

# Theorizing Community-Driven Digital Transformation Adoption: A Community Digital Transformation Enablement Framework

Completed Research Paper

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## Abstract

*Digital transformation (DT) entails not only technological change but also the enhancement of digital competence among participating stakeholders. This enhancement is considered a critical step for the successful inclusion of DT, particularly in the context of underdeveloped communities. Unfortunately, these topics remain understudied. Additionally, IS research predominantly theorizes IT/DT adoption through individual or organizational lenses, often overlooking community-driven adoption in collectivist communities, where cultural values significantly influence IT adoption. Consequently, this study addresses this gap by theorizing how cultural values enable community-level DT. An interpretive case study was conducted across four communes. The study introduces the Community Digital Transformation Enablement Framework, which is grounded in the culturally embedded TTA—a theoretical construct comprising the values of solidarity, sympathy, patriotism, and resilience characteristic of Vietnam. This research contributes to IS theory by integrating cultural dimensions into the discourse on DT and offers actionable insights for practitioners seeking to facilitate DT adoption in less developed regions.*

**Keywords:** Community-driven digital transformation, case study, Vietnam, digital inclusion

## Introduction

Digital transformation (DT) necessitates the development and refinement of digital competencies among all relevant stakeholders (Alrasheedi et al., 2022; Dang et al., 2025). For example, decision-makers are increasingly expected to embrace digital innovation and integrate technological tools into strategic governance frameworks (Brock & von Wangenheim, 2019; Kane et al., 2019), organizational leaders must proactively address the socio-organizational dynamics—such as stakeholder misalignment and collective resistance—that threaten to derail digital transformation strategies (Poláková - Kersten et al., 2023), or community members, as end-users, must be provided with opportunities to develop digital competencies, enabling them to develop digital competence and engage meaningfully with technological innovations (Faik et al., 2024).

The enhancement of digital competence among stakeholders is considered a critical step for the inclusion of DT, particularly in the context of underdeveloped communities. Unfortunately, these topics remain understudied (Vassilakopoulou & Hustad, 2023). Additionally, information systems (IS) research

predominantly theorizes information technology (IT) adoption (e.g., Solberg et al., 2020) or organizational lenses (e.g., Kauffman & Weber, 2018), often overlooking community-driven adoption in collectivist communities, where cultural values significantly influence IT adoption. Consequently, this study addresses this gap by theorizing how cultural values enable community-level digital transformation adoption.

DT has become a strategic priority for governments worldwide, not only to deliver more accessible and meaningful public services, but also to strengthen their strategic positioning and institutional effectiveness (Dang et al., 2025). In line with this global trend, DT is a central focus of the Vietnamese government (Dang et al., 2024), intended to strengthen the country's digital competitiveness and bridge the digital divide—both among its citizens and between Vietnam and more developed nations. Community Digital Transformation Task Forces (DigiForce) are a key part of Vietnam's grassroots approach to digital transformation. These task forces were established in each village. The core of this initiative is the youth, who go to every alley, knock on every door, and guide each citizen in using digital services. This approach is especially beneficial for disadvantaged groups such as elders, rural inhabitants, and ethnic minorities. The task forces were piloted on a small scale in one province in 2021 and were officially replicated on a national scale in March 2022. By October 2024, more than 93,500 DigiForce with over 457,000 members were operating around the country. This initiative is considered a breakthrough and unique approach in the country to improve digital inclusion and, consequently, the digital competence of citizens.

Given the limited scholarly attention to community-level DT in collectivist contexts—where cultural norms and communal values significantly shape technology adoption—and the distinctive features of Vietnam's DigiForce initiative, there is a compelling need to investigate how culturally embedded mechanisms facilitate DT adoption at the community level. The DigiForce initiative provides a valuable empirical case through which to examine the dynamic interplay between cultural values and DT adoption processes. Accordingly, this study explores the enabling role of cultural cores and community-based mechanisms in advancing DT adoption in underdeveloped settings. This study is guided by the following research question: *How do cultural cores and Community Digital Transformation Task Force mechanisms enable community digital transformation adoption in Vietnam?*

To address this question, an interpretive case study (Walsham, 2006) was conducted across four communes. The theoretical lens employed was *Tương Thân Tương Ái* (TTA)—a cultural construct of mutual love and support comprising solidarity, sympathy, patriotism, and resilience. TTA signifies that individuals should love, support, and care for one another within a community without expecting anything in return (Qi et al., 2024). Data collection included interviews and secondary data. The data analysis procedure followed the guidelines of Braun & Clarke (2006). This study contributes the Community Digital Transformation Enablement Framework, rooted in TTA—a culturally grounded framework to IS theory—and offers practical guidance for DT adoption efforts.

The paper is organized as follows: The subsequent section provides a literature review and theoretical background. This is followed by a detailed description of the research methods employed in the study. The findings are then presented. Finally, the paper concludes with the discussions and conclusions chapters.

## Literature Review and Theoretical Background

### *IT Adoption and Cultural Influences in IT adoption*

IT adoption and diffusion is a key research topic in the IS discipline (Bui et al., 2025). Adoption studies focus on how new technology is assimilated by individuals and organizations, while diffusion studies examine adoption across larger units like nations to understand the impact of contextual factors and transfer mechanisms (Fichman & Kemerer, 1997; Rogers, 2003). Literature review identifies four strands of research based on the nature of innovation and the social structures involved in its adoption (Bui et al., 2025). The following provides a brief overview of the four strands (Table 1). The *technological artifacts and rational adoption* strand focuses on the adoption of innovations as technological artifacts with defined properties, where adoption is driven by rational evaluation at both individual and organizational levels. The *institutional and interpretive perspectives on organizational adoption* strand examines how innovations are interpreted, negotiated, and institutionalized within and across organizations, emphasizing institutional logics and inter-organizational dynamics. The *community-based perspective adoption* strand centers on communities as sites of meaning-making, where innovations are socially constructed,

legitimated, and diffused through shared discourse and practice. Finally, the *global adoption* strand addresses the global movement of innovation, focusing on how ideas and technologies are adapted across diverse geographical and cultural contexts.

