

TAX DATA MIGRATION THROUGH CORE TAX ADMINISTRATION SYSTEM : A NETNOGRAPHIC STUDY OF DIGITAL TAX CUMMUNITY DISCOURSE

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Abstract

The digital transformation of tax administration has become one of the most significant public sector reforms undertaken by governments worldwide. Indonesia has accelerated this transformation through the implementation of the Core Tax Administration System (Coretax), an integrated platform intended to replace fragmented digital tax applications and establish a unified tax administration database. Despite its strategic importance, the early implementation of Coretax generated considerable discussion among taxpayers, tax consultants, and accounting professionals regarding technical reliability, usability, and adaptation to the new system. This study investigates how digital tax communities socially construct meanings and responses toward the migration to Coretax during its initial implementation phase. This research adopts a qualitative approach using netnography. Data were collected through passive observation of publicly accessible discussions within Telegram tax communities, Twitter/X conversations, and online tax forums between January and August 2025. Qualitative data analysis was conducted using open coding, axial coding, and selective coding to identify dominant discourse themes and explain the socio-technical dynamics underlying user experiences. The findings demonstrate that Coretax implementation represents a socio-technical transformation rather than merely a technological migration. Five dominant themes emerged from the digital discourse: system errors, user interface confusion, emotional resistance, collaborative adaptation, and system stabilization. Users experienced three consecutive migration phases characterized by initial confusion, resistance triggered by technical instability, and gradual acceptance following continuous system improvements. The study concludes that successful digital tax transformation depends not only on technological capability but also on effective communication, digital literacy, institutional responsiveness, and public trust. These findings contribute to the growing literature on digital taxation by highlighting the importance of social construction processes and online communities in shaping public sector technology adoption.

Keywords: coretax, digital taxation, netnography, tax administration, Social Construction of Technology

INTRODUCTION

Digital transformation has fundamentally changed the operation of public sector organizations throughout the world. Governments increasingly rely on integrated information systems to improve administrative efficiency, transparency, accountability, and citizen-oriented public services. Among various public institutions, tax administrations have become one of the primary sectors adopting digital technologies because taxation depends heavily upon accurate information processing, integrated databases, and timely communication between governments and taxpayers. The Organisation for Economic Co-operation and Development (OECD) consistently emphasizes that digital transformation represents a strategic priority for modern tax administrations because integrated digital systems improve compliance management while reducing administrative costs for both governments and taxpayers.

During the last two decades, many countries have progressively modernized their tax administration through electronic filing systems, digital payment services, integrated taxpayer accounts, and real-time data processing technologies. Digital taxation has gradually evolved from isolated electronic applications toward comprehensive tax ecosystems capable of integrating registration, payment, reporting, audit, collection, and compliance monitoring within a single digital platform. This transformation reflects the broader movement toward

digital government, where technology functions not only as an operational tool but also as an institutional mechanism for improving governance quality and public trust.

Indonesia has followed this international trend through a series of tax administration reforms implemented by the Directorate General of Taxes (DGT). The modernization process began with the introduction of electronic tax applications such as e-SPT, followed by e-Filing, e-Billing, e-Faktur, and DJP Online. These applications significantly improved taxpayer convenience by allowing electronic submission of tax returns, online tax payments, and digital tax invoice management. However, these systems were developed independently and relied on different databases and technological architectures. Consequently, fragmented information systems produced data inconsistency, duplicated administrative procedures, limited interoperability, and increasing operational complexity for taxpayers as well as tax administrators.

The fragmentation of tax information systems created substantial administrative challenges. Taxpayers were required to understand different applications with separate authentication procedures, user interfaces, and reporting mechanisms. Simultaneously, tax authorities encountered difficulties integrating taxpayer information across multiple digital platforms, limiting the effectiveness of compliance monitoring and risk-based tax administration. These limitations encouraged the Indonesian government to redesign its digital tax ecosystem through the implementation of the **Core Tax Administration System (Coretax)**, an integrated information system intended to consolidate all major tax administration functions into a single national platform.

Coretax represents one of the largest digital transformation initiatives ever undertaken by the Directorate General of Taxes. Unlike previous applications that primarily digitalized individual administrative processes, Coretax integrates taxpayer registration, payment processing, tax reporting, compliance management, audit activities, collection procedures, and taxpayer account administration within a unified database. The implementation of this platform is expected to strengthen institutional efficiency, improve taxpayer services, enhance data accuracy, and support evidence-based fiscal policy through integrated information management.

