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Mitigating Technostress in Nigerian Working-Class Families: A Socio-Technical Approach to E-Payment System Adoption

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Abstract **Original Research Article**

Technostress, the psychological strain induced by excessive technology use, has become a pressing issue in the digital era, particularly in developing economies where rapid adoption is often driven by policy. This study investigates technostress among Nigerian working-class families in the context of e-payment adoption, especially during the recent cashless and demonetization policies implementation. Drawing on socio-technical systems theory, we employ a mixed-methods design that combines survey data (n = 362) with interviews and focus groups. Findings reveal that while e-payments enhance financial inclusion, they also introduce stress through low digital literacy, infrastructural fragility, and cybersecurity anxieties. Socio-technical enablers such as organisational support, user-centred design, and community learning significantly mitigate these pressures. By extending technostress research from workplace settings to households, this paper contributes to Information Systems (IS) theory, informs practice, and highlights policy pathways for sustainable financial digitalisation in the Global South.

Keywords: Technostress, e-payment adoption, digital literacy, financial inclusion, cybersecurity, socio-technical systems, Nigeria.

CHAPTER 1 – INTRODUCTION

Digital transformation is no longer a distant buzzword; it is a lived reality shaping how people buy food, pay school fees, send remittances, or even donate in church. In Nigeria, these everyday transactions are increasingly mediated by electronic payment (e-payment) systems. The Central Bank of Nigeria (CBN), through its 2012 cashless policy and more recently during the 2022-2023 demonetization exercise, has encouraged millions of citizens to adopt digital channels. On paper, these policies promised efficiency, transparency, and financial inclusion. In practice, they also introduced new vulnerabilities for working-class families already grappling with economic uncertainty.

At the center of these vulnerabilities lies *technostress*-the strain people experience when adapting to new technologies (Brod, 1984). Research in Information Systems (IS) has linked technostress to reduced productivity, job dissatisfaction, and even burnout in workplaces (Ayyagari, Grover, & Purvis, 2011; Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2011). Yet for many Nigerians, technostress is not confined to office cubicles or corporate boardrooms. It spills into kitchens, market stalls, and living rooms-spaces where the struggle to adapt to digital payments often becomes a matter of dignity, trust, and survival.

1.1 Nigeria in the Global South

To understand why, we must place Nigeria within the broader context of the *Global South*. This term describes low- and middle-income countries across Africa, Asia, Latin America, and parts of Oceania that share historical legacies of colonialism, structural inequalities, and ongoing development challenges (Dados & Connell, 2012). Nigeria exemplifies the paradox of the Global South: a country with world-renowned fintech innovation (e.g., Flutterwave, Paga, Moniepoint, Opay) but fragile infrastructures-unreliable electricity, patchy internet connectivity, and persistent cyber fraud.

For working-class families, e-payment adoption is not optional. When salaries are paid electronically, cash withdrawals are limited, and school fees are increasingly demanded via

transfers, households must adapt, whether ready or not. This forced adoption often intensifies technostress, making digital financial systems feel less like tools of empowerment and more like sources of daily anxiety.

1.2 The Household as a Critical Site of Stress

Most IS research treats technostress as a workplace phenomenon. But in Nigeria, the **household** is also a frontline arena of digital adoption. Picture a mother in Yola standing at a point-of-sale (POS) terminal as her transfer fails three times, with other customers growing impatient behind her. Or a father in Lagos frantically trying to send money for a medical emergency during a network outage. Or grandparents in Enugu relying on their teenage grandchildren to operate a mobile banking app, navigating both shame and dependence in the process, while exposing their balances to the digital natives and their wild imagination.

These moments illustrate that technostress is not just about system design or efficiency; it is deeply social. It affects family roles, intergenerational relationships, and community trust. A failed transaction is not only a technical glitch, it is a potential source of embarrassment, conflict, or even lost opportunities.

1.3 Research Objective and Contribution

Against this backdrop, our central question emerges:

How can socio-technical strategies mitigate technostress among Nigerian working-class families adopting e-payment systems?

To address this, we bring together two theoretical lenses. **Technostress theory** identifies the stressors that digital finance introduces. **Socio-technical systems (STS) theory** emphasises that adoption succeeds only when technical infrastructures (apps, networks, cybersecurity) and social systems (literacy, trust, community learning) are optimised together.

