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Beyond the Individual: Digital Platforms, Tacit Knowledge Transfer and Institutional Knowledge Continuity- A Case Study of Administrative Staff at Nnamdi Azikiwe University, Nigeria

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ABSTRACT

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The sustainability of organizational knowledge depends not only on what institutions document, but also on what they can transfer, reproduce, and retain when people, roles, and circumstances change. In universities, much knowledge is tacit, emerging through experience, professional judgement, interaction, and everyday practice. As digitalization increasingly mediates organizational learning and knowledge sharing, this study investigates whether digital platforms can sustain such knowledge beyond the individuals who hold it. Using Nnamdi Azikiwe University (NAU), Awka, Nigeria, as a bounded case, the study employed an explanatory sequential mixed-methods design. Phase One involved a structured questionnaire completed by 17 administrative staff and analyzed using descriptive statistics. Phase Two comprised semi-structured interviews with five purposively selected participants representing varied onboarding experiences and institutional roles. Interview data were analyzed using Braun and Clarke's reflexive thematic analysis, with findings integrated across both phases. The findings reveal a tension between digital connectivity and institutional knowledge continuity. WhatsApp, the most widely used platform, functioned primarily as a relational bridge connecting staff to experienced colleagues rather than as a repository of tacit knowledge. Limited formal onboarding, reliance on trial-and-error learning, unequal access to informal knowledge, and weak institutional preservation mechanisms further constrained continuity. The study concludes that digitalization can facilitate access to tacit knowledge but does not, by itself, ensure its continuity. Sustainable organizational learning therefore requires the deliberate integration of digital platforms with structured onboarding, relational learning, and institutional mechanisms for capturing, contextualizing, and preserving experience-based knowledge beyond the individuals who hold it.

Key words: Tacit knowledge transfer; Digital platforms; Organizational learning; Knowledge continuity; Digitalization; Sustainability; Higher education.

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1. Introduction

Nigeria currently scores 6.6 out of 10 on the global Human Flight and Brain Drain Index, significantly above the world average of 4.98, placing it among the countries most affected by the sustained migration of skilled professionals (The Global Economy, 2024). Within Nigerian federal universities, this crisis extends beyond the physical departure of employees. Each time an experienced staff member retires, emigrates, or leaves for better opportunities, the institution loses tacit knowledge: the practical, experience-based understanding that sustains organizational continuity, including procedural know-how, institutional memory, professional judgment, and informal relational networks that are rarely documented but essential to the smooth functioning of the university system.

At Nnamdi Azikiwe University (NAU), Awka, the empirical context of this study, the consequences of this knowledge loss are increasingly visible. Administrative departments depend heavily on the embedded expertise of long-serving personnel who understand how institutional processes function beyond formal regulations. A registry officer with decades of experience, for instance, may know how to navigate interdepartmental approvals or resolve conflicts between units based on years of relational understanding. When such individuals leave, much of this knowledge disappears with them because it is neither formally captured nor automatically transferred to new employees. Such knowledge loss affects organizational performance across productivity, decision-making, institutional adaptability, and competency development (Massingham, 2018). Akinwale et al. (2023) argue that brain drain in Nigerian higher education has reached systemic proportions due to poor compensation, limited institutional autonomy, and recurring industrial unrest, creating repeated cycles of departure that leave behind knowledge gaps no manual or database can adequately replace.

Understanding this problem requires distinguishing between explicit knowledge, which can be formally documented and transferred through manuals, databases, and digital systems (Nonaka and Takeuchi, 1995), and tacit knowledge, which is personal, context-dependent, and deeply rooted in experience, intuition, and interpersonal understanding (Polanyi, 1966). Most digital platforms are designed primarily to support explicit knowledge management rather than tacit knowledge transfer. Selwyn (2014) argues that digital technologies privilege particular forms of communication and learning while limiting others. Castaneda and Toulson (2021) similarly found that most ICT tools support information sharing but do not necessarily facilitate tacit knowledge transfer unless they enable sustained interaction and dialogue, with communication-based platforms such as video conferencing and messaging proving more effective than systems designed solely for storage and retrieval. These challenges become particularly visible during onboarding. New administrative staff must learn not only formal procedures but how work is actually done within the institutional

environment. Brown and Duguid (1991) demonstrated that employees often learn organizational practices through informal interaction rather than official manuals, while Van Houten (2023) explains that tacit knowledge is most effectively transferred through storytelling, reflection, mentorship, and sustained collegial engagement. As universities increasingly rely on digital platforms for communication and coordination, important questions emerge regarding what knowledge new employees can access, how equitably it is distributed, and whether digitalized environments support or weaken institutional learning.

1.1 Justification of Study

The justification for this study rests on three interconnected realities at Nnamdi Azikiwe University. First, brain drain, and staff turnover constitute an ongoing structural problem rather than an isolated occurrence, with administrative, academic, and research staff leaving continuously through retirement, migration, and career mobility. Second, the university's onboarding mechanisms remain insufficient to address these losses. In 2019, over 300 newly employed staff entered the institution without any formalized knowledge transfer framework; institutional concerns about performance only became visible after senior staff raised complaints, prompting a reactive seminar rather than a sustainable system for continuity. Third, the digital platforms currently used at NAU, including WhatsApp, Google Meet, email, and the Centre for Institutional Records Management System (CIRMS), primarily support administrative communication rather than structured tacit knowledge exchange. While these technologies improve efficiency, they do not automatically create the relational conditions required for mentorship or institutional socialization. NAU therefore faces a condition of institutional knowledge vulnerability in which loss continues while mechanisms for continuity remain inadequate.

This study also addresses equity concerns: Access to tacit knowledge within digital environments is not evenly distributed; Leonardi et al. (2013) argue that enterprise social media can privilege some forms of participation while limiting others depending on employees' organizational position and technological access. At NAU, such inequalities intersect with rank, departmental culture, and digital access, often disadvantaging junior and early-career staff who depend most heavily on informal guidance yet are most vulnerable when knowledge flows are disrupted. From a sustainability perspective, ineffective tacit knowledge transfer challenges the long-term resilience of higher education institutions. Daghfous et al. (2023) found that organizations lacking effective knowledge transfer mechanisms face recurring inefficiencies and gradual erosion of institutional competence. Sustainability here operates at three levels: institutionally, NAU's ability to preserve knowledge across staff turnover; educationally, its capacity to provide inclusive, continuous learning for

employees in alignment with Sustainable Development Goal 4 (United Nations, 2015); and digitally, whether technological systems sustain or weaken the relational conditions necessary for tacit knowledge sharing.

Existing scholarship has explored organizational knowledge creation (Nonaka and Takeuchi, 1995), barriers to knowledge transfer (Szulanski, 1996), tacit knowledge sharing in professional practice (Van Houten, 2023), the sociomaterial relationship between technology and organizational life (Orlikowski, 2002; Orlikowski and Scott, 2023), COVID-19's effects on knowledge sharing (Cecchi et al., 2022), ICT's role in tacit knowledge exchange (Castaneda and Toulson, 2021), and brain drain in Nigerian universities (Akinwale et al., 2023). However, limited attention has been paid to how administrative staff in Nigerian federal universities experience tacit knowledge transfer through digital platforms amid brain drain, resource constraints, and institutional instability. This study addresses that gap, offering empirically grounded insight into how tacit knowledge is transferred, constrained, or transformed within Nigerian higher education, with practical relevance for administrators and HR practitioners designing digital systems and onboarding processes that sustain institutional knowledge continuity. More broadly, it reframes tacit knowledge transfer not merely as a human resource concern, but as a critical dimension of institutional resilience and sustainable educational development across the Global South.

1.2 Aim, Objectives and Research Questions

The central aim of this study is to explore how digital platforms support tacit knowledge transfer among administrative staff at Nigerian universities, using Nnamdi Azikiwe University (NAU), Awka, as a case study. It examines staff experiences, particularly during onboarding, and how platform affordances and organizational conditions enable or constrain knowledge transfer. The research aim, questions and objectives are discussed in detail in Chapter 2.

1.3 Scope and Limitations

The scope of this study is administrative staff at NAU that actively use digital platforms including WhatsApp groups, Google Meet, Email, and CIRMS as part of their regular work. CIRMS is examined specifically as a point of contrast between explicit knowledge archiving and tacit knowledge transfer, given its function as an administrative records management platform rather than a knowledge-sharing tool. The inquiry focuses on staff experiences and perceptions, rather than on platform technical architecture or student learning outcomes. NAU was selected because it represents a knowledge-intensive public institution navigating simultaneous pressures of brain drain, inadequate onboarding infrastructure, and rapid digital transformation under resource-constrained conditions,

making it both a theoretically productive and practically urgent site for this inquiry. Several limitations are acknowledged: Firstly, the qualitative, interpretivist design means findings aim for theoretical transferability rather than statistical generalizability (Lincoln and Guba, 1985). Secondly, the researcher's prior professional affiliation with NAU introduces an insider positionality requiring deliberate reflexive management to mitigate risks of social desirability bias. Thirdly, tacit knowledge is by nature resistant to full verbal articulation, meaning some dimensions may remain beyond the reach of interview-based inquiry. Fourthly, the study is constrained by the timeframe and resources of a Master's-level project, precluding large-scale sampling and longitudinal observation. These limitations are addressed through trustworthiness measures, including member checking, reflexive journaling, and Lincoln and Guba's (1985) criteria of credibility, transferability, dependability, and confirmability.

1.4 Thesis Structure

The remainder of this thesis is structured across seven further chapters. Chapter 2 presents and discusses the study's aim, research questions, and objectives in full, establishing the analytical framework that guides the entire inquiry. Chapter 3 and 4 provides a critical review of the relevant literature, examining theoretical frameworks and empirical research on tacit knowledge, digital platforms, and organizational learning in the context of higher education in Nigeria. Chapter 5 details the methodology, including research design, data collection, and ethical considerations. Chapter 6 presents findings from the questionnaire data and the thematic analysis of semi-structured interview data. Chapter 7 discusses findings in relation to the study's three theoretical frameworks and existing scholarships and lastly Chapter 8 offers conclusions, evidence-informed recommendations, and directions for future research.

2. Aim and Research Questions

This chapter presents the aim, research questions, and objectives that guide the study. Together, these elements define the focus and direction of the research and provide a framework for investigating how digital platforms support tacit knowledge transfer among administrative staff at Nnamdi Azikiwe University (NAU), Nigeria

2.1 Aim of the study

This study aims to explore how digital platforms support tacit knowledge transfer among administrative staff at Nigerian Universities with Nnamdi Azikiwe University, Awka (NAU), as an empirical case. Particular attention is given to the context of onboarding and staff transition where this challenge is most consequential. The study seeks to develop a contextually grounded and theoretically informed understanding of the conditions, practices, and platform affordances that enable or constrain tacit knowledge transfer in a digitally mediated institutional environment. The study does not seek statistically generalizable findings; rather, it aims to generate interpretive insight that informs both institutional practice and scholarly understanding of digitalization, knowledge sustainability, and equitable workplace learning in the Global South. To answer this aim, the study addresses within the empirical context of NAU the following questions:

2.2 Research Questions

The study is guided by one primary research question and two supporting research questions:

RQ1: How do digital platforms support tacit knowledge transfer among administrative staff?

RQ2: In what ways do administrative staff, particularly those in onboarding and early-stage roles, experience and navigate tacit knowledge sharing through digital platforms in their daily work?

RQ3: To what extent do platform affordances and organizational conditions enable or constrain tacit knowledge transfer, and how do these dynamics vary across staff roles and levels of digital engagement?

These three questions work in deliberate progression. RQ1 establishes the overarching empirical inquiry at the institutional level. RQ2 grounds the investigation in the lived experiences of individual staff members, with sensitivity to those whose professional integration is most dependent on informal knowledge transfer. RQ3 advances toward critical analysis of the structural and equity dimensions of knowledge access, examining not only whether platforms support tacit knowledge sharing, but under what conditions and for whom.

2.3 Research Objectives

The following four objectives define how the research questions are systematically addressed, progressing from description through identification and analysis to applied recommendation.

Objective 1: To explore how administrative staff at NAU engage with digital platforms as part of their tacit knowledge-sharing and learning practices, with particular focus on onboarding and early-stage employment.

Objective 2: To identify the platform features, interaction patterns, and organizational norms that staff perceive as enabling or hindering tacit knowledge transfer in digitally mediated work environments.

Objective 3: To analyze how institutional structures, digital work cultures, and equity of platform access shape the conditions under which tacit knowledge is shared, withheld, or lost across different staff groups.

Objective 4: To develop evidence-informed recommendations for how higher education institutions can optimize digital platform use to support inclusive, sustainable, and experience-based tacit knowledge transfer.