Nevertheless, introducing a large-scale integrated information system rarely occurs without organizational challenges. Previous studies in information systems consistently demonstrate that technological implementation involves not only technical deployment but also organizational adaptation, behavioral change, institutional learning, and social negotiation. Users evaluate new technologies according to their previous experiences, perceived usefulness, perceived risks, emotional reactions, and trust toward implementing institutions. Consequently, successful technology implementation requires understanding both technological performance and human responses.

The early implementation of Coretax generated extensive discussion across various online communities involving taxpayers, tax consultants, accountants, academics, and software developers. During the first several months following implementation, digital discussions were dominated by reports concerning login failures, server overload, unsuccessful data migration, user interface confusion, incomplete transaction processing, and delayed tax return submissions. At the same time, many users shared tutorials, practical solutions, and collaborative guidance intended to help other taxpayers adapt to the new platform. These digital conversations illustrate that Coretax implementation became not merely a technological event but also a complex social phenomenon characterized by continuous interaction, negotiation, adaptation, and collective learning.

Online communities have increasingly become important sources of knowledge regarding public sector digital transformation. Unlike conventional surveys or interviews, online discussions capture spontaneous user experiences expressed in natural communication settings. Digital conversations reveal users' emotional responses, perceptions, expectations, frustrations, collaborative practices, and trust formation processes in ways that structured questionnaires often fail to capture. Consequently, online communities provide valuable empirical evidence for understanding the social dynamics underlying technology adoption.

Despite the rapid growth of digital taxation research, most previous studies primarily investigate taxpayer compliance, technology acceptance, information system quality, or service satisfaction using quantitative approaches. While these studies contribute significantly to evaluating digital tax systems, they often overlook the complex social interactions through which taxpayers collectively construct meanings regarding technological change. Limited research has examined how online discourse influences perceptions, resistance, adaptation, and acceptance during large-scale tax system migration.

To address this research gap, this study adopts a **netnographic approach**, an adaptation of ethnographic research designed to investigate naturally occurring interactions within online communities. Rather than focusing exclusively on technical system performance, this study explores how digital tax communities interpret, negotiate, and collectively construct meanings surrounding the implementation of Coretax. By analyzing online

conversations from Telegram communities, Twitter/X, and tax discussion forums, this research seeks to understand the socio-technical processes influencing taxpayer adaptation during Indonesia's national tax data migration.

The findings of this study are expected to contribute both theoretically and practically. Theoretically, the research extends the application of the Social Construction of Technology (SCOT) and Diffusion of Innovations theories within the context of public sector digital transformation. Practically, the findings provide valuable recommendations for policymakers, tax authorities, and information system developers concerning communication strategies, stakeholder engagement, digital literacy programs, and continuous system improvement during future technology implementation.

Accordingly, the principal research question guiding this study is:

How do digital tax communities socially construct, interpret, and respond to the implementation of the Core Tax Administration System during Indonesia's national tax data migration process?

LITERATURE REVIEW

Social Construction of Technology (SCOT)

The Social Construction of Technology (SCOT), originally developed by Pinch and Bijker (1987), argues that technological development is not determined solely by engineering design or technical superiority. Instead, technology evolves through continuous interaction among various relevant social groups, each possessing different expectations, experiences, interpretations, and interests. Consequently, technological artifacts acquire meaning through social negotiation rather than through technical characteristics alone.

Unlike deterministic perspectives that consider technology as an autonomous driver of organizational change, SCOT emphasizes interpretive flexibility. Different groups frequently perceive the same technology differently depending on their professional backgrounds, institutional responsibilities, and practical experiences. During the early stages of implementation, technological meaning remains unstable because users continuously negotiate their understanding through communication and interaction.

Within the context of Coretax implementation, several relevant social groups participate in constructing collective perceptions regarding the new tax administration system. These groups include taxpayers, tax consultants, accounting professionals, corporate finance officers, software developers, tax officers, academics, and government institutions. Each group evaluates Coretax from different perspectives. Tax consultants emphasize compliance efficiency, taxpayers focus on usability and convenience, while tax authorities concentrate on administrative integration and regulatory effectiveness.