This study makes three significant contributions:

1. **Theoretical extension**: It relocates technostress from workplaces into households, surfacing new stressor categories such as *techno-vulnerability* (stress from infrastructural failures) and *techno-dependence* (stress from reliance on others).
2. **Contextual insight**: It applies STS to a Global South setting, demonstrating how weak infrastructures and strong social supports interact in shaping digital adoption.
3. **Practical and policy relevance**: It provides actionable strategies for fintech providers, policymakers, and community organisations to reduce stress and strengthen inclusion.

In doing so, this paper not only illuminates the Nigerian case but also challenges IS scholars to rethink how digital transformation affects families, not just firms, in fragile contexts.

CHAPTER 2 – LITERATURE REVIEW

2.1 Understanding Technostress

The idea of *technostress* is not new. Craig Brod (1984) called it the "modern disease of adaptation," capturing the frustration and anxiety people feel when technology changes faster than their ability to keep up. Since then, IS scholars have refined the concept into multiple categories. Tarafdar, Tu, Ragu-Nathan, and Ragu-Nathan (2011) identified five well-established "technostress creators":

1. **Techno-overload** - when technology forces people to work faster or longer.
2. **Techno-invasion** - when technology blurs personal boundaries, making users feel "always on."
3. **Techno-complexity** - when systems feel too complicated, requiring constant learning.
4. **Techno-insecurity** - when people fear being displaced or disadvantaged because they lack skills.
5. **Techno-uncertainty** - when constant updates or system changes produce instability.

Much of this research has focused on employees in formal workplaces. But these categories take on new meaning in households. A mother juggling four different mobile apps to pay bills may not call it "techno-overload," but she feels the weight of constant transactions. A father called late at night to approve an urgent transfer experiences "techno-invasion" when family life is interrupted. Complexity, insecurity, and uncertainty all take on sharper edges when financial survival is on the line.

2.2 Technostress in the Global South

Most technostress research comes from Global North contexts where infrastructures are robust, digital literacy is widespread, and adoption is often voluntary. By contrast, in the Global South-countries like Nigeria, India, or Brazil-digital adoption often happens in fragile conditions. Electricity cuts, patchy internet, cyber fraud, and government mandates create a very different stress environment.

In Nigeria, *techno-vulnerability* emerges as a unique stressor. Imagine trying to pay school fees when the network goes down; the anxiety is not about overload but about helplessness. Another pattern is *techno-dependence*. Older adults often rely on digitally savvy children or younger relatives to complete basic transactions. While helpful, this reliance can generate frustration, shame, or even conflict within families. These stressors are rarely visible in Global North studies but are critical in African contexts.

2.3 E-Payment Systems in Nigeria

E-payment adoption in Nigeria has been rapid. The CBN's 2012 cashless policy[SA1] aimed to reduce cash usage, curb corruption, and promote financial transparency. By 2024, transaction volumes exceeded ₦1 quadrillion (Nigeria Inter-Bank Settlement System [NIBSS], 2024). Fintech firms like

Flutterwave, Paga, Moniepoint and Opay have become household names.

Yet this growth masks significant struggles. Studies highlight barriers such as unreliable internet and electricity (Ifinedo, 2012, 2014), high fraud risk (Chinedu-Eze & Chinedu-Eze, 2018), and low digital literacy among older and rural populations (Eze & Chinedu-Eze, 2018). For working-class families, these challenges are not abstract. A failed hospital transfer, a frozen ATM card, or a disputed POS transaction can mean days of anxiety. Thus, while e-payments expand inclusion, they also deepen stress.

2.4 Socio-Technical Systems (STS) Theory

Socio-technical systems (STS) theory provides a useful lens for understanding these dynamics. Originating from Trist and Bamforth's (1951) studies of British coal mines, STS argues that sustainable adoption requires joint optimization of technical systems and social systems. Neither can succeed in isolation.

Applied to Nigeria's e-payment adoption:

- **Technical systems** include mobile apps, bank platforms, cybersecurity protocols, and reliable network infrastructures.
- **Social systems** include digital literacy, household practices, peer learning, organizational support, and community trust.

When these are misaligned, stress emerges. A technically robust app will still frustrate a grandmother who cannot read English menus. A digitally literate worker will still suffer stress when the network repeatedly collapses. Conversely, when social supports (like cooperative training members) step in, households can adapt even within fragile infrastructures.