Objectives 1 and 2 respond directly to RQ1 and RQ2 and are addressed through interview Themes A and D. Objective 3 responds to RQ2 and RQ3 and is addressed through Themes B, C, and D. Objective 4 draws on all three theoretical frameworks to generate institutional recommendations and is addressed through the closing questions of the interview guide. Together, the aim, three research questions, and four objectives form an integrated analytical architecture that is theoretically coherent, empirically researchable, and oriented toward the goal of sustainable institutional knowledge transfer at NAU.

3. Background

3.1 Knowledge in Organizations

Knowledge is widely recognized as one of the most strategically significant assets that an organization possesses. Scholars have argued since the emergence of the knowledge economy that sustainable organizational performance depends not on physical or financial capital alone, but on what an institution and its people collectively know and how effectively that knowledge is created, shared, and applied (Drucker, 1993; Nonaka and Takeuchi, 1995). This recognition gave rise to the field of knowledge management, understood as the systematic processes through which organizations create, capture, store, and transfer knowledge across individuals, teams, and institutional boundaries, and with it the recognition that not all organizational knowledge is equally accessible, transferable, or resistant to loss. The foundational distinction in this field is between explicit and tacit knowledge. Explicit knowledge is formal and codifiable; it can be articulated in documents, databases, and training materials and transmitted through digital systems efficiently (Nonaka and Takeuchi, 1995). Tacit knowledge, as Polanyi (1966) described, is deeply personal and embedded in experience, practice, and social interaction, encompassing professional judgment, situational awareness, relational skill, and the intuitive understanding that employees develop over years of working alongside others. Nonaka and Takeuchi (1995) demonstrated that these two forms of knowledge exist in a dynamic, spiral relationship: the creation of new organizational knowledge depends on continuous conversion between them, a process they describe through the SECI (socialization, externalization, combination and internalization) model while digital platforms are structurally oriented toward managing only the explicit dimension of this spiral, leaving the tacit dimension significantly under supported.

Tacit knowledge on the other hand is widely regarded as the most strategically significant and the most difficult to manage form of organizational knowledge (Nonaka and Takeuchi, 1995; Ambrosini and Bowman, 2001). It is transferred primarily through observation, mentoring, apprenticeship, storytelling, and collaborative problem-solving, processes that are inherently social, relational, and time intensive (Van Houten, 2023). Brown and Duguid (1991) demonstrated that employees' actual work practices diverge systematically from their formal organizational descriptions because the tacit dimensions of competence, including the unspoken adjustments, contextual judgments, and relational practices that make work function, cannot be captured in any procedure. For administrative staff in a university registry or finance office, this divergence is particularly consequential: the informal knowledge of which process to follow in an unusual case, or which colleague to consult when official channels are slow, survives only through human interaction. The organizational stakes of tacit

knowledge loss become particularly visible in contexts of disruption. Daghfous et al. (2023) systematically reviewed over a decade of knowledge loss literature, finding that tacit and experiential knowledge loss through staff departure is among the most strategically consequential yet least institutionally managed dimensions of organizational knowledge management, with most organizations lacking structured mechanisms for identifying, preserving, or transferring the knowledge carried by departing employees. DeLong (2004) documented this risk in depth, showing how the systematic departure of experienced staff erodes organizational capability in ways that formal knowledge transfer mechanisms struggle to address. In Nigerian higher education, where brain drain compounds this challenge through chronic and accelerating staff loss, the implications for institutional sustainability are particularly acute (Akinwale et al., 2023).

Learning in organization refers to the processes through which organizations acquire, interpret, distribute, and retain knowledge in ways that shape and improve collective behavior over time (Argote, 2013), including both formal learning through structured training and documented procedures, informal learning that occurs through everyday interactions, peer collaboration, trial and error, and shared workplace experiences. Thus, knowledge transfer, a central mechanism within organizational learning, involves the communication and absorption of knowledge from one individual, team, or unit to another. Szulanski (1996) identified four major barriers to effective knowledge transfer: the difficulty of articulating the knowledge itself, the motivation of the knowledge source, the absorptive capacity of the recipient, and the quality of the relationship between sender and receiver. These barriers become even more pronounced in digitally mediated, geographically dispersed, or structurally hierarchical environments, characteristics commonly associated with large Nigerian public universities.

3.2 Digital Platforms and Organizational Learning

Digital platforms have become the primary infrastructure of organizational communication and learning, a transition dramatically accelerated by the COVID-19 pandemic (Cecchi et al., 2022). Platforms such as Zoom, Google Meet, WhatsApp, and email now mediate the majority of organizational interaction in contexts where face-to-face communication has been reduced or replaced. Leonardi et al. (2013) defines enterprise social media, a category encompassing many contemporary workplace platforms, as tools that enable employees to communicate with specific colleagues or broadcast to the whole organization, and to render previously invisible knowledge connections visible across institutional hierarchies. At NAU, this category includes WhatsApp departmental groups, Google meet for meetings, Email for formal communication, and CIRMS for staff records management, platforms adopted rapidly during the pandemic but without deliberate

design for tacit knowledge transfer. From a knowledge management perspective, these platforms offer considerable advantages for explicit knowledge: they enable asynchronous communication, provide searchable archives, and support structured information sharing at scale. However, as Egielewa et al. (2022) found in their analysis of Nigerian higher education, rapid platform adoption without adequate infrastructure, including reliable connectivity, digital literacy training, and institutional support, substantially limits the knowledge-sharing potential of these tools in practice. This context shapes not only which platforms are used at NAU, but how effectively they can support tacit knowledge transfer.

Organizational learning literature consistently identifies a structural limitation in digital platforms: they are considerably more effective at managing explicit knowledge than at supporting tacit knowledge transfer (Nonaka and Takeuchi, 1995; Leonardi et al., 2013). This limitation reflects the epistemological incompatibility that Orlikowski (2002) and Selwyn (2014) identify between the logic of digital systems and the nature of tacit knowledge: platforms built to capture and retrieve information cannot replicate the conditions of shared experience, trust, and contextual negotiation through which tacit knowledge moves. Castaneda and Toulson (2021) provide direct empirical evidence: among 217 knowledge workers, only dialogue-enabling tools were found to support tacit knowledge transfer, while tools oriented toward information storage and retrieval were not. Orlikowski (2002) further demonstrates that technology does not determine how knowledge is shared; rather, it is the recurring, socially situated practices through which people engage with technology that shape what platforms actually enable or constrain in organizational life.

3.3 Affordances, Equity and the Nigerian Higher Education Context

The concept of affordances, applied to technology by Norman (1988), refers to the action possibilities that a platform offers its users. In digital knowledge environments, affordances such as persistent messaging, video communication, and discussion forums can support certain dimensions of knowledge sharing when actively and purposefully used (Majchrzak et al., 2013). However, Leonardi (2017) cautions that the knowledge-sharing potential of digital platforms is not self-executing: it depends on whether employees are adequately supported in using these affordances, whether platforms are integrated into everyday practice, and whether organizational norms cultivate informal exchange. In resource-constrained environments such as NAU, where internet connectivity is unreliable, digital literacy varies significantly, and institutional investment in platform training is limited, these conditions cannot be assumed. The equity dimension of digital knowledge access is particularly salient in this context. Leonardi et al. (2013) note that enterprise social media creates conditions in which some employees are better positioned to access informal knowledge flows than

others, depending on digital fluency, organizational role, and communication practices. At NAU, these disparities intersect with existing inequalities of rank, department, and digital infrastructure access, creating layered conditions of inclusion and exclusion that determine whose institutional knowledge is preserved and whose is lost. This equity dimension, identified as undertheorized in the justification chapter, receives explicit analytical attention throughout this study.

3.4 Research Gap

Foundational works by Polanyi (1966), Nonaka and Takeuchi (1995), Brown and Duguid (1991), and Orlikowski (2002) have established a substantial foundation for understanding tacit knowledge, organizational learning and digital platforms, while subsequent studies continually examine digitally mediated knowledge sharing, staff turnover, organizational culture and knowledge loss (Cecchi et al., 2022; Castaneda & Toulson, 2021; Van Houten, 2023; Daghfous et al., 2023). Some research has also explored knowledge sharing in higher education and African public institutions (Ipe, 2003; Alves & Pinheiro, 2022; Phaladi & Ngulube, 2022), alongside digital platform adoption and staff mobility in Nigerian universities (Egielewa et al., 2022; Akinwale et al., 2023). However, despite these contributions and drawing together the threads raised throughout this review, existing scholarship on tacit knowledge and digital platforms remains concentrated in Western, high-resource settings, with limited attention to administrative staff experiences in African federal universities, and no dedicated empirical work at the intersection of tacit knowledge transfer, sociomaterial platform affordances, equity of access, and organizational sustainability within a Nigerian federal university context. The three-framework theoretical architecture adopted in this study, spanning knowledge conversion, sociomaterial practice, and the organizational conditions for knowledge sharing, directly addresses this gap by centering NAU administrative staff experience and generating empirically grounded insight into an institutional context that remains both practically urgent and analytically underrepresented.

4. Theoretical Framework

This study draws on three complementary theoretical frameworks to examine how digital platforms support tacit knowledge transfer among administrative staff at Nnamdi Azikiwe University (NAU), Nigeria. These are Nonaka and Takeuchi's (1995) SECI model of knowledge creation, sociomateriality theory, particularly Orlikowski's (2002) practice-based perspective, and Ipe's (2003) knowledge-sharing framework, considered alongside the contributions of Alves and Pinheiro (2022) and Phaladi and Ngulube (2022). Together, these frameworks provide a multidimensional perspective for understanding knowledge conversion, technology-mediated work practices, and the individual and organizational conditions that shape knowledge sharing.

4.1 The SECI Model: Nonaka and Takeuchi (1995)

Nonaka and Takeuchi's (1995) SECI model provides a useful foundation for examining how organizational knowledge is developed, shared and applied through the interaction between tacit and explicit knowledge. Its central premise is that knowledge creation is not simply a matter of storing and transmitting information; rather, it is an ongoing process through which individuals share experience, articulate practical understanding, organize documented knowledge and incorporate what they learn into their work. The model identifies four interconnected modes of knowledge conversion: socialization, externalization, combination and internalization (SECI) which offer a framework for analyzing the contribution of digital platforms to workplace learning. In administrative environments, knowledge often develops through everyday interactions in which employees learn not only what procedures are required, but also how to interpret and apply them in specific situations. This is particularly relevant to onboarding at Nnamdi Azikiwe University (NAU), where new staff may need to understand institutional routines, exercise practical judgement and navigate situations that formal guidelines do not fully address. Socialization, the sharing of tacit knowledge through experience and interaction, provides a lens for examining how employees acquire such understanding from experienced colleagues as platforms such as WhatsApp, Zoom and Google Meet may facilitate this process by enabling staff to ask questions, exchange experiences and maintain contact across departments. However, digital communication does not automatically reproduce the learning that occurs through observation and shared practice. Its contribution depends partly on the quality of interaction, colleagues' willingness to offer guidance and opportunities to apply what has been learned.

As employees explain how they approach particular tasks or resolve recurring problems, aspects of their experience may become more accessible to others. This process, which Nonaka and Takeuchi describe as externalization, involves expressing tacit understanding in a form that can be

communicated and examined. Digital discussions, written explanations, recorded demonstrations and frequently asked questions may help make previously undocumented workplace practices visible. Yet articulation has limits: explaining how a task is performed does not necessarily convey all the contextual cues, professional judgement or situational awareness that inform its execution. This distinction is important for this study because the presence of digital exchanges may demonstrate opportunities for knowledge sharing without establishing that the underlying tacit knowledge has been fully transferred. The relationship between knowledge sharing and institutional preservation becomes particularly apparent through combination; whereby existing explicit knowledge is organized and integrated into a more systematic form. At NAU, this process could involve bringing departmental procedures, administrative templates, guidelines and frequently asked questions together in a centralized digital repository. Such an arrangement could improve access to institutional information and reduce reliance on individual employees as the sole sources of procedural guidance. Nevertheless, consolidating documents is not equivalent to preserving the experience-based judgement through which staff interpret procedures and respond to unfamiliar circumstances. A repository may retain what has been documented while leaving important practical knowledge dependent on the individuals who hold it.