Strand Name	Adopters	Innovation Nature	Key Themes	Representative Works
Technological artifacts and rational adoption	Individuals and organizations	Stable, well-defined artifacts	Adoption barriers and enablers, innovation characteristics, rational decision-making, and implementation strategies	Brancheau & Wetherbe (1990); Klein & Sorra (1996)
Institutional and interpretive perspectives on organizational adoption	Organizations and organizational networks	Flexible concepts subject to reinterpretation	Sociopolitical rationales, organizational fit, concept variation, and spillovers	Klein & Sorra (1996); DeSanctis & Poole (1994)
Community-based perspective adoption	Intra- and Inter-communities	Evolving and co-constructed concepts	Social construction, discourse, legitimation, cross-community translation, and diffusion	Miranda et al. (2015); Wang (2010, 2021); Nielsen et al. (2020)
Global adoption	Bounded actors in a global system	Technological solutions and innovation ideas	Contextual differences, global diffusion mechanisms, and adoption barriers/enablers	Sahay et al. (2013)

These strands explore IT adoption and diffusion, but theorization lacks cultural specificity. Our approach offers a unique case. Culture plays a crucial role in the success of IS as it can directly or indirectly influence the adoption of IT. IS scholars have study culture's role in IT adoption (Grover et al., 2022; Leidner & Kayworth, 2006), and digital transformation (An et al., 2024; Butt et al., 2024). For example, Leidner & Kayworth (2006) reviewed of culture in IS research and developed six themes of IT-culture research, including culture and IS development; culture, IT adoption and diffusion; culture, IT use and outcomes; culture, IT management and strategy; IT's influence on culture; and IT culture. The authors also emphasized culture's impact on IT, IT's impact on culture, and IT culture. Butt et al. (2024) indicated that three layers of organizational culture: artefacts, values, and assumptions, and highlighted organizational culture as an enabler for digital transformation. However, those study often focus on organizational or national level, yet indigenous lenses are rare. Thus, there is a need for a culturally specific, community-centric theory of adoption, integrating indigenous cultural values.

### ***Digital Transformation in Vietnam***

DT is being leveraged by governments globally to transform service delivery and citizen engagement, including digital government, digital society, and e-commerce, and digital economy. Previous research describes DT as happening in three stages: digitization, digitalization, and digital transformation (Adelakun et al., 2025; Dang et al., 2025). These stages often overlap and are defined as follows: digitization means

changing analog information into digital form; digitalization involves using digital technologies to improve existing business processes and models; and DT refers to major changes in how organizations, strategies, and even societies operate (Dang et al., 2025). In line with these stages, several DT initiatives have been implemented across different levels in Vietnam, ranging from the national level to all levels of state agencies, including the National Administrative Management Computerization Project (Gov. 112, 2001), enterprise architecture initiatives across state agencies (Dang & Pekkola, 2017), and the establishment of telecentres (Do et al., 2023; Thai et al., 2022).

More recent trends in Vietnam reflect a continued emphasis on DT, with initiatives such as smart cities (Dang, 2025), and digital health services (Dang et al., 2025), which employ digital technologies to further enhance public service delivery. Additionally, efforts have expanded to include the development of a digital society, and the growth of the digital economy. Specially, Vietnam's National Digital Transformation Program aims to integrate digital technologies across society, targeting 100% citizen access to digital services by 2030 (Gov. 749, 2020). DigiForce plays a pivotal role in extending digital competence to rural and underserved communities, leveraging Vietnam's collectivist heritage. The majority of existing research on DT in Vietnam predominantly concentrates on its impacts (Chuc & Anh, 2023) or the applications of DT adoption strategies (Dang, 2025; Dang et al., 2024). For example, studies highlight the importance of digital transformation for socio-economic growth, with businesses recognizing its value but facing technical and financial constraints (Cameron et al., 2019). The COVID-19 pandemic has accelerated digital transformation, especially in SMEs, though challenges like conversion costs and data security persist (Chuc & Anh, 2023). SMEs benefit from enhanced operations and alignment with global standards but face resistance and lack of awareness (Bui, 2021). Significant adoption of digital technologies among SMEs suggests a need for sector-specific transformation steps (Watkins et al., 2021). However, community-driven adoption in collectivist societies, where cultural values shape digital technology adoption, are often overlooked.

### ***Indigenous Concept: *trung thân tương ái****

**Trung thân tương ái** (TTA), roughly translated as “mutual love and support,” signifies that individuals should love, support, and care for one another within a community without expecting anything in return (Qi et al., 2024). This concept is deeply ingrained in Vietnamese culture, emerging from centuries of communal living, resistance to adversity, and national unity (Anderson, 2024). Unlike Western societies that often emphasize individualism, TTA is inherently relational and context-specific, reflecting Vietnam's collectivist ethos. TTA comprises four fundamental components: solidarity, sympathy, patriotism, and resilience (Anderson, 2024; Qi et al., 2024). Solidarity is defined as the act of supporting and standing together with others, offering unwavering support during times of joy or adversity. Sympathy, which refers to caring for others without expectation, is considered a moral imperative. Patriotism is characterized by personal efforts that contribute to collective identity and pride. Resilience denotes the adaptive strength derived from overcoming adversity with determination and confidence (Anderson, 2024; Qi et al., 2024).

As a theoretical lens, these four components—solidarity, sympathy, patriotism, and resilience—form the cultural core of TTA. This framework makes TTA uniquely suited to explain how community-driven digital transformation can spread through Vietnam's communities via DigiForce, aligning with the country's socio-cultural fabric rather than imposing foreign theories or lenses.

## **Research Methods**

### ***Research Settings***

To answer the question, an interpretive case study (Walsham, 2006) was employed to explore community-driven digital transformation through the DigiForce. This method was chosen to capture the nuanced, culturally specific interplay of TTA components in real-world settings, prioritizing depth over breadth (Yin, 2009).

