementation can erode trust among candidates and stakeholders (Malik & Mujtaba, 2018). Thus, evaluating both the potential and practical impacts of e-recruitment on candidates' quality, efficiency, and transparency remains critical.

Online recruitment is an ideal approach. It leverages platforms such as job boards and social networks to optimise key organisational resources — people, technology, finances, and materials — to maximise overall success (Kucherov & Tsybova, 2022). Since the emergence of platforms like Monster.com in the 1980s, online recruitment tools have evolved significantly, enabling organisations to enhance the efficiency and effectiveness of their talent acquisition processes (ibid). Human capital remains central to achieving organisational objectives. Fully integrated e-recruitment systems are expected to enable more effective utilisation of all related resources, improving recruitment outcomes and



workforce quality (Mshanga, 2020). Despite policies promoting e-recruitment to modernise, promote transparency, and improve efficiency, its practical adoption remains uneven, affecting both efficiency and effectiveness (Mwangi & Kibet, 2019). A key issue undermining effectiveness is the persistence of ghost workers (Tefurukwa & Ahafiany, 2025), highlighting weaknesses in the verification and integration of e-recruitment with payroll systems (Marcel & Tefurukwa, 2024). It challenges the assumption that digitalisation alone ensures accurate, accountable hiring and workforce management (Kucherov & Tsybova, 2022). Limitations such as inadequate infrastructure, limited digital literacy among HR staff and applicants, and resistance to change hinder the seamless use of these technologies (United Republic of Tanzania [URT], 2023a). Subsequently, public sector recruitment modernisation efforts are progressing, but not at the pace or scale envisioned. This gap between the ideal and reality results in suboptimal recruitment outcomes. It hampers the responsiveness and effectiveness of the public service. Partial or slow adoption of e-recruitment tools constrains the efficient harnessing of human capital and other organisational resources (Tanzania's Development Vision 2025). Without continued efforts to modernise HR practices and overcome adoption barriers, the intended benefits of merit-based, transparent, and inclusive recruitment may not be fully realised (Mwangi & Kibet, 2019). The net effect of these shortcomings undermines the public sector's capacity to meet its strategic goals as outlined in Tanzania's Development Vision 2025 (URT, 2025) and the Five-Year Development Plan (FYDP) III (URT, 2021).

Public sector recruitment in Tanzania is increasingly adopting e-recruitment systems as part of broader ICT-driven modernisation. The efforts aim at enhancing transparency, accountability, and efficiency in human resource management (URT, 2023b). Policy frameworks such as the draft National ICT Policy (URT, 2023b) and section 5.3.6 of the national development plans for 2021/22–2025/26 explicitly advocate for the digitisation of government services. It includes recruitment to improve public sector performance. Despite strong government commitment, full implementation of e-recruitment in Tanzania remains problematic (Deogratias & Tefurukwa, 2025). There are persistent social and technical challenges. They include, but are not limited to, ICT illiteracy, limited internet connectivity, particularly in rural areas (Kimaro & Mushi, 2020), resistance to change among users (Komba, 2020), budget constraints (Deogratias & Tefurukwa, 2025), and insufficient system integration (Saad & Itika, 2024). All these slow down adoptions and diminish the expected gains from merit-based, transparent, and inclusive recruitment. They are undermining public sector responsiveness and governance effectiveness. With Tanzania's Development Vision 2025 and the FYDP III emphasising the application of ICT as a catalyst for socio-economic development (URT, 2023b; URT, 2021), the slow progress in e-recruitment modernisation highlights an urgent need to address both technical infrastructure and human capacity gaps to realise the full benefits of digital recruitment in the public service (URT, 2023a).

Extant studies such as Mshanga (2020), Mwashia (2020), Marcel and Tefurukwa (2023), Malekano (2021), Msacky and Mwangata (2023), Sikawa (2023) and Saad and Itika (2024) shed light on infrastructure challenges, access issues, and the general impacts of ICT on public service recruitment. However, they inadequately address how the e-recruitment system is efficient and effective in facilitating hiring processes in Tanzania's public sector. The studies did not specifically explain how the adoption of e-recruitment systems has tangibly improved the efficiency of public service recruitment processes in Tanzania. In particular, metrics such as time-to-hire, candidate satisfaction, and administrative costs.

1.1 Research Objective

The study assessed the effectiveness of e-recruitment in enhancing candidate quality at the Public Service Recruitment Secretariat-Dodoma. It is crucial to assess the practical effects of e-recruitment to recognise its advantages and limitations. This will ensure that technology investments can lead to enhanced public sector outcomes and promote merit-based, transparent recruitment processes in Tanzania.