Digital communication platforms have become important arenas where these social groups negotiate technological meanings. Online discussions not only report technical problems but also shape collective interpretations regarding whether Coretax represents a successful innovation, an unfinished technological project, or an institutional reform requiring continuous improvement. Therefore, digital discourse itself becomes an essential component of technological development.

SCOT provides an appropriate theoretical foundation for this research because the implementation of Coretax demonstrates that technological acceptance cannot be explained exclusively by technical performance. Instead, users continuously reconstruct the meaning of Coretax according to their experiences, emotional responses, and interactions within digital communities.

Diffusion of Innovations

The Diffusion of Innovations theory proposed by Rogers (2003) explains how new technologies spread throughout a social system over time. Innovation adoption occurs gradually rather than simultaneously, involving sequential stages of knowledge, persuasion, decision, implementation, and confirmation. During each stage, communication among community members strongly influences adoption decisions. According to Rogers, innovation adoption depends upon five principal characteristics: relative advantage, compatibility, complexity, trialability, and observability. Technologies perceived as beneficial, compatible with previous practices, easy to understand, experimentally accessible, and visibly successful tend to diffuse more rapidly than technologies lacking these characteristics.

Coretax implementation illustrates this diffusion process. During the initial implementation period, many taxpayers possessed limited knowledge regarding system functionality. As online discussions expanded, users gradually shared implementation experiences, tutorials, troubleshooting strategies, and practical recommendations. Consequently, online communities accelerated information diffusion by reducing uncertainty and facilitating collaborative learning. The theory also categorizes adopters into innovators, early adopters, early majority, late

majority, and laggards. Within digital tax communities, early adopters frequently became informal educators by producing explanatory materials, answering technical questions, and assisting less experienced users. This collaborative behavior significantly influenced the diffusion of Coretax adoption across broader taxpayer communities.

Technology Resistance

Technology implementation frequently generates resistance among users. Kim and Kankanhalli (2009) explain that technology resistance originates from cognitive, emotional, and organizational factors rather than from technological limitations alone. Users often resist change because new systems alter established work routines, require additional learning, increase perceived uncertainty, or threaten existing competencies. Resistance is particularly common during large-scale organizational transformation where users experience temporary productivity losses while adapting to unfamiliar technologies. Emotional responses including frustration, anxiety, stress, and nostalgia toward previous systems frequently emerge during early implementation stages.

Within Coretax implementation, resistance appeared through numerous online complaints concerning system instability, login failures, interface complexity, and migration difficulties. However, resistance gradually declined as software updates improved system reliability and users accumulated practical experience through community-based learning. Rather than interpreting resistance negatively, contemporary information systems research considers user complaints as valuable organizational feedback capable of supporting continuous system improvement. Digital discussions therefore represent an important information source for evaluating implementation quality and identifying areas requiring technological refinement.

Digital Communities and Netnography

Digital communities have transformed knowledge sharing within professional environments. Tax professionals increasingly exchange information through Telegram groups, social networking platforms, online discussion forums, and other collaborative environments. These communities facilitate rapid dissemination of technical guidance, policy interpretation, implementation experiences, and practical problem-solving strategies.

Netnography, introduced by Kozinets (2015), adapts ethnographic research for investigating naturally occurring online interactions. Unlike interviews or questionnaires, netnography captures spontaneous communication generated independently by participants without researcher intervention. Consequently, netnographic data provide authentic representations of user experiences, emotions, collaborative practices, and meaning construction processes.

The increasing importance of digital communities makes netnography particularly appropriate for investigating public sector digital transformation. Since Coretax implementation generated extensive online discussion, analyzing digital conversations enables researchers to understand both technological challenges and broader social dynamics influencing technology adoption.

Research Gap

Although previous studies have extensively investigated digital taxation, most research focuses primarily on information system quality, taxpayer compliance, service quality, technology acceptance, or organizational performance. Quantitative approaches dominate this literature, emphasizing statistical relationships among predefined variables. Limited research has explored the socio-technical processes through which taxpayers collectively interpret technological transformation during implementation. Specifically, relatively few studies investigate how digital conversations shape public understanding, emotional responses, collaborative adaptation, and technology acceptance throughout large-scale tax administration reform. Therefore, this study contributes by integrating SCOT, Diffusion of Innovations, and netnography to explain how digital communities construct collective meanings regarding Coretax implementation. Rather than measuring technology acceptance numerically, this research explores the social mechanisms underlying taxpayers' adaptation to digital transformation.