DigiForce are a key part of Vietnam's grassroots approach to digital transformation. These local teams, established across Vietnam typically at the commune or village level, are tasked with driving DT in their communities. These teams are generally composed of local volunteers, youth, and commune officials who

are tech-savvy and community-minded. The mission of these teams is to support citizens in accessing and using digital technology in a simple manner, stemming from natural needs, creating practical value for the people, and integrating digital technology into every aspect of life. The DigiForce act as a bridge between national policies and local implementation, focusing on practical, community-level change, and aiming to make digital tools and services accessible to every citizen. Specifically, they focus on skills such as using online services, protecting oneself in cyberspace, and using other digital platforms depending on local specifics. The primary mission of these teams is to bring digitalization to the doorstep of every household. Their activities include:

- Awareness Campaigns: Spreading the word about the benefits of digital services and tools, and how to protect oneself in the Internet environment, often through community meetings or door-to-door outreach.
- Digital Literacy Training: Teaching residents—especially in rural or remote areas—how to use digital devices, access online services, and navigate digital platforms.
- Promoting E-Services: Encouraging the use of platforms, online payments, and e-commerce.
- Tech Support: Acting as local “tech support,” troubleshooting basic issues with devices or apps, and guiding people through DT adoption.

Purposeful sampling of four communes with active DigiForce was used, representing diverse contexts, including one in the South (Team A), one in the central region (Team B), one in a northern mountainous ethnic minority area (Team C), and a peri-urban commune near the capital (Team D). Selection criteria included evidence of digital literacy growth and DigiForce activity. Additionally, four communities where the DigiForce operate were selected, as well as officials from the Ministry of Science and Technology (MoST) and Departments of Science and Technology (DoST) that oversee DT.

### Data Collection

First, interviews were conducted in December 2022, December 2023, and from May to July 2024. A total of 50 semi-structured interviews with open-ended questions were conducted. The interviewees included officials from MoST, DoST, DigiForce members, and community members (CM). Semi-structured interviews were conducted with open-ended questions tied to TTA, focusing on solidarity (e.g., How does working together help you learn digital platforms?), sympathy (e.g., How did the DigiForce assist someone in need?), patriotism (e.g., Does using digital services feel like contributing to the country?), and resilience (e.g., What kept you going despite difficulties?). These questions allowed flexibility for emergent themes, and during the interview process, it was appropriate to ask why and how to delve deeper into the subjects to understand the issues that emerged.

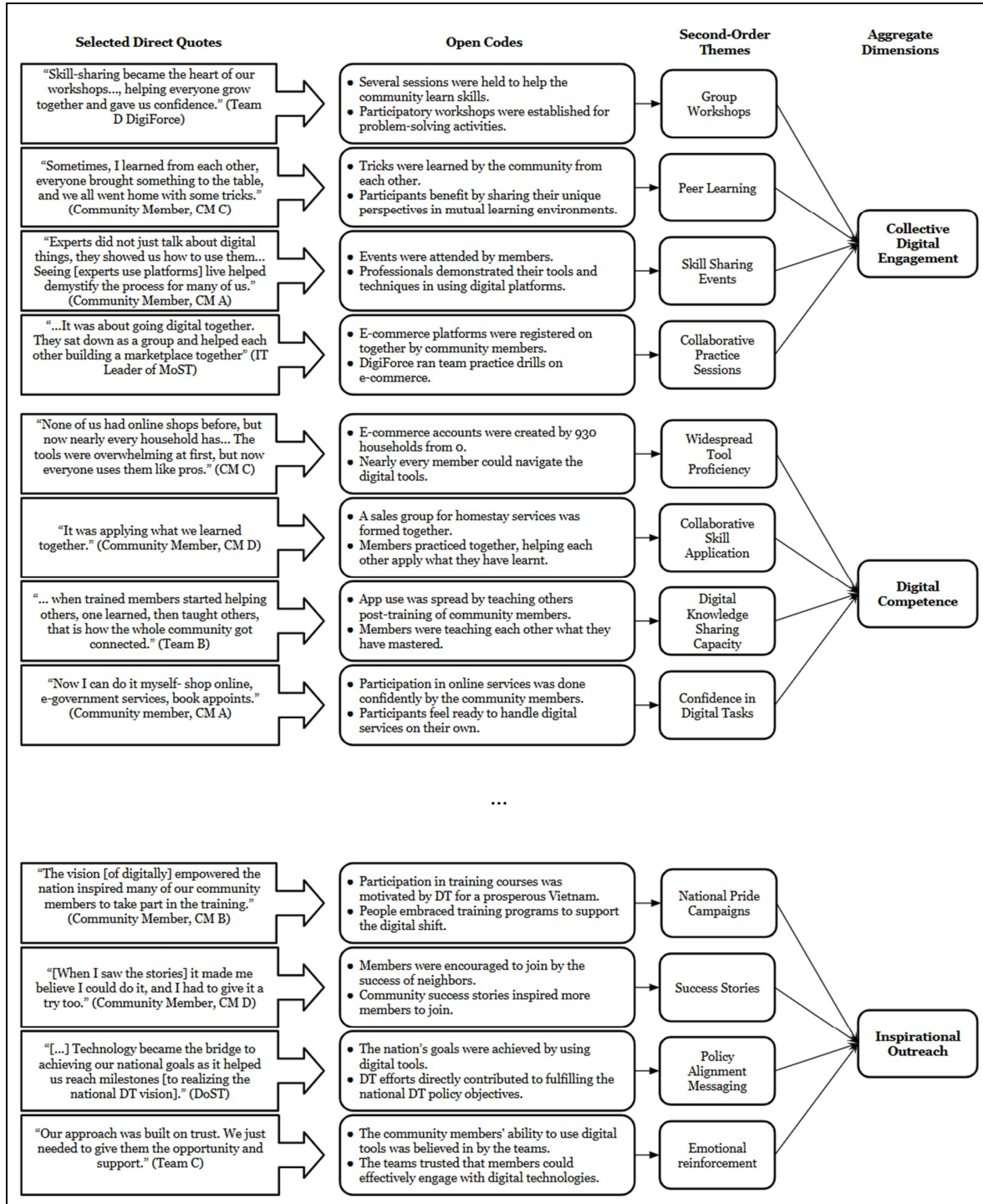
Second, along with the interviews, secondary data were collected, including news articles, internal notes, and guidelines. Secondary data were used to triangulate the interviews. Additionally, follow-up exchanges via communication apps were also conducted. The table summarizes the key data sources (Table 2):

	Team A	Team B	Team C	Team D	MoST & DoST	CM A	CM B	CM C	CM D	Total
Number of Interviews	5	6	8	4	10	4	3	6	4	50
Number of Pages	30	20	40	26	200	3	2	2	4	330
Observation			1							

### Data Analysis

The guidelines of Braun and Clarke (2006) were followed, applying thematic analysis. Data were transcribed and subsequently checked by researchers. The theoretical lens was informed during the coding

process (see example in Figure 1). For example, peers leaning or group workshops was inspired by the solidarity construct of the TTA components (Figure 2), while individual support was inspired by sympathy (Figure 3). The results of this step are presented in the Findings section. Triangulation was used to increase credibility by comparing information from various sources, such as primary and secondary data.