II. LITERATURE REVIEW

2.1 Theoretical Review

Sociotechnical Theory (STT), developed by Robert Kraut and Paul Resnick in the late 1990s, provides a comprehensive framework for understanding how the interplay between social and technical elements shapes the design, implementation, and effectiveness of systems, including but not limited to e-recruitment platforms (Kimaro & Mushi, 2020). The theory emphasises that successful system outcomes depend not only on advanced ICT infrastructure, devices, and software but also on social factors such as human behaviours, attitudes, motivations, interpersonal relationships, and organisational culture (Xinying, 2023). In the context of Tanzania's Public Service Recruitment Secretariat, STT highlights the alignment of technological tools and the social environment in which human capital functions (Tefurukwa & Ahafiany, 2025). Such alignment is critical for improving candidate quality. It enables recruitment processes to attract, evaluate, and select applicants based on merit and holistic attributes (Xinying, 2023). E-recruitment systems have become increasingly essential for public sector modernisation, streamlining candidate evaluation through digital



assessments and automating routine processes. Akoyo (2022) and Kisinza and Tuzza (2023) confirm that these platforms improve competency alignment, enabling organisations to match candidates' skills to job requirements better. Malekano (2021) affirms operational benefits such as reduced time-to-hire and cost savings, reflecting enhanced efficiency in recruitment workflows. Despite these advancements, significant challenges persist (Sikawa, 2023). Sikawa (2023) and Okolie and Irabor (2017) critique e-recruitment's limited ability to assess critical soft skills, such as confidence and emotional intelligence, as well as non-verbal cues, such as job aspirants' body language. These variables are vital for comprehensive evaluations of candidates' quality but are difficult to measure solely through digital platforms (Sikawa, 2023). Such limitations underscore the need for e-recruitment systems to integrate technical capabilities with nuanced human judgment to ensure that technology complements rather than replaces social assessment elements. Beyond candidate assessment, the successful deployment of e-recruitment in Tanzania's public sector is shaped by broader sociotechnical factors. Deogratias and Tefurukwa (2025) identify persistent ICT infrastructure limitations, inadequate digital literacy among users, resistance to organisational change, and poor system interoperability as barriers to maximising recruitment effectiveness. These factors affect not only the operational functionality of e-recruitment but also influence stakeholders' acceptance and trust in the system (Tefurukwa, 2019). Thus, e-recruitment depends on how well technological tools are integrated with social, human, organisational, and regulatory contexts, which collectively determine the system's ability to recruit competent, qualified candidates (Deogratias & Tefurukwa, 2025; Mwash, 2020).

Furthermore, STT underscores that in public service environments where regulatory frameworks, stakeholder interests, and human resources policies heavily influence processes, the co-design and joint management of technological and social elements are crucial (Ngowi & Musa, 2021). Applying STT to Tanzania's public sector e-recruitment reveals that candidate quality improves when systems are not only technically robust but also socially adaptive, incorporating user capabilities, addressing cultural attitudes, and complying with governance protocols (Deogratias & Tefurukwa, 2025; Mshanga, 2020). A balanced, integrated sociotechnical approach can better address existing technical limitations and social challenges, thereby optimising the recruitment process (Deogratias & Tefurukwa, 2025). This approach ensures that public sector recruitment is merit-based, transparent, and inclusive, ultimately leading to improved candidate selection and enhanced public service delivery outcomes in alignment with national development goals, despite its inherent limitations, such as striking a balance between technical and social factors, resistance to change under top-down management, and a lack of generalizability across different social contexts. The STT remains an ideal framework for assessing e-recruitment in enhancing candidate quality at the Public Service Recruitment secretariat-Dodoma, Tanzania.

2.2 Empirical Review

E-recruitment systems have gained attention for their ability to improve recruitment processes by automating candidate screening and providing access to larger talent pools (Mshanga, 2020; Malekano, 2021). These digital tools promote standardisation in selection criteria, reducing subjective biases and encouraging merit-based hiring (Mwangi & Kibet, 2019; Malik & Mujtaba, 2018). Furthermore, e-recruitment enhances transparency and accountability, aligning with government policies supporting ICT integration for public-sector modernisation (URT, 2016, 2021).

However, effective e-recruitment depends on infrastructure, digital literacy, and organisational readiness. Despite the benefits, challenges such as ICT illiteracy and inadequate infrastructure hinder the effectiveness and inclusiveness of e-recruitment (Deogratias & Tefurukwa, 2025). These findings highlight the complex interaction between technology and social factors in shaping recruitment practices (Elmenzhi et al., 2025; Mwangi & Kibet, 2019). While e-recruitment promises to extend reach and promote inclusivity, there is insufficient research on how social barriers, such as digital literacy, affect equitable access to public-sector recruitment (Deogratias & Tefurukwa, 2025).

