The Digital Recruitment Gap in a Nigerian Mobile Telecommunications Company: Evidence from Employee Perceptions of Recruitment Practices

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Abstract
This study examines employee perceptions of electronic recruitment relative to other recruitment arrangements in a Nigerian mobile telecommunications company, addressing whether a technology-oriented business necessarily demonstrates comparable digitalisation in its hiring practices. A descriptive secondary analysis was undertaken using recruitment-practice responses from a 2021 employee survey at ITEL Mobile Telecommunications Company, Port Harcourt, Rivers State. Of 115 questionnaires distributed, 109 were returned. Five internally consistent items in the dissertation's recruitment-practice table were analysed using response frequencies, agreement proportions, rankings and percentage-point differences. One item was omitted from comparative calculations due to its recorded frequencies being larger than the sample size. Less than half (33.9%) of the respondents indicated that electronic recruitment was used, while 85.3% indicated full-scale recruitment and 89.9% indicated on-demand recruitment. The agreements with contingency search and retail search were 34.9% and 31.2%, respectively. There were significant differences in reported visibility or use between electronic recruitment and the two most endorsed arrangements (51.4-percentage-point and 56.0-percentage-point differences, respectively). However, the categories are not mutually exclusive and the reports from employees cannot determine platform adoption and technological effectiveness or recruitment outcomes. The evidence confirms that it is an organisational diagnostic and not a causal explanation of digital underinvestment. Prior to making digital investments, HR managers should review recruitment channels, define the terms, assess the accessibility of these applicants and follow up on the results. The study provides a context-sensitive distinction between perceived utilisation of recruitment methods and demonstrated digital recruitment capability, as well as some necessary enhancements for better sectoral comparisons and future research in similar employment contexts. These results suggest further research to test employee perceptions with recruitment records.

Keywords: *electronic recruitment; digital recruitment; employee perceptions; recruitment practices; Nigeria*

Introduction

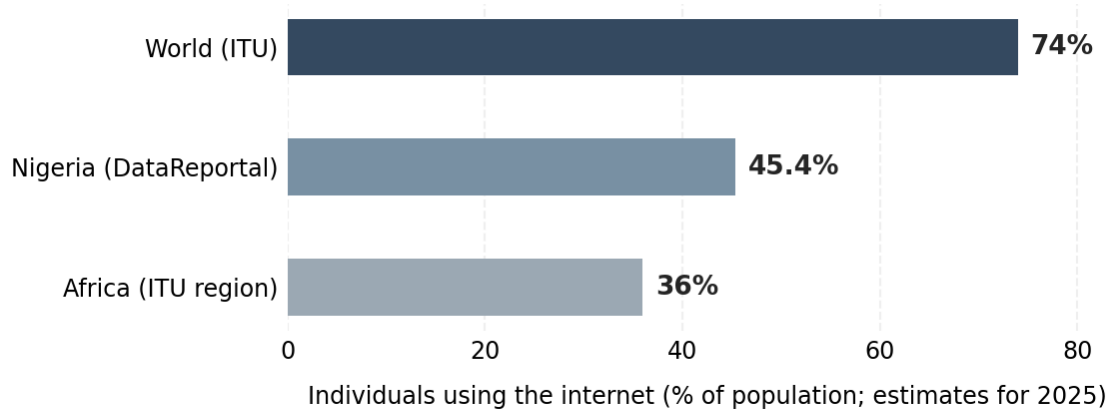
Digital technologies have transformed the way that employers post jobs, engage with prospective candidates (Tuttle & Critchlow, 2025), and process information relating to their selection (Nikolaou, 2021), but a smart looking organisation does not equal a smart looking human resource management function. Stone et al. (2015) stated that information technologies offer opportunities for more accessible and effective human resource processes, but bring issues of impersonality, limited interaction and effectiveness. Studies on electronic recruitment