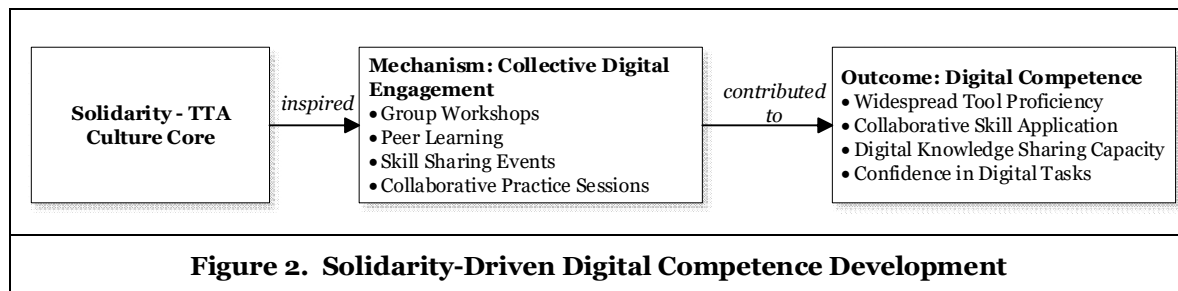


**Figure 1. Example of Coding Process, from Quotations, Open Codes, Second-Order Themes, to Aggregate Dimensions**

## Findings

### Collective Digital Engagement – Digital Competence

Collective digital engagement, inspired by the **solidarity** aspect of the TTA cultural core, significantly contributes to the development of digital competence (Figure 2). Collective digital engagement plays a crucial role in encouraging community members to learn and adopt digital tools together, reinforcing the idea that no one is left behind.



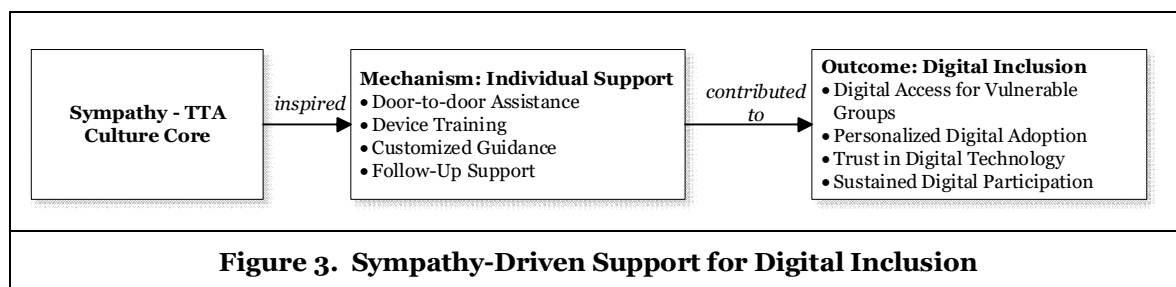
The **mechanism** involves the DigiForce organizing activities where families or community members learn to use apps collectively. Team members model collaborative learning, demonstrating how digital skills benefit the entire community. These activities include *group workshops, peer learning, skill-sharing events, and collaborative practice sessions*. First, the DigiForce organizes group workshops where community members gather in community centers. Here, they teach various skills requested by the community, such as using online public services (e.g., local and national public service portals), making cashless payments, and installing and using applications (e.g., electronic identification VNeID, electronic health applications, and other popular applications like digital signatures and e-wallets). As voiced by a community member: “We had several sessions helping the community learn five skills, including using online public services, shopping online, making online payments, protecting oneself in cyberspace, and using other digital platforms specific to the locality.” – A1 of Team A. Second, peer learning activities are conducted, where community members teach their peers. For example, citizens share how to use the locality's Smart app for e-government services or ensure information security on smartphones. As voiced by a citizen in CM C: “The community learns from each other tricks to develop smart tourism. For example, we learn how to use e-services for reporting or how to effectively advertise homestays through apps like Agoda, Booking, and Zalo.” Third, skill-sharing events are organized independently, such as “Community Digital Days,” featuring demos of services like e-health, online banking, and e-commerce. For example, e-commerce is promoted to sell One Community One Priority Products (OCOP) in D’s province. These events are also integrated into national events such as National Digital Transformation Day and Cultural Festivals. Fourth, collaborative practice sessions are held, involving hands-on group tasks like setting up online stores via platforms such as <https://nongsan.buudien.vn/>. As commented by a team member of Team B: “Together with local residents, we registered on e-commerce platforms and opened electronic payment accounts. We guided them on using digital platforms and technology to upload and promote products, in line with the local socio-economic conditions. Currently, our commune has over 10 products recognized as OCOP products and available online.”

The **outcomes** of collective digital engagement include increased digital competence. These activities reduce intimidation around technology, as peers support each other, rapidly increasing overall collective digital uptake within communities. Data show the ability to effectively use digital tools and platforms, resulting from collective digital engagement and learning efforts. First, widespread tool proficiency is evident, with broad adoption of digital tools across community members. As noted by a leader in C: “...930 households created accounts in Voso, and the total number of agricultural production households that created accounts for buying and selling on the e-commerce platform is 838 for Posmart.” Second, there is evidence of collaborative skill application, with communities using skills collectively, demonstrating the payoff of peer learning in online sales and other services. This is exemplified by the case of C, where a sales group was formed for homestay services. Third, knowledge-sharing capacity is another outcome, with data

showing the ability of community members to teach others post-training, thereby spreading app use. Fourth, confidence in digital tasks indicates self-assurance in performing digital actions. Community members can now independently conduct online payments, access online services, and utilize e-commerce services. As voiced by a citizen from CM C: “Now I am confident participating in online services, including e-health and e-government services.”