Moreover, e-recruitment platforms enhance competency alignment and streamline candidate evaluation through digital assessments (Kisinza & Tuzza, 2023). Operational benefits, such as reduced time-to-hire and cost savings, are documented (Okolie & Irabor, 2017; Malekano, 2021). However, concerns remain about the systems' capacity to accurately assess critical soft skills, as Sikawa (2023) highlights. These findings reveal an empirical research gap regarding comprehensive candidate evaluation methods within digital recruitment platforms, particularly beyond technical skills. There is a need to explore how psychometric and behavioural evaluations can enhance e-recruitment systems.

Additionally, while Okolie and Irabor (2017) identify mechanisms through which e-recruitment can enhance candidate quality and diversity, limited analysis exists on how these benefits impact metrics such as time-to-hire, candidate satisfaction, or cost reductions within the Tanzanian public service recruitment process (Elmenzhi et al., 2025). Furthermore, the relationship between improved technological processes and broader organisational or cultural factors influencing e-recruitment effectiveness remains underexplored.

Although e-recruitment shows advantages in fairness compared to traditional methods (Mshanga, 2020; Malekano, 2021), there is limited empirical evidence on how its objective mechanisms translate into actual recruitment



quality and organisational performance. Consequently, this study aims to empirically assess the effectiveness of e-recruitment systems at the Public Service Recruitment Secretariat in Dodoma, with a focus on improving candidate quality. Understanding e-recruitment effectiveness in the public sector is crucial, as Tanzania relies on qualified candidates to meet specific job requirements.

III. METHODOLOGY

3.1 Study Approach

The study used a qualitative research approach and a case study design to collect information from participants with direct experience with the online recruitment system. It relied on face-to-face interviews to capture insights into the successes of system users. This approach and the study design allowed the researchers to understand the actual context of the system's use in a public institution setting and to analyse in depth how it works, its benefits, and areas for improvement.

3.2 Study Area

This study was conducted in Dodoma city, focusing on the Public Service Recruitment Secretariat (PSRS), the main institution responsible for public-sector recruitment in Tanzania. PSRS was selected because it is the institution with the legal authority to manage recruitment in accordance with the Public Service Act of 2002, as amended in 2007. The study aimed to obtain the views of various stakeholders, such as PSRS staff, IT professionals, and job applicants, to understand in depth the effectiveness of the e-recruitment system managed by PSRS. Dodoma was a suitable research location because it is the hub of the system's policy and operational activities.

3.3 Sample

In this study, we chose not to set a specific sample size in advance; instead, we decided on the number of participants when we reached saturation—when no new information emerged. A total of 15 individuals participated, representing different areas. We focused on respondents from PSRS, particularly those involved in administration and human resource management, as well as ICT personnel and job applicants. The insights from HR personnel helped us understand administrative perspectives, while the ICT personnel provided valuable technical viewpoints. Our participants included ten interviewees: five from the HR department (HR1-HR5), eight job seekers (J1-J8), and two ICT experts (ICT1 and ICT2). Table 1 shows the breakdown of the participants involved in the interviews. The number of participants in each category was due to saturation.

Table 1

Distribution of Participants in Interviewees

S/n	Participant Type	Number of Participants	Codes
1.	HR Personnel	5	HR1, HR2, HR3, HR4, HR5
2.	Job Applicants/Seekers	8	J1, J2, J3, J4, J5, J6, J7, J8
3.	ICT Personnel	2	ICT1, ICT2
5.	Total	15	

3.4 Data Analysis

The analysis employed a semi-structured interview guide, which ensured a comprehensive exploration of the topic while allowing flexibility in participants' responses. This dual approach not only fostered a rich and dynamic exchange of ideas but also encouraged participants to delve deeper into their thoughts and feelings, leading to more nuanced insights. Each interview was crafted to stimulate open dialogue, creating a safe and comfortable space for participants to share personal experiences and opinions. This environment was crucial, as it allowed individuals to feel secure in expressing their views, which ultimately enriched the data collected. The thoughtful design of each interview question facilitated discussions that uncovered hidden perspectives and complexities related to the research topic. Through this systematic and reflective approach, the analysis effectively illuminated key themes and insights that aligned closely with the research objectives, contributing significantly to the study's overall findings and enhancing our understanding of the subject matter.



3.5 Validity and Reliability

To enhance the study's validity and reliability, the researcher conducted a pilot study with four respondents. Before the main research, the team reviewed existing literature and conducted a preliminary visit to the study area to identify appropriate techniques, such as interviews, to ensure data accuracy and the overall reliability of the study. The decision to undertake a pilot study enabled the researchers to adopt a flexible approach, allowing them to reorganise, clarify, and address potential misunderstandings regarding the study's tools and methodologies. Furthermore, the researcher adhered to consistent interview protocols, utilising the same set of questions for all participants and systematically documenting any follow-up inquiries. This consistency was crucial in ensuring that the data collection process was replicable and safeguarded against researcher bias or variations in approach.