also show that adoption is not guaranteed, nor is it uniform. Chapman and Webster (2003) discovered that organisations tended to merge traditional and technological processes, with some reporting minimal success from digital investment and Parry and Tyson (2008) determining that the rise of online recruitment did not supplant traditional processes fully to the extent of contemporary predictions. This discovery challenges the idea that digital recruitment should be all-encompassing. What is more defensible is to ask what is perceived to be the difference in functioning between hiring and the other arrangement and whether that difference is a technological one, a strategically different channel mix, or merely a limit of measurement. Recruitment is a series of activities that include workforce planning, vacancy announcement, attraction of applicants, screening, assessment and appointment. Breaugh (2008, 2013) argued that results of recruitment do not just rely on the nominal channel of recruitment, but on a combination of method, message, timing and applicant characteristics. Acikgoz (2019) also viewed the recruitment and job search process as interrelated, where both organisational and applicant decisions influence the awareness and attraction. It is logical that the rate of a specific recruitment label does not determine if the organisation is connecting with the right people, hiring faster or retaining staff. E-recruitment can offer a web ad, an e-application form, an applicant tracking system or a built-in hiring infrastructure. These arrangements vary in substance in terms of their technological and strategic importance. This does a disservice to the power of descriptive survey questions and overstates the extent to which digital transformation is created. This is important because findings from the global recruitment context are not to be simply transferred across labour markets and technological contexts without critical analysis in the Nigerian context. Researchers in the developing world associate electronic recruitment with a broader reach but also network privilege and opaque selection practices (Rahman et al., 2022). Ali et al. (2021) conducted a study on the impact of online channels in South Asia concluded that online channels could help to attract organisations, but not necessarily to increase applications, and that paper-based channels remained the preferred approach for recruiters. Although these results do not tell us what kinds of employees ITEL is looking for, they do challenge the notion of technological determinism and suggest possible reasons why employees respond that way. Nor should national connectivity statistics be used as proof of the company's internal hiring practices. Further complicating the assumptions about digital recruitment in African labour markets is the scale and distribution of connectivity. According to International Telecommunication Union (ITU, 2025), internet penetration in the world in 2025 is projected at 74% of the population while in the ITU Africa region, it is projected at 36%. According to DataReportal (2025), at the start of 2025, Nigeria had an internet population of 107 million or 45.4% of the national population, with an estimated 128 million Nigerians still offline. These statistics reflect internet usage and do not necessarily validate or invalidate the approach of any individual employer for recruiting. They help to identify the gap between the availability of a recruitment channel and the accessibility of that channel to potential applicants. An all-digital application system can widen the scope for connected candidates, while mixed channel recruitment might be a digital system but not be a separate e-recruitment category (Parry & Tyson, 2008; Rahman et al., 2022).

Figure 1 shows a broader context for digital access, in which recruitment-system assumptions must be examined. The figure is contextual because the geographical scope and data-production processes of the ITU and DataReportal estimates differ. Importantly, all three statistics are for 2025 and are not retroactively considered as measured conditions in the 2021 company survey.

Figure 1

Internet use in the world, ITU Africa region and Nigeria, 2025



Sources: ITU (2025), Facts and Figures 2025; DataReportal (2025), Digital 2025: Nigeria. Nigeria and global/regional figures are not necessarily methodologically identical.

The present analysis was based on a survey conducted on the staff of ITEL, Port Harcourt in 2021, archived in the Master's dissertation of Okonkwo (2021). Its recruitment-practice table had respondents answering questions about whether they used electronic recruitment, retail search, contingency search, full-scale recruitment, on-demand recruitment or staff augmentation. The results of the aggregates available show a clear contrast between e-recruitment and two other recruitment methods. This contrast provides a more specific question than does the question of the effect of recruitment on performance; it provides information about the relative salience of electronic and alternative recruitment arrangements, as gleaned from employees' responses. The focus of the inquiry is on the existence of affirmative perceptions, not on whether or not recruitment leads to organisational performance. It therefore does not re-use the performance measures from the dissertation or the (controversial) correlation estimate as proof of the central thesis. The article provides an auditable comparison of recruitment-method endorsements from an underrepresented company setting, clarifies the difference between electronic recruitment and the full-scale and on-demand service scope implied by these terms, and demonstrates how the frequency inconsistencies and loosely defined constructs limit interpretation. This approach aligns with the demand for more aggressive recruitment strategies (Breaugh & Starke, 2000) and taking into account of applicant reactions and technological implementation within the context of the specific technology (Potočnik et al., 2021; Woods et al., 2020). Which methods employees endorse, the size of the endorsement gaps and what this difference can legitimate reveal about the digital recruitment.

