

Digital Leadership and ICT Utilisation in Public Basic School Administration in Ghana: Headteachers' Experiences and Implementation Realities

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Abstract

The purpose of this article is to examine how public basic school headteachers in Ghana experience and interpret ICT utilisation in their administrative work. Although policy increasingly requires digital communication, record-keeping, reporting and accountability, school-level conditions remain uneven. Guided by the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), the study employed an interpretivist qualitative case study design. Semi-structured interviews with twelve headteachers in the Effutu Municipality were analysed thematically, with TAM and UTAUT constructs used to interpret differences in confidence, independent use and institutional support. Headteachers regarded ICT as necessary for communication, documentation, report preparation and information retrieval, but benefits were uneven. Confident users worked more independently, whereas others relied on digitally skilled colleagues. Limited infrastructure, practical training, technical support and funding constrained sustained use. The study concludes that positive attitudes alone cannot produce effective administrative digitalisation when facilitating conditions remain weak. It recommends pairing digital reporting requirements with task-based training, basic infrastructure, responsive technical support and clear school-level data-protection procedures. This study is significant because it shifts attention from classroom integration to the administrative realities of digital leadership in basic schools.

Key terms: Digital leadership, Ghana, headteachers, ICT utilisation, school administration.

1.0 INTRODUCTION

Public basic school headteachers in Ghana are increasingly expected to use ICT for communication, record-keeping, reporting and accountability, yet many schools lack the devices, connectivity, task-based training and technical support needed to sustain these routines (Adarkwah, 2021; Lomo et al., 2025; Ministry of Education, 2015, 2018). Ghana's ICT in Education Policy frames ICT not only as a teaching and learning resource, but also as a tool for managing educational environments, communication and institutional operations (Ministry of Education, 2015). This creates an implementation problem: headteachers are expected to sustain digital administrative routines, manage school information securely, and meet reporting deadlines, but the practical conditions for doing so are not consistently available in basic schools—a challenge consistent with recent Ghanaian evidence on headteachers' ICT-support constraints (Lomo et al., 2025). For the purposes of this study, digital leadership refers to basic school headteachers' capacity to use, guide and sustain ICT-enabled administrative routines that improve efficiency, protect school data and support institutional accountability. ICT utilisation refers to the practical use of computers, smartphones, internet platforms, spreadsheets, messaging applications and related tools for routine school administration.

In Ghana, policy attention to ICT in education has developed over several years. The Ghana ICT for Accelerated Development (ICT4AD) Policy provided a broad national vision for using ICT to promote socio-economic transformation, including educational development (Republic of Ghana, 2003). The ICT in Education Policy later identified ICT as a learning and operating tool and stressed the need to improve access, equity and quality through technology (Ministry of Education, 2015). Improved management, accountability and quality education are also identified as national priorities in the Education Strategic Plan 2018–2030 (Ministry of Education, 2018). These policy directions provide an enabling framework for digital transformation in schools. However, the existence of policy does not automatically produce effective use of ICT in school administration.

The role of the headteacher is central to this challenge. Headteachers are not only managers of school routines; they are institutional gatekeepers who influence how innovations are interpreted, prioritised, resisted or sustained. This interpretation is consistent with digital leadership scholarship, which emphasises the responsibility of educational leaders to create conditions for meaningful technology use, responsible digital practice, professional growth and systems building (International Society for Technology in Education [ISTE], 2018; Sheninger, 2019). These patterns can also be interpreted through the Technology Acceptance Model (TAM), which emphasises perceived usefulness and perceived ease of use (Davis, 1989), and the Unified Theory of Acceptance and Use of Technology (UTAUT), which highlights performance expectancy, effort expectancy, social influence and facilitating conditions (Venkatesh et al., 2003). Headteachers who regard ICT as useful, manageable and adequately supported are more likely to integrate it into communication, reporting and record management. In contrast, those who lack confidence, resources or institutional support may use ICT mainly under pressure or delegate digital tasks to others. Lomo et al. (2025) found that headteachers supported ICT integration through training, monitoring, infrastructure mobilisation and maintenance, but their efforts were constrained by inadequate funding, difficulty organising training, unreliable electricity and internet access, and high maintenance costs. Although that study focused primarily on teaching and learning, it reinforces the central role of headteachers in shaping the technology environment of basic schools.