2.5 Existing Mitigation Strategies

Globally, IS research suggests strategies such as digital literacy training, flexible policies, ergonomic design, and mental health support (La Torre, Esposito, Sciarra, & Chiappetta, 2019). In Nigeria, these strategies require re-contextualization. Training must not only teach button-clicking but also fraud awareness. Mental health support may not come from employers but from churches or community leaders. User-centered design must mean apps available in local languages, with visual cues for low-literacy users.

2.6 Conceptual Framework

Bringing these strands together, this study proposes a framework where technostress in Nigerian families is shaped by:

- **Technostress creators** (overload, invasion, complexity, insecurity, uncertainty).
- **Contextual amplifiers** (infrastructure gaps, fraud risks, low literacy, policy-driven adoption).
- **Socio-technical inhibitors** (digital literacy, organizational support, user-friendly design, community learning).

This framework underpins the empirical investigation that follows, guiding our analysis of how stress arises-and how it can be mitigated-in real family settings.

CHAPTER 3 – METHODOLOGY

3.1 Research Design

Studying technostress in Nigerian working-class families requires more than statistics alone. Numbers can tell us how widespread stress is, but they cannot capture the fear in a parent's voice when a hospital transfer fails, or the relief when a cooperative provides training. For this reason, we adopted a **mixed-methods design** (Creswell & Plano Clark, 2018).

The study unfolded in two phases:

1. **Quantitative survey** - to measure the prevalence of technostress and identify its key predictors across households.
2. **Qualitative interviews and focus groups** - to bring in lived stories, communal practices, and coping strategies that numbers cannot fully convey.

This design allowed us to combine breadth with depth: statistics revealed the patterns, while voices revealed the meaning behind them.

3.2 Population and Sampling

Target Population

Our focus was on **working-class Nigerian families**. We defined these as households with:

- At least one employed income earner,
- Lower- to middle-income bracket (per National Bureau of Statistics classifications), and
- Regular use of e-payment systems (at least once per month).

These criteria reflect families most directly impacted by cashless policies and financial precarity.

Sampling Strategy

We used a **stratified sampling approach** to capture Nigeria's diversity. Households were drawn from different regions: North, South, East, and West-with a balance of urban and semi-urban settings. Within these strata, we included a mix of artisans, traders, civil servants, and low-level corporate employees. We also ensured variation in age, gender, and education levels.

This approach was deliberate. A trader in Lagos faces very different digital realities than a farmer's household in Yola, yet both live under the same national cashless policy.

Sample Size

- **Survey**: 400 distributed, 362 valid responses.
- **Interviews**: 30 participants.
- **Focus groups**: 4 groups, 8–10 participants each.

This combination was large enough for meaningful statistical analysis (Creswell & Creswell, 2018; Hair et al., 2019) and rich enough for thematic depth, exceeding common thresholds for qualitative saturation (Guest et al., 2006; Saunders et al., 2018).

3.3 Data Collection Instruments

Survey

The survey instrument drew on established scales adapted to the Nigerian context. Constructs included:

- **Technostress creators** (Tarafdar et al., 2011).
- **Digital literacy** (Eze & Chinedu-Eze, 2018).
- **E-payment adoption frequency** (Ifinedo, 2014; Ohunmah, 2016.
- **Socio-technical supports** (training, peer networks, community learning).
- **Outcomes** (perceived stress, trust in e-payment, intention to continue).

Items were measured on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

Interviews

Semi-structured interviews explored participants' experiences with digital payments. Questions encouraged them to recall stressful moments-such as failed transactions or fraud attempts-and reflect on how they coped. Interviews lasted 45-60 minutes, conducted in English or local languages with interpreters where necessary.

Focus Groups

Focus groups captured collective perspectives. For example, women's cooperatives often discussed shared frustrations with POS machines, while youth groups reflected on being the "tech support" for their parents. Each session lasted about 90 minutes, offering not just data but insights into community-level coping.

3.4 Data Collection Procedure

Fieldwork took place between March 2025 and September 2025. Enumerators were trained not only to administer surveys but also to explain items in plain language to ensure inclusivity for low-literacy respondents. Ethical clearance was obtained from American University of Nigeria's Institutional Review Board. Informed consent was sought from all participants, with clear assurances of confidentiality and anonymity.

3.5 Data Analysis

Quantitative Analysis

Survey responses were analyzed using SPSS and AMOS. Steps included:

- **Data cleaning** (removing incomplete responses),
- **Reliability checks** (Cronbach's α values > 0.70),
- **Validity tests** (factor analysis to confirm constructs), and
- **Regression modeling** to test relationships between predictors (digital literacy, infrastructure, support) and technostress outcomes.