Methodology

Research design and setting

The secondary data was found in the published aggregate data presented in Table 4.7 of the dissertation titled Recruitment Process and Organizational Performance in ITEL Mobile Telecommunication Company, Port Harcourt, Rivers State, Nigeria conducted by Okonkwo (2021). The dissertation involved a survey of the personnel of ITEL, Port Harcourt, in various departments and employment categories. The data are for the research period of the source and NOT for recruitment practices in 2026. A retrospective case analysis is suitable for finding discrepancies in the reporting of recruitment arrangements, but not to infer contemporary market coverage or change over time. The unit of analysis for this study is the employee's response to each of the recruitment-method statements, not a proven hiring event, a recruitment campaign or an organisational information system. Therefore, estimates provide information based on perceived use at the time of fieldwork.

Population, sampling and data collection

The source dissertation stated that there were 141 personnel in the study setting and a combination of stratified and simple random sampling was used. It said that 115 questionnaires were sent out and 109 were returned, giving a 94.8% return rate. The original instrument included a four-point Likert-type agreement format (strongly agree, agree, disagree and strongly disagree). The six method-specific statements were included in the instrument in the section on recruitment practices. The data for this reanalysis were published item-level aggregates, and the original data set may have included individual responses. Thus, it is not possible to independently reconstruct the reported sampling procedure, nor to verify response level covariates, missing value patterns, paired comparisons and reliability statistics. A high return rate for questionnaires does not in itself eliminate potential employee selection and common-method and social desirability biases.

Measures and conceptual boundaries

The electronic recruitment was measured by the statement “E recruitment process is used for recruitment” at the organisation. Five other statements mentioned retail search, contingency search, full-scale recruitment, on-demand recruitment and staff augmentation. Each reflects respondent agreement that they used a claim, not how often they made transactions, how much they spent on recruitment, how many candidates they sourced or how many they successfully appointed. The terminology is not silently changed to other professional categories. In particular, the terms "retail search" were not operationally defined in the questionnaire, and the terms "full-scale recruitment" and "on-demand recruitment" refer to service scope or timing and can coexist with digital recruitment. An employee may very well believe in both e-recruitment and on-demand recruitment; they are not mutually exclusive nor conceptually equal.

Data verification and analysis

Each of the four counts of responses for each item were added together and verified with the analytic sample reported of 109. There were five items that met this requirement. For these, agreement was considered strongly agree+agree, disagreement as disagree+strongly disagree, and agreement percentage as the number of agreements/109 x 100. Items were ranked according to the percentage of agreement. The percentage-point differences were determined as the difference between the agreement rate for another arrangement and the electronic-recruitment agreement rate. The staff-augmentation row reported 22 strongly agree, 25 agree, 30 disagree and 34 strongly disagree, which equals 111 instead of 109; and, therefore, was not included in the common-denominator comparison. There were no individual-level records available to determine where the discrepancy was from. The reported source percentages also include small inconsistencies and rounding errors; the present descriptive percentages are recalculated exclusively from valid frequencies. No hypothesis tests, correlation coefficients, regression models or confidence intervals for between-item differences were produced. Responses to different statements came from the same participants, but only separate marginal counts were supplied. Estimating the standard error of a within-person difference or conducting a McNemar test requires paired response patterns, which cannot be recovered from the published table. Furthermore, a convenience-limited organisational case should not be presented as a probability sample of the Nigerian telecommunications sector. The analysis therefore identifies relative endorsement patterns and evaluates their meaning through recruitment and electronic human resource management scholarship rather than testing claims of causal adoption barriers.

Results

Four-category response distributions

The four-point response distributions were reconstructed from the original 2021 recruitment-practice frequencies. Table 1 reports each category as a count and a within-item percentage, preserving the distinction between strong and moderate positions. The two highly endorsed arrangements were on-demand recruitment and full-scale recruitment: together, the strongly agree and agree categories accounted for 98 (89.9%) and 93 (85.3%) employees, respectively. The explicitly electronic recruitment statement, however, attracted affirmative responses from only 37 employees (33.9%). Disagreement was the modal direction for electronic, contingency and retail search, although these statements did not produce identical response intensities.