Existing Ghanaian research has provided valuable evidence on instructional ICT integration, technology adoption and the challenges affecting ICT use in school administration (Buabeng-Andoh, 2019; Lomo et al., 2025; Teye & Duah, 2022; Yalley, 2022). However, it offers limited qualitative insight into how headteachers negotiate digital administrative expectations in their everyday work, particularly how strong perceptions of usefulness and performance benefits coexist with uneven ease of use, effort demands and facilitating conditions (Davis, 1989; Venkatesh et al., 2003).

The objective of this study was to examine how public basic school headteachers experience and interpret ICT utilisation in administration, the conditions that shape their use, and its influence on administrative practice and routine decision-making. Accordingly, the study addressed three research questions: (1) How do headteachers experience and interpret ICT utilisation in public basic school administration? (2) What individual, institutional and infrastructural conditions shape headteachers' utilisation of ICT for administrative work? (3) How does ICT utilisation influence administrative practices, efficiency and routine decision-making in public basic schools? The subsequent sections of the paper provide a review of the conceptual, theoretical, and empirical literature, describe the research methodology and ethical procedures, present and interpret the findings, and end with practical implications and recommendations.

2.0 LITERATURE REVIEW

ICT, Digital Leadership and School Administration

Within school administration, ICT refers to the use of digital devices, software, internet-based platforms and communication technologies to support reporting, record keeping, communication, examination data management, attendance documentation and activity coordination. This administrative use differs from instructional ICT, which primarily supports teaching and learning. The distinction matters because administrative ICT shapes how schools meet accountability requirements and communicate with education authorities, yet it has received less direct attention than classroom integration.

At the global level, digital leadership scholarship emphasises vision, responsible digital practice, professional learning, resource mobilisation and systems building (ISTE, 2018; Sheninger, 2019). UNESCO (2023) strengthens this perspective by cautioning that technology should be judged by relevance, equity, scalability and sustainability rather than by availability alone. These sources provide a useful normative framework, but they offer limited detail on how leaders in resource-constrained basic schools manage routine administrative demands.

Evidence from outside Ghana also shows that leadership practice and context shape digital use. Dasruth et al. (2024), studying public primary schools in South Africa, found that conventional leadership practices often limited the development of digital leadership and called for system-wide support. The study is valuable because it demonstrates that digital leadership is not produced by individual enthusiasm alone; however, its primary focus was the broader digital shift in schools rather than the administrative routines examined here.

The Technology Acceptance Model explains headteachers' acceptance and use of ICT for administrative work through perceived usefulness and perceived ease of use (Davis, 1989), while UTAUT highlights performance expectancy, effort expectancy, social influence and facilitating conditions (Venkatesh et al., 2003). Together, the models are useful for this qualitative study because they allow participants' accounts

to be interpreted at two levels: how headteachers judge the value and difficulty of digital tools, and how institutional demands and support arrangements enable or constrain actual practice.

African evidence generally confirms the importance of infrastructure and leadership support, but it also shows that relationships among acceptance factors may vary by context. For example, the South African evidence presented by Dasruth et al. (2024) points to weaknesses in leadership practice and system support. In Ghana, Teye and Duah (2022) found that perceived usefulness, access, training, technical support, and motivation were significant predictors, whereas perceived ease of use was not. This divergence cautions against assuming that all TAM constructs operate uniformly and supports closer qualitative examination of how users interpret difficulty in practice.

Within Ghana, the ICT4AD Policy, ICT in Education Policy and Education Strategic Plan establish national expectations for technology-supported teaching, management and accountability (Republic of Ghana, 2003; Ministry of Education, 2015, 2018). Their relevance to this study lies in the gap between these policy expectations and the operational conditions under which headteachers carry out digital administrative work. Ghanaian studies provide more direct evidence of this gap. Yalley (2022) identified challenges affecting ICT use in pre-tertiary school administration, while Teye and Duah (2022) showed that access, perceived usefulness, training, technical support and motivation were associated with adoption among basic school administrators. Lomo et al. (2025) similarly found that headteachers supported ICT integration through training, monitoring and resource mobilisation but were constrained by funding, electricity, internet access and maintenance costs. These studies establish the importance of contextual conditions but offer limited insight into the lived administrative experiences, emotional discomfort, and informal delegation explored in the present study.