Qualitative Analysis

Interview and focus group recordings were transcribed verbatim. Analysis followed Braun and Clarke's (2006) six-step thematic method: familiarization, coding, theme development, review, definition, and reporting. Two researchers coded independently, achieving inter-rater reliability above $\kappa = 0.80$. NVivo software was used to organize the data.

Integration

Findings from both phases were brought together during interpretation. For instance, survey results showing that digital literacy reduces stress were illuminated by interview quotes of parents relying on children for support. This **triangulation** enriched both validity and resonance.

3.6 Ensuring Rigor

We took multiple steps to ensure the rigor and credibility of the study:

- **Construct validity**: drawing on validated instruments from IS literature.
- **Internal validity**: triangulating across surveys, interviews, and focus groups.
- **Reliability**: standardized protocols for survey administration and transcription.
- **Transferability**: providing rich descriptions of Nigeria's socio-economic context so readers can judge applicability to other settings.

CHAPTER 4 – FINDINGS

4.1 Prevalence of Technostress in Families

The survey confirmed what many families already feel: technostress is widespread. Out of 362 valid responses, **68% reported moderate to high levels of stress** linked to e-payment systems. Among the five classic technostress creators (Tarafdar et al., 2011), two stood out most sharply:

- **Techno-complexity** (mean = 3.9/5): Families often described apps and banking platforms as confusing, full of technical jargon, or requiring steps they found difficult to master.
- **Techno-invasion** (mean = 3.7/5): Respondents reported that digital payments made them "always available," whether for late-night approvals, urgent transfers, or family expectations of constant responsiveness.

Other stressors such as techno-overload were less pronounced (mean = 2.8), suggesting that for Nigerian families, stress is not so much about *doing too much* but about *struggling with complexity and uncertainty*.

One participant captured this sense of intimidation:

"When I try to transfer money and the app keeps hanging, I feel like I am failing. My children laugh and say, 'Daddy, just give it to us.' It makes me anxious, like maybe this thing is not for people like me[SA2]."
(Male trader, Lagos)

This voice reflects a larger pattern: technostress is not only technical but also emotional, often tied to feelings of inadequacy and dependence.

4.2 Barriers to Adoption and Use

Survey and focus group data pointed to four main barriers intensifying stress:

1. **Unreliable infrastructure**: network failures and power cuts left families stranded mid-transaction.
2. **Cybersecurity fears**: 57% of respondents expressed serious concerns about fraud; 42% had personally experienced attempted scams.
3. **Low digital literacy**: especially among older family members, who often relied on children or younger relatives?
4. **Weak redress mechanisms**: failed transactions or disputed transfers often lingered unresolved, leaving households in financial limbo.

The anxiety these barriers caused was palpable. A focus group participant described:

"Last month, I paid for goods with a transfer. The money left my account, but the seller said he didn't receive it. For two weeks, we were arguing, until the bank finally reversed it. During that time, I was under serious stress-sleepless nights, thinking I had lost everything[SA3]."
(Female civil servant, Enugu)

Such stories underline how digital failures can spill into social conflicts, eroding trust between buyers and sellers, friends, and even family members.

4.3 The Role of Digital Literacy and Peer Learning

The survey showed a strong negative correlation between digital literacy and technostress ($r = –0.51$, $p < .001$). In simple terms, those with better digital skills experienced less stress. But what stood out from interviews was *how* families coped with literacy gaps: through **peer learning**.

Children became tutors for parents, neighbors shared tips, and women's cooperatives organized informal training circles. These supports reduced anxiety, but they also created tensions. One young respondent explained:

"My mother cannot use the banking app alone. She always waits for me to come back from school. I show her step by step. She is learning, but slowly. Sometimes I feel tired, but I know she depends on[SA4] me."
(Student, Yola)

Here, peer learning is both empowering and burdensome. It empowers parents to access digital finance, but it can also weigh on children or younger relatives who feel constantly responsible.

4.4 Socio-Technical Supports as Stress Buffers

Certain supports clearly made a difference:

- **Organizational support**: Families whose workplaces offered training or reimbursement assistance reported lower stress (mean = 2.6) compared to those without such support (mean = 3.8).
- **User-centred design**: Apps with simple navigation and local language options were rated as less stressful.
- **Community learning**: Cooperatives, churches, and unions often acted as safe spaces to share digital tips and fraud prevention strategies.