Table 1

Distribution of employee responses across five recruitment practices (N = 109)

Recruitment practice	Strongly agree, n (%)	Agree, n (%)	Disagree, n (%)	Strongly disagree, n (%)
On-demand recruitment	31 (28.4)	67 (61.5)	3 (2.8)	8 (7.3)
Full-scale recruitment	30 (27.5)	63 (57.8)	10 (9.2)	6 (5.5)
Contingency search	20 (18.3)	18 (16.5)	25 (22.9)	46 (42.2)
E-recruitment	22 (20.2)	15 (13.8)	36 (33.0)	36 (33.0)
Retail search	13 (11.9)	21 (19.3)	28 (25.7)	47 (43.1)

Note. Percentages refer to the 109 completed questionnaires and are recalculated from the original response counts. The sixth source item, staff augmentation, has inconsistent frequencies (n = 111) and is excluded. Source: Okonkwo (2021), Table 4.7, reanalysed.

The direction of the individual categories matters because overall endorsement conceals distinct patterns of recognition. Electronic recruitment attracted 22 strong agreements (20.2%) but also 36 strong disagreements (33.0%) and 36 disagreements (33.0%). Retail search recorded the lowest strong-agreement proportion, 11.9%, and the highest strong-disagreement proportion, 43.1%. Although contingency search and e-recruitment generated almost identical numbers of affirmative responses, contingency search generated more strong disagreement (46 versus 36). The responses therefore suggest that the three lower-endorsed practices should not be collapsed into a single low-use category without recognising differences in the firmness of respondents' assessments.

Agreement, opposition and relative ranking

Table 2 collapses the four response options into affirmative (strongly agree and agree) and negative (disagree and strongly disagree) categories, making the balance of perceived utilisation directly comparable. The net endorsement index subtracts the disagreement percentage from the agreement percentage; zero denotes evenly divided responses, positive values indicate a majority endorsing use, and negative values indicate a majority disputing use. This transformation summarises opinion within each statement and does not measure the proportion of actual recruitment transactions.

Table 2
Agreement-based ranking and net endorsement of recruitment practices

Recruitment practice	Agree, n (%)	Disagree, n (%)	Net endorsement (pp)	Rank
On-demand recruitment	98 (89.9)	11 (10.1)	+79.8	1
Full-scale recruitment	93 (85.3)	16 (14.7)	+70.6	2
Contingency search	38 (34.9)	71 (65.1)	-30.3	3
E-recruitment	37 (33.9)	72 (66.1)	-32.1	4
Retail search	34 (31.2)	75 (68.8)	-37.6	5

Note. Net endorsement = [(strongly agree + agree) − (disagree + strongly disagree)] / 109 × 100. pp = percentage points. Ranking uses overall agreement percentages, not differences in independently observed recruitment events.

On-demand recruitment registered a net endorsement of +79.8 percentage points, followed by full-scale recruitment at +70.6. Conversely, contingency search (−30.3), e-recruitment (−32.1) and retail search (−37.6) received more disagreement than agreement. The separation between the two high-endorsement items and the other three is pronounced; nevertheless, this does not imply that full-scale or on-demand recruitment is technologically separate from e-recruitment. The terms describe potentially overlapping organisational arrangements. Indeed, a single vacancy might be initiated on demand and then advertised online, meaning that the table offers marginal employee assessments rather than mutually exclusive hiring-market shares.

Response intensity and ordinal diagnostics

The agreement dichotomy discards the strength of each response. To preserve that information, Table 3 reports a supplementary descriptive score based on the original categories (strongly disagree = 1; disagree = 2; agree = 3; strongly agree = 4). The mean and standard deviation are useful summaries of the assigned category scores, while the median and most frequent response identify their ordinal centre and mode. Because the response categories are ordered rather than proven to be equally spaced, the means must be read as descriptive indices rather than precise interval-scale measurements.