### **Individual Support – Digital Inclusion**

This reflects addressing individual needs with care. It links to the *sympathy* component of TTA, which supports digital inclusion through tailored, empathetic assistance from teams to vulnerable individuals (Figure 3). In other words, sympathy inspires the team to ensure that the most vulnerable—elderly residents, ethnic minorities, or those without devices—are prioritized, offering tailored support by spending extra time with them in teaching and support.

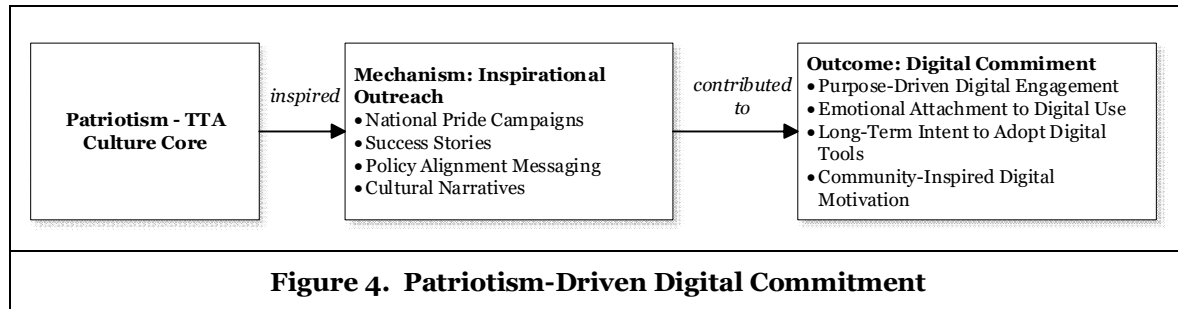


The **mechanisms** through the DigiForce involve providing support rooted in care rather than obligation, reflecting care without expectation and building trust in technology. They operate concurrent activities on a voluntary basis. The mechanisms include door-to-door assistance, device training, customized guidance, and follow-up support. First, door-to-door assistance is one of the mottos of the DigiForce. As voiced by the leader in C: “We have a motto: ‘Go to every alley, knock on every door, and guide each person.’ and we guide community members in need.” Second, device training involves teaching how to use smart devices, such as smartphones or government-subsidized devices. Third, customized guidance provides tailored help depending on the community’s socio-technical status. For example, in C, Khmer and other ethnic languages are used to support the community. As commented by a member of the Khmer community in CM C: “The team explained to our community in our language, which is much easier than using the King language.” Fourth, follow-up support involves revisiting to ensure continued use and to strengthen sustained participation. As quoted by a member of A: “The team members regularly revisited us to make sure we use digital tools long-term. They also provided us with MOOC and self-study platforms.”

The **outcome** of individual support is digital inclusion, which helps achieve inclusive literacy and reach marginalized groups. This personalized attention builds trust in digital tools, raising literacy among hard-to-reach groups. This is particularly important for those in mountainous areas, where teams help minority communities use services and thus improve their access. There are four outcomes: digital access for vulnerable groups, personalized digital adoption, trust in digital technology, and sustained digital participation. First, digital access for vulnerable groups is reflected in door-to-door support, as evidenced by elderly, minority, or low-literacy individuals using digital tools. As voiced by a 60-year-old resident CM A: “I can now use the e-authentication app with online services.” Second, personalized digital adoption indicates tailored tech use meeting individual needs. As commented by a resident in Binh Thuan (CM A): “The DigiForce used Khmer to guide us, making it easier to understand.” Third, trust in digital technology is tied to customized guidance, which helps reduce fear or skepticism due to supportive relationships. As voiced by residents of BN (CM D): “I trust digital services and online services more because the DigiForce helped me during the process.” Fourth, sustained digital participation is tied to the follow-up support mechanism. It involves ongoing use post-support, such as regular access to e-government services or e-health services. As commented by a resident of Tuong Son (CM B): “My peers and I created an account on nongsan.buudien.vn when the DigiForce taught us, and we still use it.”

### ***Inspirational Outreach – Digital Commitment***

This indicates framing digital literacy as a national duty. It links to **patriotism** of TTA and thus contributes to fostering digital commitment (Figure 4). Inspirational outreach plays a role in tying DT adoption to national progress or national pride, presenting it as a way to strengthen Vietnam in a globalized world.