Additionally, the researchers maintained a detailed inspection track, documenting every aspect of the research process, including decision-making, methodological changes, and comprehensive notes on data collection and analysis procedures. This transparent documentation facilitated other researchers' ability to follow the study's methodology, thereby making it easier to replicate the research or validate its findings. By employing these strategies, the study's reliability was significantly reinforced, ensuring that the results are trustworthy and consistent over time.

3.6 Ethical Consideration

The study's ethical issues were prioritised by obtaining informed consent from all participants, ensuring they were fully aware of the research's objectives, their role in the study, and the nature of the data being collected. The researchers provided each participant with detailed information about the research purpose, the procedures involved, and any potential risks or benefits associated with their participation. The participant was allowed to ask questions and was required to provide their voluntary consent, either in writing or verbally, before participating. This process followed the ethical principles, which emphasised the respect for autonomy and the importance of obtaining informed agreement from research subjects. Also, the study upholds strict measures of confidentiality and anonymity to protect the privacy and identities of all participants, especially given that the study involves public service officials who may disclose sensitive information about the recruitment process. All identifiable information was anonymised, and participants' names or specific job titles were not included in any published findings. To further safeguard confidentiality, data were securely stored, and access is limited to the research team.

IV. FINDINGS & DISCUSSION

4.1 Findings

This study assessed the effectiveness of the e-recruitment system managed by PSRS in enhancing the quality of candidates selected for public positions. The findings are based on interviews with employees and job seekers who used the public service recruitment portal. The results in Table 2 are organised into themes based on the main research questions, with the numbers indicating the percentage of respondents who responded to each theme.

Table 2

The Effectiveness of E-Recruitment in Enhancing Candidate Quality

Theme	Findings	Response Percentage (%)
Accessibility and Reach of E-Recruitment	The system increased the reach of job advertisements, attracting candidates from diverse locations. Job seekers from rural areas had easier access to job opportunities.	75% HR Personnel, 85% Job Seekers
Tools for Assessing Candidate Qualifications	HR personnel found that automated filtering tools helped to assess qualifications and experience effectively. Concerns that the system does not account for non-traditional qualifications.	80% HR Personnel, 45% Job Seekers
Screening and Shortlisting Process	The system automates screening, improving efficiency in shortlisting suitable candidates. Concerns have been raised about the system's inability to assess soft skills.	90% HR Personnel, 30% HR Personnel (concerns)
Quality of Candidates	The increase in qualified applicants is due to the system's effective filtering. Job descriptions became clearer and more detailed, attracting better candidates.	70% HR Personnel, 60% Job Seekers
System Limitations and Areas for Improvement	The system does not adequately assess soft skills. Non-traditional qualifications or practical experience are not always recognised.	50% HR Personnel, 40% Job Seekers



4.1.1 Accessibility and Reach of E-Recruitment

In this sub-theme, the researchers aimed to assess whether the accessibility and reach of the e-recruitment system were significant factors in attracting a diverse pool of candidates. According to study findings, HR professionals found that the program increased job discovery, demonstrating a more accessible approach than traditional recruitment methods. This view was confirmed by one of the technical experts, who asserted that,

*After the secretariat receives employment permits, PSRS prepares job advertisements through its website (www.ajira.go.tz). It also uses official social media accounts, including Facebook, Twitter (X), Instagram, and WhatsApp. In addition, PSRS has created a mobile application, "Ajira Portal Mobile App," for Android and iOS users that informs job seekers about available employment opportunities. Similarly, applicants who have registered on the USSD digital system receive information about employment availability via mobile phones. However, to receive employment information, a job seeker must register by pressing *152*00# and then follow the instructions. All these have improved the accessibility and reach of the e-recruitment system to job seekers (Respondent, ICT₁, 18th April 2025).*

Also, one of the respondents on this sub-theme had the following views;

We can post events on various social media platforms and websites, which has helped attract a wider audience from there as well. For example, in the past, we could only rely on local newspapers, but now even someone in a remote village can apply for a position (Respondent, HR₄, 18th April 2025).

Job seekers were pleased with this increase in efficiency, as the initiative made it easier to apply for a position.

As one of the respondents commented;

I live in a rural area, and before the e-recruitment system, it was not easy to apply for a job without having to travel to remote areas. Now I can apply for jobs while at home just with my smartphone, without travelling to towns. Hence, the advent of E-recruitment has opened more opportunities for me (Respondent, Job seeker, 18th April 2025).