As one cooperative leader noted:

"When the cash scarcity started, many women in our group didn't know how to use POS. We invited a fintech representative to teach us. After that session, the fear reduced. We still make mistakes, but at least we are not afraid."
(Cooperative leader, Kaduna)

This shows the power of social systems to compensate for technical fragility. Where infrastructure falters, communities step in.

4.5 Adoption and Stress: A Double-Edged Sword

Perhaps the most striking finding is the **paradoxical role of e-payment adoption**. On the one hand, it empowers families by enabling inclusion, reducing reliance on cash, and speeding transactions. On the other hand, it introduces anxieties when systems fail or skills are lacking.

For some, digital adoption feels like liberation; for others, it feels like pressure. The same app that allows a trader to sell across cities can leave another family anxious when a transfer disappears into cyberspace. This duality reflects the fragile nature of digital transformation in the Global South: inclusion and exclusion, empowerment and stress, progress and precarity, all unfolding together.

CHAPTER 5 – DISCUSSION

5.1 Making Sense of the Findings

This study set out to examine how Nigerian working-class families experience and mitigate technostress when adopting e-payment systems. The findings tell a clear story: technostress is not only common but deeply intertwined with the everyday realities of family life. It is felt in the anxiety of a mother waiting for a failed transfer to reverse, in the embarrassment of a father relying on his children to use an app, and in the collective relief of a cooperative after a training session reduces fear.

Quantitatively, **techno-complexity** and **techno-invasion** emerged as the most significant stressors. Qualitatively, participants repeatedly described feelings of helplessness when systems failed and frustration when constant digital demands intruded into their personal lives. This mix of evidence paints technostress not as a purely technical or psychological issue, but as a *socio-technical phenomenon* rooted in fragile infrastructures, uneven literacy, and shifting family roles.

5.2 Extending Technostress Theory

Theoretically, these findings allow us to extend technostress research in three ways:

1. **Households as sites of stress:** Most studies link technostress to workplaces and employee performance (Ayyagari et al., 2011; Tarafdar et al., 2011). This study demonstrates that households, too, are fertile ground for stress. Here, the stakes are survival and dignity, not job performance. This shift broadens the scope of technostress theory to include domestic and community settings.
2. **New stressor categories:** Beyond the five canonical stressors, two additional dimensions surfaced in Nigeria:
   - *Techno-vulnerability*: stress linked to infrastructural fragility (e.g., failed transfers, power outages).
   - *Techno-dependence*: stress linked to reliance on others, often children or younger relatives, to complete digital tasks.

   These categories may not replace existing ones but enrich the framework for contexts where fragility and interdependence dominate.
3. **Stress as relational, not just individual:** Unlike the individual focus in much IS research, this study shows how stress is distributed within families and communities. A father's digital insecurity becomes his son's burden. A grandmother's fear of fraud becomes the cooperative's collective responsibility. Stress is relational, moving through social ties.

5.3 Advancing Socio-Technical Systems Theory

Socio-technical systems (STS) theory reminds us that technical success requires social alignment (Trist & Bamforth, 1951; Mumford, 2006). The Nigerian case highlights this vividly:

- **When technical systems outpace social readiness**, stress rises. An app with advanced features is useless to a mother who cannot read English prompts.
- **When social systems compensate for technical fragility**, stress falls. Cooperatives, churches, and peer-learning circles often became buffers against unreliable networks.

This flips the Global North assumption that robust infrastructures are the default. In Nigeria, infrastructures are fragile, so the **social system carries the weight of adaptation**. In this sense, STS is not only about balance but about *compensation*-social systems stepping in where technical systems falter.

5.4 Global North vs. Global South Dynamics

A comparison with Global North studies further sharpens the insights. In North America and Europe, technostress often arises from **overconnectivity**-too many emails, too many updates, too much pressure to always be online (Barber & Santuzzi, 2015). By contrast, in Nigeria, stress stems from **uncertainty and exclusion**: unreliable networks, fraud risks, lack of redress, and low literacy.

This difference matters. It shows that IS theories cannot simply be transplanted across contexts. The Nigerian case demonstrates that technostress is shaped not only by the design of systems but also by the socio-economic realities of adoption. In Global South settings, stress is often about *fragility*, not *excess*.

