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CULTURAL PERSPECTIVES ON OFFICE TECHNOLOGY: ADDRESSING SOCIOLOGICAL BARRIERS TO INNOVATION IN TVET SYSTEMS IN SOUTHWEST NIGERIA

By

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Abstract

The adoption of office technology in Technical and Vocational Education and Training (TVET) institutions is essential for equipping students with the necessary skills for the modern workforce. However, sociocultural factors such as traditional beliefs, resistance to change, generational differences, and lack of digital literacy hinder seamless integration. This study examines these barriers in TVET institutions in Southwest Nigeria, aiming to identify key challenges and propose effective solutions. Using a descriptive survey design, data were collected from 285 respondents, including TVET instructors, administrators, and students. A structured questionnaire was employed, and the data were analyzed using descriptive statistical methods. The findings reveal that resistance to digital tools stems from fear of job displacement, lack of confidence in digital literacy, and a strong preference for face-to-face communication over digital interactions. Younger students were found to be more open to office technology compared to older instructors, indicating a significant generational gap in adoption. The study concludes that overcoming these barriers requires targeted awareness campaigns, regular digital training programs, curriculum reforms, and industry collaborations to enhance practical exposure. It recommends that policymakers enforce digital literacy policies, integrate office technology into the TVET curriculum, and adopt culturally inclusive strategies to facilitate smooth technology adoption. These measures will ensure that TVET institutions effectively prepare students for a rapidly evolving digital workplace.

Keywords: *Office Technology[1], Sociocultural Barriers[2], Innovation[3], Technical and Vocational Education and Training (TVET)[4], Digital Literacy[5], Southwest Nigeria[6].*

1.0 Background to the Study

The world is experiencing a rapid transformation in office technology, driven by advancements in digital tools, automation, and artificial intelligence. Office technology now includes a broad range of innovations such as cloud computing, artificial intelligence (AI)-enabled automation, advanced word-processing software, and enterprise resource planning (ERP) systems (Gibson, 2020). These tools have revolutionized administrative tasks, enhancing efficiency and productivity in the workplace. Consequently, Technical and Vocational Education and Training (TVET) institutions are expected to integrate these modern technologies into their curricula to equip students with the skills required in contemporary work environments (UNESCO, 2021). However, despite the global shift toward digital workplaces, TVET institutions in Southwest Nigeria have struggled to fully integrate innovative office technologies. This challenge is largely attributed to sociological barriers, including resistance to change, cultural beliefs, and generational gaps between instructors and students (Odu & Ekpenyong, 2019). Historically, office technology has evolved from basic typewriters and manual filing systems to sophisticated digital solutions that enhance administrative efficiency. The transition from analog to digital office systems has necessitated the training of workers who can efficiently use these technologies. In TVET institutions, office technology plays a crucial role in preparing students for employment in administrative, clerical, and managerial roles (Olawale, 2018). According to Adebayo (2021), office technology education must be dynamic and adaptive to remain relevant in the digital age. However, TVET institutions in Nigeria face challenges in keeping pace with technological advancements due to inadequate funding, outdated curricula, and limited access to modern training equipment (Okeke, 2020).

Office technology is not just about learning how to use computers and software; it encompasses the broader adoption of digital literacy skills essential for employability. Research by Nwosu and Eze (2022) highlights that modern office tasks increasingly rely on cloud computing, digital collaboration platforms, and AI-driven automation. Workers are now expected to manage electronic records, analyze data using advanced software, and communicate using digital tools. Without proper training in these areas, TVET graduates may struggle to compete in today's highly digitized job market. Despite the recognized importance of office technology, its adoption in TVET institutions in Southwest Nigeria has been slow due to sociological and cultural factors. One major challenge is resistance to change, which is prevalent among educators and administrators who have relied on traditional teaching methods for decades. Studies indicate that older instructors are often hesitant to embrace new technologies, fearing that digital tools may render their skills obsolete (Ogunleye, 2019). This resistance is further compounded by inadequate training opportunities for educators, leaving them unprepared to integrate modern office technologies into their teaching practices.