The responses revealed that e-recruitment significantly improved candidate quality by enabling access to a broader and more diverse pool of applicants with higher educational qualifications and relevant professional experience. The catchment area of potential aspirants increased significantly as they received submissions from various regions, including rural areas, thus increasing diversity and enhancing the likelihood of selecting top talent. This finding aligns with Bicky and Kwok (2011), who concluded that online recruitment platforms overcome geographic and temporal barriers, attracting more qualified candidates. From a Sociotechnical Theory (STT) perspective, this improvement highlights the critical interplay between the technical subsystem of the e-recruitment platforms (online portals, mobile applications, and digital databases) and the social subsystem, comprising HR personnel capabilities, candidate digital literacy, and organisational policies. STT posits that neither technology nor social factors alone guarantee system success; rather, their joint optimisation leads to enhanced organisational performance (Bicky & Kwok, 2011). In this context, the technical subsystem of e-recruitment enables broader reach and more efficient application processing by overcoming the spatial and temporal constraints inherent to traditional recruitment methods (Elmenzhi et al., 2025; Msacky & Mwangata, 2023). This digital infrastructure allows public sector organisations to attract candidates from diverse geographic locations, improving demographic representation and expanding the talent pool (Mwangi & Kibet, 2019). The enhanced efficiency in processing applications also reduces administrative burdens and accelerates decision-making (Okolie & Irabor, 2017). Thus, the technical subsystem is fundamental in modernising recruitment and increasing accessibility. Simultaneously, the social subsystem plays a crucial role by ensuring that HR officers possess the skills to manage and interpret the influx of digital candidates effectively (Deogratias & Tefurukwa, 2025). However, sustaining and expanding these gains requires ongoing focus on the interplay between technology and social factors. For instance, while technological platforms can facilitate broad reach, actual candidate access depends significantly on digital literacy levels and reliable internet connectivity, components of the social subsystem that remain unevenly distributed, especially in rural Tanzania (Deogratias & Tefurukwa, 2025; Sikawa, 2023). Hence, the conclusions drawn from this discussion emphasise that e-recruitment's success pivots on continuous investment in both ICT infrastructure and social capacity-building to foster equitable recruitment outcomes.

4.1.2 Tools and Features for Assessing Candidate Qualifications

The study found that the e-recruitment system's infrastructure for assessing the qualifications and experience of individuals has been highly effectively, as mentioned by the respondents. Most of the HR professionals agreed that the organisation's automated background checks helped streamline the hiring process. It was confirmed by one of the respondents as follows;

The system has incorporated filters that automatically match applicants' qualifications and understanding of job requirements, which reduces manual effort. For example, if a job requires specific qualifications, the system will automatically screen out applicants who do not meet those requirements, saving time and effort in the first place (Respondent, HR₂, 18th April 2025).



However, responses from the job seekers expressed concern that the system cannot always accommodate non-standardised qualifications of some applicants, as one of the respondents uttered the following;

I have years of experience in a specific field, but the system does not recognise it. There is a strong emphasis on academic qualifications, which may mean some of our practical skills are ignored (Respondent, Job Seeker, 18th April 2025).

On the contrary, some HR professionals agreed that the system is useful in identifying specific skills when applicants use keywords in their profiles. One of the respondents confirmed the assertion as follows; *If someone mentions a specific skill, such as project management, the system can flag and indicate that it is a critical job requirement*” (Respondent, HR₃, 18th April 2025).

The responses reveal that adopting digital platforms in the public service recruitment process has enabled HR officers to obtain richer, more comprehensive candidate profiles. The technical subsystems of e-recruitment broaden candidate reach and enhance application processing efficiency (Elmenzhi et al., 2025), thereby overcoming previous spatial and temporal recruitment limitations (Msacky & Mwangata, 2023). This situation enables access to a more diverse talent pool, improving recruitment quality and workforce diversity (Mwangi & Kibet, 2019). The social subsystem ensures that HR officers have the skills to manage and interpret digital applications, provide candidate support through awareness and training, and uphold equity and inclusivity (Deogratias & Tefurukwa, 2025). The subsystems optimise recruitment by enabling fairer, more transparent, and accessible hiring processes (Elmenzhi et al., 2025). However, sustaining these gains requires strong sociotechnical alignment, as candidates’ actual participation depends on social factors such as digital literacy and internet connectivity, which remain uneven (Deogratias & Tefurukwa, 2025), especially in rural areas (Sikawa, 2023). Additionally, e-recruitment tools that include digital portfolios, social media behaviours, and recommendation ratings provide richer insights beyond traditional applications, revealing candidates’ personalities, values, and soft skills (AbdulKareem et al., 2024). From a Sociotechnical Theory perspective, the critical interplay between advanced technology and the social subsystem—such as HR professionals’ interpretive skills and organisational values—ensures meaningful data use. Both subsystems must work harmoniously for e-recruitment to optimise outcomes through holistic candidate evaluation and decision-making (AbdulKareem et al., 2024). Moreover, as in the studies (i.e. Ngowi & Mndeme, 2021; Okolie & Irabor, 2017), digital recruitment systems foster greater transparency and inclusivity by broadening candidate reach and allowing diverse data inputs, consistent with previous research. However, the benefits of these technologies depend on addressing social challenges, such as ensuring HR staff have sufficient training to use new tools, maintaining candidate data privacy (Msacky & Mwangata, 2023), and managing infrastructural constraints (AbdulKareem et al., 2024).