Taken together, the literature suggests that administrative ICT utilisation is shaped by the interaction of perceived value, perceived difficulty, institutional expectations and facilitating conditions. It also reveals a tension: headteachers may value ICT and face strong pressure to use it, yet lack the material and professional support required for independent practice. The present study addresses this gap by using qualitative evidence to examine how these tensions are experienced and managed in the day-to-day administration of public basic schools in a Ghanaian municipality.

3.0 METHODOLOGY

This study employed an interpretivist qualitative case study design to understand how public basic school headteachers in Effutu Municipality experienced ICT utilisation in administration. This municipality was selected because its 39 public basic schools operate within three circuits and follow common district reporting requirements. However, the schools differ in context and ICT conditions, making the municipality suitable for examining variation within a single administrative system. Twelve headteachers were selected through purposive maximum variation sampling, with four drawn from each circuit to ensure equal circuit representation and variation in experience and ICT confidence. All had served for at least two years in their current headship roles. Semi-structured face-to-face interviews were conducted over eight weeks, from March 24 to May 18, 2025. Each interview lasted 30–45 minutes and was audio-recorded with the participant's permission. Field notes supplemented the interviews, which were subsequently transcribed verbatim. The data were analysed manually using inductive coding and theory-informed interpretation, guided by Braun and Clarke's (2006) approach to thematic analysis. The transcripts were read repeatedly, and initial codes were assigned. Related codes were then clustered, candidate themes were reviewed

against the data, and the final themes were named to reflect experiences of use, shaping conditions, and administrative influence. The low, moderate, and high ICT confidence profiles presented in Table 1 were assigned based on participants' reported independence, frequency of ICT use, difficulties encountered, and reliance on assistance. Trustworthiness was supported through consistent use of the interview guide, comparison of codes across transcripts, reflexive checking of interpretations and the use of participant quotations.

At the time of the study, the author's institution did not operate a formal ethics review board for this type of minimal-risk educational research involving adult professionals; consequently, formal ethics committee approval was not obtained. Administrative permission was obtained from the Effutu Municipal Directorate of Education. Participation was voluntary, written informed consent was secured, participants could withdraw without penalty, and no sensitive personal or clinical information was collected. Alphanumeric pseudonyms (HT1–HT12) were used, recordings and transcripts were stored securely, and confidentiality was maintained in accordance with the British Educational Research Association's ethical principles (BERA, 2018).

Table 1: Profile of Participant Headteachers

Code	Sex	Age	Teaching experience (years)	Headship experience (years)	ICT confidence/use profile
HT1	Male	50	23	6	Low – limited knowledge and little confidence with current ICT tools
HT2	Female	45	21	5	High – knowledgeable and regularly updates her ICT skills
HT3	Male	50	19	8	Low – mainly familiar with older technologies
HT4	Female	40	17	4	Moderate – knowledgeable but constrained by poor infrastructure
HT5	Male	54	20	8	Low – delegates ICT tasks and is reluctant to learn new tools
HT6	Female	41	15	5	High – knowledgeable and encourages ICT use among staff and learners
HT7	Male	45	20	7	Moderate – knowledgeable but limited by a lack of school resources
HT8	Female	36	14	4	High – knowledgeable and advocates ICT training for staff
HT9	Male	45	20	4	Moderate – uses communication tools but struggles with administrative software
HT10	Female	41	14	3	High – actively uses ICT for administration and school-data management
HT11	Male	50	25	8	Low – supportive of ICT but not confident in using it independently
HT12	Female	45	16	5	Moderate – values digital records but needs further training

Note: ICT confidence categories were derived from participants' descriptions of their independence, difficulties and use of ICT in school administration.