Table 3
Strength of employee responses by recruitment practice

Recruitment practice	Mean score	SD	Median category	Modal response
On-demand recruitment	3.11	0.77	Agree	Agree
Full-scale recruitment	3.07	0.77	Agree	Agree
Contingency search	2.11	1.15	Disagree	Strongly disagree
E-recruitment	2.21	1.11	Disagree	Disagree / Strongly disagree (tie)
Retail search	2.00	1.05	Disagree	Strongly disagree

Note. Four-point scores range from 1 (strongly disagree) to 4 (strongly agree). SD = sample standard deviation of coded responses reconstructed from frequency counts; the descriptive scores do not test group differences or recruitment effectiveness.

The intensity results qualify the agreement ranking. Contingency search narrowly exceeds e-recruitment on binary endorsement (34.9% versus 33.9%), whereas e-recruitment records a higher four-point mean (2.21 versus 2.11) because it attracts more strong agreement and less strong disagreement. Both items have a median response of disagreement. Contingency search is most frequently strongly disagreed with; e-recruitment has an exact modal tie between

disagreement and strong disagreement. Thus, the ranking depends partly on how response intensity is handled, reinforcing that perceived use cannot be reduced to one unqualified ordering.

Benchmarking the electronic-recruitment gap

Table 4 takes e-recruitment as the descriptive reference category, reporting percentage-point differences in total agreement, as well as the strong-agreement and strong-disagreement extremes. The differences are contrasts between item-level aggregate response distributions from the same sample; because the source does not preserve joint respondent-level answers, they are not paired estimates with calculable significance tests. In particular, the contrasts should not be presented as evidence that one recruitment practice displaced another.

Table 4

Percentage-point contrasts against electronic recruitment as the reference

Recruitment practice	Total agreement (%)	Gap in agreement (pp)	Gap in strongly agree (pp)	Gap in strongly disagree (pp)
On-demand recruitment	89.9	+56.0	+8.3	-25.7
Full-scale recruitment	85.3	+51.4	+7.3	-27.5
Contingency search	34.9	+0.9	-1.8	+9.2
E-recruitment	33.9	+0.0	+0.0	+0.0
Retail search	31.2	-2.8	-8.3	+10.1

Note. Gap = proportion for the named practice minus the proportion for e-recruitment. Positive agreement gaps represent greater endorsement than e-recruitment; positive strong-disagreement gaps indicate more emphatic rejection. "E-recruitment" is the zero-gap reference, not a control group. Relative to e-recruitment, full-scale recruitment exceeded the affirmative share by 51.4 percentage points, while on-demand recruitment exceeded it by 56.0 points. These contrasts arise both from stronger affirmative responses and substantially fewer strongly negative responses. By contrast, contingency search exceeded e-recruitment by only 0.9 percentage points in overall agreement, even though it attracted 9.2 percentage points more strong disagreement. Retail search fell 2.8 percentage points below e-recruitment in agreement and attracted 10.1 points more strong disagreement. Thus, the most defensible empirical result is a two-tier structure in how staff recognised recruitment arrangements, not a straightforward hierarchy of actual recruitment-channel investment or successful hires.

Integrity checks and limits of the published aggregates

The staff-augmentation item has 22 strong agreements, 25 agreements, 30 disagreements and 34 strong disagreements, for a total of 111 responses (and a valid sample of 109). If there is a mistake in either the number of the two quantities, there is no way to determine which is which from the aggregate data and the item was not speculatively repaired. The five remaining items each have a total of 109 and percentages were based on these numbers rather than the percentages provided in the sources, which are not consistent. Another question has a separate performance-correlation table which is not reused because of reporting discrepancies that are not resolved. The source response distributions, endorsement balance, response intensity and differences to e-recruitment are presented in Tables 1, 2, 3 and 4 respectively. None of these are causal changes to the same historical survey; none are individual measures of hiring volumes, or of recruitment effectiveness or current digital maturity.