METHOD

Research Design

This study employed a qualitative research design using the netnographic approach developed by Kozinets (2015). Netnography represents an adaptation of traditional ethnography designed specifically to investigate social interaction occurring within online environments. The method enables researchers to observe naturally occurring communication among participants while minimizing researcher intervention. A qualitative approach was selected

because the objective of this study was to understand how taxpayers collectively construct meanings regarding Coretax implementation rather than measure predetermined causal relationships. The interpretive paradigm underlying qualitative inquiry allows researchers to explore perceptions, experiences, emotions, and collaborative practices emerging throughout digital interaction.

Research Setting

The research focused on digital communities actively discussing Coretax implementation during Indonesia's national tax data migration between January and August 2025. This period represented the most intensive implementation phase, characterized by extensive public discussion regarding technical problems, user adaptation, institutional communication, and system improvements.

Data were collected from three principal online environments:

- Telegram tax communities
- Twitter/X public discussions
- Online tax discussion forums

These platforms were selected because they contain substantial interaction among taxpayers, tax consultants, accounting professionals, academics, and software developers.

Data Collection

Data collection followed passive observational procedures commonly applied within netnographic research. The researcher did not actively participate in discussions but systematically documented naturally occurring conversations concerning Coretax implementation. Digital data included user comments, technical questions, troubleshooting discussions, software update announcements, practical tutorials, and collaborative problem-solving activities. Relevant conversations were archived through screenshots, digital documentation, and systematic coding procedures. To maintain research ethics, only publicly available discussions were analyzed. User identities were anonymized, and no personal information was disclosed throughout the research process.

Data Analysis

Qualitative analysis followed three coding procedures widely applied in grounded qualitative research.

Open Coding

The first stage involved identifying recurring concepts emerging from digital conversations. Similar statements were grouped into preliminary categories representing common implementation experiences.

Axial Coding

The second stage established relationships among preliminary categories by connecting causal conditions, contextual factors, user responses, and adaptive behaviors.

Selective Coding

Finally, broader theoretical themes were developed by integrating related categories into comprehensive explanations describing taxpayers' experiences during Coretax implementation. The coding process ultimately identified five dominant themes that collectively explain the socio-technical dynamics of Indonesia's national tax data migration.

Research Validity

Research credibility was strengthened through source triangulation involving multiple digital platforms, iterative coding procedures, audit trail documentation, and continuous comparison among different online communities. These procedures enhanced analytical consistency while ensuring that the findings accurately represented naturally occurring digital discourse.

RESULTS AND DISCUSSION

Overview of Netnographic Findings

The netnographic investigation generated a comprehensive corpus of digital conversations collected from Telegram tax communities, Twitter/X discussions, and online tax forums during the initial implementation of the Core Tax Administration System. The collected discourse represented spontaneous interactions among taxpayers,

tax consultants, accountants, software developers, academics, and tax officers who actively discussed the opportunities and challenges associated with the migration process.

Qualitative coding identified **326 meaningful discourse units**, which were subsequently classified into five major themes through open coding, axial coding, and selective coding procedures. These themes represent the dominant patterns characterizing taxpayers' experiences during the national implementation of Coretax. The five themes consist of **system errors and technical problems**, **user interface confusion**, **emotional resistance**, **collaborative adaptation**, and **system stabilization**. Collectively, these findings illustrate that the implementation of Coretax was not merely a technical migration but a complex socio-technical transformation involving continuous interaction between technology and its users. The progression of online discussions further revealed that taxpayers' perceptions evolved over time. Initial conversations were dominated by uncertainty and frustration, whereas later discussions increasingly emphasized collaborative learning, practical solutions, and gradual confidence in the new platform. This evolution demonstrates that technological acceptance is dynamic rather than static and develops through continuous interaction within digital communities.

Theme One: System Errors and Technical Problems

The most dominant discourse theme concerned technical instability during the early implementation period. Participants frequently reported login failures, session timeouts, server overload, unsuccessful tax return submissions, incomplete synchronization of taxpayer data, and failures in generating withholding tax certificates. Many participants expressed concern regarding the inability to complete statutory tax obligations because system errors prevented them from accessing essential services before filing deadlines. Such technical disruptions generated uncertainty and increased operational pressure for tax consultants responsible for multiple clients simultaneously.