4.0 RESULTS AND DISCUSSION

The findings are presented around the three research questions. Quotations were selected to illustrate the recurring patterns clearly rather than to reproduce every participant's account. All twelve headteachers contributed to the themes, even though not every participant is quoted directly.

Contextual and Participant Overview

The findings should be read against the Winneba Central, Winneba East and Winneba West circuits from which participants were drawn, representing varied school settings across the municipality rather than a single locality. Participants' ICT confidence profiles differed sharply, ranging from headteachers who worked independently to others who depended on more digitally skilled colleagues for demanding tasks. This variation helped preserve the original focus of the study: digital leadership as a lived administrative practice shaped by school resources, personal competence and district expectations.

Headteachers' Experiences and Interpretations of ICT Utilisation

Theme 1: ICT as a Necessary but Unevenly Used Administrative Resource

Across the twelve interviews, headteachers consistently acknowledged the growing importance of ICT in their day-to-day administrative work. Most recognised that digital tools had become necessary for communicating with district education offices, preparing reports, storing records, and coordinating school activities. What varied considerably, however, was how willingly and confidently they engaged with these tools.

Several participants approached ICT with confidence and a sense of ownership. They described digital tools as a normal part of contemporary school leadership rather than as an additional burden. Their accounts showed a willingness to learn and to use technology directly in communication, reporting, and record management. For example, one headteacher remarked: *"ICT has become part of modern school administration. If you do not learn how to use it, you will struggle with reporting and communication"* (HT2).

Another participant made a similar point: *"These days, if you are not able to use ICT, administrative work becomes very difficult, because most communication now comes electronically"* (HT7).

Other participants had a more complicated relationship with technology. They used ICT when district or regional offices required an electronic report or digital submission, but they often completed such tasks with discomfort. Some relied on colleagues or teachers because they did not feel able to manage the applications independently.

One participant confessed: *"I sometimes feel uncomfortable when I have to depend on younger teachers to complete some ICT-related tasks for me"* (HT9).

Another participant admitted: *"Sometimes I depend on teachers to help me prepare reports, because I am not fully confident using some of the computer applications myself"* (HT5). HT3 described a similar difficulty, explaining that most of his experience was with older systems: *"I am used to the older, traditional desktop applications from years back, but these newer administrative software systems ... baffle me"* (HT3).

This contrast suggests that the difference among participants was not simply between those who accepted ICT and those who rejected it. Rather, it was a difference in the conditions under which acceptance could

become independent practice. For confident headteachers, ICT reduced effort and strengthened their sense of control over administrative work. For less confident headteachers, the same digital tasks produced discomfort because mistakes in spreadsheets, report templates or online submissions could affect official records and district deadlines.

A smaller number of participants described very limited engagement with digital tools. The accounts of HT3 and HT5 illustrate the low-confidence and delegation profiles presented in Table 1. Both acknowledged the importance of ICT in administration but described difficulty using newer applications independently. HT3 was mainly familiar with older systems, whereas HT5 relied on colleagues to complete some digital administrative tasks.

Taken together, participants' accounts placed ICT utilisation on a continuum: some headteachers used digital tools confidently and proactively, others used them mainly to satisfy administrative requirements, and a smaller number depended substantially on more digitally skilled colleagues.

Individual, Institutional, and Infrastructural Conditions Shaping ICT Utilisation

Theme 2: Structural and Professional Constraints on ICT Utilisation

Participants' experiences revealed that the challenges associated with ICT utilisation extended beyond technical access alone and included issues of confidence, institutional support, and financial sustainability.

The first major barrier was inadequate ICT infrastructure. Participants reported that some schools lacked functional computers, printers, reliable internet access, suitable office space, or stable electricity. They described a clear mismatch between the expectation to submit information electronically and the limited facilities available for doing so. One participant explained: *"We are asked to send reports electronically, but sometimes there is no reliable internet connection in the school"* (HT8).

The second barrier was inadequate training. Several participants could perform basic tasks on mobile phones, but struggled with document preparation, spreadsheets, file management, and online submission procedures. Their accounts distinguished general awareness workshops from the practical, task-based support they needed for everyday administrative work. Another participant explained: *"We need practical demonstrations on report preparation, spreadsheets, and online submissions instead of only theory during workshops"* (HT6).

