

Public Policy and Graduate Employability in Nigeria: Assessing the Role of Digital Skills in the Transition from Higher Education to Employment

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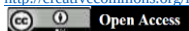
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ABSTRACT

Nigeria produces more than 500,000 tertiary graduates every year, yet many struggle to secure decent work amid persistent underemployment, skills mismatch and limited formal job creation. At the centre of this challenge is a clear gap between the digital abilities most graduates leave university with and the practical competencies employers now require; national assessments show that most possess only basic skills, while fewer than one in four demonstrate intermediate competence in data handling, digital communication, and workplace software. This paper conceptualises public policy on digital skills development as the independent variable and graduate employability as the dependent variable, mediated by applied digital competence and moderated by infrastructural and socio-demographic access, and assesses how digital skills shape graduates' transition from higher education into employment, examining how policy can close the competence gap through deliberate investment in digital skills. It analyses the National Digital Economy Policy and Strategy (2020-2030), the National Digital Literacy Framework, the 3 Million Technical Talent programme and the Digital Training Academy. It gets this policy right by assuming digital competence as a key requirement. The presentation is uneven: courses are overly theoretical, lack infrastructure, and impact tracking is weak. Digital training based on real assignments, forming the basis of certification, career and real work linkages, can deliver economic impacts and open new locations for work and trade, but only with infrastructure and employment skills as well. It therefore believes that policy should focus on delivering results through standardised competence certification as part of a graduation/bridge requirement for all training in Nigeria, with programmes creating pathways into jobs and markets over the long term, and employment outcomes tracked, converting Nigeria's graduates into an economic resource.

Introduction

Nigeria's tertiary education has expanded, releasing over 500,000 graduates into the labour market each year (Zincware & Kifordu, 2026). However, it still has low capacity to generate formal jobs and high rates of underemployment. While there appears to be a surplus of certificate holders, a disconnect also remains between the skills offered by the tertiary education system and labour market demands. This disconnect creates another paradox: while higher institutions produce many more certificates, they do not necessarily translate them into dignified, productive jobs.

The employability doldrums were clearly caused by a skills mismatch, particularly in digital skills. Systematic reviews of Nigerian empirical literature found that most Nigerian graduates leave school with only basic digital skills. At the same time, employers demand an intermediate level of digital skills and application in data management, digital communication, cloud-driven applications and tools, and cybersecurity (Saidu et al., 2025; Zincware & Kifordu, 2026). Empirical evidence generally finds positive returns on investment in digital skills acquisition up to a certain level of competence. World Bank analyses of online job vacancies across Nigeria and peer countries confirm rising demand for digital skills, with nearly half of recent postings specifying at least one digital requirement (Chinen &

Montorsi, 2025). These findings underscore that the current graduate profile is poorly matched to labour-market realities.

The country has formally acknowledged digital skills through the National Digital Economy Policy and Strategy (2020–2030) and subsequent government efforts to foster mass digital literacy and technical competence development (Federal Ministry of Communications and Digital Economy, 2019). However, a critical review of implementation reveals many gaps. Thus, academia largely treats digital literacy as theory-based; on-the-ground digital training is patchy; infrastructure limits digital access outside big cities; and few programmes track outcomes in terms of employment/self-employment (Adewole, 2026; Zincware & Kifordu, 2026). Intervention studies show that structured, practice-oriented digital skills programmes can produce large competence gains and improve employability outcomes when linked to real tasks and career support (Samuel et al., 2025). Yet these successes remain limited in scale and are not yet embedded as standard features of the higher-education system.

These structural weaknesses are further compounded by disparities in access and infrastructure. Unreliable electricity and limited broadband connectivity outside major urban centres restrict both the delivery of digital skills training and graduates' ability to apply what they learn (Dosumu, 2024; Athena Centre for Policy and Leadership, 2026). Regional and institutional differences reinforce this pattern, with graduates from less-resourced institutions and non-metropolitan areas consistently reporting weaker labour-market outcomes than their peers in Lagos, Abuja and Port Harcourt (Adeyemi & Adu, 2022; Odunlami, Nwokporo, & Akanle, 2024). Gender-based disparities also persist, particularly in technical and high-demand digital fields, contributing to uneven patterns of underemployment across the graduate population (GIZ, 2025). Any credible account of the digital-skills gap must therefore treat these access and equity dimensions as integral to the problem, not as peripheral concerns to be addressed only after core competence gaps are resolved.