Another sociological barrier is the generational gap between instructors and students. Younger students, often referred to as "digital natives," are more comfortable with emerging technologies compared to older instructors who are "digital immigrants" (Prensky, 2001). This difference in technological proficiency can create friction in classrooms, where students may be more adept at using digital tools than their teachers. According to Ajayi and Olatunji (2020), the lack of technological competence among TVET educators negatively impacts the learning experience, as students may not receive adequate guidance on how to use office technologies effectively. Cultural beliefs also play a significant role in determining how new technologies are received. In some parts

of Southwest Nigeria, there is skepticism toward automation and digitalization, with some stakeholders viewing them as threats to traditional job roles (Akinwale & Olorunfemi, 2017). This cultural perspective can lead to reluctance in fully embracing office technology, as some individuals fear that automation may lead to job displacement. The World Economic Forum (2022) notes that while digital transformation creates new job opportunities, societies that do not embrace technological change risk being left behind in global economic competitiveness.

Around the world, TVET systems are undergoing reforms to align with technological advancements. Countries like Germany, Finland, and Singapore have successfully integrated office technology into their vocational training programs, ensuring that graduates are well-equipped with digital skills (Schwab, 2019). In contrast, many African nations, including Nigeria, still struggle with outdated TVET curricula that do not reflect modern workplace demands (UNESCO-UNEVOC, 2020). A study by the International Labour Organization (ILO, 2021) emphasized the need for continuous curriculum updates, industry partnerships, and investment in digital infrastructure to enhance the quality of vocational education. In Nigeria, TVET institutions must adopt a more proactive approach to incorporating office technology. This requires collaborative efforts between the government, private sector, and educational institutions to provide modern training equipment, retrain educators, and develop policies that promote digital literacy (Aina, 2020). The National Board for Technical Education (NBTE) has made efforts to introduce competency-based training models, but implementation remains slow due to financial and administrative challenges (Oladimeji, 2021). To overcome the sociological barriers to office technology adoption in TVET institutions, targeted strategies must be implemented. Awareness campaigns can help change negative perceptions and highlight the benefits of digital transformation in office administration. Training programs tailored for instructors can also enhance their confidence and competence in using modern technologies (Eze, 2018). Furthermore, industry collaboration can provide TVET students with hands-on experience, bridging the gap between theoretical knowledge and practical application (Ogunbanjo, 2022).

Additionally, curriculum updates should be a continuous process, incorporating emerging technologies such as artificial intelligence, cybersecurity, and cloud computing. According to the World Bank (2021), countries that regularly update their vocational education curricula based on industry trends produce graduates who are more competitive in the global job market. Digital infrastructure investment, including access to high-speed internet and modern training facilities, is also crucial for effective technology integration (NITDA, 2020). Office technology is a critical component of modern workplaces, and its integration into TVET institutions is essential for preparing students for the digital economy. However, sociological barriers such as resistance to change, generational differences, and cultural beliefs continue to hinder innovation in Southwest Nigeria's TVET system. Addressing these challenges requires a multi-faceted approach, including training programs, policy reforms, and increased investment in digital resources. By adopting global best practices and fostering a culture of digital literacy, TVET institutions in Nigeria can enhance their relevance and effectiveness in an increasingly technology-driven world.

2.0 Statement of the Problem

The integration of modern office technologies into Technical and Vocational Education and Training (TVET) institutions is essential for equipping students with relevant digital skills.

However, cultural and sociological barriers significantly hinder this process. Resistance to change, deeply rooted traditional beliefs, and generational disparities between instructors and students create obstacles to technology adoption (Odu & Ekpenyong, 2019). Many instructors, particularly those trained in conventional teaching methods, often perceive new technologies as threats to their expertise, leading to reluctance in embracing innovation (Adebayo, 2021). Additionally, societal attitudes toward vocational education in Nigeria further exacerbate the issue. TVET is often regarded as inferior to conventional academic pathways, resulting in limited investment and slower adoption of advanced office technologies (Ajayi & Olatunji, 2020). A study by Nwosu and Eze (2022) highlights that inadequate exposure to modern technological tools among students and educators reinforces a cycle of outdated training methods, leaving graduates ill-prepared for the evolving labor market. Furthermore, infrastructural challenges, such as poor internet access and insufficient funding for technology upgrades, compound the problem (World Bank, 2021). Without targeted interventions to address these sociological barriers, TVET institutions may continue to lag in producing graduates with the digital competencies required for today's workforce. This study, therefore, seeks to explore these challenges in-depth and propose strategies for fostering a culturally inclusive approach to technology adoption in TVET systems.