Internalization on the other hand concerns how individuals incorporate explicit knowledge into their own understanding and practice. Administrative staff may consult digital resources or receive written guidance and subsequently apply this knowledge to workplace tasks, through practice, feedback and experience, they may develop greater confidence and the ability to work independently. Internalization therefore connects the availability of information to the development of practical competence, while highlighting that access to documentation alone may be insufficient. Employees may also require opportunities to practice tasks, observe experienced colleagues and receive feedback in context. The four modes together provide an analytical basis for examining different dimensions of digitally mediated knowledge processes at NAU, as well as distinguish between connecting employees to experienced colleagues, articulating practical understanding, organizing documented information and enabling staff to apply what they learn. This distinction is central to the study's concern with the relationship between digitalization and institutional knowledge continuity as digital platforms may facilitate access to experience-based knowledge, but whether that knowledge becomes embedded in organizational practice and remains available beyond individual employees is a separate question. Although the SECI model illuminates the processes through which knowledge may be shared and developed, it offers a less complete explanation of why opportunities to participate in these processes may differ between employees.

4.2 Sociomateriality Theory: Orlikowski (2002) and Orlikowski and Scott (2023)

While the SECI model explains how knowledge develops through interactions between tacit and explicit forms, sociomateriality offers a complementary perspective on how digital technologies and organizational practices shape these processes. Drawing on Orlikowski's (2002) practice-based perspective, this study understands organizational knowing as something enacted through everyday work, relationships and the use of technological resources. Accordingly, the significance of digital platforms depends not only on their technical capabilities but also on how employees incorporate them into their work. At Nnamdi Azikiwe University (NAU), this perspective directs attention to how platforms such as WhatsApp, email, Google Meet and the Computerized Information and Records Management System (CIRMS) are used to exchange information, seek guidance and resolve administrative problems. For instance, a WhatsApp conversation may provide immediate access to an experienced colleague, yet the knowledge shared may remain confined to that interaction rather than becoming accessible to others. Conversely, CIRMS may support institutional record-keeping without necessarily facilitating informal exchanges through which employees develop practical judgement. These examples illustrate the distinction between using technology to communicate knowledge and embedding that knowledge within institutional practices.

Sociomateriality also draws attention to inequalities in knowledge access; employees with established professional networks or closer relationships with senior colleagues may obtain guidance more readily than those with fewer connections. Hierarchical relationships may further discourage some staff from asking questions or seeking clarification. Consequently, access to the same digital platforms does not necessarily provide equal opportunities to learn and these knowledge-sharing outcomes are shaped by the interaction between technological arrangements, professional relationships and institutional authority. Infrastructure and organizational routines further influence these practices: connectivity problems, fragmented information repositories and inconsistent access to digital systems may limit the usefulness of available resources. Similarly, workplace expectations influence whether employees contribute to shared systems or rely on personal contacts. Thus, the contribution of this perspective is to explain how technological resources acquire meaning and practical value within specific institutional contexts. In this study, it supports an examination of how platform use, infrastructure and workplace relationships shape the accessibility and continuity of administrative knowledge at NAU.

4.3 Ipe's Knowledge Sharing Framework: Ipe (2003), Alves and Pinheiro (2022) and Phaladi and Ngulube (2022)

Where the SECI model explains the processes through which knowledge is developed and converted, and sociomateriality illuminates how technology and organizational practices shape these processes,

Ipe's (2003) framework directs attention to the conditions that influence whether individuals share what they know. This perspective is particularly relevant to tacit knowledge, whose transfer often depends on interpersonal engagement, professional experience and the willingness of knowledgeable employees to offer guidance. It therefore adds an important behavioral and organizational dimension to the present study: understanding how digital platforms support knowledge transfer requires examining not only what these platforms enable, but also why employees share knowledge, under what circumstances they do so, and who is able to benefit. Ipe (2003) identifies four interrelated factors influencing knowledge sharing: the nature of knowledge, individual motivation, opportunities for sharing and organizational culture, providing a framework for understanding why frequent platform use does not necessarily translate into effective or sustainable knowledge transfer and why the same digital environment may facilitate learning for some employees while offering limited benefits to others.

The nature of knowledge influences how readily it can be communicated; explicit knowledge can often be represented through documents, guidelines and instructions, whereas tacit knowledge is more closely associated with experience, contextual understanding and practical judgement. An administrative procedure, for example, may be distributed electronically, but the judgement required to apply it to an unfamiliar situation may emerge only through explanation, observation and interaction with an experienced colleague. At Nnamdi Azikiwe University (NAU), this distinction directs attention to whether digital platforms provide access to procedural information alone or also facilitate the exchange of experience-based understanding needed to navigate everyday administrative work, however, the availability of opportunities to share knowledge does not guarantee that employees will use them. Individual motivation shapes the willingness to provide guidance, explain established practices or make personal expertise available to colleagues. Trust, perceived value and the quality of professional relationships may encourage such engagement, whereas competing demands, limited time or reluctance to share expertise may constrain it. This is particularly significant for tacit knowledge transfer because communicating practical understanding may require repeated questions, detailed explanations and sustained interaction. While digital platforms may make these exchanges easier to initiate, they cannot independently ensure that knowledgeable employees will participate or that the guidance provided will be sufficient for others to develop competence.

The extent to which knowledge sharing occurs also depends on the opportunities available for exchange; these may include formal onboarding, mentoring, workplace observation, staff meetings, professional networks and digital communication channels. In the context of NAU, platforms such as WhatsApp, email and Google Meet can connect employees to colleagues and institutional information, while formal onboarding and mentoring can provide more structured opportunities for

learning. Yet the existence of these mechanisms must be distinguished from their practical accessibility and effectiveness. An employee may have access to a platform without being included in relevant discussions or knowing whom to approach for guidance. Similarly, an onboarding process may communicate formal responsibilities without providing sufficient opportunities to develop the practical understanding required for independent work. The analytical question is therefore not simply whether opportunities exist, but whether they enable meaningful and inclusive knowledge exchange.

These individual and practical dimensions are shaped by organizational culture, which influences the extent to which knowledge sharing is recognized, encouraged and supported. Where employees feel comfortable asking questions and experienced colleagues are expected to support less-experienced staff, knowledge exchange may become part of routine organizational practice. Conversely, hierarchical relationships, limited trust or norms that discourage questioning may restrict access to experience-based guidance. Organizational culture also influences whether knowledge sharing is treated as a collective responsibility or left to the goodwill of individual employees. This distinction matters for institutional knowledge continuity when the transfer of experience depends primarily on personal initiative, valuable knowledge may remain unevenly distributed and vulnerable to the departure of those who possess it.

Although analytically distinct, these four factors operate in relation to one another: the characteristics of knowledge shape how it can be communicated; motivation influences the willingness to share it; available opportunities determine the circumstances in which exchange can occur; and organizational culture affects whether sharing is encouraged and sustained. The relevance of this framework can also be situated within scholarship addressing knowledge sharing in higher education and African organizational contexts. Phaladi and Ngulube (2022) provide additional literature through which the social, institutional and contextual conditions surrounding knowledge-sharing practices are considered. Their contribution to this study should be understood in relation to the specific arguments and findings presented in their respective publications, rather than as evidence that the same conditions necessarily operate in every institution. This contextual emphasis is important when examining NAU, where digital infrastructure, administrative arrangements and established professional relationships may shape how knowledge-sharing opportunities are experienced in practice. Thus, knowledge management practices in African public organizations must address the individual, organizational, and structural dimensions of knowledge sharing simultaneously to be effective. Ipe's framework does not, by itself, explain the processes through which tacit and explicit knowledge are converted, nor does it fully account for how technological arrangements become embedded in everyday work thus, its analytical value therefore lies in its complementarity with the other two perspectives.

5. Method

5.1 Research Design

This study adopts an explanatory sequential mixed methods design to investigate how digital platforms support tacit knowledge transfer among administrative staff at Nigerian universities, using Nnamdi Azikiwe University (NAU), Awka, as an empirical case. The design was selected because the research problem requires both an overview of staff experience and an understanding of the organizational conditions underlying those experiences. While quantitative data can reveal patterns in platform use, onboarding experiences and perceived barriers to knowledge sharing, qualitative accounts provide insight into how staff interpret and navigate these processes in their everyday work. The combination is therefore intended not merely to bring together two forms of data, but to use qualitative findings to explain and contextualize the patterns identified during the quantitative phase (Ivankova et al., 2006). This study is informed by a pragmatic orientation to mixed-methods inquiry, which emphasizes selecting and integrating methods according to their suitability for addressing the research problem. This orientation is appropriate because neither numerical patterns nor individual accounts alone can provide a sufficiently comprehensive understanding of digitally mediated tacit knowledge transfer. The quantitative phase, involving a questionnaire completed by 17 administrative staff, establishes descriptive patterns relating to platform use, knowledge-sharing practices and perceived organizational conditions. The subsequent qualitative phase comprises semi-structured interviews with 5 purposively selected participants, enabling closer examination of the experiences and circumstances that may explain these patterns. The qualitative phase is thus connected to the quantitative findings through participant selection and the development of interview questions, while integration occurs during interpretation, when findings from both phases are considered together.

Although pragmatism informs the choice and integration of methods, the study retains an interpretive orientation towards participants' experiences; Tacit knowledge transfer is not understood solely as a technical process determined by platform availability; it is also shaped by how employees interpret workplace practices, develop professional relationships and access experience-based guidance. The interview phase therefore recognizes the importance of participants' accounts in understanding how knowledge sharing occurs within NAU's institutional context. This interpretive emphasis complements the descriptive questionnaire findings without assuming that participants' perceptions provide a complete or objective account of every organizational process.

The study is further situated within a case study strategy, treating NAU as a bounded institutional setting in which administrative staff experiences of digital platforms and knowledge transfer can be examined in context. This strategy enables the quantitative and qualitative findings to be interpreted

in relation to the university's organizational arrangements rather than as context-free patterns. Consistent with Merriam and Tisdell (2016), the case study provides an in-depth examination of a defined system. The study does not seek statistical generalization; instead, it aims to generate contextually grounded insights whose relevance to other institutional settings can be assessed through a clear description of the research context and findings (Lincoln & Guba, 1985).

5.2 Recruitment and Participant Selection

Participant selection was guided by the explanatory sequential mixed-methods design, with sampling decisions intended to generate descriptive insights in the quantitative phase and more detailed experiential understanding in the qualitative phase. Accordingly, the two strands employed related but distinct sampling approaches: the questionnaire phase sought to obtain responses from administrative staff with relevant experience of digital platforms and workplace knowledge sharing, while the interview phase involved purposive selection of participants whose experiences could help explain and contextualize the initial findings.

For the quantitative strand, a census-oriented recruitment approach was adopted, with the intention of reaching all eligible administrative staff across different departments and institutional roles at Nnamdi Azikiwe University (NAU). Rather than selecting a predetermined subgroup, this approach sought to capture a range of staff experiences within the practical constraints of the study. However, the 17 completed questionnaires represent the achieved sample and should not be interpreted as a complete representation of the university's administrative workforce.

For the qualitative strand, purposive sampling was used to select five participants from the questionnaire respondents. Purposive sampling involves deliberately selecting participants whose experiences are relevant to the research objectives and can provide information-rich accounts of the phenomenon under investigation (Campbell et al., 2020). Selection sought variation in departmental affiliation, years of service and onboarding experiences, enabling the interviews to explore how knowledge-sharing practices might differ across institutional and professional contexts. Linking interview selection to the questionnaire phase also strengthened the sequential design by allowing the qualitative inquiry to follow up on patterns identified in the initial findings.

5.2.1 Inclusion Criteria

Participant eligibility was guided by the study's focus on administrative knowledge sharing and digitally mediated workplace learning. To be eligible for inclusion in both strands of this study, participants were expected to meet three criteria: current or recent employment as an administrative staff member at NAU; regular use of at least one of the digital platforms identified as primary communication tools at NAU, specifically WhatsApp groups, Zoom, Google Meet, or email; and

either direct personal experience of onboarding at NAU or sufficient institutional tenure to have witnessed the effects of staff brain drain and knowledge loss. These criteria were intended to ensure that participants could speak to the practical use of digital platforms and the organizational conditions influencing access to experience-based knowledge. For the interview phase, participants were additionally selected based on their ability to provide detailed accounts relevant to the research questions and their willingness to participate in an interview. Also, variations in onboarding experiences were particularly important because it allowed the study to explore whether formal, informal or absent onboarding arrangements were associated with different experiences of learning from colleagues and accessing institutional knowledge.

5.2.2 Sample Size and Composition

The questionnaire phase yielded 17 responses from administrative staff which included staff occupying different administrative and related institutional roles, with variations in professional experience and departmental affiliation. The quantitative data were analyzed descriptively to identify patterns in platform use, knowledge-sharing practices, onboarding experiences and perceived organizational constraints. Given the small sample, these patterns are interpreted as indicative of the experiences reported by participants rather than statistically representative of all administrative staff at NAU. The interview phase comprised 5 purposively selected participants with varied onboarding experiences, institutional roles and lengths of service. Their accounts provided contextual depth for interpreting the questionnaire findings, particularly in relation to informal learning, reliance on experienced colleagues, unequal access to knowledge and the preservation of institutional experience. The purpose of the interview sample was therefore to deepen the explanation of the quantitative patterns rather than to achieve statistical representativeness. Findings from both phases were subsequently considered together to develop a contextually grounded understanding of digitally mediated tacit knowledge transfer at NAU.