Discussion

Interpreting the gap without technological determinism

The key takeaway is that there was an imbalance in employee endorsement, with over 85% recognizing on-demand and full-scale recruitment, while 33.9% recognized e-recruitment. This creates a perceived visibility gap, not a failure of digital. On-demand is a term used for the timing of recruitment, full-scale can be a term used for breadth of service, both can be digital. Furthermore, e-recruitment has a slightly higher response intensity score than contingency search despite marginally lower binary agreement score. This conceptual and measurement difference corresponds to the emphasis of Bondarouk and Ruël (2009) on technology being part of the HR processes and not just buying software. According to Abia and Brown (2020), conceptual variation of e-recruitment is technology, system, process, service and proxy. Their analysis offers an explanation for why a survey based on a single undefined term might underestimate technologically mediated activity. To one employee, e-recruitment means an employer's Web site, to another it means e-submission of resumes and to still another, it means an integrated applicant-tracking system. Even if some digitisation is done, these interpretations can lead to disagreement as there are no behavioural anchors to guide interpretation. The current findings can therefore relate to awareness within the organisation as well as implementation. Future research needs to identify which functions were digital, which employees had information on them and which channels completed hires were processed through. These important differences would be lost if the aggregate were treated as an adoption rate.

Why Digital Channels Need Not Replace Established Arrangements

These results support recruitment scholarship, viewing channel coexistence as normal rather than pathological. Continued mixing of technological and conventional approaches was reported by Chapman and Webster (2003) and the use of online tools was not always effective in recruitment tasks as described by Parry and Tyson (2008). Even though the website had stronger effects in the study of Baum and Kabst (2014), recruitment websites and printed advertisements complement each other in the process of influencing applicant attraction. These results pose a challenge to a benchmark that considers digital as being the only way to be successful. Digital applications may complement rather than supplant, if the company's hiring model is on-demand hiring to meet immediate staffing needs. When conducting a valid comparison, service model, sourcing channel and selection technology must be separated and conclusions regarding efficiency must be drawn. However, this almost 67% divergence on the e-recruitment item is not a semantic inconvenience to be overlooked. Because some of the administrative burden and standardisation of applicant information and visibility of the vacancy could be reduced by recruitment technologies, lack of awareness may be consequential. Allen et al. (2007) concluded that information about a job on an organisation's website has an impact on job-seeking intentions, and Collins (2007) showed that recruitment processes differ depending on the applicant's knowledge of the employer. Lievens and Slaughter (2016) also provided further evidence of the importance of employer image and signalling in talent attraction. The lack of recognition of an electronic recruitment channel by employees may also lead to inconsistencies of employer information, but this cannot be derived from the staff responses. The finding thus should not be interpreted as a sign of poorer organisational performance, but as a sign to review the organisation's recruitment communication.

Institutional Context and Organisational Choices

Digital recruitment is only as effective as it is in connecting with the right applicant pool. Nikolaou (2014) noted the use of professional social media sites in recruitment and job search while Melanthiou et al. (2015) highlighted the legal and informational risks that accompany

the use of social media in screening. Based on evidence from developing countries, Rahman et al. (2022) showed that social networks can be used to help in e-recruitment process and can also be used as a tool to manipulate. These studies all indicate that an organisation may prefer direct, agency mediated or on-demand approaches as they cater to certain needs, relationship models, or risk perceptions. But the source survey did not measure ITEL's recruitment budget, its applicants' characteristics, its digital infrastructure, its managerial preferences or its channel costs. Thus, none of these mechanisms can be claimed as the cause of the gap found.

The evidence from South Asia provided by Ali et al. (2021) is particularly valuable in challenging generalizations about the effectiveness of online recruiting as it found that online channels made a recruitment more appealing, but did not necessarily make applicants more likely to apply. Likewise, Kissi (2023) found that the experiences of job seekers of e-recruitment are correlated with dissatisfaction, which is related to expectations, perceived performance and concerns about recruitment fraud. This is because these different results point to recruitment success through users' engagement with a credible system, rather than the number of digital interfaces an employer show. A less successful electronic application process may be one that prospective employees don't trust, can't navigate or don't use regularly. In the Nigerian context this interpretation is still a theoretical possibility and not yet proven, but it does set the right parameters for assessing future investments.

