

BANKING LEADERSHIP TRANSFORMATION IN THE DIGITAL ERA: A DIGITAL SOCIOLOGY PERSPECTIVE ON BANK NTT HEAD OFFICE, KUPANG

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ABSTRACT

The digital transformation of banking is often understood as a technological change, even though it is a social process that involves shifting values, norms, and power relations in dimensional organizations that have not been touched much by banking leadership studies, especially in Regional Development Banks in the Eastern Indonesia region. This research aims to examine leadership transformation in PT Bank Pembangunan Daerah Nusa Tenggara Timur (Bank NTT) through the perspective of digital sociology. The research uses a qualitative approach with a case study method, with primary data from in-depth interviews with directors and heads of divisions as well as participatory observations, and secondary data from internal documents and official publications of Bank NTT. The results of the study show that the success of Bank NTT's digital transformation is supported by leadership capacity that develops multidimensionally, strategic actions that integrate infrastructure strengthening, service innovation based on local needs, and organizational culture transformation, as well as sensitivity to the social dynamics of the NTT community including the digital divide, changes in social relations, and the construction of digital trust. These findings confirm that banking leadership in the digital age is evolving into collaborative and participatory network leadership. This research contributes to offering an analytical framework that integrates transformational leadership, digital sociology, and functionalism to understand digital transformation in regional banks more holistically.

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INTRODUCTION

Indonesia's economic system based on Pancasila emphasizes a balance between state and individual interests, so that every economic activity is directed at improving the collective welfare of the people (Jamal & Police, 2023). Within this framework, the banking sector occupies a strategic position as a collector and distributor of public funds as well as a support for national development (Ali et al., 2023). OJK data in the Indonesian Banking Surveillance Report for the first quarter of 2024 recorded domestic economic growth of 5.11% (yoy), in line with commercial bank credit growth of 12.4% and deposits of 7.44%, which confirms the vital role of banking amid global uncertainty.

Globalization and digitalization bring transformative challenges to the sector. The adoption of mobile banking, internet banking, artificial intelligence, and cloud computing drives efficiency and better customer experience, but also poses data security risks, changing customer behavior, the need for competent digital human resources, and competitive pressures from fintech and digital banks. This phenomenon gave birth to the so-called digital society, a society whose daily activities depend on digital technology. The perspective of digital sociology, as stated by Lupton (Dahnar Nur et al., 2024), emphasizes that this transformation is not only a technological problem, but also a social, cultural, and structural one.

Therefore, the digital transformation of banking cannot be separated from the leadership factor. Hie (2020) in his research on fifty-five banks in Indonesia found that the success of digital transformation is highly determined by the effectiveness of leadership, which includes the ability to formulate a digital vision, change organizational culture, integrate technology with business processes, and build good governance. Leadership is a key element because without strategic coordination from the top, digitalization initiatives from various lines will run independently and not integrated (Nefianthus, 2025).

In that context, leadership is a determining factor, through a study of 55 banks in Indonesia, it was found that the success of digital transformation is highly dependent on the ability of leaders to formulate digital visions, change organizational culture, and build integrated governance. Nefianto (2025) added that without strategic coordination from the top, digitalization initiatives will run alone. However, these two studies, as well as the literature on digital banking leadership in general, focus on banks in aggregate or national commercial banks, and have not reached the typical character of Regional Development Banks (BPDs) operating in different local socio-cultural contexts. (Bayu Prawira Hie, 2020)

Bank NTT is a relevant case to fill this gap. Through mobile banking, digital loans, internet banking, QRIS MSMEs, KUB's collaboration with Bank Jatim, as well as the Blue Print Digital Transformation 2023-2027 and RSTI 2025-2030, Bank NTT shows its commitment to structured digital transformation. The results look positive: profit before tax in 2024 reached IDR 231.11 billion (up 55.59%), mobile banking users more than 114 thousand, and digital transactions grew 78.49% (yoy). However, this transformation also leaves the challenge of reducing deposits by 7.04% and increasing gross NPLs to 3.44% which requires adaptive leadership to the local socio-economic dynamics of NTT, a region with a distinctive geographical character, digital literacy, and customer culture.