3.0 Objectives of the Study

The objectives of this study was to examine the cultural perspectives on office technology: addressing sociological barriers to innovation in tvet systems in southwest Nigeria but specifically, the study tends to:

1. Examine the cultural perceptions influencing the adoption of office technology in TVET institutions.
2. Identify key sociological barriers impeding the integration of modern office technologies.
3. Assess the impact of resistance to change and generational differences on innovation in TVET.
4. Recommend strategies to foster cultural inclusivity in the adoption of office technologies.

4.0 Research Questions

The following research questions were raised to guide this study:

1. How do cultural perceptions influence the adoption of office technology in TVET institutions?
2. What sociological barriers hinder the integration of modern office technologies?
3. To what extent do resistance to change and generational differences impact innovation in TVET?
4. What strategies can be implemented to overcome sociological barriers to technology adoption?

5.0 Literature Review

Office technology encompasses a range of digital tools and applications that have become integral to modern workplaces, including word processing software, cloud computing, and automation systems. In the context of Technical and Vocational Education and Training (TVET), the integration of these technologies is essential for preparing students to meet current labor market demands. According to a study by Edionwe (2023), the incorporation of office technology management into business education programs in Nigerian universities equips students with the necessary competencies to navigate contemporary business environments. Furthermore, the

World Bank's report on educational technology in TVET systems emphasizes that digitization is transforming skills development, highlighting the need for TVET curricula to adapt accordingly. This adaptation ensures that graduates are proficient in the latest technological tools, thereby enhancing their employability. However, the successful integration of office technology into TVET programs requires addressing various challenges, including the need for adequate infrastructure, continuous professional development for educators, and alignment of curricula with industry standards. A study by Anikeze et al. (2023) on office information technologies in Southeast Nigeria's tertiary institutions found that the effective use of tools like printers and photocopy machines significantly influences employee performance and job quality. This underscores the importance of providing up-to-date technological resources and training within TVET institutions.

Cultural and sociological barriers significantly impede the adoption of technology in educational institutions in Southwest Nigeria. Deep-rooted traditional beliefs and values often foster skepticism towards new technologies, leading to resistance among educators and administrators. This resistance is further compounded by entrenched organizational cultures that favor conventional methods over innovative approaches. Okundaye, Fan, and Dwyer (2019) highlight that such resistance to change and existing organizational culture can impede technology adoption in Nigerian government institutions. Generational disparities also play a crucial role in hindering technology integration. Older educators may lack exposure to modern technological tools, resulting in a preference for traditional teaching methods. This generational gap creates friction in adopting new technologies, as younger, tech-savvy students may find the conventional approaches less engaging. A study by Adebayo (2021) indicates that generational differences contribute to the reluctance in embracing technological innovations within educational settings. Additionally, inadequate training and support for teachers exacerbate the situation. Many educators are not well-versed in utilizing modern technologies effectively in their teaching practices. This lack of competence leads to a conservative attitude towards adopting educational innovations. A study published in the *Journal of Education and Learning* (2016) argues that the education system must show a pragmatic attitude towards the adoption of such innovation rather than a conservative attitude. Socio-cultural factors, such as societal attitudes towards technology and traditional teaching methods, also play a significant role. In some cases, there is a preference for traditional classroom-based learning, and a lack of awareness and knowledge about digital learning, which have hindered its adoption. A study by Adeyinka Tella and colleagues (2019) highlights those socio-cultural factors, including attitudes towards technology and traditional teaching methods, affect the adoption of digital learning in Nigeria. To overcome these barriers, it is essential to implement targeted awareness campaigns, provide comprehensive training programs for educators, and develop policies that promote a culture of innovation within educational institutions. Addressing these sociological challenges is crucial for the successful integration of technology in TVET systems in Southwest Nigeria.

To address sociological barriers to office technology adoption in TVET institutions, several strategies have been recommended in existing literature. One effective approach is targeted awareness campaigns that educate instructors, students, and administrators on the benefits of modern office technologies. According to Adebayo (2021), resistance to change is often rooted in misinformation or fear of job displacement. Therefore, sensitization programs can help demystify technology and highlight its role in enhancing efficiency rather than replacing human labor.