4.1.3 Screening and Shortlisting Process

The findings indicated that the automated screening and shortlisting process was perceived as highly effective by most HR personnel. Most of the HR respondents agreed that the system’s automation helped filter out unqualified candidates early in the process, allowing them to focus on the most suitable applicants. Furthermore, one of the respondents commented that;

This method of applying for a job online, rather than writing a letter and sending a PSRS, has been very effective for analysing job applicants against the relevant job instructions, because the system has all the information about the advertised job. Hence, it is easy for the system itself to analyse the applicants and accept only those applicants who meet the relevant employment criteria that are prepared by our service officers, thus making the system able to analyse those applicants who meet the criteria only due to the job descriptions (Respondent, HR₄, 18th April 2025).

In line with this sub-theme on the ability of the system in screening and shortlisting candidates, as one of the respondents asserted the following;

This way of e-recruitment has great efficiency in sorting the candidates as the system is enriched with all the job descriptions that we do prepare as employer so the system which helps to sort out applicants quality and allow only those with advertised job criteria to continue with the applications and remove those without qualifications automatically contrary to traditional way of recruitment where all applicants application had to be received in our office for sorting regardless of having qualifications or not hence consuming time in sorting and delay in recruitment decisions. While the system is excellent at filtering candidates based on hard skills, it cannot assess interpersonal skills, which are equally important in the workplace. We still need to conduct interviews to gauge how well a candidate will fit into the team (Respondent, HR₂, 18th April 2025).

One of the features of the recruitment process is its efficiency, impartiality, and fairness, which can significantly reduce human bias. One of the respondents shed light on by asserting the following;

The system does an excellent job of screening out unqualified candidates based on basic criteria, such as education and work experience. It helps us move through the hiring process much faster because we do



not waste time on individuals who do not meet the minimum requirements. Previously, when we did manual screenings, unconscious bias sometimes influenced decisions. However, with the automated system, candidates are shortlisted purely on their qualifications and experience, making the process much fairer (Respondent, HR₅, 18th April 2025).

The responses outlined above clearly demonstrate that e-recruitment systems play a crucial role in enhancing transparency and objectivity in public sector recruitment by reducing subjective judgments and political influence during the shortlisting process. These systems utilise predefined filters and algorithms that prioritise qualifications over favouritism and bias (Abia & Brown, 2020; Mwangi & Kibet, 2019). Such automation contributes to procedural fairness, reflected in the increased credibility and acceptance of recruitment outcomes by both applicants and recruitment authorities. Support for these findings can be seen in the work of Ndayizigamiye and Mpinganjira (2020) in South Africa, as well as Mensah (2018) in Ghana, both of whom demonstrate that digital recruitment platforms enhance candidate quality and procedural transparency. In Tanzania, Kambuga and Msuya (2022) further affirm the improvements in efficiency and quality resulting from the adoption of ICT in recruitment.

From a theoretical perspective, the study's findings align with Sociotechnical theory, which posits that technology alone cannot achieve optimal recruitment outcomes unless it is integrated with social factors such as HR personnel's skills, organisational culture, and leadership commitment (Abia & Brown, 2020). This interplay was evident in the findings, which indicated that the effective use of the PSRS portal and automated systems hinges on HR officers' ability to interpret data and facilitate candidate access through training and awareness. Additionally, candidates' digital literacy emerged as a critical social factor affecting equitable access, particularly in rural areas, underscoring persistent sociotechnical misalignments (Deogratias & Tefurukwa, 2025).

Furthermore, the AbdulKareem et al. (2024) study reveals that e-recruitment tools that incorporate digital portfolios, social media behaviour, and recommendation ratings provide a more comprehensive view of candidates, encompassing soft skills and cultural fit—elements that traditional methods often overlook. This approach supports better alignment with organisational goals and enhances workforce quality, illustrating that technical functionalities must be complemented by human judgment and organisational values for optimal decision-making (Akoyo, 2022).

4.1.4 Quality of Candidates

The study also found that, over time, the quality of job applicants has improved through e-recruitment. Most HR staff reported an increase in the quality of job applicants since the system was implemented. One of the HR staff expressed his opinion as follows;

In general, the online employment system has made a significant contribution to finding the best employees across various public institutions, as it now allows PSRS to reach many applicants simultaneously. When you have many applicants, you have a big chance to choose those who are best qualified according to job descriptions than before when the job advertisement was coming out through newspapers, hence people with qualifications were not reached at large a situation that resulted in finding few applicants and having to choose employees in the same small number (Respondent, HR₁, 18th April 2025).