So far, the study of leadership in the digital transformation of banking is still dominated by a managerial approach at the level of national banks in general, while studies that place BPDs in the Eastern Indonesia region as an analysis unit, and use a digital sociology perspective to read the shifts in values, norms, and organizational power structures that accompany them, are still very limited. In fact, digital transformation in BPDs such as Bank NTT cannot be understood solely as technical changes, but as a social process that takes place in a specific local context.

Based on these gaps, this study aims to: (1) describe the knowledge and skills capacity of Bank NTT leaders in facing digitalization challenges; (2) describe the form of strategic actions carried out by the leadership; (3) describe the application of the digital sociological perspective in mapping the situation of local communities; and (4) describe how the perspective of digital sociology encourages changes in banking leadership in the digitalization era.

METHOD

This study uses a qualitative research type with a case study approach. Qualitative research was chosen because it fits the research objective of understanding in depth the phenomenon of transformational leadership in the context of digital transformation from a social perspective, rather than to generalize the findings. (Wiraguna et al., 2024) The case study approach is used because this research focuses on one specific single case, namely the transformation of digital leadership at Bank NTT, to be analyzed holistically and in-depth. (Gana et al., 2024)

Bank NTT was chosen as a single case based on three considerations: first, representing the general character of Regional Development Banks in Eastern Indonesia that face transformation pressures with limited resources compared to national commercial banks; second, the availability of structured digital transformation documents (Blue Print Digital Transformation 2023-2027, RSTI 2025-2030) that allow adequate data triangulation; and third, Bank NTT's post-transformation performance achievements that show results. The mix of increased profits and digital users on the one hand, declining deposits and rising NPLs on the other makes it a rich case for understanding non-linear leadership dynamics. This research uses two complementary paradigms: the functional paradigm, which views the organization as a rational entity and examines the relationship between organizational structure, individual behavior in leadership transformation, and organizational adaptation to the digital environment; and the interpretivism paradigm, which believes in the existence of a reality that is socially constructed and understood through the perspective of the parties involved (Junjie & Yingxin, 2022).

The research site is the Head Office of PT. East Nusa Tenggara Regional Development Bank (Bank NTT) in Kupang City, as the center of strategic decision-making in the organizational structure of Bank NTT. This location was chosen purposively because it is considered the most representative to describe the leadership process in the ongoing digital transformation in the regional banking environment. The subject of the research is the Board of Directors of PT Bank NTT, which is a strategic policy maker and a key role holder in the bank's digital transformation.

The selection of informants is carried out by purposive sampling, which is to select informants based on certain considerations who are considered to know the most information needed. The key informants are all Board of Directors of Bank NTT who are directly involved in the formulation and implementation of digital transformation strategies. Supporting informants include several division heads, including the Corporate Secretary & Legal Division, the Information Technology Division, and the Human Resources Division, who can provide information on the technical implementation and social impact of digital transformation. (Stratton, 2024)

The data collection technique uses triangulation, which combines several data collection techniques and data sources to obtain data validity. First, in-depth interviews were conducted to explore the perceptions, experiences, and in-depth knowledge of informants related to the role of leadership in digital transformation. Second, participatory observation to directly observe social interactions, work culture, and leadership styles applied. Third, a documentation study to collect and analyze various written documents related to Bank NTT's policies, strategies, and digital transformation achievements. (Farid Helmi Setyawan, 2021)

Data analysis uses interactive model qualitative data analysis techniques from Miles, Huberman, and Saldana, which consists of three stages: data reduction, data presentation, and conclusion/verification. The validity of the findings is maintained through the trustworthiness criteria of Lincoln and Guba Dalam (; 1985), which include credibility (triangulation of sources and methods), transferability (rich descriptions of the research context), dependability (systematic trail audit), and confirmability (separation between data facts and personal interpretation). Secondary data includes Bank NTT's internal documents such as the Blue Print Digital Transformation 2023-2027, Financial Statements, Annual Report, as well as OJK publications and relevant academic literature. (Lanka et al., 2021) (Retired, 2025)

Conceptually, this research is built on a theoretical framework that connects three main perspectives: transformational leadership (Bass, 1985), digital sociology (Marres, 2017; Lupton, 2022), and functionalism (Parsons, 1951). These three perspectives do not deny each other, but form a complementary theoretical triangulation. Transformational leadership answers the question of who is driving change and how. Digital sociology provides a critical lens for understanding the social impact of change. Functionalism provides a systematic framework for understanding how change is institutionalized into a permanent part of the way an organization operates. (Vivek et al., 2023)