This article critically reviews the extent to which public policy is bridging the digital skills gap, assessing the role of digital skills in Nigerian graduates' transition from higher education into employment and how that transition affects their employability (positively or negatively). Drawing on peer-reviewed Nigerian research, policy white papers, and recent empirical studies, it critiques the strengths and weaknesses of the Nigerian policy framework, as well as its ongoing implementation failures. The paper focuses on tertiary education, explains how digital skills may deliver desired labour market outcomes, and offers evidence-based lessons to inform better policy practice. The paper begins by defining terms, then analyses the Nigerian context of employability, links it to digital skills, the policy environment, and structural impediments, draws lessons from programme evidence, and concludes with policy recommendations.

3. Key Concepts and Analytical Framework

In practice, employability is primarily pragmatic rather than deducible from purely academic factors. Employability is defined as 'the knowledge, skills, attitudes and networks which, when combined, enable a graduate not only to gain and sustain satisfying work, whether employed or self-employed, but also to create their own economic opportunities' (Hillage & Pollard, 1998). In the Nigerian context, it is not merely a matter of holding the degree/certification as an indicator of employability. It implies that the job can be performed adequately and adapted to a changing job environment; that it can communicate and work effectively with others as part of a team; and that it can identify pathways into self-employment or into whatever employment opportunities exist within the wider labour-market ecosystem (Zincware & Kifordu, 2026; Saidu et al., 2025).

Digital skills form a continuum rather than a single competence. At the basic level they include everyday tools such as office software, email, online research and simple digital communication. Intermediate skills encompass data analysis, digital marketing, collaborative platforms and the ability to

use digital tools to solve routine workplace problems. Advanced skills involve coding, cybersecurity, cloud computing, artificial intelligence applications and the capacity to design or manage digital systems. Research in Nigeria indicates that most graduates currently operate at the foundational end of this continuum, while labour-market demand increasingly concentrates on intermediate and advanced levels (Zincware & Kifordu, 2026; Chinen & Montorsi, 2025). The distinction matters because basic exposure does not automatically produce employability gains; functional competence at higher levels is required before digital skills reliably improve job prospects or entrepreneurial outcomes (Saidu et al., 2025).

Framed empirically, this paper treats public policy on digital skills development as the independent variable, operationalised through the National Digital Economy Policy and Strategy, the National Digital Literacy Framework, the 3 Million Technical Talent programme and the Digital Training Academy. Graduate employability constitutes the dependent variable, reflected in employment status, job quality, self-employment and income outcomes. Applied digital competence functions as the mediating variable through which policy inputs translate into employability gains, while infrastructure access, gender, institutional type and region operate as moderating variables that strengthen or weaken this relationship (Saidu et al., 2025; Samuel et al., 2025). This variable structure underpins the analytical framework presented in Figure 1 and is applied consistently throughout the review that follows.

4. Methodology

This paper adopts a systematic, desk-based review and critical synthesis of empirical and policy literature on digital skills and graduate employability in Nigeria, rather than new primary data collection. Sources were purposively selected across three categories: peer-reviewed Nigerian and Africa-focused empirical studies (2022-2026) reporting digital-skills assessments, labour-market outcomes and programme evaluations; official Nigerian policy documents, including the National Digital Economy Policy and Strategy (2020-2030), the National Digital Literacy Framework, and programme reports for the 3 Million Technical Talent initiative and the Digital Training Academy; and comparative multilateral analyses, such as World Bank job-vacancy studies, bearing on digital-skills demand. Evidence was screened for relevance to the independent variable (public policy on digital skills development), the mediating variable (applied digital competence), the dependent variable (graduate employability), and the moderating variables (infrastructural and socio-demographic access) set out in the analytical framework (Section 3), and synthesised thematically around policy design, implementation gaps and reported employability outcomes. Because the evidence base is drawn from secondary empirical and policy sources rather than an original survey or interview sample, the analysis is interpretive and synthesis-based: it identifies patterns and associations reported across the reviewed studies but does not itself test the strength or statistical significance of the relationships between these variables.

5. The State of Graduate Employability in Nigeria

Each year, Nigeria's universities and polytechnics produce well over 500,000 employed and unemployed graduates into the labour market. However, the formal economy can integrate only a certain proportion of this annual output (National Bureau of Statistics [NBS], 2024). This absorption problem plays out nationally: significant numbers of certificate-owners remain unemployed for a considerable length of time after graduation. Officially registered labour-force figures, using the revised methodology, show modestly low headline unemployment rates; however, independent assessment data indicate that underemployment and casualisation remain extensive. Many graduates are willing to take lower-productivity, lower-paid informal work that does not recognise their qualifications and fails to provide a living wage. This reflects the structural inability of traditional formal work to match the supply of graduates (Jobberman Foundation, 2025).