5.3 Data Collection

The first phase of data collection involves the administration of a structured questionnaire to eligible administrative staff at NAU administered online via Google Forms or WhatsApp, consistent with the existing communication practices of NAU staff. The questionnaire comprises four sections: Section A collects demographic and professional profile information including role, department, years of service, and grade level. Section B addresses digital platform use, asking participants to indicate which platforms they use regularly, for what purposes, and how frequently. Section C addresses tacit knowledge sharing experiences using a five-point Likert scale ranging from strongly agree to strongly disagree, with items covering the ease of sharing working knowledge through platforms, perceived

barriers to sharing, access to informal guidance, and whether platforms have helped them during onboarding or witnessed knowledge loss after colleagues departed. Section D includes three open-ended items inviting participants to describe their most significant experience of knowledge sharing or knowledge loss at NAU, explain what they believe would most improve tacit knowledge transfer at the institution, and indicate whether they are willing to participate in a follow-up interview. Responses are analyzed descriptively using frequency counts and percentages to identify patterns and inform the design of interview probes. The complete questionnaire guide is provided in Appendix A.

The second phase of data collection involves semi-structured interviews with 5 participants selected from questionnaire respondents. Semi-structured interviews combine a pre-designed topic guide with sufficient flexibility for participants to elaborate, redirect, and introduce dimensions of experience the researcher may not have anticipated (Bryman, 2016). This format is particularly well suited to the investigation of tacit knowledge, which is by definition difficult to articulate and may only become visible through extended, trust-based, exploratory conversation (Naz et al., 2022). The interview guide builds directly on patterns identified in the questionnaire data, with probes designed to explain and deepen the quantitative findings through participants lived experiences. All interviews are conducted remotely via Zoom, Google meet or WhatsApp video call, based on each participant's preference and connectivity. Remote interviewing is methodologically well-established as a rigorous approach in qualitative research (Archibald et al., 2019). Each interview is conducted in English, audio-recorded with explicit participant consent, and lasts approximately 45 to 60 minutes. Recordings are transcribed verbatim by the researcher immediately following each interview. The interview guide is organized around four substantive thematic areas corresponding to the study's research questions and objectives: digital platforms and tacit knowledge in daily work (RQ1 and RQ2, Objectives O1 and O2); onboarding and early-stage knowledge acquisition (RQ1 and RQ2, Objectives O1 and O3); brain drain and institutional knowledge continuity (RQ1 and RQ3, Objectives O2, O3, and O4); and organizational conditions, norms, and equity (RQ3, Objectives O2, O3, and O4). The complete interview guide is provided in Appendix B.

5.4 Data Analysis

Questionnaire data are analyzed using descriptive statistics, including frequency counts, percentages, and mean scores for Likert-scale items. The purpose of the quantitative analysis is not inferential but descriptive: to map the distribution of platform use patterns, knowledge-sharing experiences, and perceived barriers across the participant group, and to identify themes and variations that will be pursued in depth through the interview strand. Data are organized and analyzed using Microsoft Excel or Google Sheets, and findings are presented in the form of tables and descriptive summaries in Chapter 6.

Interview data are analyzed using Braun and Clarke's (2006) reflexive thematic analysis framework, a method for systematically identifying, analyzing, and interpreting patterns of meaning across qualitative datasets. The analysis follows the six-phase framework: familiarization, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Braun and Clarke's (2021) reflexive approach emphasizes that themes are actively constructed by the researcher through interpretive engagement rather than discovered in the data, consistent with the constructivist epistemology of this study. Throughout all six phases, a reflexive analytical journal and a comprehensive audit trail are maintained to support the dependability and confirmability of the findings.

5.5 Researcher Positionality and Reflexivity

The researcher occupies an insider position in relation to this study, having previously worked as an administrative staff member at Nnamdi Azikiwe University (NAU). As a member of the 2019 intake cohort, comprising over 300 newly employed staff who received no structured onboarding, the researcher brings direct institutional familiarity and personal experience of the challenges underpinning the research problem. This background informed the study’s focus on onboarding, informal knowledge sharing and the role of digital platforms in accessing experience-based institutional knowledge. As Bukamal (2022) observes, familiarity with a research setting can facilitate access, rapport and contextual understanding, but it may also encourage assumptions about shared experiences or influence participants’ responses. The researcher’s prior experience therefore provided valuable contextual insight while requiring critical reflection on how personal expectations might shape the research process.

Reflexivity on the other hand was addressed by critically examining prior assumptions about administrative work and knowledge sharing, comparing participants’ accounts rather than treating individual experiences as representative of the institution, and grounding interpretations in the

questionnaire responses and interview data. Particular attention was given to identifying areas of convergence and divergence between participants' experiences and the researcher's prior understanding which helped ensure that interpretations reflected the empirical material rather than being based primarily on personal experience. By acknowledging the researcher's institutional familiarity and considering its potential influence on interpretation, the study seeks to maintain transparency and strengthen the credibility of its findings.

5.6 Ethical Considerations

This study was conducted in accordance with ethical principles governing research involving human participants, with particular attention to informed consent, voluntary participation, confidentiality and the protection of participants' identities. These principles informed the research design and data collection procedures, ensuring that participants were adequately informed about the study and that their rights and interests were respected throughout the research process. Before participation, individuals received a participant information sheet explaining the purpose of the research and the nature of their involvement and written informed consent was obtained before each data collection activity (Nii Laryeafio & Ogbewe, 2023). Participation was voluntary, and no participant was pressured or incentivized to take part. Given the researcher's previous professional relationship with some participants at Nnamdi Azikiwe University (NAU), particular attention was paid to the possibility that these relationships could influence participants' willingness to participate or express their views openly. Confidentiality was maintained by assigning pseudonyms to participants and excluding identifying information from the presentation of findings (Maldonado-Castellanos & Mondragon Barrios, 2023). Contextual details that could reasonably enable participants to be identified through their institutional roles or interview accounts were avoided, and for online data collection, participants were informed of relevant limitations concerning platform data security and offered alternative methods where concerns were expressed.

6. Results

6.1 Presentation of Phase One Quantitative Analysis | N = 17 Respondents

This report presents the full quantitative descriptive analysis of Phase One questionnaire data. It is organized across six sections: participant profile, platform use, Likert-scale analysis by sub-section, open-ended responses, interview candidate selection, and a summary of key patterns with theoretical framework connections and interview implications.

Table 1

Participant Profile

ID	Role	Department	Yrs	Onboarding
1	Admin Officer	Igbo Village/IVACAC	6	Informal
2	Sr. Asst. Registrar	Faculty of Arts	12	Informal
3	Admin Officer	Students' Affairs	6	Informal
4	Admin Assistant	Directorate	6	Formal
5	Asst. Registrar	Igbo Village Directorate	7	Informal
6	Admin Assistant	Administrative Dept	6	Formal
7	Admin Staff	Fac. Environmental Sci.	9	Informal
8	Admin Assistance	IVACAC Directorate	6	None
9	Civil Servant	Personnel Unit	7	Informal
10	Admin Officer	Faculty of Arts	8	Informal
11	Research Assistant	Electrical Engineering	4	None
12	Research Assistant	Electrical Engineering	3	Informal
13	Admin Officer	Fac. Social Sciences	8	Formal
14	Lab Technologist	Faculty of Engineering	12	Informal
15	Executive Assistant	Fac. Management Sci.	5	None
16	Clerical Officer	Faculty of Arts	2	None
17	Departmental Secretary	Faculty of Science	15	Formal

Of the 17 respondents, 4 (23.5%) received formal structured onboarding (Respondents 4, 6, 13, 17); 9 (53%) describe informal, unstructured onboarding; and 4 (23.5%) received no formal onboarding at all (Respondents 8, 11, 15, 16). Combined, 76.5% of respondents experienced inadequate or absent onboarding support. Years of service range from 2 to 15, with the majority (11 of 17) between 5 and 9 years. Thirteen of 17 (76.5%) were employed at NAU during or after 2019.

Table 2

Digital Platform Use

Platform	**N**	**%**
WhatsApp	15	88.2%
Email	11	64.7%
CIRMS	11	64.7%
Zoom	6	35.3%
Google Meet	4	23.5%

Frequency	**N**	**%**
Daily	13	76.5%
Several times/week	2	11.8%
Once a week	1	5.9%
Not answered	1	5.9%

Purpose	**N**	**%**
Formal instructions/directives	15	88.2%
Informal guidance from colleagues	11	64.7%
Sharing documents/templates	14	82.4%
Informal learning of NAU practices	9	52.9%
Admin documentation/record-keeping	9	52.9%

WhatsApp is the dominant platform (88.2%), used almost universally alongside email and CIRMS (each 64.7%). Most respondents (76.5%) engage with digital platforms daily. Notably, informal guidance-seeking (64.7%) and informal learning (52.9%) exist as a purpose for platform use, however, formal communication (88.2%) remains the single most common purpose.

6.1.1 Likert-Scale Findings (N=17)

Scale: 1=Strongly Disagree to 5=Strongly Agree.

Table 3

Platform Effectiveness for Tacit Knowledge Transfer (C1)

Item	Agree/SA	Neutral	Dis/SD	Mean
C1.1	82%	6%	12%	3.82
C1.2	65%	18%	18%	3.59
C1.3	76%	18%	6%	3.94
C1.4	53%	35%	12%	3.47
C1.5	59%	18%	24%	3.35

Accessing informal knowledge from experienced colleagues (C1.3) is the strongest item in this sub-scale (76% agree/strongly agree, mean 3.94). Informal guidance accessibility (C1.1) is similarly high (82%, mean 3.82). CIRMS effectiveness (C1.5) is more divided (59% agree, mean 3.35), and equivalence of platform versus face-to-face knowledge (C1.4) is the weakest item (53% agree, mean 3.47). Respondent 7 disagrees or strongly disagrees across all five items, the clearest outlier in the dataset.

Table 4

Onboarding and Early-Stage Learning (C2)

Item	Agree/SA	Neutral	Dis/SD	Mean
C2.1	35%	29%	35%	2.88
C2.2	71%	12%	18%	3.59
C2.3	24%	29%	47%	2.71
C2.4	41%	12%	47%	3.06

C2.2 (trial-and-error) is the highest-agreement item in the entire questionnaire: 71% agree or strongly agree that they had to figure out how their job works without formal training or digital support (mean 3.59). C2.4 (network-dependence) shows strong agreement (41%, mean 3.06), and C2.3 (adequate access for new staff) is the most negatively rated item on this sub-scale (24% agree, 47% disagree, mean 2.71). C2.1 (platform support at joining) is similarly low (35% agree, mean 2.88).

Table 5

Brain Drain and Knowledge Loss (C3)

Item	Agree/SA	Neutral	Dis/SD	Mean
C3.1	53%	12%	35%	3.24
C3.2	41%	6%	53%	2.88
C3.3	71%	12%	18%	3.59
C3.4	47%	24%	29%	3.18

C3.2 is the most decisive negative finding overall: 53% disagree that NAU has effective systems for preserving institutional knowledge (mean 2.88). C3.1 (irreplaceable knowledge loss on departure) shows majority agreement (53%, mean 3.24), as does C3.3 (platforms help retain institutional knowledge, 71%, mean 3.59), a striking contrast suggesting staff see unrealized potential in existing platforms even as they judge NAU's actual preservation systems inadequate. C3.4 (personal experience of knowledge loss) is more evenly split (47% agree, mean 3.18).

Table 6

Organizational Culture and Equity (C4)

Item	Agree/SA	Neutral	Dis/SD	Mean
C4.1	82%	12%	6%	3.82
C4.2	76%	12%	12%	3.76
C4.3	71%	18%	12%	3.65
C4.4	76%	12%	12%	3.76
C4.5	56%	25%	19%	3.50

C4.1 (culture encourages sharing) is strongly positive (82%, mean 3.82), as is C4.3 (comfort asking questions, 71%, mean 3.65) and C4.4 (connectivity as barrier, 76%, mean 3.76). C4.2 (senior staff have greater access) shows strong agreement (76%, mean 3.76), confirming an equity gap. C4.5 (unspoken rules about sharing) is more moderate (56% of 16 valid responses, mean 3.50).