A headteacher stated: *"Most of the ICT workshops are too general. We need practical training on the actual administrative tasks we perform in school"* (HT4).

The third barrier was limited technical support. Participants explained that device faults, software problems, and connectivity difficulties could interrupt administrative work, yet immediate assistance was rarely available. This increased delays and, in some cases, dependence on people outside the headteacher's office.

The absence of localised technical assistance therefore turned minor digital problems into administrative delays. A faulty printer, unstable internet connection or corrupted file could prevent timely reporting even when the headteacher was willing to use ICT. In this sense, infrastructure was not merely a background

condition; it actively shaped whether digital leadership became efficient, stressful or dependent on informal support.

The fourth barrier was financial constraint. Participants reported that limited school funds made it difficult to purchase and repair devices, print documents, or maintain internet access. Some headteachers therefore used personal money for data bundles or minor maintenance in order to meet administrative demands. One headteacher remarked: *"Sometimes we use our personal money to buy data bundles (mobile data subscriptions) and maintain devices because the school does not have enough resources"* (HT10).

Another participant observed: *"Even when we want to use ICT fully, the financial burden of maintaining devices and paying for internet access is difficult for the school"* (HT11).

The fifth barrier was uneven digital competence. Prior exposure, personal learning, and opportunities to practise differed across participants. Consequently, some headteachers handled digital tasks independently, whereas others avoided particular applications or sought help from colleagues. Overall, participants described ICT utilisation as being shaped by the interaction of personal competence, school resources, financial capacity, technical assistance, and the expectations placed on headteachers by education offices.

Theme 3: ICT as a Support for Administrative Responsiveness

All participants reported that ICT improved the speed and organisation of several administrative tasks, although the extent of the benefit varied. Its clearest contribution was to communication: headteachers could receive directives from education offices and share information with staff more quickly than through physical letters alone.

ICT also supported report preparation and submission by allowing documents to be typed, revised, stored and transmitted electronically. This benefit was fully realised mainly by participants with adequate competence, devices and connectivity. For others, electronic reporting remained stressful and sometimes shifted the task to a more digitally skilled colleague, meaning that the school met the reporting requirement without necessarily strengthening the headteacher's own capacity.

The influence on routine decision-making was more limited. Participants explained that quicker access to attendance, enrolment, staffing and school records helped them respond to immediate questions and requests. They did not, however, describe systematic use of dashboards, formal management information systems or advanced analysis. ICT therefore improved the availability and timeliness of information for routine judgements, but only confident users were positioned to draw consistently on digital records without assistance.

Overall, ICT improved communication, documentation, report preparation and information retrieval across the participant group. The extent of the benefit depended on competence and facilitating conditions: confident users achieved greater independence and responsiveness, while less confident users experienced partial benefits mediated by informal support. The evidence supports a cautious conclusion that ICT strengthened routine administrative responsiveness more clearly than it transformed data-driven decision-making. A participant explained: *"When records are stored digitally, it becomes easier to retrieve information quickly whenever the district office requests data"* (HT12).

Even these basic gains mattered in a resource-constrained setting: they reduced avoidable delays and made requested information easier to retrieve, regardless of the modest scope of the improvement.

Discussion

This study examined how public basic school headteachers in Ghana experience and interpret ICT utilisation in their administrative work. The findings speak directly to the perceived usefulness dimension of TAM. Participants consistently described ICT as useful for faster communication, better organised records and more manageable reporting. Even those who struggled to use digital tools confidently did not question their relevance. Their difficulty lay not in recognising ICT's value, but in translating that recognition into consistent, independent practice (Davis, 1989). This gap between valuing ICT and using it independently is central to the problem the study sought to understand.

Perceived ease of use and the four UTAUT dimensions provide a fuller explanation of this unevenness. Performance expectancy was reflected in participants' belief that ICT could improve administrative work, while effort expectancy was visible in the contrast between headteachers who found routine applications manageable and those who experienced them as difficult or stressful. Social influence appeared in district and regional expectations for electronic reports and communication: these demands encouraged use, but also produced compliance-driven engagement among participants who lacked confidence. Facilitating conditions were the most persistent constraint, as inadequate devices, connectivity, training, funds, and technical assistance limited what willing headteachers could accomplish (Venkatesh et al., 2003).