5.5 Implications for Policy and Practice

The findings also carry practical lessons:

1. **Digital literacy as infrastructure:** Just as roads and electricity are essential for development, digital literacy should be treated as basic infrastructure. Schools, cooperatives, and employers should embed digital finance training into their programs.
2. **Consumer protection to build trust:** Families are most anxious when transactions fail or fraud strikes. Regulators must strengthen redress systems-fast, transparent dispute resolution reduces stress and restores trust.
3. **Community-based interventions:** Cooperatives, unions, and religious organisations are already teaching members how to use apps and avoid scams. Policymakers and fintech firms should partner with these grassroots networks to scale training.
4. **Inclusive fintech design:** Fintech providers must prioritize simplicity: local languages, intuitive icons, and fraud alerts that are clear to low-literacy users. Human-centred design reduces complexity and fear.

5.6 Theoretical and Practical Significance

By bringing technostress theory into the household and Global South contexts, this study challenges IS scholars to see technostress as more than a workplace phenomenon. It is a lived, relational, and contextual experience that reveals new stressor categories and highlights the compensatory role of social systems.

Practically, it calls on policymakers, fintech firms, and community leaders to rethink digital inclusion. The question is not only "How many people are using e-payments?" but also "At what psychological cost?" True inclusion balances access with well-being.

CHAPTER 6 – DISCUSSION

6.1 Revisiting the Study

This study is set to explore how Nigerian working-class families experience and cope with technostress in the adoption of e-payment systems. Guided by technostress theory and socio-technical systems (STS) theory, we used a mixed-methods approach: surveys, interviews, and focus groups to capture both the breadth of patterns and the depth of lived experiences.

The findings were clear: while e-payments bring convenience and extend financial inclusion, they also introduce new vulnerabilities. Stress was not only about "using too much technology," as often described in the Global North, but about **fragile infrastructures, low literacy, and uncertainty**. Families faced the daily reality of apps freezing, networks collapsing, fraud threats, and the uneasy dependence of parents on their children to navigate digital systems.

6.2 Theoretical Contributions

This research makes three key contributions to Information Systems theory:

1. **Extending technostress theory to households**: By focusing on family settings, the study broadens the scope of technostress beyond organizational boundaries.
2. **Introducing new stressor categories**: *Techno-vulnerability* (stress from infrastructural fragility) and *techno-dependence* (stress from reliance on others) enrich the typology of technostress creators.
3. **Advancing STS theory in fragile contexts**: The study shows how social systems-cooperatives, families, community networks-often compensate for weak technical systems, a reversal of assumptions common in Global North studies.

6.3 Practical and Policy Implications

For practice and policy, the lessons are equally compelling:

- **Digital literacy as infrastructure**: Governments, schools, and employers must treat digital finance education as essential infrastructure, not a luxury.
- **Trust-building mechanisms**: Regulators should strengthen fraud prevention and redress processes to reduce anxiety and rebuild confidence.
- **Community-based learning**: Grassroots institutions-churches, cooperatives, unions-are already trusted spaces where people learn. Partnerships with fintech firms can multiply their impact.
- **Human-centered fintech design**: Apps must be built for inclusivity, with clear icons, local language options, and intuitive layouts that empower rather than intimidate.

6.4 Limitations and Future Research

No study is without limits. Our cross-sectional design captures a snapshot, not the evolution of technostress over time. Future research should adopt **longitudinal approaches** to track how stress shifts as infrastructures improve or new fintech tools emerge. Comparative studies across other Global South countries-such as Kenya, India, or Brazil-could reveal whether stressors like techno-vulnerability and techno-dependence are widely shared.

Another fruitful direction lies in **intervention studies**: testing whether targeted digital literacy programs, cooperative-based training, or user-centred design innovations can measurably reduce stress. Emerging technologies like AI-driven payment assistants or central bank digital currencies also deserve attention for their potential to reshape stress dynamics in households.

6.5 Closing Thoughts

E-payment systems are often celebrated as tools of empowerment, expanding financial inclusion and enabling modern participation in the economy. Yet as this study shows, inclusion can come with hidden costs. For Nigerian working-class families, technostress is not an abstract concept-it is the sleepless night after a failed transfer, the frustration of relying on children for everyday tasks, the tension between opportunity and anxiety.

The challenge, then, is not only to connect more people but to connect them well. Digital transformation must be **human-centred**, balancing efficiency with empathy, and innovation with well-being. Only then can financial inclusion truly become a path to empowerment rather than another source of strain.

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