Skills mismatch is at the heart of this crisis, with digital skills among the most frequently cited gaps. While national and employer data show most university graduates leave with only basic digital skills, intermediate proficiency in handling data, workplace software, digital messaging, and supporting tools remains scarce (NITDA, 2023; World Bank, 2023). Other reports reveal that the bulk of graduates lack basic proficiency in office software, and the Global Competitiveness Index 2020 suggests that nearly 60 per cent of firms find new graduates in general ill-equipped for the job, pointing out their lack of technical, digital and other soft skills (Proten International, 2026; Ezech, 2025). Evidence also shows that demand for digital skills in online jobs has been rising even faster than supply (Chinen & Montorsi, 2025).

Patterns of unemployment and underemployment vary markedly across region, gender, institution type and field of study. Graduates outside major urban centres such as Lagos, Abuja and Port Harcourt face steeper barriers, while those from less-resourced institutions or purely theoretical programmes generally fare worse than peers from specialised technical programmes (Adeyemi & Adu, 2022; Odunlami, Nwokporo, & Akanle, 2024). Gender disparities persist in certain technical and high-demand fields. Underemployment is especially pronounced: many degree holders work fewer hours than desired or in roles unrelated to their training, contributing to a labour market in which formal qualifications alone offer limited protection against precarious livelihoods (NBS, 2024; GIZ, 2025).

Against this backdrop, informal work, freelancing and remote digital opportunities have expanded as alternative pathways. A growing share of graduates and even current students engage in online freelancing, content creation, virtual assistance, digital marketing and software-related services for both local and international clients (The Garage, 2026; Daily Trust, 2026). These channels provide income and skills utilisation where traditional formal jobs are scarce, yet access remains uneven and depends heavily on reliable connectivity, practical digital competence and professional networks. The broader economic context reinforces the shift: formal job creation in traditional sectors remains constrained, while digital, creative and service industries continue to expand, albeit from a still-modest base and with their own skills bottlenecks (BusinessDay, 2025; World Bank, 2023).

Public policy is understood as the coordinated set of government decisions, programmes, funding choices and institutional arrangements that shape the education system, skills development, digital infrastructure and labour-market linkages. Literature on digital skills and graduate outcomes in Nigeria shows that policy does not influence employability directly. Instead, it works through the quality, relevance and accessibility of digital skills training. When curricula remain largely theoretical, when training programmes lack practical application, or when infrastructure and industry linkages are weak, the expected gains in employability fail to materialise even when digital skills are formally promoted (Adewole, 2026; Zincware & Kifordu, 2026). Empirical work further demonstrates that digital competence acts as a critical mediating variable: skills development improves employability primarily when it produces applied competence that employers can recognise and that graduates can use in real work settings (Saidu et al., 2025). Supporting conditions such as reliable electricity and internet access, soft skills, career guidance and actual employment or market opportunities therefore determine whether policy-driven digital skills investments translate into measurable labour-market results. The analytical framework adopted in this paper traces this independent variable–mediator–dependent variable chain, as illustrated in Figure 1, focusing on the points at which moderating structural weaknesses interrupt the conversion of digital competence into improved graduate employability outcomes.