6.1.2 Open-Ended Responses

Table 7

Situations Needing Informal Knowledge (D1)

ID	Summary
1	Meeting minutes — no findable template
2	Tracing mail for blind student — tagged senior colleague
4	States no such situation has occurred yet
5	Digital appraisal confusion — resolved by asking a colleague
6	Needed to upload info — asked senior staff member
7	Would go to the office and check physically
9	Colleague travelled abroad — shared repository eased handover
10	Annual conference committee — no documented precedent, relied on colleagues
11	Undocumented lab equipment configuration — consulted a more experienced colleague
12	Lab equipment setup not in manual — consulted senior colleague
13	Administrative process unclear — colleague explained the procedure
14	Lab instrument fault undocumented — contacted former colleague, searched online
15	Correspondence routing steps not formally taught — learned from senior colleagues
16	Admin process unclear at resumption — colleague guided via WhatsApp
17	Procedure changed, instructions outdated — contacted another department

In virtually every substantive response, staff describe turning to a human colleague rather than a digital system when formal documentation failed to meet their needs. Respondent 9's case, in which a departing colleague's documents were already stored in a shared repository, is the only account of a digital system successfully preserving knowledge across a staff departure.

Table 8

Biggest Barrier to Knowledge Sharing (D2) Thematic Grouping

Theme	Respondents	N
Infrastructure (internet/electricity/network)	1,2,4,5,10	5
Absence of centralized knowledge platform	11,12,13	3
Knowledge hoarding/siloing among staff	13,17	2
Individual staff as sole knowledge holders	15	1
Digital illiteracy	9	1
Communication/administrator attitude	6	1
New staff unsure who to approach	16	1
Lack of time/motivation to document	14	1

Infrastructure remains the most cited barrier (5 of 15 substantive responses), closely followed by the absence of a centralized knowledge-sharing platform (3 of 15), raised specifically by research and administrative staff in technically oriented roles.

Table 9

Recommended Practical Change (D3) Thematic Grouping

Theme	Respondents	N
Centralized digital knowledge-sharing platform	5,11,12,13,14,15,16	7
Improve internet/infrastructure	2,4,10	3
Digital training for staff	4,9	2
Proactive workshops	1	1
Delegation and trust in new staff	10	1
Administrator's attitude change	6	1
Regular review/maintenance of resources	17	1

A centralized digital knowledge-sharing platform is by far the most frequently recommended change, cited independently by 7 of 17 respondents (41.2%), the strongest single consensus finding in the entire dataset.

Table 10

Interview Candidate Selection (Phase Two, N=5)

ID	Willing to be interviewed?
1	Yes
3	Yes
8	Yes
10	Yes
11	Yes
12	Yes
13	Yes
15	Yes

Contact details for all respondents are held separately in a password-protected contact log accessible only to the researcher, consistent with anonymity commitments in Chapter 4. This report and all analysis documents refer to participants only by their sequential numeric identifier. Given the target of 5 Phase Two interviews, the following respondents are selected to maximize variation in onboarding experience, department, and thematic richness: Respondent 8 (no formal onboarding, richest account of infrastructure barriers); Respondent 15 (no formal onboarding, strong network-dependence and centralized-platform recommendation); Respondent 13 (formal onboarding, knowledge-hoarding insight, contrasting case); Respondent 11 (informal onboarding, detailed account of undocumented technical knowledge and platform-absence barrier); and Respondent 10 (informal onboarding, rich account of institutional precedent-seeking and delegation recommendation).

6.1.3 Summary of Key Findings

First, platforms are used daily (76.5%) primarily for formal communication (88.2%), though informal guidance-seeking (64.7%) is notably higher. Second, trial-and-error remains the strongest single finding overall (C2.2, 71% agreement, mean 3.59). Third, new staff access to informal knowledge through platforms is rated poorly (C2.3, mean 2.71), the most negative item on the onboarding sub-scale. Fourth, NAU is judged to lack effective knowledge preservation systems (C3.2, 53% disagree, mean 2.88), even though platforms themselves are seen as having unrealized preservation potential (C3.3, 71% agree). Fifth, culture and personal comfort with platforms are rated positively (C4.1, C4.3, 82% and 71% respectively), while a clear equity gap between senior and junior staff access is acknowledged (C4.2, 76%). Sixth, a centralized digital knowledge-sharing platform is the dominant unprompted recommendation, raised independently by 41.2% of respondents.

6.2 Presentation of Phase Two Qualitative Analysis | N = 5 Respondents

This chapter presents the findings generated through semi-structured interviews conducted with five purposively selected administrative and technical support staff at Nnamdi Azikiwe University (NAU). Interviews were selected to maximize variation in onboarding experience (none, informal, and formal), department, and thematic richness, consistent with the sampling rationale set out in Chapter 5. All participants are identified only by their numeric respondent identifier; no names, contact details, or other identifying information appear anywhere in this chapter.

Table 11

Participant Overview

ID	Role	Department	Years	Onboarding	Selection Rationale
R8	Admin Assistance	IVACAC Directorate	6	None	Richest account of infrastructure barriers
R15	Executive Assistant	Fac. Management Sciences	5	None	Network-dependence, centralized platform need
R13	Admin Officer	Fac. Social Sciences	8	Formal	Knowledge siloing, contrast with informal/none group
R11	Research Assistant	Electrical Engineering	4	None	Undocumented technical knowledge
R10	Admin Officer	Faculty of Arts	8	Informal	Institutional precedent-seeking, delegation

The sample deliberately spans all three onboarding categories identified in the Phase One questionnaire: no formal onboarding (R8, R15, R11), informal onboarding (R10), and formal onboarding (R13). This allows the interview data to test whether formal onboarding meaningfully changes how staff experience tacit knowledge access, a question the questionnaire data alone could not resolve.

6.2.1 Thematic Findings

Analysis of the five transcripts, following Braun and Clarke's (2006) six-phase approach, generated five recurring themes. Each theme is presented with supporting evidence drawn from at least two participants, and variation within each theme is explicitly noted.

Theme 1: Platforms Connect People, But Knowledge Itself Comes From the Person, Not the Platform

Through all five interviews, participants consistently described digital platforms, especially WhatsApp, as a means of reaching an experienced colleague quickly, rather than as a source of knowledge in themselves. The platform's value lay in facilitating access to a person who held the knowledge, not in storing or transmitting that knowledge independently.

> *"If I am not sure how something should be done, I can ask someone directly or ask in a work group. So, the platform helps, but the important part is still the person who has the experience." (R8)*

> *"The platform makes the connection quicker. It is especially useful when you don't need formal instruction but just need somebody to tell you, 'This is how we normally handle this." (R15)*

R11 offered a near-identical account from a technical context: consulting an experienced colleague through WhatsApp about equipment configuration *"made it possible to ask the person and get guidance, but the actual knowledge came from their experience" (R11)*. This pattern was unbroken across the sample, including R13, whose formal onboarding did not appear to change this reliance: *"you can learn from discussions that happen in groups because someone asks a question and another person explains what should be done".*

Theme 2: New Staff Learn Largely Through Trial, Error, and Repeated Asking, Regardless of Onboarding Status

Four of five participants described learning their roles primarily through informal, unstructured means, even the one participant (R13) who received formal onboarding.

> *"When I joined, there was no formal program that took me through everything I needed to know. I learned gradually by asking people and observing how things were done." (R8)*

> *"I did not receive a formal onboarding program; I learned from people around me and by doing the work. There were things I had to ask about several times before I became comfortable." (R15)*

> *"Sometimes you try something, see that it does not work, and then ask someone." (R11)*

R13's account complicates a simple onboarding-versus-no-onboarding narrative: *"My onboarding was more structured than what some colleagues experienced. I had formal guidance, but even with that, there were practical aspects of the job that I learned later through colleagues".* This suggests formal onboarding addressed procedural knowledge but did not substitute for the informal, relational learning that all five participants described as necessary.

Theme 3: Access to Tacit Knowledge Depends on Who You Know, Not on Platform Membership

A striking and consistent finding across the sample is that participants distinguish between having access to a platform and having access to the knowledge that flows through it.

> *"Being in a WhatsApp group does not automatically mean you have access to the knowledge." (R8)*

> *"I think access depends a lot on who you know. If you have a good relationship with people who have experience, you can get information quickly so someone else may be doing the same job but not have those connections." (R15)*

> *"If you know the person who has dealt with the problem before, you can solve it faster. If you don't know them, you may spend much more time searching." (R11)*

R10 extended this into a specific institutional example by describing an annual conference committee where undocumented precedent meant that *"a new staff member who knows who to approach will probably settle faster. Someone who does not know the right people may struggle even if the information exists somewhere" (R10)*. R13, the formally onboarded participant, agreed: *"I don't think access is completely equal. Senior staff often know the background of processes and have established relationships. New staff have to build those relationships over time" (R13)*.

Theme 4: Institutional Knowledge Is Lost When Experienced Staff Leave, and Current Platforms Do Little to Prevent It

All five participants described a meaningful risk of knowledge loss upon staff departure, and each independently identified the same underlying reason: knowledge that is never documented or deliberately captured has nowhere to go when its holder leaves.

> *"When someone who has been doing a particular job for many years leaves, there can be a problem because that person may know many things that are not written down. Sometimes you only discover that after the person has left." (R8)*

> *"When experienced staff leave, you can lose information that nobody realized was important until afterwards. The person may have known the history behind certain decisions or the best way to handle particular situations." (R15)*

> *"If an experienced technical person leaves, there is a risk because they may know how to solve problems that have never been properly documented." (R11)*

R10 offered the clearest first-hand account of this risk materializing and being addressed reactively: *"someone may know the history of an annual event and the small details that make it work. If that person leaves without handing it over, the next committee has to start asking questions again" (R10)*. Regarding platforms' capacity to prevent this, participants were consistent in distinguishing between communication and preservation: *"WhatsApp conversations can disappear among many messages. A proper system where procedures, examples and explanations are stored would be better" (R8).* R13 made the same distinction from a formal systems perspective: *"CIRMS and other digital systems can preserve formal information, but they do not necessarily preserve the explanation behind the information" (R13).*

Theme 5: Near-Universal Demand for a Centralized Institutional Knowledge Platform

Every one of the five participants, independently and without prompting a specific solution, proposed the same institutional remedy: a searchable, centralized digital repository for procedures, templates, and practical guidance, distinct from the communication platforms currently in use.

> *"I would recommend a central digital knowledge platform where important procedures, templates, previous examples and explanations are stored. It should be searchable and regularly updated." (R8)*

> *"The most important change would be a central knowledge-sharing platform. It should contain procedures, templates, FAQs, examples and maybe a directory showing who is responsible for particular processes." (R15)*

> *"I would create a searchable institutional knowledge platform. It should allow staff to upload procedures, experiences, templates and useful explanations." (R11)*

R13 and R10 arrived at compatible but distinct variations of the same recommendation. R13 emphasized institutional and departmental responsibility for documentation: *"Each department could identify important processes and make sure the relevant knowledge is documented and updated" (R13)*. R10 emphasized process-level documentation tied to task completion: *"Departments should*

document recurring activities after they are completed and delegation should be a priority so that new staff are given opportunities to learn rather than simply being told what to do" (R10). The convergence of five independently selected participants on the same core recommendation, despite differing roles, departments, and onboarding experiences, is among the most robust findings in this study.

6.2.2 Cross-Case Observations

One contrasting observation in this study pertains to the formal onboarding contrast involving R13; R13 is the only participant among the five who received formal onboarding, and their account offers an important point of comparison. Formal onboarding appears to have addressed explicit, procedural knowledge but did not eliminate reliance on informal, relational channels for practical or tacit knowledge, nor did it produce a meaningfully different perception of platform effectiveness or organizational equity. R13 additionally introduced a theme not raised by other participants: knowledge siloing, describing how *"people keep knowledge within their own areas"* and how sharing *"may share within their immediate unit but not necessarily across the wider institution" (R13)*. This suggests that formal onboarding, at least as currently practiced at NAU, addresses initial entries but does not resolve the structural fragmentation of knowledge across departments.

However, regarding organizational culture, patterns that emerge show that knowledge sharing is supportive in principle yet constrained by hierarchy. All five participants described NAU's culture as broadly willing to help, while simultaneously identifying hierarchy as a constraint on who feels comfortable asking questions. R8 noted hesitating *"before asking a senior person something you think you should already know".* R10 observed that *"junior staff may not always feel confident questioning senior colleagues"*, and R15 similarly noted that a junior colleague *"may feel more comfortable asking a colleague at the same level than putting a question into a large group".* This pattern was consistent regardless of onboarding status or department.