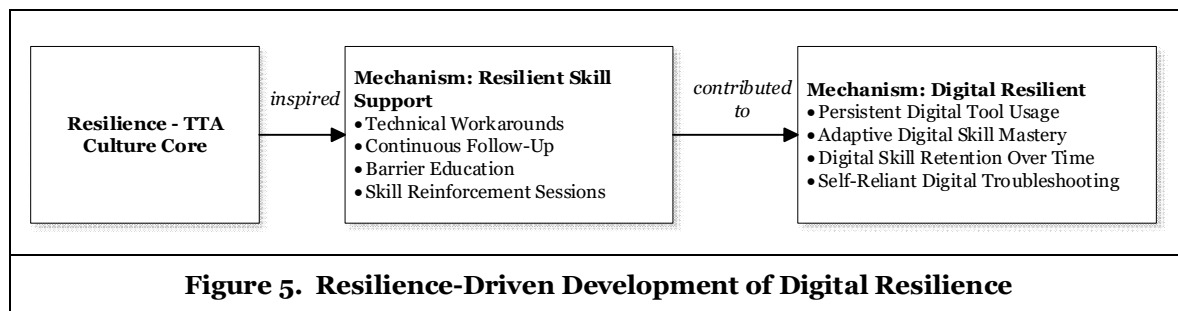


The **mechanism** through the DigiForce involves appealing to collective pride to inspire voluntary engagement with digital tools. National successes—such as Vietnam’s 5G rollout—are tied to inspire action, aligning local efforts with the government’s 2030 digital goals. The mechanisms include national pride campaigns, success stories, policy alignment messaging, and emotional reinforcement. First, national pride campaigns, such as ‘digital skills for a strong Vietnam’ or ‘digital transformation for a prosperous Vietnam,’ are used. Public campaigns or slogans leverage national pride to inspire digital adoption, emphasizing Vietnam’s progress and collective identity. As voiced by a resident of QN (Team D): “The country is gradually transitioning into the digital age, and the community digital transformation team emphasizes the importance of digital skills. This motivated me to participate in training courses.” Second, success stories involve sharing local or regional examples of digital success to motivate community members. This is exemplified by the case in DL, where the DigiForce shared how a neighboring community used an e-commerce platform to sell their OCOP, encouraging others to follow. As commented by a resident (Team D): “The DigiForce showed the benefits of moving online through the digital transformation portal dx.gov.vn or onetouch.mic.gov.vn, as well as communities in our province. I want to try too.” Third, policy alignment messaging links digital use to national goals, such as 100% e-government online services by 2030 per Decision 749/QĐ-TTg of the Government, framing it as a patriotic duty. This is evident when the DigiForce convinces and explains to residents how using e-government apps supports Vietnam’s 2030 vision. As voiced by a HP community member (CM A): “Learning and using digital services such as e-government, e-commerce, and e-health is helping build our country and helps the country meet its 2030 goals.” Fourth, emotional reinforcement involves providing personal affirmations or emotional support to strengthen pride and motivation for digital engagement. By doing so, community members feel motivated to learn.

The **outcome** of inspirational outreach is digital commitment, which includes purpose-driven digital engagement, emotional attachment to digital use, long-term intent to adopt digital tools, and community-inspired digital motivation. First, purpose-driven digital engagement means using digital tools motivated by a sense of contributing to national progress, tied to national pride campaigns. It is evident that community members adopt or use platforms to support the nation’s digital goals. Second, emotional attachment to digital use, linked to emotional reinforcement, means feeling pride or an emotional connection to digital participation due to its patriotic significance. As commented by a community member of LC (CM C): “Our peers and I are proud to use Vietnamese digital platforms such as Zalo or Postmark because it’s our country.” Third, long-term intent to adopt digital tools, aligned with policy alignment messaging, means a sustained willingness to learn and use new digital platforms, inspired by national purpose. This is evident when community members commit to using future solutions regarding e-government and other digital-based services. Fourth, community-inspired digital motivation, reflecting the success stories mechanism, means motivation to engage digitally, spurred by seeing community peers succeed.

### Resilient Skill Support – Digital Resilience

This is inspired by **resilience** of TTA, which plays a role in overcoming barriers with determination that shaped digital resilience (Figure 5). Resilience fuels team efforts to overcome technical barriers and empowers communities to push through challenges such as poor infrastructure, low literacy, or initial tech failures. This ensures that everyone keeps trying. Within a short period, the majority of communes have shifted from traditional, cash-based services to a thriving online market, contributing to the country's digital progress.



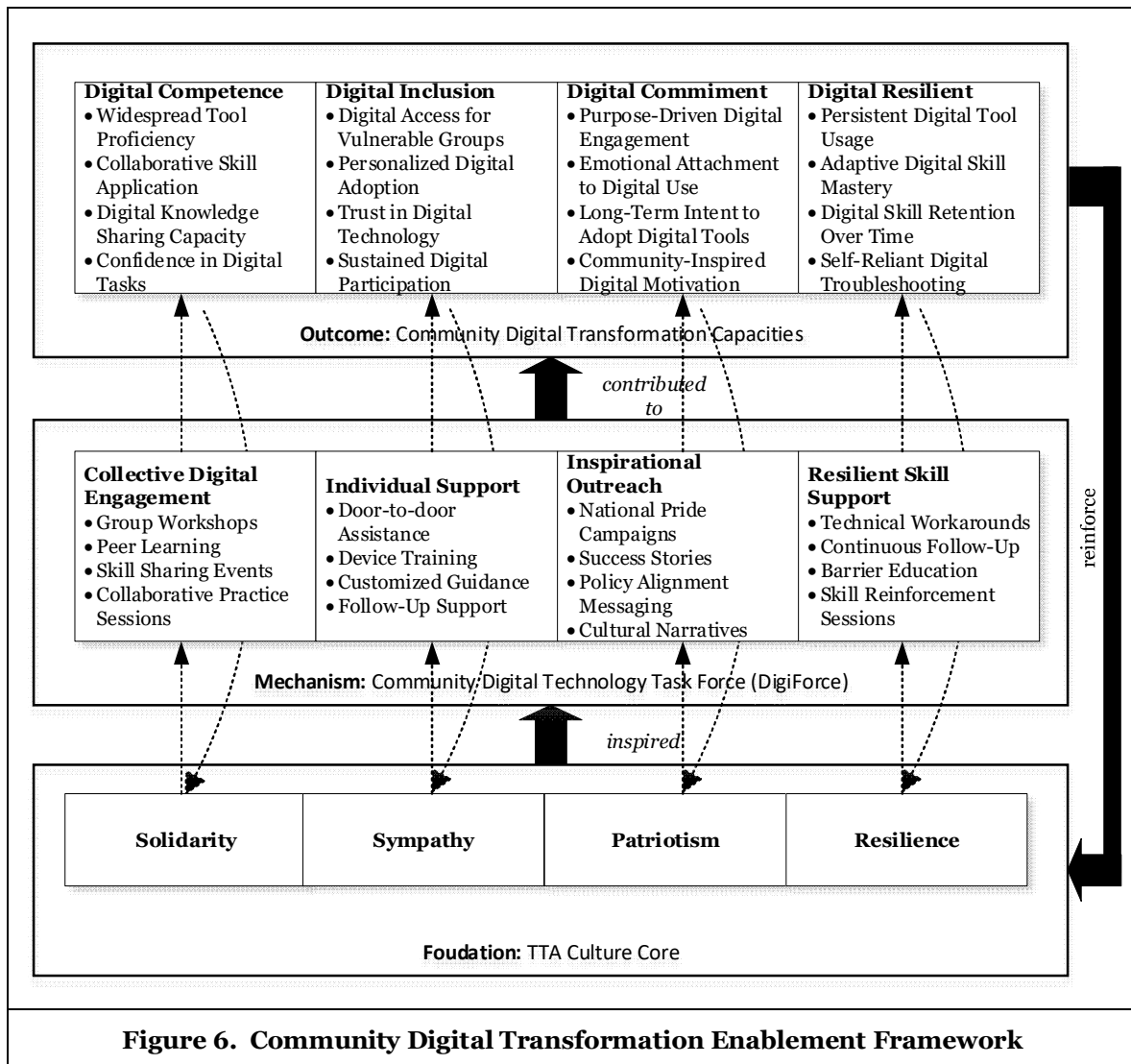
The **mechanisms** through the DigiForce involve persistent support, echoing Vietnam's history of recovery and encouraging sustained effort. The DigiForces encourage persistence and share stories of resilience to inspire confidence. These mechanisms include technical workarounds, continuous follow-up, barrier education, and skill reinforcement sessions. First, technical workarounds involve practical solutions to overcome technical barriers. For example, the digital DigiForce in YB (Team C) helps the community use e-commerce despite poor internet due to disasters (e.g., floods) by switching to SMS-based updates. As voiced by a community member: "No network or weak signal, the DigiForce team found a way and guided us to use SMS for emergency sales." Second, continuous follow-up involves ongoing visits or check-ins post-training to ensure skill retention and address issues. For example, the DigiForce in DC (Team D) revisits households to reinforce the use of VNeID after their initial training. As voiced by a team member: "We always have a plan to come back to check the status for additional support, as well as to make sure that the community members don't forget their skills." Third, barrier education involves teaching residents to independently troubleshoot digital problems. For example, the DigiForce teaches community members how to reset devices or change passwords when apps fail. As commented by a member of the NA community (CM B): "I can fix some simple issues because of the knowledge I learned from the team. It looks like magic as it was not possible before." Fourth, skill reinforcement sessions involve structured follow-up sessions (e.g., workshops, MOOCs) to practice and solidify digital skills over time. For example, the DigiForce holds monthly and quarterly reviews to practice cybersecurity and the use of e-government services, ensuring long-term mastery.