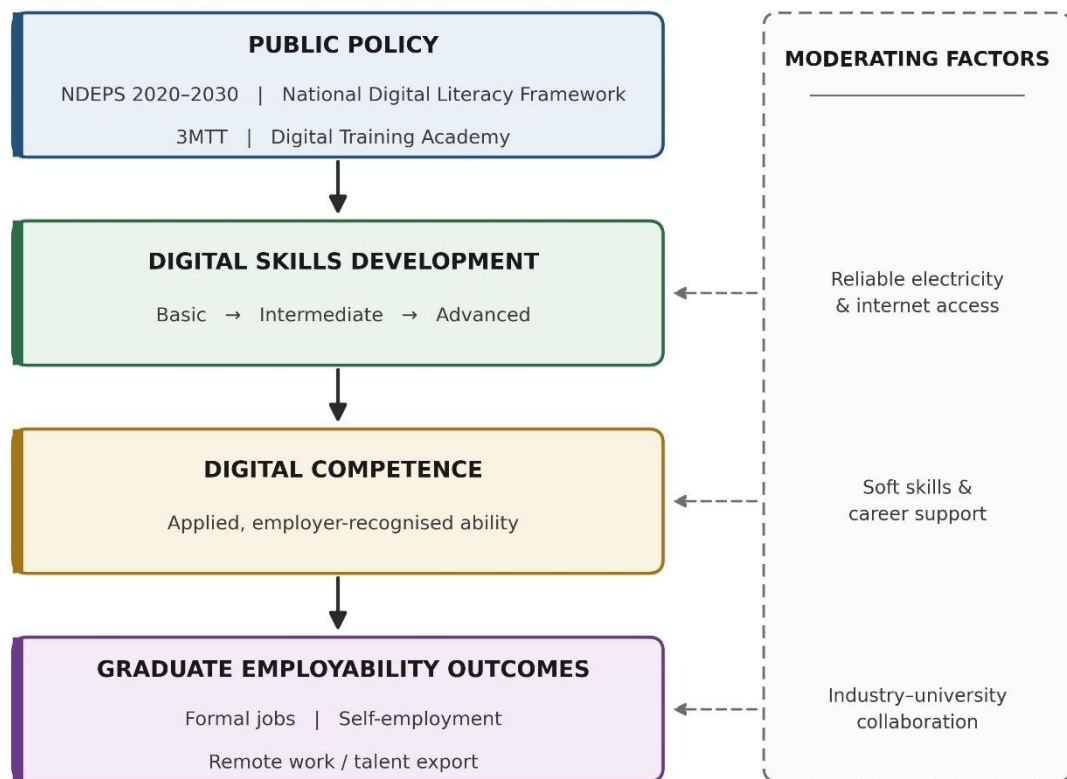


Figure 1. Analytical framework showing the policy–skills–employability chain and key moderating factors in Nigeria.

6. The Contribution of Digital Skills to Employability

Practical digital skills raise the likelihood of formal employment, improve starting positions, and increase graduates’ ability to adapt to changing workplace demands. Nigerian studies show that graduates who move beyond basic computer literacy to intermediate competence in data handling, workplace software, digital communication, and collaborative tools secure jobs faster and enter roles that better match their qualifications (Saidu et al., 2025; Adewole, 2026). These skills also open pathways into self-employment, freelancing, and small digital businesses. Graduates proficient in digital marketing, content creation, graphic design, data analysis, or basic software development can generate income through local clients and online platforms, reducing dependence on scarce formal jobs. Remote and international work opportunities further expand these options, allowing skilled graduates to earn foreign currency while remaining in Nigeria, an emerging form of talent export that already supports thousands of young professionals (Nwachukwu & Emeh, 2023).

Evidence from recent Nigerian research confirms that practical digital competence produces stronger employment outcomes. Intervention studies, including large-scale modular training programmes, demonstrate significant gains in both skill levels and subsequent job placement or self-employment rates when training is hands-on and linked to real tasks (Samuel et al., 2025). Graduates who combine digital skills with soft skills, especially communication, problem-solving, teamwork, and workplace readiness, perform better than those who rely on technical skills alone. Employers repeatedly rank these complementary abilities as decisive in hiring decisions, and successful freelancers and remote

workers report that professional communication and reliability often determine whether they retain clients (Adegoke, 2021; Saidu et al., 2025).

Digital skills alone, however, are not sufficient. Their impact depends heavily on reliable electricity and internet access, the presence of local and international market demand, and structured career support such as mentorship, portfolio development, and job-matching assistance. Without these enabling conditions, many graduates who acquire digital skills still struggle to convert competence into sustained income or formal employment. Infrastructure gaps, limited industry linkages, and weak follow-up support therefore remain critical constraints that determine whether digital skills training ultimately improves graduate employability (World Bank, 2023; Adewole, 2026).

7. Public Policy Landscape

The National Digital Economy Policy and Strategy (NDEPS) 2020–2030 provides the overarching vision for Nigeria’s digital transformation, built on eight pillars that include digital literacy and skills, solid infrastructure, and indigenous content development. It sets ambitious targets for broadband penetration, digital job creation, and mass digital literacy across the working-age population (Federal Ministry of Communications and Digital Economy, 2019). Complementing this framework, the National Digital Literacy Framework (NDLF), led by the National Information Technology Development Agency (NITDA), defines clear competence areas and proficiency levels and guides efforts to embed digital skills in schools and tertiary institutions. As illustrated in Figure 2, the NDLF is structured around six competence areas, 23 specific competences, and eight proficiency levels ranging from foundation to highly specialised. Major programmes operationalising these policies include the 3 Million Technical Talent (3MTT) initiative, which aims to train three million young Nigerians in high-demand technical skills by 2027, the Digital Training Academy, and related efforts under education renewal and talent-export agendas. Institutional responsibilities are shared among the Federal Ministry of Education, NITDA, the National Universities Commission, and state-level actors, creating a multi-level architecture for delivery.