Also, a conceptual distinction recurred across the sample, between platforms as tools for communication, and platforms as mechanisms for knowledge preservation. Participants consistently judged existing NAU platforms, WhatsApp, email, and CIRMS, as adequate for the former but inadequate for the latter. R8 summarized this directly: *"having technology does not automatically mean knowledge is preserved. Someone has to make sure that the knowledge people have is actually captured"*. R13 articulated the same distinction using different language: *"the important distinction is between storing information and preserving knowledge. A record may exist, but that does not mean a new staff member understands what to do with it".*

6.2.3 Summary of Interview Findings

Table 12

Summary of interview findings

Table 12 summarizes the five themes generated from the interview data, indicating the number of participants (of five) whose accounts directly evidenced each theme.

Theme	Participants Evidencing Theme	N/5
1. Platforms connect people; knowledge resides in the person	R8, R15, R11, R13, R10	5/5
2. Learning occurs through trial, error, and repeated asking	R8, R15, R11, R13 (partial)	4/5
3. Access depends on relationships, not platform membership	R8, R15, R11, R13, R10	5/5
4. Knowledge loss on staff departure; platforms do not prevent it	R8, R15, R11, R13, R10	5/5
5. Demand for a centralized knowledge repository	R8, R15, R11, R13, R10	5/5

Four of the five themes achieved full consensus across the sample (5 of 5 participants), and the fifth achieved near-consensus. Given these findings across only five interviews, combined with the earlier findings identified in the Phase One questionnaire, thematic saturation was substantially reached within this sample, though the small number of interviews and the researcher's insider positionality are acknowledged as limitations addressed in Chapter 5. These findings are interpreted in relation to the SECI model, Sociomateriality Theory, and Ipe's Knowledge Sharing Framework in Chapter 7.

7. Discussion

The discussion draws jointly on the Phase One questionnaire findings (N=17) and the Phase Two interview findings (N=5), treating the two datasets as complementary evidence within the study's sequential explanatory design, and organizes the interpretation in relation to the research questions in Chapter 2 and the study`s three theoretical frameworks: the SECI model (Nonaka and Takeuchi, 1995), Sociomateriality Theory (Orlikowski, 2002; Orlikowski and Scott, 2023), and Ipe's Knowledge Sharing Framework (Ipe, 2003; Alves and Pinheiro, 2022; Phaladi and Ngulube, 2022) established in chapter 4.

7.1 Interpretation of Results

RQ1: How Do Digital Platforms Support Tacit Knowledge Transfer Among Administrative Staff?

RQ1, and its associated Objective 1 (to explore how administrative staff engage with digital platforms as part of their tacit knowledge-sharing practices) findings suggest that digital platforms operate as relational bridges indicating that the most important contribution of these platforms is not that they contain tacit knowledge, but that they reduce the distance between the person seeking knowledge and the person who possesses relevant experience. In Phase One, WhatsApp was the most widely used platform (88.2%), while Email and CIRMS were each used by 64.7% of respondents. Digital platforms were used daily by 76.5%, and their purposes extended beyond formal communication: 64.7% reported using them for informal guidance and 52.9% for informal learning of NAU practices. More importantly, access to informal knowledge from experienced colleagues was one of the strongest-rated items in the questionnaire (76% agreement/strong agreement; mean = 3.94). All five Phase two participants described a consistent pattern: the platform, principally WhatsApp, is not itself a repository of tacit knowledge but a channel through which a knowledgeable colleague can be reached quickly. R8 stated this with clarity: the platform *"helps, but the important part is still the person who has the experience"*. R11 offered a near-identical formulation in a technical context, explaining that consulting a colleague about equipment configuration *"made it possible to ask the person and get guidance, but the actual knowledge came from their experience"*. Suggesting that platforms are used daily and are perceived as reasonably effective for accessing colleagues' knowledge (C1.3, 76% agree, mean 3.94), yet this effectiveness is contingent entirely on the platform's capacity to connect the seeker to the right person, not on any inherent capacity of the platform to store or transmit tacit knowledge independently. This is directly consistent with the SECI model's prediction that digital platforms readily support the Combination mode, in which existing explicit knowledge is reorganized and systematized, but are considerably weaker at supporting

Socialization, the direct, experience-based transfer of tacit knowledge between individuals (Nonaka and Takeuchi, 1995). The remaining SECI modes further illuminate the partial and uneven nature of digitized knowledge conversion at NAU. Externalization was evident when experience was articulated as explanation, example, template, or document; R10's account of the annual conference is particularly instructive, as practical knowledge initially depended entirely on experienced colleagues before the participant created a document so that future staff would not need to rely on the same individuals, illustrating a genuine movement from tacit experience toward explicit organizational knowledge. Combination, by contrast, was more closely associated with systems such as CIRMS and shared repositories, where existing explicit information could be stored, organized, and retrieved; yet the questionnaire and interview findings suggest these systems preserve formal records more effectively than the experiential explanations surrounding them. R13 captured this distinction precisely, observing that *"a record may exist without providing the explanation a new employee needs to understand how to act"*, meaning the combination stage is constrained when the material being combined is already incomplete. Finally, internalization, the process through which employees apply what they have learned to develop working competence, appeared to occur largely through unstructured trial-and-error rather than a deliberately designed knowledge cycle, as evidenced by the high levels of self-directed learning reported in Phase One. These findings suggest that digital platforms at NAU support a partially functioning knowledge-conversion process: socialization and externalization occur meaningfully through interpersonal digital practices, but the movement of this knowledge into durable, accessible organizational memory remains inconsistently achieved, leaving the institution reliant on individual relationships rather than systematized structures for tacit knowledge continuity.

RQ2: How Do Administrative Staff, Particularly Those in Onboarding and Early-Stage Roles, Experience and Navigate Tacit Knowledge Sharing Through Digital Platforms?

RQ2 concerns how staff, particularly those in onboarding and early-stage roles, experience and navigate tacit knowledge sharing. In the phase one findings, 71% of respondents agreed or strongly agreed that they had to learn how their job works through trial and error rather than through formal training or digital support (C2.2, mean 3.59), the highest-agreement item across the entire onboarding sub-scale. Correspondingly, the section asking whether new staff have adequate access to informal knowledge through platforms (C2.3) was the most negatively rated item in its sub-scale (24% agree, 47% disagree, mean 2.71), and the item asking whether platforms helped respondents learn informal practices when they joined (C2.1) was similarly low (35% agree, mean 2.88). Read through Ipe's framework, this is a clear deficit in organizational opportunity: the structural mechanisms through which tacit knowledge might be deliberately shared with new staff are largely absent, leaving

individual motivation and relational goodwill to quietly do the work the institution has not designed for.

Three of the five interview participants, R8, R15, and R11, received no formal onboarding whatsoever, and each independently described a strikingly similar process of unaided, incremental learning. R8 *"learned gradually by asking people and observing how things were done"*; R15 *"learned from people around me and by doing the work,"* needing to *"ask about several times before I became comfortable"*; and R11 described a cycle of trial, failure, and subsequent inquiry: *"you try something, see that it does not work, and then ask someone"*, an empirical confirmation of Brown and Duguid's (1991) claim that employees' actual work practices, and the ways they learn those practices, diverge systematically from formal organizational descriptions of that work, a claim developed from Western corporate ethnography but reproduced with near-identical texture in a Nigerian public university administrative context three decades later. Objective 1 asked specifically about the onboarding and early-stage experience, and the most theoretically significant finding here is R13's account, the only interview participant who received formal onboarding. R13 reported that formal guidance addressed the procedural basics of the role but did not eliminate the need for informal, colleague-mediated learning: *"I had formal guidance, but even with that, there were practical aspects of the job that I learned later through colleagues"* suggesting that formal onboarding at NAU operates mainly at the level of Externalization and Combination, handing new staff documented, systematized information, without meaningfully accelerating Socialization or Internalization, the modes through which tacit knowledge actually becomes working competence. Even with a structured start, R13 walked the same informal path as colleagues who had no onboarding at all, suggesting that current onboarding addresses only one part of the SECI cycle and leaves the harder, more experiential part to chance. This finding is consistent with Van Houten's (2023) argument that professional tacit knowledge is transferred through reflection, storytelling, mentorship, and sustained collegial engagement, processes that formal training programs, however well designed, cannot fully substitute for, because tacit knowledge, following Polanyi (1966), resists complete articulation in advance of it being needed.

RQ3: To What Extent Do Platform Affordances and Organizational Conditions Enable or Constrain Tacit Knowledge Transfer, and How Do These Dynamics Vary Across Staff Roles?

One of the strongest findings concerning RQ3 is that access to tacit knowledge remains socially uneven despite a generally supportive knowledge-sharing culture. Phase One data show that 82% of respondents agreed that NAU's culture encourages informal knowledge sharing (C4.1, M = 3.82), while 71% reported feeling comfortable seeking guidance through digital platforms (C4.3, M = 3.65). At the same time, 76% agreed that senior staff have greater access to informal knowledge through

digital platforms (C4.2, M = 3.76). The phase two data help resolve this apparent tension. Participants consistently indicated that platform membership does not guarantee knowledge access because tacit knowledge remains embedded in interpersonal relationships. R8 observed that *"Being in a WhatsApp group does not automatically mean you have access to the knowledge,"* while R15 stated that *"Access depends a lot on who you know."* Similarly, R11 noted that not knowing the appropriate person can result in considerably more time spent searching for solutions. R10 illustrated this through committee work, explaining that new staff who know whom to approach may settle more quickly, whereas those without such relationships may struggle even when relevant information exists. R13 similarly noted that senior staff possess established relationships and background knowledge that new employees must gradually develop.

Ipe's (2003) framework helps explain these findings through the interconnected conditions of the nature of knowledge, motivation, opportunity, and organizational culture. Much of the knowledge participants required was contextual and experience based such as handling unusual administrative cases, organizing recurring events, or identifying whom to approach when formal procedures were insufficient. Such knowledge is inherently personal, contextual, and relational (Polanyi, 1966; Nonaka & Takeuchi, 1995), making it difficult to transfer through standardized digital channels alone. Although WhatsApp, email, and CIRMS create opportunities for interaction and information exchange, these opportunities remain fragmented: guidance may occur privately, useful documents may remain in individual inboxes, and valuable WhatsApp exchanges may become difficult to retrieve. Thus, opportunity exists at the interpersonal level without necessarily becoming an institutional opportunity accessible to others.

The findings further indicate that motivation and culture mediate these opportunities. Staff generally appear willing to assist colleagues, yet hierarchy can influence who feels comfortable asking questions. R8 and R10 both described hesitation among junior staff when approaching senior colleagues, while R15 noted that *"staff may feel more comfortable seeking help from peers than raising questions in larger groups"*. Consequently, a supportive organizational culture does not automatically produce equitable knowledge access. The central issue is therefore not simply whether staff are willing to share, but whether organizational relationships, hierarchies, and platform practices enable all employees to access and contribute to the experience-based knowledge on which effective work depends.

A further and highly consistent finding concerns infrastructure. The questionnaire found strong agreement that connectivity issues limit platform use for knowledge sharing (C4.4, 76% agree, mean 3.76), and the open-ended responses identified infrastructure as the single most frequently cited barrier to knowledge sharing, raised by five of the fifteen substantive D2 responses. This reinforces

Phaladi and Ngulube's (2022) contribution that effective knowledge management within African public-sector requires attention to individual, organizational and structural dimensions simultaneously. At the individual level, employees possess experience-based knowledge and differ in their networks and confidence, at the organizational level, onboarding practices, hierarchy, culture and departmental structures influence sharing and at the structural level, infrastructure and institutional systems shape the material conditions under which knowledge can be accessed and preserved. Thus: If employees are willing to share but consistently meet unreliable infrastructure, knowledge transfer is constrained, if infrastructure is strong, but employees do not trust or feel comfortable approaching colleagues, transfer may still be limited and if communication is effective but there is no mechanism for capturing recurring knowledge, the institution may remain vulnerable to knowledge loss suggesting that the conditions enabling tacit knowledge transfer must be considered as an interconnected system. It also corroborates Egielewa et al.'s (2022) finding that Nigerian universities adopted digital platforms rapidly during the COVID-19 period without the accompanying infrastructural investment, connectivity, digital literacy training, and institutional support, necessary to realize their knowledge-sharing potential. This is a critical qualification for Objective 4: any recommendation regarding platform redesign or a centralized knowledge repository must be read alongside this infrastructural precondition, since, as Leonardi (2017) cautions, the knowledge-sharing potential of a digital platform is never self-executing but depends on the adequacy of the conditions: technical and organizational, surrounding its use.