The operational definitions of the key concepts of this research are as follows. Digital Transformational Leadership is defined as the ability of bank leaders to influence, inspire, and encourage subordinates to achieve digital vision through four components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The Digital Sociology perspective is a perspective that analyzes digital transformation as a social process that involves the formation of digital habitus, power relations, and organizational culture changes. Digital Transformation is the process of integrating digital technology into all areas of the bank's business that results in fundamental changes in the way it operates and delivers value to customers.

RESULTS AND DISCUSSION

Knowledge and Skills Capacity of Bank NTT Leaders in Facing Digitalization Challenges.

The findings from the three data sources—in-depth interviews, participatory observations, and documentation studies—complement each other and confirm that Bank NTT's digital leadership capacity has developed significantly and evolved. This capacity does not arise instantly, but rather through a process of collective learning, strategic investment in self-development, and a willingness to constantly adapt to technological disruptions that occur very quickly. This is in line with Bass's transformational leadership theory (which emphasizes the importance of inspirational motivation and idealized influence as the foundation of change. (Moazam Shahwar et al., 2025)

A clear and internalized digital vision is the strongest evidence of this leadership capacity. President Director Statement, Our vision is to become a digital financial partner that enables the people of NTT, not just replacing tellers with machines, reflects the deep philosophy behind the transformation, that technology must serve people and their social context, not the other way around. This vision is designed to address NTT's specific challenges: inclusion, challenging geography, and the power of local culture. The Blue Print Digital Transformation 2023-2027 document serves as a operationalization of that vision, detailing clear tactical steps, targets, and success metrics.

Adaptive skills and responsiveness to feedback are very prominent aspects of leadership capacity. Observations of digital marketing teams proactively monitoring and responding to complaints on platforms like Instagram and Facebook show how this adaptive mindset translates into action. Quantitative data from the Customer Experience Monthly Report showing a 40% decrease in complaints after app updates is clear evidence of the effectiveness of this approach. This adaptive capacity reflects the implementation of customer-centric leadership that sees negative feedback as a valuable source of learning. (Chliova et al., 2025)

Continued investment in digital human resource development demonstrates a serious financial commitment. The training budget allocation of IDR 21.60 billion in 2024 proves that digital transformation is understood not only as a technology project, but as a human transformation. The training provided is not uniform, but differentiated: for the board of directors and senior management, the focus is on digital literacy and strategic thinking; for the implementation level, it is more technical-operational; For senior employees who experience resistance, the buddy system assistance program is applied. This individualized approach demonstrates a deep understanding of the diversity of development needs in the context of digital transformation.

The capacity to build collaboration and strategic networks is another dimension revealed from the research findings. The ability to establish partnerships with Bank Jatim in the KUB scheme, local governments, and technology providers such as Privy shows that Bank NTT's digital leadership understands the limitations of internal resources and is able to leverage the external ecosystem to accelerate transformation. This collaboration is not only transactional, but strategic, aimed at strengthening the bank's competitive position and sustainability in the digital era.

From the perspective of digital sociology, this leadership capacity can be understood as the process of forming a digital habitus that takes place collectively within the organization. Bank NTT's leaders not only adopt technology, but also shape and transmit digital mindsets, values, and practices to all members of the organization. This process reflects the dynamics of cultural transformation that goes beyond just technical training, reaches the dimensions of value socialization and a deeper restructuring of work norms. (TAŞDELEN & GÜL, 2023) (Tulings et al., 2022)

Overall, data triangulation provides a complete picture that Bank NTT's leaders are not just digital literate, but have developed into digital leaders who are able to formulate contextual visions, lead adaptation with an open mindset, and build collaborative networks to face the complexity of digitalization challenges in NTT. This capacity is the critical foundation that allows all strategies and other transformation actions to be executed effectively. These findings are consistent with the argument that digital leaders must simultaneously have vision, technological competence, and change management capabilities. (Wujarso et al., 2023)

Table 1, Triangulation of Bank NTT's Digital Leadership Capacity Data.