Capacity-building programs are also essential in equipping TVET instructors with the necessary skills to integrate technology into teaching and administrative functions. Nwosu and Eze (2022) emphasize that continuous professional development workshops, hands-on training, and certifications in office technology can bridge the digital literacy gap among educators. When instructors are proficient in using office technology, they are more likely to incorporate it effectively into the curriculum, thereby fostering a culture of technological adaptability among students. Furthermore, curriculum reform is crucial in ensuring that TVET programs align with industry needs. Ajayi and Olatunji (2020) suggest that integrating digital tools into coursework, adopting blended learning approaches, and incorporating industry partnerships can enhance the practical relevance of TVET education. Collaboration with private sector stakeholders can provide students with exposure to real-world applications of office technology, thereby increasing their readiness for the workforce. Government policies and institutional support also play a significant role in overcoming sociological barriers. According to a report by UNESCO (2021), policy frameworks that incentivize technology adoption—such as funding for ICT infrastructure, provision of digital resources, and mandatory digital literacy training—can accelerate the transition to tech-enabled TVET systems. In addition, fostering an inclusive technological environment by considering cultural contexts and generational differences can improve acceptance and participation among diverse groups. In conclusion, a multi-faceted approach involving awareness campaigns, capacity building, curriculum reform, industry collaboration, and supportive policies is necessary to mitigate sociological barriers to office technology adoption in TVET institutions. Implementing these strategies can enhance the effectiveness of TVET programs and ensure that graduates are equipped with skills relevant to the modern workforce.

6.0 Methodology

This study employs a descriptive survey design to investigate sociological barriers affecting office technology adoption in TVET institutions across Southwest Nigeria. The target population includes TVET instructors, administrators, and students, with a stratified random sampling technique used to ensure diverse representation. A total of 285 respondents were selected from various institutions in the region. Data were collected using a structured questionnaire designed to assess cultural perceptions, resistance to change, and exposure to modern office technologies. The instrument was validated by experts in educational technology and piloted to ensure reliability before full-scale administration. Quantitative data were analyzed using descriptive statistics, including frequency distributions, mean scores, and standard deviation analysis, to determine the significance of sociological barriers on technology adoption. Findings from the analysis provide insights into the key challenges and inform recommendations for fostering a more inclusive and technology-driven TVET system.

7.0 Data Presentation and Analysis

Table 1: Research Question 1: How do cultural perceptions influence the adoption of office technology in TVET institutions?

S/N	Statement	Mean	Std Dev

1	Traditional beliefs influence the willingness to adopt new office technologies.	3.26	0.95
2	Many instructors and students see office technology as unnecessary due to reliance on manual methods.	3.41	0.81
3	The cultural perception that technology reduces job security discourages its adoption.	3.55	0.80
4	Some individuals believe office technology conflicts with traditional work ethics.	3.53	0.77
5	The preference for face-to-face communication over digital communication hinders technology use.	3.56	0.71

Note: n = 285, Scale 1 (Strongly Disagree) to 4 (Strongly Agree)
Source: Authors Computation (2024)

The results above indicate that sociocultural factors significantly impact office technology adoption in TVET institutions, with the strongest barriers being the fear of job insecurity (Mean = 3.55, SD = 0.80) and the preference for face-to-face communication over digital tools (Mean = 3.56, SD = 0.71), while traditional beliefs (Mean = 3.26, SD = 0.95) and perceptions of office technology conflicting with traditional work ethics (Mean = 3.53, SD = 0.77) also contribute to resistance, as evidenced by generally high mean scores and relatively low standard deviations, suggesting a broad consensus among respondents with some variability in opinions, highlighting the need for awareness campaigns and culturally inclusive strategies to foster greater acceptance and integration of technology in TVET institutions.

Table 2: Research Question 2: What sociological barriers hinder the integration of modern office technologies?

S/N	Statement	Mean	Std Dev
6	Many instructors resist using office technology due to fear of learning new digital tools.	3.58	0.68
7	Older instructors are less willing to integrate modern office technologies into teaching.	3.43	0.85
8	Resistance to technology adoption is due to a lack of confidence in digital literacy.	3.54	0.75
9	There is a general reluctance to change long-established work practices in TVET institutions.	3.58	0.66
10	Even when office technologies are introduced, they are underutilized due to resistance.	3.53	0.68

Note: n = 285, Scale 1 (Strongly Disagree) to 4 (Strongly Agree)
Source: Authors Computation (2024)