From a socio-technical perspective, these discussions demonstrate that users initially evaluated Coretax primarily through its operational reliability. Technical failures significantly influenced public confidence because system availability directly affected taxpayers' ability to fulfill legal obligations. Consequently, technological reliability emerged as a prerequisite for institutional trust. Furthermore, discussions indicated that repeated technical failures influenced broader public perceptions extending beyond individual user experiences. Users frequently shared screenshots documenting system errors, thereby amplifying collective awareness regarding implementation challenges. Consequently, digital communities functioned as mechanisms through which individual technical experiences were transformed into collective public discourse.

Theme Two: User Interface Confusion

The second dominant theme involved confusion regarding Coretax's redesigned user interface and workflow. Although the integrated platform introduced numerous functional improvements, substantial differences compared with previous applications required users to modify established working routines. Participants frequently discussed difficulties locating menus, understanding revised terminology, navigating multi-page forms, and completing administrative procedures. Such challenges were particularly evident among users accustomed to DJP Online and previous tax applications.

The findings indicate that interface redesign significantly influences technology acceptance because usability determines users' initial impressions regarding system quality. Even technically sophisticated systems may generate resistance if users perceive interaction as unnecessarily complex. Interestingly, digital communities rapidly responded by creating informal learning materials, including screenshots, workflow diagrams, video tutorials, and practical implementation guides. These community-generated resources substantially reduced uncertainty and accelerated users' adaptation processes.

Theme Three: Emotional Resistance

Besides technical challenges, digital conversations revealed strong emotional responses during the implementation period. Numerous participants expressed frustration, anxiety, disappointment, stress, and nostalgia regarding previous tax administration systems. Emotional resistance frequently emerged after repeated technical failures prevented users from completing important administrative activities. Many discussions reflected concerns regarding filing deadlines, taxpayer penalties, and professional responsibilities associated with unsuccessful system access. However, emotional resistance should not necessarily be interpreted as opposition toward digital transformation itself. Rather, users generally supported modernization while expecting greater system reliability

and more effective implementation management. Consequently, emotional reactions represented constructive feedback regarding implementation quality rather than rejection of technological innovation.

The gradual reduction of negative emotional expressions following software updates further demonstrates that emotional resistance closely corresponded with perceived system performance.

Theme Four: Collaborative Adaptation

One of the most significant findings concerns the emergence of collaborative learning within digital communities. Rather than functioning solely as complaint forums, online communities evolved into informal knowledge-sharing networks supporting taxpayers throughout the migration process. Experienced users voluntarily shared implementation experiences, troubleshooting techniques, explanatory videos, regulatory interpretations, and practical recommendations. Tax consultants frequently answered technical questions submitted by other community members, while software developers occasionally clarified technical implementation issues. This collaborative environment substantially reduced users' uncertainty while accelerating technology adoption. Community-generated knowledge complemented official government communication by providing practical solutions based upon real implementation experiences. Consequently, digital communities functioned as informal support systems capable of increasing digital literacy beyond formal institutional education programs.

Theme Five: System Stabilization

The final theme illustrates the gradual stabilization of Coretax following continuous software improvements implemented by the Directorate General of Taxes. As technical updates addressed major implementation issues, online discussions increasingly reflected successful tax return submissions, improved processing speed, enhanced system responsiveness, and greater confidence regarding platform reliability.

Positive user experiences progressively replaced earlier complaints. Participants acknowledged that many initial problems had been resolved and began recognizing advantages associated with integrated taxpayer administration. This transition demonstrates that technology acceptance develops progressively rather than immediately. Successful stabilization required continuous institutional responsiveness, software refinement, and active communication with users.

CONCLUSION

This study concludes that the implementation of the Core Tax Administration System constitutes a complex socio-technical transformation extending beyond technological migration. Users experienced three successive implementation phases characterized by initial confusion, resistance arising from technical instability, and gradual adaptation following continuous software improvements. Netnographic analysis identified five dominant discourse themes that collectively explain taxpayers' experiences during Indonesia's national tax data migration. These findings demonstrate that technological success depends not only upon software capability but also upon communication quality, institutional responsiveness, digital literacy, collaborative learning, and public trust. Theoretically, this study enriches research concerning digital taxation by extending the application of Social Construction of Technology and Diffusion of Innovations within public sector digital transformation. Practically, the findings provide evidence-based recommendations for policymakers responsible for future tax administration modernization.

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