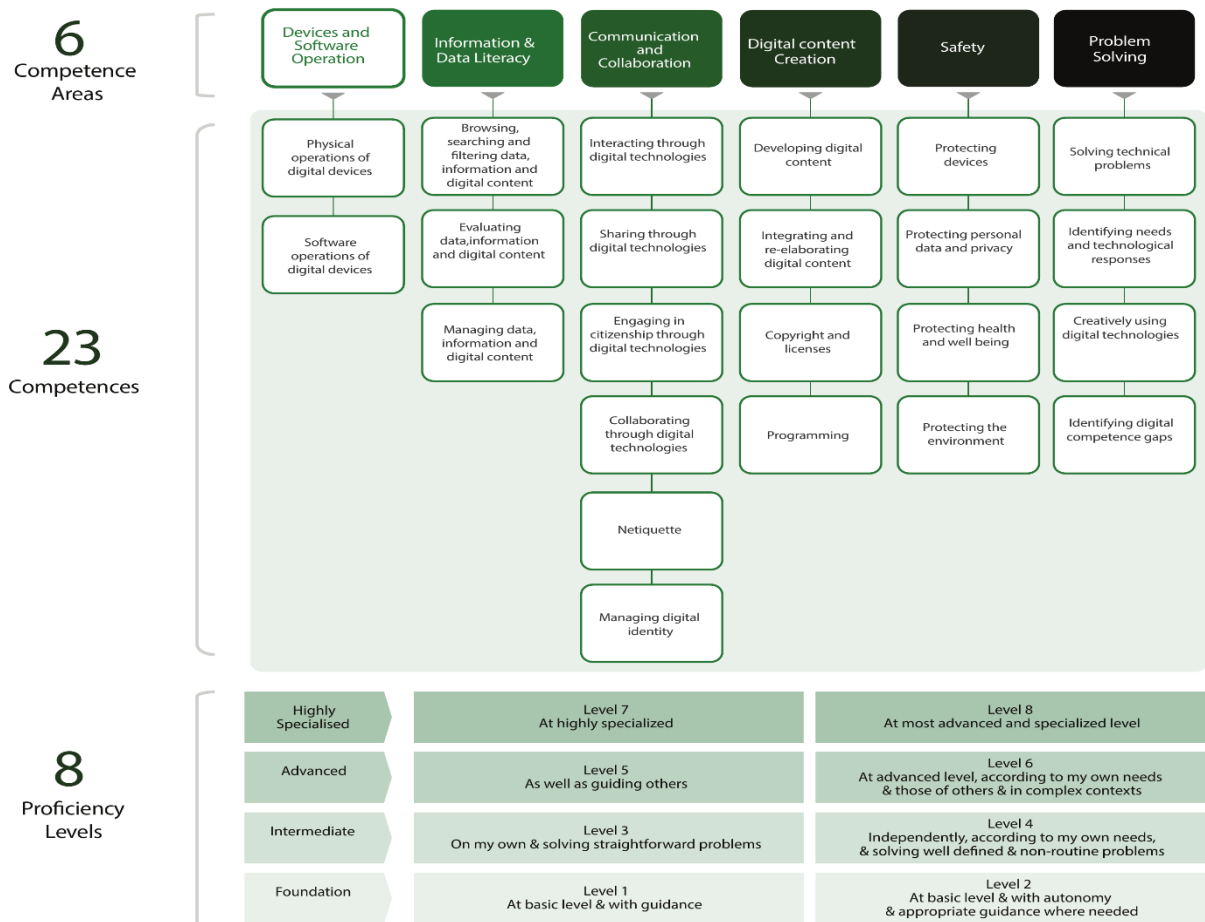


Figure 2. National Digital Literacy Framework showing six competence areas, 23 competences, and eight proficiency levels. Adapted from NITDA (2023).

The current policy approach has clear strengths: it openly recognises the skills gap, sets ambitious quantitative targets, and has expanded free and subsidised training opportunities for young people. However, significant weaknesses persist. Implementation remains uneven across regions and institutions, practical digital modules are still poorly integrated into mainstream university curricula, employment outcomes of training programmes are weakly tracked, infrastructure shortfalls limit participation outside major cities, and coordination gaps between federal and state agencies reduce overall effectiveness (Adewole, 2026; NITDA, 2023). These delivery challenges risk limiting the impact of otherwise well-designed policy frameworks.