Digital Capability Is Not Synonymous with Organisational Digitisation

The ITEL case brings up the point of the difference between commercial identity and the digitalization of internal HR processes. Drawing on recruitment interviews with recruiters in various organisations, Gilch and Sieweke (2021) suggested that recruitment is a means to facilitate digital transformation by providing capabilities and acting as a mediator between organisational and external demands. In their study, they focused on strategic digital talent recruitment, a concept that is different from digital media recruitment. An enterprise that sells products or services from mobile devices can have a lot of product-market expertise and still operate some HR functions via decentralised or traditional means. On the other hand, an organisation can post a job on the internet and not use digital analytics, applicant tracking or structured assessments. So, apparent contradiction between a technology related business and weak endorsement of e-recruitment should not be regarded as a definite organisational failure but rather as a hypothesis for systems-level evidence. Strohmeier (2007) and Marler and Fisher (2013) cautioned that the research on electronic human resource management frequently made claims of benefits without providing adequate proof of strategic benefits. Stone et al. (2015) also questioned the notion that HR outcomes are always better with the use of new technologies. The current data set does not directly measure recruitment cost, time to fill, hiring quality, candidate diversity, or candidate experience or retention. Angrave et al. (2016) also doubted the unchallenged euphoric view on HR analytics, given the lack of analytical skills and practice. Also, the current article avoids a common inferential error: it does not translate low levels of acknowledgement of an electronic-recruitment statement into lost productivity. Rather, it reads the result as a call to action to track the real recruitment deals and results before touting any given software solution.

Making E-Recruitment More Specific

The next step in the empirical process should be to break down e-recruitment into measurable steps. During the sourcing process, an audit might identify open roles on employer websites, job boards and professional networks. It could provide the candidates with some sort of electronic submission of the application and allow for acknowledgment and progress tracking. The audit may consider aspects of scheduling, record management, remote interviewing, etc. at the selection stage without assuming that automated decision-making will occur. Memon et

al. (2024) categorized a diverse array of digital tools for recruitment and selection, while Woods et al. (2020) classified the various types of digital selection methods as online applications, digital testing, interviews, gamified assessment and social media. These studies further emphasize the need to not have one binary adoption measure. Recruitment maturity is multi-dimensional and an organisation can be strong at one stage and weak at another.

There should also be a distinction between the recruitment sources that applicants used to find job vacancies and the assessment and hiring processes. Breaugh (2013) showed that recruitment methods should be considered in relation to both prehire and posthire outcomes. In their meta-analysis, Uggerslev et al. (2012) showed that the various predictors of applicant attraction vary at each stage of the recruitment process, and that the one-item organisational endorsement is rather coarse. A better follow up design would involve using records of recruitment campaigns to determine how many applicants were received, how many qualified, how many interviews were completed, how many offers were made, how many were accepted, and the costs and time to fill by source. These would separate e visible from being effective and allow for comparisons across digital, referral, agency and walk-in without assuming that they are mutually exclusive.

Fairness and the boundary of technological solutions

When it comes to e-recruitment, consideration needs to be given as to who benefits and how the applicants are evaluated. Noble et al. (2021) determined that automated résumé screening was rated as less procedurally and interpersonally just than conventional screening on multiple dimensions, but higher on consistency. Similarly, Hilliard et al. (2022) analyzed applicant perceptions of fairness in the use of algorithmic hiring tools. This is because these findings contradict the notion that digital recruitment by nature guarantees impartiality. Köchling and Wehner (2020) reported on possible discrimination based on algorithmic decision-making, and Raghavan et al. (2020) challenged claims of fairness and validation practices by vendors. Thus, the policy goal must be transparent and accessible, auditable recruitment, not software deployment in lieu of institutional accountability. Strategic benefits of new technology can be seen, but there are also substantive reasons to be wary. Black and van Esch (2020) spoke about the efficiency potential of AI based recruitment, and van Esch et al. (2019) discovered that the attitudes of applicants toward AI based recruitment had an impact on the likelihood of applying. By contrast, Mirowska and Mesnet (2022) noted that professional interviewees worry about the absence of human factors in AI assessment while Chen (2023) highlighted the need for collaboration between recruiters and AI. The 2021 instrument does not indicate whether ITEL used AI tools or not in these studies. They are relevant in terms of their prospective use: technological efficiency should not be accepted as self-justifying, but as a factor to be considered alongside explanation, human review and procedural justice, as employers modernise the recruitment process.