The evidence therefore shows that policy pressure alone cannot produce sustained ICT utilisation. In TAM terms, participants consistently perceived ICT as useful, but ease of use varied. In UTAUT terms, social influence from district reporting requirements was strong, while facilitating conditions were often weak. This combination explains why some headteachers complied with digital demands without becoming confident, independent users.

The experience of HT3 illustrates this pattern concretely. Although he acknowledged ICT's role in administration, his competence was rooted mainly in older desktop applications, while newer administrative software felt unfamiliar and difficult. From a TAM perspective, the barrier was therefore not perceived usefulness alone, but low perceived ease of use. UTAUT similarly suggests that the effort required to move from familiar legacy tools to newer systems had become high for him, particularly in the absence of practical, task-specific support. District requirements for electronic reporting created strong social and institutional pressure to use these tools, but weak facilitating conditions did not necessarily build independent competence. Instead, they could encourage reluctant use or dependence on more digitally skilled colleagues. This finding shows why professional development should not assume that all headteachers begin from the same digital baseline. Training should connect their existing knowledge with current administrative applications through guided practice, repeated support, and tasks drawn directly from school administration. This illustrates that effort expectancy is relative to a user's starting point: an application that appears manageable to an experienced user may demand considerably more effort from a headteacher whose competence was developed around older systems.

Taken together, the findings suggest that digital leadership in public basic schools is not simply an individual attribute or a matter of access to devices. It is a contextually negotiated practice, meaning that it

is worked out through the interaction of personal competence, institutional expectations, and available support. A headteacher may value technology and wish to lead its use, yet still depend on others when the institutional environment does not make independent use realistic.

This interpretation is consistent with Ghanaian evidence that headteachers' ICT-support efforts are constrained by funding, infrastructure, connectivity and maintenance challenges (Lomo et al., 2025). It also supports UNESCO's (2023) concern that educational technology must be relevant, equitable and sustainable rather than judged only by the presence of devices or digital reporting requirements.

The use of personal funds for data bundles and minor device maintenance also reveals a less visible implementation problem. It suggests that compliance with digital administrative requirements may partly depend on a headteacher's willingness and ability to subsidise school operations. Such an arrangement is inequitable and difficult to sustain because headteachers with fewer personal resources may struggle to meet the same reporting expectations, even when their commitment is comparable.

The more cautious finding on decision-making is also instructive. Participants described ICT mainly as helping them organise and retrieve information rather than analyse data through formal management systems. This suggests that digital administration in these schools currently supports quicker routine judgements and responses, but has not yet developed into systematic data-driven decision-making. Because this conclusion is based on participants' accounts rather than direct observation of administrative decisions, it should remain appropriately modest. This distinction is consistent with UNESCO's (2023) caution that the presence of digital tools does not automatically produce bigger changes in educational practice; meaningful use depends on the skills, systems, and support surrounding the technology.

One dimension of this experience deserves more attention than it usually receives: the emotional one. Feelings of embarrassment, discomfort and dependence were evident in several accounts. When a headteacher repeatedly hands a task to a more digitally skilled colleague rather than completing it independently, the immediate reporting requirement may be met, but the competence gap remains. This is why one-off awareness workshops have limited effects. Headteachers need practical, ongoing support that gives them opportunities to practise routine administrative tasks and seek help when difficulties arise.

Participants did not describe informal assistance as a data-protection problem, but their accounts raise an important governance issue. When headteachers rely on colleagues to prepare reports or work with learner and staff records, the immediate task may be completed, yet responsibility for accessing, editing, storing and transmitting the information can become unclear. The risk is greater where files are handled on personal devices, shared through informal channels or stored without consistent password protection.

Seen in this way, facilitating conditions involve more than devices, internet access and technical help; they also include procedures that allow digital work to be completed securely. Ghana's Data Protection Act, 2012 (Act 843) provides the legal basis for protecting personal information. At the school level, this means clearly identifying who may access and process official records, how files should be shared and stored, and how secure backups should be maintained. These safeguards would allow headteachers to obtain legitimate support without unnecessarily exposing learner or staff information.