The National Digital Literacy Framework does not operate in isolation. As illustrated in Figure 3, it is embedded within a broader network of complementary government policies and initiatives that collectively reinforce the national digital agenda. These include the Nigerian National Broadband Plan 2022–2025, the Nigeria e-Government Master Plan, successive recommendations of the National Council on Communication and Digital Economy, the Digitization of Government Processes and Records, the Nigerian Judiciary Information Technology Policy Document, the National Strategy for Public Service Reform, and service-wide digital literacy initiatives coordinated by the Bureau of Public Service Reform. Together, these instruments create a multi-layered policy environment that strengthens the case for embedding digital competence across education, public administration, and the wider economy, while also highlighting the need for stronger coordination if the goals of the National Digital Literacy Framework are to be fully realised.

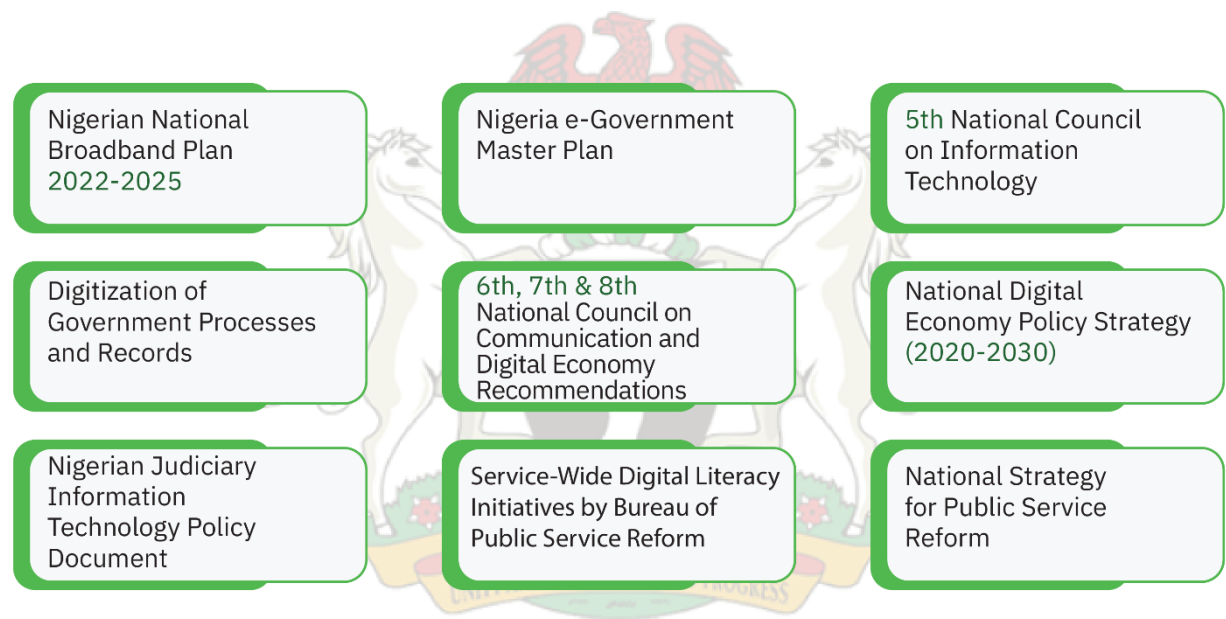


Figure 3. Relevant government policies and initiatives that demand or support a national digital literacy standard. Adapted from NITDA (2023).

8. Barriers to Effective Progress

Infrastructure constraints remain one of the most binding barriers to effective digital skills development in Nigeria. Unreliable electricity and limited internet access, particularly outside major urban centres, restrict both the delivery of training and the ability of graduates to apply newly acquired skills. Many rural and semi-urban institutions operate with intermittent power and costly or unstable connectivity, which undermines practical learning and continuous skill practice (Dosumu, 2024; World Bank, 2023). These infrastructural gaps disproportionately affect students from less-resourced institutions and limit the scalability of national digital literacy programmes.

Curriculum and teaching challenges compound the problem. University programmes continue to emphasise theoretical instruction over practical application, and many lecturers lack adequate digital capacity and training in technology-enhanced pedagogy (National Universities Commission [NUC], 2026; Adewole, 2026). Access and equity issues further restrict progress. The high cost of devices and data, gender disparities in some technical fields, and lower participation rates from rural and less-resourced institutions create uneven opportunities for skill acquisition (Athena Centre for Policy and Leadership, 2026). Quality and relevance problems are also widespread, as many short training programmes end at certificate issuance without real projects, employer engagement, or practical application.

Weak industry–university collaboration and limited career guidance leave many students without clear pathways from training into employment or self-employment. Measurement gaps further weaken progress. Few programmes systematically track whether participants secure sustained employment or launch viable enterprises after training, making it difficult to assess impact or refine delivery (Proten International, 2026; Adewole, 2026). Without stronger coordination, better infrastructure, and outcome-focused evaluation, these barriers will continue to limit the effectiveness of digital skills initiatives.