Also a key contradiction in the Phase One findings emerges between respondents' assessment of NAU's current knowledge-preservation systems and their perception of digital platforms' potential. While 53% disagreed that NAU has effective systems for preserving institutional knowledge (C3.2, mean = 2.88), 71% agreed that digital platforms can help retain knowledge when staff leave (C3.3, mean = 3.59) suggesting that respondents distinguish between current institutional practice and unrealised technological potential. The interview findings reinforce this distinction as R8 noted that WhatsApp conversations *"can disappear among many messages"* and suggested a dedicated system for storing procedures and explanations, while R13 observed that CIRMS and other digital systems can preserve formal information without necessarily preserving the contextual explanations behind it. This finding supports Daghfous et al. (2023), who argue that knowledge loss often reflects inadequate organizational mechanisms for identifying, capturing and transferring knowledge held by departing employees. Similarly, DeLong (2004) emphasizes that the challenge is not necessarily technological absence but the lack of systematic organizational approaches to knowledge retention. At NAU, R15 illustrated this vulnerability by explaining that experienced employees may leave behind undocumented institutional history and practical knowledge, while R10 described situations where successors must reconstruct knowledge when effective handover has not occurred. Thus, the

findings reveal a gap between platform capability and organizational practice: digital technologies possess potential to support institutional knowledge continuity, but their effectiveness depends on deliberate processes for capturing, organizing and contextualizing experience-based knowledge. This gap provides a direct basis for Objective 4, which focuses on developing evidence-informed recommendations for more sustainable and inclusive tacit knowledge transfer.

7.2 Contextualizing Findings Within Literature

The findings of this study both support and qualify existing scholarship on tacit knowledge, organizational learning and digitally mediated knowledge transfer. Polanyi's (1966) distinction between tacit and explicit knowledge alongside Ambrosini and Bowman's (2001) characterization of tacit knowledge is particularly relevant to the experiences reported by participants, who described procedural exceptions and professional judgements that were difficult to document fully, suggesting that administrative knowledge extends beyond formal procedures to include contextual understanding developed through experience and interpersonal interaction. Consequently, the availability of documented information does not necessarily ensure that employees can reproduce the practical judgement required to navigate unfamiliar situations. This distinction also provides a basis for interpreting the findings through Nonaka and Takeuchi's (1995) SECI model. The results broadly support the model's distinction between processes of knowledge conversion, suggesting that digital platforms facilitate the exchange and organization of explicit information more readily than the transfer and preservation of experience-based understanding. However, the NAU case adds an important qualification: digital platforms can function as relational bridges through which employees access colleagues who possess relevant expertise, even when the knowledge exchanged is not systematically captured, reinforcing the importance of organizational knowledge highlighted by Drucker (1993) and Argote (2013). In the questionnaire, 53% of respondents agreed that knowledge was lost when experienced staff left the institution, indicating a perceived risk to institutional continuity. Szulanski's (1996) discussion of barriers to knowledge transfer further illuminates this problem: the difficulty of articulating experience-based knowledge, alongside the importance of relationships between knowledge holders and recipients, is reflected in participants' accounts. R11's and R12's descriptions of undocumented laboratory equipment configurations illustrate the challenges of making practical knowledge explicit, while R15's observation that access depends on *"who you know"* highlights the influence of professional relationships. Although participants generally perceived the organizational culture as supportive of knowledge sharing, these findings suggest that motivation alone may not overcome barriers associated with knowledge articulation and unequal access.

The relationship between technology and knowledge transfer becomes clearer when the findings are considered alongside scholarship on digital affordances and sociomateriality. Selwyn's (2014) discussion of how digital technologies enable some forms of communication while constraining others is relevant to the reported differences between formal communication and informal learning. Although 88.2% of respondents reported using digital platforms for formal instructions, 52.9% reported using them to learn informal institutional practices. These figures suggest that the platforms were used for both purposes, but formal communication was more commonly reported. The contrast between WhatsApp and the Computerized Information and Records Management System (CIRMS) further illustrates that immediate interaction and institutional information management do not necessarily fulfil the same function. Participants described WhatsApp as useful for obtaining guidance from experienced colleagues, whereas CIRMS was not consistently perceived as sufficient for preserving explanatory knowledge. This distinction aligns with Castaneda and Toulson's (2021) emphasis on dialogue in knowledge transfer and Majchrzak et al.'s (2013) argument that technological affordances depend on how they are enacted in practice. It also resonates with Van Houten's (2023) emphasis on interpersonal engagement in the sharing of professional knowledge.

These findings also qualify Ipe's (2003) framework, which identifies the nature of knowledge, individual motivation, opportunities for sharing and organizational culture as interrelated influences on knowledge sharing. The study supports the relevance of these dimensions, particularly the difficulty of communicating tacit knowledge and the importance of opportunities for interaction. However, the findings suggest that the practical accessibility of those opportunities deserves particular attention as a culture that encourages knowledge sharing may coexist with unequal access when employees rely on informal networks to obtain guidance. This interpretation is consistent with Alves and Pinheiro's (2022) emphasis on interpersonal conditions in higher education, while Phaladi and Ngulube's (2022) work provides a relevant point of comparison for considering knowledge vulnerability in African public institutions. Akinwale et al.'s (2023) discussion of staff mobility in Nigeria further situates the findings within wider concerns about the potential loss of institutional expertise when employees leave.

8. Conclusion

This study examined how digital platforms support tacit knowledge transfer among administrative staff at Nnamdi Azikiwe University (NAU), Nigeria, focusing on onboarding, workplace learning and institutional knowledge continuity. Using an explanatory sequential mixed-methods design, it analyzed questionnaire responses from 17 administrative staff and semi-structured interviews with five purposively selected participants. The findings indicate that digital platforms facilitate access to experienced colleagues and support the exchange of experience-based guidance. However, the knowledge shared through these interactions does not necessarily become accessible beyond individual relationships or remain available when employees leave or change roles. The study therefore distinguishes digital connectivity from institutional knowledge continuity: the ability to connect employees and exchange information does not ensure that institutional knowledge is retained.

This distinction is shaped by organizational and infrastructural conditions: Limited formal onboarding, reliance on trial-and-error learning, unequal access to experienced colleagues and connectivity problems influence how staff acquire and apply administrative knowledge. Although participants generally perceived the organizational culture as supportive of knowledge sharing, this did not necessarily translate into equitable access or systematic preservation. Theoretically, integrating the SECI model, sociomateriality and Ipe's knowledge-sharing framework enabled the study to examine knowledge-conversion processes alongside the technological practices and organizational conditions shaping them. The findings suggest that access to experience-based knowledge depends not only on platform availability but also on professional relationships and opportunities to engage with knowledgeable colleagues. Thus, providing a contextually grounded contribution to understanding digitally mediated knowledge sharing within an underrepresented institutional setting. Practically, the findings point to the need for structured onboarding, mentoring, formal handover procedures, reliable digital infrastructure and a maintained centralized knowledge repository. As R8 observed, *"having technology does not automatically mean knowledge is preserved. Someone has to make sure that the knowledge people have is captured"*. This captures the study's central implication: preserving institutional knowledge requires deliberate organizational responsibility rather than reliance on individual employees and informal networks.

Significantly, this study contributes to scholarship by highlighting how professional relationships and patterns of participation shape access to knowledge within digitally mediated environments, offering a contextual qualification of sociomaterial perspectives (Orlikowski, 2002; Orlikowski & Scott, 2023) by drawing attention to relational access alongside technical access. It also extends the application of Ipe's (2003) framework by suggesting that a supportive organizational culture may be insufficient where structured opportunities for knowledge capture and transfer are limited. For

institutional practice, the findings provide an evidence-informed basis for strengthening knowledge continuity at NAU. A centralized repository could complement existing communication platforms, provided it has clear institutional ownership, regular maintenance and links to onboarding and handover processes. The study also relates to broader concerns about staff mobility and organizational knowledge loss in Nigerian universities (Akinwale et al., 2023; Daghfous et al., 2023). Its relevance to Sustainable Development Goal 4 lies in its focus on sustaining institutional capacity for continuous learning, although the study did not directly measure progress towards this goal (United Nations, 2015).

Limitations and Future Research

The findings should be interpreted considering the study's small sample, cross-sectional design and focus on administrative staff at a single institution. The questionnaire provides descriptive insights rather than statistically representative evidence, while the five interviews offer contextual depth and would require a larger sample to claim thematic saturation across the wider administrative workforce with confidence, a constraint shaped by the Master's-level timeline. The researcher's previous affiliation with NAU also presents a potential source of interpretive bias, that was addressed by critically examining prior assumptions, comparing accounts across participants, and grounding interpretations in questionnaire responses and interview data. However, these measures cannot be assumed to have eliminated the influence of researcher positionality entirely. Furthermore, excluding lecturers, assistant lecturers, and IT staff means the findings cannot speak to academic or technical specialist experiences at NAU and because tacit knowledge is difficult to articulate fully (Polanyi, 1966), interview accounts cannot capture every dimension of practical expertise.

Future research could address these limitations in five ways: First, larger studies across NAU and other Nigerian federal universities could examine the relevance of the findings across institutional contexts. Second, research involving academic and IT staff could investigate whether patterns of relational access and knowledge continuity differ across occupational groups. Third, an implementation-focused study could develop and evaluate a centralized knowledge repository to assess its use, maintenance and contribution to knowledge continuity. Fourth, longitudinal research following new employees through their first two to three years could explore how professional networks and access to experience-based knowledge develop over time. Finally, comparative research across public institutions in the Global South could examine whether relational access is a recurring feature of digitally mediated knowledge sharing, building on contextual work such as Phaladi and Ngulube (2022).

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Appendices

Appendix 1:

Instrument A: Structured Questionnaire (Phase One)

Study Overview and Instructions

This questionnaire forms the first phase of a mixed methods study examining how digital platforms support tacit knowledge transfer among administrative staff at Nnamdi Azikiwe University (NAU), Awka, Nigeria. Tacit knowledge refers to the informal, experiential working knowledge that staff develop through practice and interaction with colleagues, rather than through formal training or official documents.

Your responses are entirely confidential and anonymous. No information that could identify you will be shared with your employer or colleagues. Completion takes approximately 10 to 15 minutes. Please answer all questions as honestly and fully as you can. There are no right or wrong answers.

If you are willing to participate in a follow-up interview of approximately 45 to 60 minutes, please indicate this at the end of the questionnaire.

Section A: Professional Profile

This section collects basic information about your role and experience at NAU. Please fill in or select as appropriate.

Current job title or role: _____

Department or faculty: _____

Grade level or staff category: _____

Total years of service at NAU: _____

A5. Were you employed at NAU during or after 2019?

[ ] Yes

[ ] No

A6. Did you personally go through an onboarding or induction period at NAU?

[ ] Yes, with formal structured support

[ ] Yes, but informally with no structured programme

[ ] No formal onboarding was provided

Section B: Digital Platform Use

This section asks about how you use digital platforms as part of your daily administrative work at NAU.

B1. Which of the following digital platforms do you use regularly for work-related communication or learning at NAU? Please tick all that apply.

[ ] WhatsApp (departmental or staff groups)

[ ] Zoom (for meetings, training, or communication)

[ ] Google Meet

[ ] Email (institutional or personal)

[ ] CIRMS (Centre for Institutional Records Management System)

[ ] Other (please specify): _____

B2. How frequently do you use digital platforms for work-related purposes?

[ ] Daily

[ ] Several times a week

[ ] Once a week

[ ] Rarely

B3. For what purposes do you primarily use these platforms? Tick all that apply.

[ ] Receiving or sharing formal instructions and directives

[ ] Asking colleagues for advice or informal guidance on work tasks

[ ] Sharing documents, templates, or procedures

[ ] Learning informally how things are done at NAU

[ ] Administrative documentation and record-keeping

[ ] Other (please specify): _____

Section C: Tacit Knowledge Sharing Experiences

This section uses a five-point scale to explore your experiences of sharing and receiving working knowledge at NAU through digital platforms. Please indicate the extent to which you agree or disagree with each statement.

Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Sub-section C1: Platform Effectiveness for Tacit Knowledge Transfer

C1.1 I can easily get informal working guidance from colleagues through digital platforms at NAU.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C1.2 WhatsApp groups at NAU help me understand how things are actually done in my department.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C1.3 Digital platforms help me access informal knowledge from experienced colleagues.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C1.4 The knowledge I gain through digital platforms is as useful as knowledge shared face to face.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C1.5 CIRMS helps me access the institutional knowledge I need to do my job effectively.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

Sub-section C2: Onboarding and Early-Stage Learning

C2.1 When I first joined NAU, digital platforms helped me learn the informal working practices of my department.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C2.2 I had to figure out most of how my job works through trial and error rather than through formal training or digital support.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C2.3 New staff at NAU have adequate access to the informal working knowledge they need through digital platforms.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C2.4 Access to working knowledge through digital platforms depends more on who you know than on the platform itself.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

Sub-section C3: Brain Drain and Knowledge Loss

C3.1 When experienced colleagues leave NAU, important working knowledge is lost that is not available anywhere in writing.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C3.2 NAU has effective systems for preserving institutional knowledge when experienced staff depart.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C3.3 Digital platforms at NAU help retain institutional knowledge when staff leave.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C3.4 I have personally experienced a noticeable loss of departmental knowledge following the departure of an experienced colleague.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

Sub-section C4: Organizational Culture and Equity

C4.1 The organizational culture at NAU encourages staff to share working knowledge informally through digital platforms.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C4.2 Senior staff are more likely than junior staff to have access to informal working knowledge through digital platforms.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C4.3 I feel comfortable asking questions or seeking informal guidance through digital platforms at NAU.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C4.4 Connectivity and internet access issues limit my ability to use digital platforms for knowledge sharing.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

C4.5 There are unspoken rules at NAU about what kinds of knowledge should or should not be shared through digital platforms.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

Section D: Open-Ended Questions

This section invites you to share your own experiences and perspectives in your own words. There are no right or wrong answers. Please write as much or as little as you feel comfortable sharing.

D1. Briefly describe a situation where you needed working knowledge that you could not find in any official document or training material. How did you eventually get it, and did a digital platform play any role?

D2. In your view, what is the single biggest barrier to sharing informal working knowledge among administrative staff at NAU through digital platforms?

D3. What one practical change at NAU would most improve how working knowledge is shared and preserved among administrative staff?

Section E: Follow-Up Interview

E1. This study also involves follow-up interviews of approximately 45 to 60 minutes via Zoom or WhatsApp video call. Are you willing to participate in an interview?

[ ] Yes, I am willing to be contacted for a follow-up interview

[ ] No, I prefer not to participate in an interview

If yes, please provide your preferred contact method (WhatsApp number or email): _____

Thank you sincerely for completing this questionnaire. Your contribution is valuable to this research. If you have any questions, please contact the researcher at (Phone number and E-mail retracted).

Appendix 2:

Instrument B: Semi-Structured Interview (Phase Two)

Overview

This interview guide is used in Phase Two of a sequential explanatory mixed methods study. The Interviews are designed to build directly on patterns identified in the Phase One questionnaire data and questions are designed to open conversations that the researcher adapt to, probes, and follows up based on each participant's responses and the patterns their questionnaire responses revealed.

Aim: To explore how digital platforms support tacit knowledge transfer among administrative staff at Nnamdi Azikiwe University, Nigeria.

RQ1: How do digital platforms support tacit knowledge transfer among administrative staff at NAU?

RQ2: In what ways do staff, particularly those in onboarding and early-stage roles, experience and navigate tacit knowledge sharing through digital platforms?

RQ3: To what extent do platform affordances and organizational conditions enable or constrain tacit knowledge transfer, and how do these dynamics vary across staff roles and levels of digital engagement?

Duration: 45 to 60 minutes. Mode: Zoom or WhatsApp video call. Language: English. Recording: Audio-recorded with explicit written consent.

Pre-Interview Checklist

- [ ] Participant information sheet sent and confirmed received
- [ ] Signed consent form obtained before the interview begins
- [ ] Participant's questionnaire responses reviewed and key patterns noted
- [ ] Recording confirmed working
- [ ] Participant pseudonym assigned and noted

Opening Protocol

Welcome the participant and thank them for their time. Re-state the study's purpose in plain language. Confirm voluntary participation and the right to withdraw at any time. Confirm recording permission. Explain that the interview builds on their questionnaire responses and that there are no right or wrong answers.

Warm-Up

Context-building only — not a data question

W1. Could you start by telling me briefly about your role at NAU, how long you have been there, and what a typical working week looks like to you?

> **Probe:** Which department are you based in, and what kinds of administrative tasks does your role involve day by day?

Theme A: Digital Platforms and Tacit Knowledge in Daily Work

Purpose: Establishes how participants use digital platforms in their daily administrative work and explores informal knowledge exchanges that occur through and around those platforms. Addresses RQ1 and RQ2 through the SECI model and Sociomateriality Theory. Connects to Objectives O1 and O2.

RQ1, RQ2 | O1, O2 | SECI: Socialization, Externalization | Sociomateriality: platform-practice entanglement

A1. You indicated in your questionnaire that you use [reference specific platforms]. Can you walk me through how a typical day of communication and knowledge sharing looks for you across those platforms? I am particularly interested in moments when you used a platform to get guidance or working knowledge from a colleague rather than just to send information.

> **Probe:** What kinds of things do you share or receive through WhatsApp that you would not put in a formal email? Why?

> **Probe:** Is there a platform you trust more than others when you genuinely need practical guidance on how to handle something? What makes it feel more trustworthy?

Probe: When you shared or received that informal guidance through a platform, did the platform itself change what was possible to say or understand? Was the knowledge different in any way from what would have been shared face to face?

RQ1 | O1, O2 | SECI: Externalization, Combination | Sociomateriality: constitutive entanglement

A2. Think of a specific situation where you learned something important about how to do your job at NAU through a digital platform. What was the knowledge, and what was it about the platform that made that exchange possible?

Probe: What specific features of the platform made that exchange possible — the group chat history, a voice note, seeing someone on a video call, or something else?

Probe: Has using a digital platform at NAU ever changed the way you personally work, the decisions you make, or the knowledge you now carry? Has the platform shaped your practice in ways that go beyond just communicating information?

Probe: What would have happened if that platform had not been available? How would you have accessed that knowledge instead?

RQ3 | O2 | Ipe: nature of knowledge; Sociomateriality: limits of platform affordances

A3. Are there things that are genuinely important to know about doing your job at NAU that simply cannot be shared through any digital platform, no matter how it is used? What kinds of things are those, and why do you think they resist digital transfer?

Probe: Can you give a specific example of a time when you needed to know something that only a direct, face-to-face or informal conversation could provide?

Probe: What does that experience tell you about the limits of the digital tools currently available at NAU?

Theme B: Onboarding and Early-Stage Knowledge Acquisition

Purpose: Explores the gap between what new administrative staff need to know and what digital platforms provide during onboarding. Addresses RQ1 and RQ2 through Ipe's Framework (motivation, opportunity) and SECI (Socialization, Internalization). Connects to Objectives O1 and O3.

RQ1, RQ2 | O1, O3 | SECI: Socialization, Internalization | Ipe: motivation, opportunity

B1. When you first started working at NAU, what institutional knowledge did you need to do your job effectively that was not provided through any formal training or onboarding process? How did you eventually acquire it, and did any digital platform play a role?

> **Probe:** How long did it take before you truly understood how your department actually worked in practice, not just what was written in any official document?
>
> **Probe:** Were there colleagues who helped you informally through digital platforms? What did they share, and through which platform?
>
> **Probe:** After a colleague explained something to you informally through WhatsApp or a Zoom call, were you then able to apply that knowledge directly in your work? Did learning it informally feel different from attending a training session?
>
> **Probe:** Looking back, what was the most significant piece of institutional knowledge you had to figure out on your own, and how did that absence of formal support affect your early experience at NAU?

RQ2, RQ3 | O1, O3 | Ipe: motivation, culture | Sociomateriality: equity and inclusion

B2. In your experience, do all new administrative staff at NAU have equal access to the informal guidance and working knowledge they need to settle into their roles? Or do some find it easier than others?

> **Probe:** What factors, in your view, determine whether a new staff member gets access to that informal institutional knowledge?
>
> **Probe:** Does the digital platform a person uses, or how visible or active they are on those platforms, affect their access to informal guidance and working knowledge?
>
> **Probe:** Have you ever seen a colleague struggle to settle in because they could not access the unwritten knowledge about how things work at NAU? What happened?

Theme C: Brain Drain and Institutional Knowledge Continuity

Purpose: Investigates consequences of experienced staff departure on institutional tacit knowledge and whether platforms help preserve or transfer that knowledge. Addresses RQ1 and RQ3 through Ipe's Framework (nature of knowledge, opportunity) and Organizational Memory dimensions. Connects to Objectives O2, O3, and O4.

RQ3 | O3 | Ipe: nature of knowledge, motivation, opportunity; Phaladi and Ngulube (2022): African institutional knowledge loss

C1. In your experience at NAU, is the pattern of experienced staff leaving something the institution manages proactively, or does the knowledge loss tend to become visible only after the person has already gone?

> **Probe:** What typically happens to the informal knowledge a long-serving colleague carries: the unwritten procedures, the personal working relationships, the departmental know-how when they retire, emigrate, or do not return from studies?
>
> **Probe:** Beyond individual people, does NAU as an institution have any collective ways of preserving working knowledge, for example through departmental customs, shared stories, or cultural practices that help new staff understand how things are done here? Or does that knowledge live only in people?
>
> **Probe:** Has NAU ever put any formal or informal system in place for knowledge handover when staff transition or leave? How effective has that been in your experience?

RQ1, RQ3 | O2, O3, O4 | Sociomateriality: constitutive entanglement; Ipe: opportunities and culture for sharing; Phaladi and Ngulube (2022)

C2. Are any of the digital platforms currently available at NAU being used in ways that help preserve or transfer institutional knowledge when experienced staff leave? If so, how? If not, what prevents that from happening?

> **Probe:** Could platforms like WhatsApp group chats, CIRMS, Zoom recordings, or email archives be better used to preserve the kind of working knowledge that experienced staff carry? What would need to change for that to happen?
>
> **Probe:** Has using a digital platform at NAU ever changed the way you personally work or the decisions you make, in ways that go beyond just receiving information?
>
> **Probe:** Can you think of a specific example where a digital platform successfully helped retain or transfer institutional knowledge that would otherwise have been lost?

RQ3 | O2, O3 | Ipe: opportunities to share; organizational culture

C3. Thinking about the digital platforms available at NAU, do you feel the institution actively creates opportunities for administrative staff to share what they know informally through those platforms? Or does the culture at NAU make it difficult to use platforms this way?

> **Probe:** Can you give a specific example of a situation where the culture or norms at NAU either encouraged or discouraged you from sharing working knowledge through a digital platform?
>
> **Probe:** Do you think NAU's organizational culture treats knowledge as something that belongs to individuals or as something that should flow freely between staff? How does that affect what you share and what you hold back?

Theme D: Organizational Conditions, Norms, and Equity

Purpose: Addresses structural, cultural, and equity dimensions of tacit knowledge transfer at NAU. Addresses RQ3 through Ipe's Framework (culture, motivation) and Sociomateriality (equity and inclusion logics). Connects to Objectives O2, O3, and O4.

RQ3 | O2, O3 | Ipe: organizational culture | Sociomateriality: equity and inclusion logics

D1. In your view, does the organizational culture at NAU encourage or discourage the open sharing of informal working knowledge through digital platforms? What specific cultural norms, hierarchies, or unspoken expectations shape that?

> **Probe:** Are there situations where you would hesitate to ask a genuine question or share practical working knowledge through a digital platform because of who might see it, or how it might reflect on you?
>
> **Probe:** How does rank or seniority at NAU affect who shares knowledge through digital platforms and with whom?

RQ3 | O2, O3 | Ipe: opportunities to share | Sociomateriality: platform logics versus human practice

D2. Are there any official policies or unofficial expectations at NAU about how digital platforms should or should not be used for work-related communication and knowledge sharing?

Probe: How do those rules or expectations, whether written or unspoken, affect your ability to ask questions, seek informal guidance, or share working knowledge through digital platforms?

Probe: In your experience, does the way staff actually use digital platforms at NAU match the official or intended purpose of those platforms? If there is a gap between official use and actual use, what does that tell you about where tacit knowledge actually moves?

RQ3 | O3, O4 | Ipe: all four factors | Sociomateriality: equity

D3. What would need to change at NAU, in terms of how digital platforms are used, how departments are organized, or how the institution treats knowledge sharing, to ensure that important working knowledge is not lost when experienced staff leave and that new staff can access what they need to do their jobs well?

Probe: Who would need to take responsibility for making those changes? What would be the biggest institutional obstacle?

Probe: If NAU could take one practical step tomorrow to improve how tacit knowledge is transferred and preserved through digital platforms, what should that step be?

Closing Questions

Reflective | All RQs | Member checking setup

E1. Is there anything important about your experience of tacit knowledge transfer at NAU, or about how digital platforms are used here, that has not come up in our conversation and that you feel matters to this study?

E2. Looking at the research as a whole, do you think a study of this kind matters for NAU and for Nigerian universities more broadly? What do you hope comes out of it?

Closing Protocol

Thank the participant sincerely. Explain the member checking process: that a summary of relevant findings will be shared with them for review before the final report is completed. Confirm preferred contact method for follow-up. Remind the participant of their right to withdraw any part of their data. Stop the recording.