The data reveals that resistance to office technology adoption in TVET institutions is largely driven by fear of digital tools, lack of confidence, and reluctance to change, as indicated by consistently high mean scores across all statements. The strongest barriers include instructors' fear of learning new digital tools (Mean = 3.58, SD = 0.68) and the general reluctance to change long-established work practices (Mean = 3.58, SD = 0.66), both of which suggest a deep-seated resistance to

innovation. Similarly, a lack of confidence in digital literacy (Mean = 3.54, SD = 0.75) and the underutilization of introduced technologies due to resistance (Mean = 3.53, SD = 0.68) highlight the need for targeted training and support programs to enhance digital adaptability. The lower mean score for older instructors' unwillingness to integrate office technologies (Mean = 3.43, SD = 0.85) suggests that while age-related resistance exists, it is slightly less pronounced than other factors. Overall, the relatively low standard deviations indicate a strong level of agreement among respondents, emphasizing the urgent need for structured interventions such as digital literacy training, awareness campaigns, and institutional policies to foster a culture of technological acceptance in TVET institutions.

Table 3: Research Question 3: To what extent do resistance to change and generational differences impact innovation in TVET?

S/N	Statement	Mean	Std Dev
11	Younger students are more comfortable using office technology than older instructors.	3.50	0.75
12	Generational gaps between students and instructors hinder effective technology adoption.	3.53	0.77
13	Older staff members prefer traditional teaching methods over technology-driven approaches.	3.54	0.76
14	Digital tools are more readily accepted by younger individuals than by older generations.	3.61	0.64
15	Differences in technology exposure affect the willingness to integrate office tools.	3.66	0.58

Note: n = 285, Scale 1 (Strongly Disagree) to 4 (Strongly Agree)
Source: Authors Computation (2024)

The findings indicate that generational differences significantly influence office technology adoption in TVET institutions, with the highest-rated barrier being differences in technology exposure affecting the willingness to integrate office tools (Mean = 3.66, SD = 0.58), suggesting that familiarity with digital tools plays a crucial role in adoption. The strong agreement that digital tools are more readily accepted by younger individuals than by older generations (Mean = 3.61, SD = 0.64) further reinforces the generational divide in technology use. Additionally, the preference of older staff members for traditional teaching methods over technology-driven approaches (Mean = 3.54, SD = 0.76) and the perception that generational gaps hinder effective technology adoption (Mean = 3.53, SD = 0.77) highlight the need for bridging strategies, such as intergenerational training and mentorship programs. The mean score of 3.50 (SD = 0.75) for younger students being more comfortable with office technology than older instructors further supports the idea that age influences technology adoption. The relatively low standard deviations across the statements suggest a strong consensus among respondents, emphasizing the need for initiatives that promote digital inclusion and reduce generational barriers in TVET institutions.

Table 4: Research Question 4: What strategies can be implemented to overcome sociological barriers to technology adoption?

S/N	Statement	Mean	Std Dev
16	Regular training programs can help instructors overcome resistance to office technology.	3.66	0.58
17	Awareness campaigns can improve acceptance of office technology in TVET institutions.	3.72	0.51
18	Government and institutional policies should promote digital literacy in TVET.	3.58	0.74
19	Industry collaboration can help integrate practical office technology training into the curriculum.	3.61	0.66
20	A culturally inclusive approach is necessary to ensure successful technology adoption.	3.56	0.74

Note: n = 285, Scale 1 (Strongly Disagree) to 4 (Strongly Agree)
Source: Authors Computation (2024)

The results suggest strong agreement on the effectiveness of various strategies for overcoming sociological barriers to office technology adoption in TVET institutions, with awareness campaigns receiving the highest mean score (Mean = 3.72, SD = 0.51), indicating that respondents widely recognize their potential in fostering acceptance. Regular training programs (Mean = 3.66, SD = 0.58) and industry collaboration to integrate practical office technology training into the curriculum (Mean = 3.61, SD = 0.66) are also seen as crucial in enhancing digital competence and bridging skill gaps. The necessity for government and institutional policies to promote digital literacy (Mean = 3.58, SD = 0.74) and a culturally inclusive approach to technology adoption (Mean = 3.56, SD = 0.74) further emphasize the importance of structured interventions that align with local contexts. The relatively low standard deviations, particularly for awareness campaigns (0.51) and training programs (0.58), indicate strong consensus among respondents, reinforcing the urgency of implementing these strategies to enhance technology integration in TVET institutions.