9. Evidence from Existing Programmes and Studies

Empirical research in Nigeria demonstrates that structured, hands-on digital skills training produces measurable gains in competence and employability. A major intervention study involving

1,028 unemployed and underemployed graduates in Ogun State found statistically significant improvements across four practical modules, with large effect sizes, when training focused on real workplace tools and tasks (Samuel et al., 2025). Similar evidence shows that graduates who acquire intermediate digital competence through practice-oriented programmes achieve stronger employment and self-employment outcomes than those who receive only theoretical exposure (Saidu et al., 2025).

Lessons from government and partnership initiatives reinforce these findings. The 3 Million Technical Talent (3MTT) programme has expanded training scale and begun linking fellows to internships and job placements through collaborations with the European Union, UNDP, Microsoft, and private employers (Federal Ministry of Communications, Innovation and Digital Economy, 2026). Complementary efforts such as the Digital Training Academy emphasise globally recognised certifications and pathways into remote work and entrepreneurship. Private bootcamps and industry-linked schemes that combine modular learning with employer input have also reported higher placement rates than purely academic or short-term interventions.

What works in practice is clear: modular training focused on real tasks, recognised certification, active employer involvement, and follow-up career support consistently deliver better results. Programmes that ignore these elements tend to fall short. Short one-off workshops, training disconnected from actual job markets, and initiatives that fail to account for local infrastructure realities produce limited or transient benefits (World Bank, 2023; Adewole, 2026).

Emerging insights highlight the growing importance of remote work and talent-export pathways. Graduates with practical digital skills and reliable connectivity are increasingly accessing international freelance and remote employment opportunities, generating foreign-currency income while remaining in Nigeria. These pathways expand the effective labour market beyond domestic formal job creation constraints, but they remain accessible mainly to those who have already cleared competence and infrastructure thresholds.

10. Policy Recommendations

For the Federal Government and relevant agencies, the priority is to move from ambitious targets to enforceable standards and better delivery systems. Verified practical digital competence should become a clear graduation requirement across all disciplines, with assessment based on demonstrated ability rather than theory alone. Stronger coordination is needed between the ministries responsible for education, the digital economy, and industry so that training programmes connect directly to employment and talent-export pathways. Expanding reliable power and broadband access, particularly in underserved areas, and supporting shared digital learning hubs are essential enabling conditions. Systematic tracking of training outcomes, with regular public reporting on employment and self-employment results, would improve accountability and allow continuous improvement of programmes (Federal Ministry of Communications and Digital Economy, 2019; World Bank, 2023).

Universities and tertiary institutions must integrate practical digital modules with real projects into every programme rather than treating digital skills as optional or peripheral. Stronger partnerships with employers are required for curriculum input, structured internships, and shared training facilities. Continuous digital capacity development for lecturers is equally important, as teaching quality remains a major constraint on skill acquisition (Adewole, 2026; National Universities Commission, 2026).

Training programmes and private partners should focus on high-demand skills that are linked to actual employer needs and remote-work opportunities. Career guidance, mentorship, and job-matching support must be treated as standard components rather than optional extras. Delivery methods should deliberately address equity through targeted outreach and flexible options for women and rural youth, ensuring that national programmes do not reinforce existing disparities (Samuel et al., 2025; Saidu et al., 2025).

Cross-cutting priorities include aligning digital skills development with local economic opportunities in agri-tech, fintech, creative industries, and public-service digitalisation. State governments should be encouraged to adapt national frameworks to their specific labour markets. Sustained public–private partnerships that share costs, maintain quality standards, and remain focused on measurable employment and enterprise outcomes will be critical to turning policy intentions into lasting results.

11. Conclusion

Digital skills are not a complete solution to graduate unemployment in Nigeria, but they remain one of the most practical and scalable levers available to policymakers. The country produces hundreds of thousands of tertiary graduates each year, yet many leave university with only basic digital abilities that fall short of labour-market requirements. Current public policies, including the National Digital Economy Policy and Strategy and major initiatives such as the 3 Million Technical Talent programme, correctly recognise the importance of digital competence and have created expanding training opportunities. Consistent with the analytical framework applied throughout this paper, the relationship between the independent variable, public policy on digital skills, and the dependent variable, graduate employability, is neither direct nor automatic: it is carried by applied digital competence as a mediating variable and conditioned by infrastructural, institutional and regional moderating factors. However, the evidence reviewed in this paper shows that recognition alone is insufficient. Progress is constrained by uneven implementation, theory-heavy curricula, infrastructure deficits, weak industry linkages, and limited tracking of employment outcomes. The critical next step is therefore stronger and more consistent delivery: embedding verified practical digital competence as a graduation requirement, aligning training more closely with employer needs and remote-work pathways, expanding reliable power and broadband access, investing in lecturer capacity, and systematically measuring results. With coordinated action across government, universities, and private partners, and with sustained attention to equity and outcomes, Nigeria can convert its large graduate population from a source of frustration into a genuine competitive advantage in the digital economy.