In line with the theme on the quality of the candidates selected via e-recruitment and selection, another respondent commented the following,

E-recruitment helps us to get better candidates because a system helps or gives chances for the candidates to fill all the qualification that he/ he has in the system that directly helps the system in shortlisting the candidates because if the candidates apply for the job that he/she does not meet the criteria or job descriptions the system itself reject that applications compared to the traditional way of recruitment the all that candidates applications was to be received for manual sorting's hence the situation led to human errors that may led to an qualified candidates to be employed in the public sector (Respondent, HR₃, 18th April 2025).

Moreover, the respondent HR₄ asserted that,

The system has made it easier for us to attract and select talented people. We can now access a much larger talent pool, which makes it easier to find the right person for the job. Previously, we had to weed out many poor applicants, but now the software helps us focus on the best candidates from the start (Respondent, HR₄, 18th April 2025).

Also, job applicants have noticed a change in the quality of job postings and job descriptions, as one of them revealed the following;

Job postings are more detailed now. In the past, I sometimes applied for a job without knowing the requirements, but now the software provides a complete description of the requirements, which helps me decide whether I am a good fit (Respondent, Job Seeker, 18th April 2025).

The responses above clearly indicate that e-recruitment systems play a pivotal role in enhancing transparency and objectivity in public sector recruitment by minimising subjective judgments and political influence during the



shortlisting process. It is the result of predefined filters and algorithms that focus on qualifications rather than favouritism and bias (Abia & Brown, 2020; Mwangi & Kibet, 2017). Such automation fosters procedural fairness, as echoed in the increased credibility and acceptance of recruitment outcomes by both applicants and recruitment authorities. These findings are supported by Ndayizigamiye and Mpinganjira (2020) in South Africa and Mensah (2018) in Ghana, respectively, who show that digital recruitment platforms improve candidate quality and procedural transparency. In Tanzania, Kambuga and Msuya (2022) reinforce the efficiency and quality gains from ICT adoption in recruitment. From a theoretical standpoint, the study's findings align with Sociotechnical theory, emphasising that technology alone cannot deliver optimal recruitment outcomes unless harmonised with social factors such as HR personnel skills, organisational culture, and leadership commitment (Abia & Brown, 2020). This interplay was evident in the findings, which showed that the successful use of the PSRS portal and automated systems depends on HR officers' ability to interpret data and facilitate candidate access through training and awareness. Digital literacy among candidates emerged as a crucial social factor influencing equitable access, especially in rural areas, highlighting ongoing sociotechnical misalignments (Deogratias & Tefurukwa, 2025). Furthermore, the findings reveal that e-recruitment tools that incorporate digital portfolios, social media behaviour, and recommendation ratings provide a more holistic view of candidates, including soft skills and cultural fit, which traditional methods often overlook (AbdulKareem et al., 2024). It supports better alignment with organisational goals and enhances workforce quality, demonstrating that technical functionalities must be complemented by human judgment and organisational values for optimal decision-making (Akoyo, 2022).

4.1.5 System Limitations and Improvements

The present study elucidates that, despite its merits, e-recruitment exhibits considerable limitations. The primary concern articulated by HR professionals is the system's inadequacy in assessing soft skills, which are vital for effective teamwork and collaboration. One respondent noted,

While the system excels at matching technical skills, it overlooks the critical competencies necessary for collaboration and teamwork. Human judgment remains essential in these areas, which technology cannot replicate" (Respondent, HR₃, 18th April 2025).

This observation highlights a fundamental issue: the reliance on technology may diminish the invaluable insights and judgments provided by human evaluators. Furthermore, candidates have expressed dissatisfaction regarding the system's inability to recognise non-traditional qualifications. One individual remarked,

I possess extensive experience working on various community projects; however, the system disregarded my experience because the search focused solely on specific professional requirements. It felt like a fruitless endeavour (Respondent, Job Seeker, 18th April 2025).

This underscores another aspect of sociotechnical misalignment—technology's rigid criteria may inadvertently overlook significant, albeit unconventional, experiences that do not conform to predefined standards. The feedback received concerning the limitations of e-recruitment suggests that the system does not represent a comprehensive solution for improving staff quality. This observation aligns with Sociotechnical Systems (STT) theory, which posits that technology alone cannot achieve optimal outcomes; the human element must be effectively integrated (Almulhim, 2023; Deogratias & Tefurukwa, 2025). The challenges identified—insufficient assessment of soft skills and inadequate recognition of diverse qualifications—highlight a notable misalignment between the technical and social subsystems. The inability to assess soft skills effectively in e-recruitment processes illustrates a sociotechnical disconnection. The lack of integration between these subsystems often results in inefficiencies, wherein technology operates in isolation, detached from the collaborative and nuanced nature of human interactions. For example, soft skills such as leadership and communication are inherently subjective and context-dependent, underscoring the need for human evaluation rather than reliance on algorithmic assessments.