The **outcome** of resilient skill support is digital resilience, meaning the capacity to maintain digital engagement despite disruptions. This includes persistent tool usage, adaptive problem-solving, digital skill retention over time, and self-reliant digital troubleshooting. First, persistent tool usage means continued use despite technical issues. For example, community members keep selling online despite occasional outages due to disasters, thanks to workarounds. Second, adaptive problem-solving means the ability to adjust to digital challenges. For example, they can switch platforms if others have problems. As voiced by Lang Van BN (CM D): "We switched to the buudien app if Voso has some problems or challenges." Third, digital skill retention over time means maintaining digital proficiency long after initial training. For example, a community member still uses e-commerce Voso apps months later due to follow-ups. As he commented: "My colleagues and I now use the app expertly after several months because we review and use it every day." Fourth, self-reliant digital troubleshooting means independently resolving digital issues without ongoing team help. For example, community members can fix an app error learned from barrier education.

## Discussions

### Community Digital Transformation Framework

Taken together, the findings synthesize the community digital transformation enablement framework, comprising three elements: cultural core, mechanisms of the DigiForce, and outcomes (Figure 6). Overall, there is interchangeability both *horizontally* and *vertically*.



Horizontally, *first*, the components of the cultural core interlink, forming a cohesive cultural base. Specifically, *solidarity* and *sympathy* foster grassroots cooperation, while *patriotism* and *resilience* align local efforts with Vietnam’s national digital vision. These cultural constructs are not only individually significant but also function in a complementary and reinforcing manner. *Solidarity* fosters group cohesion, *sympathy* ensures inclusivity, *patriotism* inspires collective action, and *resilience* sustains effort—together forming a holistic cultural foundation for DT. They also reinforce each other interchangeably; for example, *solidarity*’s group unity supports *sympathy*’s care, and *patriotism*’s pride enhances *resilience*’s grit. Tingelhoff et al. (2024) note that cultural values interlink to shape IT adoption, supporting this synergy. *Second*, mechanisms interchange, forming a robust operation. Specifically, they are complementary:

*collective digital engagement* builds skills, *individual support* extends access, *inspirational outreach* motivates, and *resilient skill support* sustains. They also reinforce each other interchangeably; for example, collective digital engagement's peer learning aids individual support's reach, and inspirational outreach's motivation boosts resilient skill support's persistence. Imran et al. (2021) highlight interconnected mechanisms in digital transformation adoption. *Third*, outcomes reinforce each other by interlinking capacities: *Digital competence* enables use (Schiuma et al., 2024), *digital inclusion* ensures equity (Raihan et al., 2024), *digital commitment* drives longevity (Rodrigo et al., 2022), and *digital resilience* sustains adaptation (Tim et al., 2021) — together achieving comprehensive DT. They also bolster each other interchangeably; for example, competence supports inclusion, and commitment sustains skills, forming a virtuous cycle. Sarker et al. (2019) advocate for systemic IS frameworks, supporting this interconnectedness.

Vertically, there are two cycles. The outer cycle (thick arrows) starts with the TTA cultural core is seen as the *foundation*. The cultural core components acting as the cultural engine shape community behavior (i.e. *mechanisms* of the DigiForce). The *mechanisms* of the DigiForce serve as the operational arm, channeling TTA's values into outcomes (i.e. enhance community's DT capabilities). These mechanisms bridge the cultural framework with actionable strategies such as collective digital engagement, individual support, inspirational outreach, and resilient skill support. The *outcomes* enable individuals and communities to adopt digital technologies confidently, contributing to broader DT by creating a digitally capable population ready for a digital economy, digital government, and digital society. The *outcome* i.e. community's DT capabilities facilitate the continuous acquisition of DT-related knowledge among its members. This process reinforces the community's cultural *foundations* and establishes a self-sustaining cycle of DT adoption and refinement.