<u>Capacity Aspect</u>	<u>Interview Data</u>	<u>Date Notice</u>	<u>Document Data</u>	<u>Analysis</u>
Digital Vision	"Our vision is to become a digital financial partner that enables the people of NTT..."	The strategy meeting discussed the digital roadmap for 2027 with a vision board displayed.	Blue Print Digital Transformation 2023-2027: An Inclusive Vision of Leading Digital Banks.	High consistency between speech, practice, and documents indicates an internalized vision.
Adaptive Skills	"We learned from customer complaints on social media. That becomes valuable feedback."	The digital marketing team monitors complaints in real-time on Instagram and Facebook.	Q4/2024 Customer Experience Report: A 40% decrease in app error complaints after an update.	Adaptive leadership is evident through responsiveness to external feedback.
HR Investment	"We invest heavily in training because digital transformation is a human transformation."	Digital training sessions are intensive with modules varying per employee segment.	The training budget of IDR 21.60 billion in 2024 includes 125+ training programs.	Real financial commitment to human resource development to be an enabler of digital transformation.

Source : Bank NTT Digital Leadership Capacity Data

Form and Direction of Strategic Actions of Bank NTT Leaders.

The strategic actions taken by the leadership of Bank NTT are not partial or reactive, but rather a comprehensive approach that is integrated and mutually reinforcing, covering three main pillars: technology, human resources, and organizational culture. Based on data triangulation, it can be identified that all of these actions are directed to create a sustainable, inclusive, and contextual digital ecosystem with the conditions of East Nusa Tenggara. This multi-dimensional approach reflects a mature understanding that successful digital transformation cannot be achieved through a single dimension of intervention alone. (Vergiansyah et al., 2025)

The first strategic action is to strengthen the foundations of digital infrastructure and security. Bank NTT invested IDR 45 billion to build and update the Tier-3 Data Center and Disaster Recovery Center (DRC). Tier-3 status guarantees 99.982% system availability, demonstrating a high commitment to service reliability. In addition, the implementation of a multi-layered cybersecurity layer includes Web Application Firewall (WAF), Endpoint Detection Response (EDR), Intrusion Prevention System (IPS), and Anti-DDoS, which successfully reduced cybersecurity incidents by 60% in six months. The achievement of ISO/IEC 27001:2022 certification for Information Security Management Systems is clear evidence of commitment to digital trust. (Nathasya , 2024)

The second strategic action is service innovation based on local needs, which is the main competitive differentiator of Bank NTT. Unlike large commercial banks that offer generic digital solutions, Bank NTT develops very specific innovations that answer the unique pain points of the people of NTT. Digital Loan with the Privy platform allows MSME customers in remote areas such as Rote Ndao to apply for loans without having to cross the ocean to Kupang, with the processing time reduced from 7 days to 2 working days. TTS's QRIS (Withdraw, Transfer, Deposit) innovation allows merchants to not only accept payments but also make cash withdrawals and deposits through the same QR code, reaching 15,000 merchants within 10 months of launch. The integration of PDAM and school payments creates a digital ecosystem that facilitates people's daily lives, increasing the volume of PDAM payment transactions via mobile banking by up to 300% in six months (Rogers, 1962;. (Wujarso et al., 2023)

The third strategic action is the transformation of organizational culture through the internalization of BINTANG values as the foundation for change. The BINTANG (Business Oriented, Independent, Networking, Trust & Team Work, Adaptive, New Technology, Growth & Sustainable) value is not just a slogan, but is integrated into a performance appraisal system (KPI) with a weight of 30% of the total employee appraisal, as well as a reward and punishment system. This process reflects the institutionalization of systematic cultural change: from externalization by top leadership, through objectification through KPIs and training, to internalization by all employees as part of their professional identity (Berger & Luckmann, 1966). Townhall meetings held regularly with open question and answer sessions through online platforms became a medium for participatory leadership social construction.