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District education offices can therefore play a dual role. Their reporting requirements create the social influence that encourages ICT use, but their support arrangements determine whether that influence builds capacity or produces reluctant compliance. Combining clear digital procedures with help desks, peer mentoring, periodic coaching, and realistic submission systems would make administrative expectations more achievable.

Practical Implications

The findings suggest that improving digital administration in public basic schools requires more than setting electronic reporting requirements or supplying devices. Headteachers were better able to use ICT independently when the tools were available, familiar and supported by workable school routines. Digitalisation plans should therefore reflect the actual administrative work of headteachers, including communication, record keeping, reporting and the secure handling of school information. Support should also recognise differences in competence. A general workshop is unlikely to serve equally a headteacher who prepares reports independently and another who still relies on colleagues. Practical training, guided practice and follow-up support linked to everyday administrative tasks are therefore more likely to strengthen independent use.

The design of district support systems also matters. Reporting templates, communication channels and digital platforms should simplify recurring school tasks rather than create parallel paper and electronic procedures. The reliance on informal assistance further highlights the need for clear data-governance arrangements covering authorised access, password protection, secure storage and routine backups. These measures would help schools benefit from digital administration while reducing delays, dependence and possible exposure of learner and staff information.

Contribution to Knowledge

The study contributes to digital leadership scholarship by showing that technology acceptance in school administration is not only a matter of positive attitude or access to devices. Headteachers may recognise the usefulness of ICT and still struggle to use it independently when effort expectancy is high and facilitating conditions are weak. Empirically, the study shifts attention from classroom ICT integration to the less visible administrative work through which headteachers communicate, prepare reports, manage records and respond to district demands.

Limitations of the Study and Future Directions

This study has several limitations. It involved twelve headteachers in a single municipality and was not designed for statistical generalisation to other districts or regions of Ghana. Evidence on ICT use and its influence on decision-making relied on headteachers' self-reports in semi-structured interviews rather than direct observation of administrative practice or documentary analysis of records and decisions. The cross-sectional design also captured a single point in time and could not show how confidence or infrastructure conditions change as headteachers gain experience or schools receive support. Future research could address these limitations through multi-district or comparative studies, direct observation of administrative ICT use, longitudinal designs and mixed-methods approaches that combine qualitative accounts with system-level usage data.

5.0 CONCLUSION AND RECOMMENDATIONS

Conclusion: The study produced four closely related findings. First, headteachers generally regarded ICT as necessary for modern school administration, but their confidence and independence ranged from proactive use to reluctant compliance and reliance on colleagues. Second, ICT utilisation was shaped by inadequate infrastructure, insufficient task-based training, limited technical support, financial pressure and uneven digital competence. Third, ICT improved communication, documentation, report preparation and information retrieval, although confident users benefited more fully and independently. Its contribution to decision-making was mainly through quicker access to routine information rather than advanced data analysis. Fourth, informal delegation created a less visible data-governance risk, because responsibility for accessing, storing and transmitting school records sometimes became unclear.

The TAM and the UTAUT help explain why positive attitudes did not consistently result in independent use. Participants consistently perceived ICT as useful and expected it to improve administrative performance, but ease of use, effort demands and facilitating conditions varied. Digital leadership in public basic schools is therefore not simply a matter of individual willingness or access to devices; it is shaped by the interaction of competence, institutional expectations and available support. Administrative digitalisation cannot be sustained through reporting pressure alone when infrastructure, practical training, technical support and secure procedures remain inadequate.

Recommendations: The Ghana Education Service and district education authorities should resource digital reporting rather than merely demand it. Public basic schools should be provided with basic devices, reliable internet connectivity, practical refresher training, responsive technical support and clear rules for protecting school data. Headteachers should also receive differentiated, task-based training in report preparation, spreadsheet use, digital communication, file organisation, basic troubleshooting and data protection. District and municipal education offices should establish accessible help desks or peer-support systems so that headteachers can resolve routine ICT problems without relying informally on others.

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