The inner cycle (thin dotted arrows) is described as follows. First, *solidarity's* unity, rooted in Vietnam's communal traditions, drives *collective digital engagement*, yielding digital competence and fostering group learning. This leads to *digital competence*—the ability to use digital technologies, platforms, and tools effectively. In turn, *digital competence* reinforces *solidarity*. For example, competence in using the e-commerce app Postmark spreads via training, enhancing group cohesion and thus strengthening community bonds. Alhassan & Adam (2021) and Thapa et al. (2012) note that collective learning in communities enhances ICT competence, aligning with solidarity's role in skill diffusion. Second, *sympathy's* care, reflecting Vietnam's empathetic care for the needy, ensures *individual support* by providing tailored assistance, resulting in *digital inclusion* by ensuring digital access for all. In turn, *inclusion* deepens *sympathy*. For example, support for an elder using e-government services extends sympathy's reach. Lythreathis et al. (2022) argue that personalized support bridges digital divides, mirroring sympathy's inclusive intent. Third, *patriotism's* pride, tied to Vietnam's national pride, fuels *inspirational outreach* through motivational narratives, building *digital commitment*. *Digital commitment*, in turn, enhances *patriotism*. For example, outreach that inspires the use of online services, including e-government, e-commerce, and e-health, strengthens patriotic sentiment. Choi & Song (2010) link intrinsic motivation to e-government adoption, paralleling patriotism's role. Fourth, *resilience's* grit, from Vietnam's history of overcoming adversity, drives *resilient skill support* by ensuring sustained skill development, which in turn fosters *digital resilience*. This *digital resilience* then reinforces broader cultural *resilience*, creating a feedback loop in which resilience is further strengthened through the maintenance of DT capacity (Ye et al., 2024).

### **Comparison with Diffusion of Innovations (DoI)**

The study explores how cultural values enable community-level DT adoption, emphasizing the interplay of cultural drivers, communal mechanisms, and holistic capacities in a non-Western setting. The following discussion highlights the differences between this study and the innovation adoption model of Rogers (2003) to provide a deeper understanding of the study's results. Table 3 shows the differences in terms of unit, drivers, process, outcomes, and context. First, in terms of the unit of analysis, this study focuses on communal adoption, while the DoI model focuses on an individual lens, offering a new perspective. This is a strength, as it positions this study's findings as an alternative for collectivist contexts. Second, the driving force of this study is cultural grounding, contrasting with DoI's rationalist approach, emphasizing intrinsic, collective motivation over extrinsic benefits. This comparison justifies the cultural specificity of the study. Third, the process examined in this study is dynamic and complementary to DoI, as it extends DoI's static process, aligning with systemic IS theories. Fourth, the outcomes of the process are holistic and

interdependent in this context, going beyond DoI’s singular focus on uptake, offering a richer view of transformation. Finally, this context-specific approach critiques DoI’s generality, highlighting adaptability to non-Western settings.

In sum, DoI focuses on how innovations diffuse through individuals driven by rational attributes and social influence (Rogers, 2003). Its individual-centric, universalist approach contrasts with the examined framework’s community focus, cultural grounding, and reciprocal dynamics. Whereas DoI’s persuasion relies on attributes like trialability (Moore & Benbasat, 1991; Xia & Lee, 2000), the present framework leverages cultural components through inspirational outreach. While DoI focuses on adoption rates, it tends to overlook the interdependence of community digital transformation capacities, offering a static perspective in contrast to the dynamic approach proposed here (Mehmood et al., 2016). This comparison underscores the novelty and contextual relevance of the current framework, particularly within collectivist settings.

Aspect	Community Digital Transformation Enablement Framework	Diffusion of Innovations (Rogers, 2003)
Unit of Analysis	Community-level (collective adoption within groups)	Individual-level (personal adoption decisions)
Driving Force	Intrinsic, cultural values (e.g., solidarity, sympathy, patriotism, and resilience) enable adoption via communal mechanisms (e.g., DigiForce)	Extrinsic, rational (e.g., perceived benefits) drive adoption via individual perception
Diffusion Process	Reciprocal, community-led, systemic	Linear, individual-driven, sequential
Outcomes	Interdependent community digital transformation capacities (e.g., competence, inclusion, commitment, resilience)	Adoption rate across population
Role of Context	Context-specific, culturally embedded (Vietnam’s collectivism)	Context-neutral, universalist assumptions

## Conclusions

The Community Digital Transformation Enablement Framework demonstrates how digital transformation is rooted in cultural values, showing that digital transformation is not just technical but deeply human, sustainable, and inclusive.

We contribute to the literature by proposing the Community Digital Transformation Enablement Framework, which focuses on how TTA’s cultural core enables community-level digital transformation in Vietnam, emphasizing communal adoption, cultural drivers, and interdependent capacities. It theorizes digital transformation adoption as a reciprocal, culturally embedded, complementing individual adoption models. Thus, we extend IS theory with a culturally specific, community-centric model, aligning with calls for contextual theories in IS research (Avgerou, 2019; Osei-Bryson et al., 2022), and extending IS theory with a community-centric, culturally embedded framework (Leidner & Kayworth, 2006). In other words, compared to DoI, the study framework is grounded in Vietnam’s collectivist, relational, and adversity-shaped identity. It theorizes behavior as emerging from mutual interdependence and national spirit, not isolated rational choice.

This study has several practical implications. Vietnam could leverage TTA’s communal strengths for faster transformation and to achieve the 2030 digital transformation goals, bringing Vietnam into a digital society, digital government, and digital economy. Policymakers can enhance the DigiForce by embedding TTA

principles and using the DigiForce for their national digital initiatives. By leveraging TTA through the DigiForce, digital literacy becomes a culturally embedded process, not a top-down imposition.

The study has several limitations: The use of a case study approach with context-specific focus may limit generalizability. However, the aim is to generalize findings to theory (Yin, 2009) rather than to other contexts. This leaves opportunities for future research. Future research can also compare TTA with other cultural lenses or test it in other collectivist settings, urban Vietnam, or other indigenous concepts. Given that this study employed an indigenous concept rooted in Vietnamese culture—TTA—future research could enhance its theoretical contribution by comparing these findings with other indigenous or hybrid cultural constructs (e.g., Confucianism or ASEAN cultural traits). Such comparative analyses would offer deeper insights into how TTA interacts with or diverges from other cultural frameworks, particularly in the context of DT adoption.

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