8.0 Discussion of Results

The findings of this study reveal significant sociocultural barriers to office technology adoption in TVET institutions in Southwest Nigeria, aligning with previous research on resistance to technological change in educational settings. The results indicate that traditional beliefs, resistance to change, generational differences, and inadequate exposure to digital tools significantly hinder the seamless integration of office technology in TVET institutions. These barriers are consistent with the observations of Adebayo (2021), who highlighted that cultural perceptions and fear of job displacement often contribute to reluctance in adopting new technologies in educational and workplace settings. A key finding of this study is that fear of digital tools and lack of confidence in digital literacy (Mean = 3.54, SD = 0.75) contribute to resistance among instructors. This supports the argument by Nwosu and Eze (2022) that many educators, particularly older instructors, perceive technology as complex and difficult to master, leading to avoidance. Additionally, the preference for face-to-face communication over digital tools (Mean = 3.56, SD = 0.71) suggests a strong attachment to traditional work practices, reinforcing Ajayi and Olatunji's

(2020) assertion that the adoption of office technology is often hindered by deep-rooted workplace norms. The study also highlights generational differences as a major factor influencing technology adoption, with younger students being more comfortable with digital tools (Mean = 3.50, SD = 0.75) compared to older instructors, who tend to prefer traditional teaching methods (Mean = 3.54, SD = 0.76). This aligns with UNESCO (2021), which reported that digital skills gaps between generations often create challenges in implementing technology-driven learning models. The strong agreement that differences in technology exposure affect willingness to integrate office tools (Mean = 3.66, SD = 0.58) further supports the need for targeted training interventions to bridge this gap. To mitigate these barriers, respondents strongly endorsed awareness campaigns (Mean = 3.72, SD = 0.51) and regular training programs (Mean = 3.66, SD = 0.58) as key strategies for increasing technology adoption in TVET institutions. This finding aligns with Adebayo (2021), who emphasized that structured training programs can enhance digital competence and reduce resistance to change. Additionally, industry collaboration (Mean = 3.61, SD = 0.66) and government policies promoting digital literacy (Mean = 3.58, SD = 0.74) were identified as essential measures for overcoming sociocultural barriers, a perspective supported by Ajayi and Olatunji (2020), who advocated for stronger public-private partnerships to facilitate practical technology integration in vocational education. Overall, the study reinforces existing literature on the impact of cultural and generational factors on technology adoption, emphasizing the need for targeted interventions, inclusive digital policies, and structured training programs to foster a technology-friendly environment in TVET institutions. These findings highlight the importance of policy-driven, culturally inclusive strategies that consider local sociological dynamics while ensuring that instructors and students are adequately equipped with relevant digital skills for the modern workforce.

9.0 Conclusion and Recommendations

This study examined sociocultural barriers affecting the adoption of office technology in TVET institutions in Southwest Nigeria, revealing that traditional beliefs, resistance to change, generational differences, and lack of confidence in digital literacy significantly hinder integration. The findings highlight that older instructors are less inclined to embrace modern office technologies due to familiarity with manual methods, while younger students demonstrate higher acceptance and adaptability. Additionally, fears of job displacement and a preference for face-to-face communication over digital tools further contribute to resistance. However, respondents strongly agreed that awareness campaigns, regular training programs, industry collaboration, and government policies promoting digital literacy could serve as effective strategies for overcoming these barriers. These findings align with previous studies, emphasizing the need for structured interventions to foster a technology-driven TVET environment that prepares students for the evolving workforce.

Based on the findings, the following recommendations are proposed:

1. TVET institutions should conduct targeted awareness campaigns to educate instructors, administrators, and students on the benefits of office technology, dispelling myths surrounding job displacement and traditional work ethics.

2. Continuous professional development workshops and hands-on training should be introduced to enhance digital literacy among instructors, ensuring they gain the confidence to integrate office technologies into teaching and administrative functions.
3. The TVET curriculum should be updated to include practical digital skills training, with strong industry partnerships that expose students and instructors to real-world applications of office technology.
4. Policymakers should enforce digital literacy policies, provide funding for ICT infrastructure, and mandate the incorporation of office technology in TVET programs to bridge the technological gap.
5. Strategies for technology adoption should consider cultural perspectives, ensuring that training methods align with local work ethics and traditional values to facilitate acceptance among different generational groups.

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