12. References

1. Adegoke, T. (2021). Digital skills and graduate employment outcomes in Nigeria. *African Journal of Education and Development Studies*.
2. Adewole, Y. A. (2026). Curriculum relevance, digital competence, and employability outcomes among university graduates in Nigeria. *British Journal of Multidisciplinary and Advanced Studies*. <https://doi.org/10.37745/bjmas.0554>
3. Adeyemi, T., & Adu, E. (2022). Graduate output and labour market absorption in Nigeria. *Journal of Higher Education in Africa*.
4. Athena Centre for Policy and Leadership. (2026). *From connectivity to classroom impact: Integrating digital literacy in Nigeria's education system*. Athena Centre for Policy and Leadership.
5. BusinessDay. (2025). Widening skills gap keeps millions of Nigerians jobless. *BusinessDay NG*.
6. Chinen, M. H., & Montorsi, C. (2025). *Exploring digital skills demand: Key insights from online job vacancies in South Africa, Nigeria, Kenya, and Uganda* (Education Working Paper No. 21). World Bank Group.
7. Daily Trust. (2026). Job seekers to freelancers: How young Nigerians are embracing digital space. *Daily Trust*.

8. Dosumu, J. (2024). Overcoming infrastructural barriers to digital literacy in rural Nigeria. *SSRN Electronic Journal*. <https://ssrn.com/abstract=4992050>
9. Ezech, F. C. (2025). Digital marketing competencies as correlate of employability potentials of business education graduates in public universities in Anambra State. *Madonna University International Journal of Education and Arts*, 2(2).
10. Federal Ministry of Communications and Digital Economy. (2019). *National digital economy policy and strategy (2020–2030)*. Federal Government of Nigeria.
11. Federal Ministry of Communications, Innovation and Digital Economy. (2026). *Updates on the 3 Million Technical Talent (3MTT) programme and placement initiatives*. Federal Government of Nigeria.
12. GIZ. (2025). *Employment and labour market analysis: Nigeria*. Deutsche Gesellschaft für Internationale Zusammenarbeit.
13. Hillage, J., & Pollard, E. (1998). *Employability: Developing a framework for policy analysis* (Research Report RR85). Department for Education and Employment.
14. Jobberman Foundation. (2025). *Skills mismatch and graduate readiness in the Nigerian labour market*. Jobberman Foundation Report.
15. National Bureau of Statistics. (2024). *Labour force statistics: Unemployment and underemployment report (Q2 2024)*. National Bureau of Statistics.
16. National Information Technology Development Agency. (2023). *National digital literacy framework and digital skills assessment*. NITDA.
17. National Universities Commission. (2026). *ICT-enabled STEM transformation strategy for tertiary education*. National Universities Commission.
18. Nwachukwu, C., & Emeh, I. (2023). Advanced digital skills, remote work, and the gig economy among Nigerian graduates. *Journal of African Labour Studies*.
19. Odunlami, A. O., Nwokporo, E. I., & Akanle, O. (2024). Graduates in the informal sector of Southwestern Nigeria. In *The African informal economy: Structure, dynamics, and resilience* (pp. 169–197). Brill.
20. Proten International. (2026). *Bridging the skill gap between education and industry needs in Nigeria*. Proten International.
21. Saidu, M. S., Onyiambayi, E. T., Haddy, I., & Ajoge, N. S. (2025). Impact of digital skills development on employability among university graduates in Nigeria: The mediating role of digital competence. *CUSTECH International Journal of Education*, 4(1), 193–209.
22. Samuel, N., Akorede, O. J., & Karimu, A. Y. (2025). Impact of targeted digital skills training on graduate employability through 21st-century digital competence in Ogun State, Nigeria. *Zamfara International Journal of Education*, 5(4), 70–80. <https://doi.org/10.64348/zije.202591>
23. The Garage. (2026). *The state of student work report*. The Garage Nigeria.
24. World Bank. (2023). *Nigeria digital economy assessment*. World Bank Group.
25. Zinware, P., & Kifordu, A. A. (2026). Digital skills acquisition and employability outcomes of university graduates in Nigeria. *International Journal of Innovative Research in Technology*, 13(2).