Bank NTT's overall strategic direction is built on three pillars: inclusion, collaboration, and sustainability. Inclusion is realized through the strategy of Laku Pandai Agents that reach remote areas, with the use of community-based social trust as a bridge of the digital divide. Collaboration is realized through strategic partnerships with various stakeholders, from local governments to fintech partners. Sustainability is evident from the issuance of the Sustainability Report, which follows the Global Reporting Initiative (GRI) standard, exposing the bank's contribution to three pillars: economic (MSME credit), social (financial education), and environment (paperless transactions). The integration of these three pillars proves that technology is placed as an enabler of the social mission, not the end goal. (Menter, 2024)

From the perspective of the Resource-Based View (Barney, 1991), the combination of infrastructure, local services, and organizational culture built by Bank NTT meets the criteria of VRIN: Valuable (proven from financial performance), Rare (ISO 27001 certification and Tier-3 Data Center are not owned by all BPDs), Inimitable (path dependency that is difficult to replicate because it is rooted in a long-term transformation process), and Non-Substitutable (digital trust cannot be replaced by other approaches in the financial industry). This continuous competitive advantage is the basis for optimal performance.

These three pillars of strategic action are organically interconnected. A robust infrastructure allows service innovation to run reliably and securely. STAR's culture moves employees to learn, adopt, and develop these innovations. Service innovation then provides tangible evidence (return on investment) that motivates the entire organization to continue investing in infrastructure and cultural development. The concrete results of this multi-dimensional approach are manifested in profit before tax which increased by 55.59% to IDR 231.11 billion in 2024, digital transactions soared 78.49% year-on-year, and the number of mobile banking users reached more than 114 thousand customers.

An in-depth analysis of Bank NTT's strategic actions shows that the success of digital transformation is not solely about the adoption of the latest technology, but rather about the ability of leaders to integrate three elements coherently: a strong technical foundation, contextual innovation, and a supportive cultural ecosystem. These findings are in line with the argument that ICT innovation mediates the relationship between leadership and organizational performance, as well as reinforcing the position of digital leadership as a key determinant of transformation success. (Sönmez, 2025)

Table 2, Triangulation of Data on the Strategy and Impact of Bank NTT's Service Innovation

Forms of Innovation	Interview Data	Date Notice	Document Data	Analysis
Digital Loan (Privy)	"MSME customers in Rote can apply for loans without having to take a boat to Kupang. The disbursement time from 7 days to 2 days."	Demonstration of the use of the application by field agents in traditional markets for MSME customers.	Digital MSME credit growth of 45% YoY in Q4/2024.	Innovation based on understanding the geographical context of NTT. It has been proven to increase the financial inclusion of remote MSMEs.
QRIS TTS	"One QR code for receiving, withdrawing, and depositing. Merchants don't need to bother going to ATMs or branches."	The use of QRIS TTS is active in the traditional market of Kupang and its surroundings.	15,000 merchants were active in 10 months since launch.	Proprietary innovation that answers the challenge of ATM limitations in the region. Creating a digital merchant ecosystem.
PDAM Digital Payments	"This is part of our mission to make people's lives easier. You don't have to pay for water."	Banners and banners are installed at PDAM branch offices and counters.	The volume of PDAM payment transactions via mobile banking increased by 300% in 6 months.	Smart onboarding ecosystem. Building digital habits through people's daily needs.

The perspective of digital sociology maps the social situation of the community.

The perspective of digital sociology provides a critical lens to understand that the adoption of technology is not a purely linear and technical process, but rather a complex, dynamic, and negotiated social phenomenon of meaning. This approach allows an understanding not only of what is changing, but also how and why those changes are happening, as well as what social impacts they have in the context of NTT's unique society. Digital sociology rejects a deterministic view of technology that sees technology as an autonomous force that linearly transforms society, and instead sees that technology and society are in a dialectical relationship (Ri, 2024)

The mapping of the digital divide is the most significant sociological finding. Based on data triangulation, it was identified that the adoption of Bank NTT's digital services was uneven. User segmentation based on age, geographic location, and digital literacy illustrates the existence of a multidimensional digital divide. The younger generation (Millennials/Gen-Z) in urban areas are early adopters with 65% of active mobile banking users under the age of 35. The urban-educated middle class utilizes digital payment services with 85% of customers in this category using at least two digital features. In contrast, urban micro-entrepreneurs have ample access to infrastructure but limited literacy, while farmers and fishers in the interior face a dual challenge: infrastructure access is very limited and digital literacy is low, with only 15% of transactions conducted independently through digital. (I&R, 2025)