Moreover, the existing literature (e.g. Akoyo (2022); Buya and Kembu (2022); and Elmenzhi et al., 2025) indicates that although e-recruitment enhances information dissemination and transparency, it struggles to capture the essence of interpersonal and informal skills. This limitation is particularly pronounced in Tanzanian and other African contexts, as noted by Deogratias and Tefurukwa (2025), underscoring the necessity of context-sensitive adaptations. To address these deficiencies, HR professionals should incorporate psychometric testing and video interviewing, which could provide a more comprehensive evaluation of candidates (Deogratias & Tefurukwa, 2025). The integration of these methodologies aligns the technical capabilities of e-recruitment with vital social processes, thereby fostering a more robust evaluation framework.

In the context of e-recruitment, the technical subsystem comprises platforms, screening algorithms, and ICT infrastructure that, while enhancing efficiency and reach, lack the capacity to evaluate interpersonal skills or the subtleties of informal experiences. Conversely, the social subsystem encompasses HR capabilities, candidate literacy, organisational culture, and leadership. These elements are essential for bridging the gap created by technological limitations, providing the requisite human judgment and context that technology cannot achieve independently.



Eventually, the STT framework posits that the future efficacy of e-recruitment relies on the amalgamation of technological tools with adaptive social processes, such as enhanced training for HR personnel and supportive leadership initiatives (Deogratias & Tefurukwa, 2025). By acknowledging and addressing these sociotechnical misalignments, organisations can progress toward a more harmonious integration of technology and human judgment, thereby facilitating more effective recruitment practices that genuinely consider the complexities of human potential.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusion

This study assessed the effectiveness of e-recruitment systems at the Public Service Recruitment Secretariat in Dodoma, focusing on improving candidate quality. E-recruitment has enabled PSRS to analyse, filter and select applicants who match employment criteria. E-Recruitment has significantly improved the principles of recruitment: impartiality, meritocracy, transparency, fairness, and efficiency. The study reveals that e-recruitment significantly reduced biases, unnecessary human errors, and excuses that could jeopardise the quality of recruited candidates. E-recruitment increased the chances of recruiting the best-qualified applicants. However, the system has yet to measure soft skills such as leadership, collaboration, communication, and job applicants' vested experience. Overall, despite the existing challenges, e-recruitment at the PSRS remains a modern tool that significantly contributes to improving the quality of human resources in the public sector in Tanzania.

5.2 Recommendations

Based on the findings, organisations can enhance the effectiveness of e-recruitment to foster a more transparent, equitable, and efficient hiring environment, as recommended hereunder.

Firstly, the findings indicate that the success of e-recruitment hinges on ongoing investment in both ICT infrastructure and social capacity-building, which are essential for achieving equitable recruitment outcomes. The government must prioritise investments in ICT infrastructure, especially in underrepresented rural areas. This should include initiatives to improve internet connectivity and accessibility, ensuring that all candidates, regardless of location, can participate in e-recruitment. By doing so, the candidate pool will not only expand but also improve the overall quality of applicants.

Secondly, the findings demonstrate that digital recruitment systems promote greater transparency and inclusivity by expanding the reach of candidates and allowing for diverse data inputs. Furthermore, HR staff require training to effectively utilise these new tools while maintaining candidate data privacy and addressing infrastructural constraints. To harness the full potential of digital recruitment systems, organisations should adopt measures that promote transparency and inclusivity. This entails actively reaching out to a diverse array of candidates and incorporating varied data inputs into the recruitment process. Creating a standardised framework for sharing information about job opportunities enhances diversity and encourages a broader range of applications. Additionally, implementing robust training programs is crucial for both HR personnel and job seekers. These programs should focus on developing digital literacy skills to enable users to navigate e-recruitment tools proficiently. Training should also cover best practices for managing candidate data privacy and ensuring compliance with relevant regulations, thereby fostering a secure recruitment environment.

Finally, the findings highlight the limitations of e-recruitment, particularly its inability to assess interpersonal skills or the nuances of informal experiences. Recognising the limitations of e-recruitment in assessing interpersonal skills and informal experiences is vital. Organisations should develop hybrid recruitment methods that match innovative technological tools with adaptive social processes. It involves training HR personnel to assess soft skills and leveraging supportive leadership initiatives to add a human touch to the recruitment process.

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