An interpretation of potential barriers to adoption in context

The imbalance may be due to budget, in-house communication, centralisation of recruitment or channel appropriateness, which the survey did not test. Kim and O'Connor (2009) recognized resource and staff-adjustment challenges in US public sector e-recruitment and Zahedi Nejad et al. (2025) recognized technical and contextual challenges in other organisations. However, Chapano et al. (2023) concluded that perceived implementation challenges may not be a barrier to the adoption of digital HRM in South Africa. Thus, barriers cannot simply be taken for granted due to the low level of recognition of electronic recruitment by respondents, but an explanation relating to the specific condition of the company is needed. Staff interviews, process mapping, and applicant accounts and recruitment logs should all be used in an organisational assessment. HR professionals would be able to identify if the

positions labeled as on-demand were electronic, outsourced or referral, and applicants would be able to identify if the channels were accessible and if the process was credible. Administrative records might be used to determine the percentages of hires from different sources. Triangulation of these types of evidence would help to differentiate between limited implementation and low employee awareness. Published data cannot be used to test across employee categories, but an additional individual-level design may be required to do so.

Theoretical and Research Implications

Theoretically, it shows how technology adoption is best thought of as situated practice in the organisation, not as a step-by-step move from analogue to digital. Potočnik et al. (2021) advocated for the research on recruitment to have more solid conceptual and methodological frameworks, whereas Aparna and Kumar (2025) described the modern recruitment landscape as a field of efficiency, fairness, and human interaction. The particular contribution here is less ambitious, and more measurable, namely that apparently low digital-recruitment endorsement can coexist with high endorsement of recruitment arrangements which could themselves be digitally enabled. The key takeaway is not if recruitment is digital or on-demand, but what technologies are being utilized in each path of recruitment and whether workers and applicants can reliably see them. This discrepancy in the number of staff augmentations and the frequency of the item precludes a valid percentage based on the sample, and the recruitment constructs are not behaviourally specified so it is not possible to make a direct comparison with behaviourally specified measures. Breaugh and Starke (2000) identified costs of poorly designed recruitment. This article does not hide the defects, but keeps the verified counts, and the inference is limited to descriptive endorsements, while the inconsistent item is omitted. Further studies should pretest the recruitment terminology used, get individual-level responses and validate against recruitment transactions in multiple organisations and on multiple occasions.

Conclusion

The 2021 ITEL survey shows a strong descriptive imbalance in employee perceptions of recruitment practices. In terms of the respondents, only 33.9% agreed that e-recruitment was used, while 85.3% agreed to full-scale recruitment and 89.9% agreed with on-demand recruitment. There was also significantly more opposition to the electronic-recruitment item. These results highlight a lack in perceived use or visibility, but do not indicate that the company did not have digital recruitment technology, that their preferred channels were only offline, or that recruitment outcomes were affected. When the various categories of questionnaires refer to different aspects of hiring arrangements, such distinctions are key.

The most defensible implication for management is to determine what recruitment processes actually occur, who uses them and what the consequences are. The audit should include a detailed breakdown of recruitment stages, applicant access and experience, and costs, completion rates, and hiring outcomes and procedural fairness should be verified at the various digital touchpoints. It should also make it clear if the employees can recognise the recruitment approach that is used in their organisation. This evidence should be followed when deciding to digitalise and be compatible with candidate accessibility and human accountability.

The contribution of the article is based on an empirical boundary that is transparent. A small single-company data set collected in 2021 is not adequate for making generalisations, causal explanations, or statements about organisational performance in today's world. Another item had inconsistent frequencies and was not included in the like-for-like analysis. However, there is a significant difference in valid responses that warrants further investigation, particularly with improved measurement. The main takeaway is not that all companies need to abandon alternative recruitment models and embrace electronic models, but that there must be

something tangible behind a company's digital recruitment identity, and behind the mere label ‘digital recruitment’ in surveys.

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