The digital divide in NTT is not only a technical problem (first-level divide), but also a problem of capabilities and skills (second-level divide), as well as differences in utilization for profitable purposes (third-level divide). Structurally-historically, 70% of NTT's territory is in the form of hills and islands that hinder the development of telecommunication infrastructure, with operator investment concentrated in Kupang and leaving rural areas. Rural communities are forced to make costly adaptations such as traveling to cities for bank transactions, which deepens economic exclusion. These findings confirm that Bank NTT cannot solve this problem alone, but rather requires ecosystem collaboration with local governments, telecommunication operators, and local communities (Hargittai, 2002; . (Dwi et al., 2024)

The mediation of technology and changes in social relations are equally important sociological findings. Interviews with senior customers in Kupang reveal the feeling of an increasingly tenuous relationship with the bank: I used to know the teller well, now I only deal with the app. On the other hand, young customers state efficiency advantages: It is easier to use applications, no need for small talk, fast. Transaction data shows a 15% decrease in the frequency of visits to branches year-on-year, while interaction via application chat increased by 65% in the 2023-2024 period. This change reflects the theory of technological mediation and networked individualism, in which technology transforms the form of social relations from communal-personal to network-efficient. (Sosnovskaya, 2023)

The birth of new social capital in the form of digital trust is a significant sociological phenomenon. Trust is no longer built just through handshake and face-to-face interactions, but through system reliability, interface clarity, and digital customer service responsiveness. As many as 68% of respondents in the customer satisfaction survey stated that the ease and speed of the application are the main reasons they believe in digital transactions. Observations and interviews also reveal the new role of young people as digital translators for their parents, which slightly shifts the dynamics of power in the family where the younger generation becomes the gatekeeper of access to family financial resources. (Zhao et al., 2023)

From the perspective of financial sociology, Bank NTT's digital services are a double-edged sword: they have great potential for inclusion, but they also risk creating new forms of exclusion. Digital Loan has reached 5,000+ MSMEs in remote areas that previously did not have access to formal banking, demonstrating the potential for democratizing access to finance. However, 22% of senior customers over the age of 60 feel increasingly left behind and rely on the help of others for basic transactions. The increase in digital transactions also raises ethical questions about privacy and the potential for digital surveillance through credit scoring based on customer consumption behavior data (Carruthers, 2025)

Bank NTT's strategy in overcoming the digital divide shows a targeted socio-technical approach. The Agen Laku Pandai program that utilizes local trust as a digital bridge, community-based socialization through PKK and youth organizations, as well as the Safe Digital Transaction module that has been used in 150+ sessions reaching 10,000+ participants, is a response rooted in a sociological understanding of the local context. This approach is in line with the concept of digital trust construction which is built through institutional trust, technological trust, and communal trust simultaneously. (Bodó, 2021)

This synthesis of digital social mapping reveals that digital transformation is a complex social process, where technology interacts with existing social structures. Bank NTT's success in increasing digital transactions must be read critically: behind the positive numbers, there are inequality of access, changes in social relations, and the struggle to build trust. This deep sociological understanding is what allows Bank NTT to design a strategy that is not only technologically sound, but also socially responsible and culturally sensitive, ensuring that digital transformation brings benefits to all levels of NTT society.

Table 3, Triangulation of Digital Social Mapping Data of the NTT Community

Theme Sociology	Interview Data	Date Notice	Document Data	Confirmation & Discussion
Digital Divide	"In the village, the signal is difficult, you want to use mobile banking, so you are lazy." (TTU Regency Customer)	The queue of tellers remains long in the rural branches, while in the city it is already quiet.	Transaction report per branch: digital transaction volume is 40% lower in rural branches.	Infrastructure access gap is the main structural barrier to digital inclusion in NTT.
Changes in Social Relations	"Right now, it's very rare to find a teller, but through an app you can transfer at any time." (Young customers)	Customer service interactions are more via app chat than face-to-face.	Teller transactions decreased 15% YoY; mobile banking transactions increased by 78.49% YoY.	Technology shifts personal relationships to impersonal-efficient. A new form of relationship that mediates technology is born.
Digital Literacy & Trust	"I teach PKK women how to scan QRIS safely, afraid of being cheated," he said. (Agent of Laku Pandai)	The socialization of QRIS and digital security was carried out with social services and community groups.	The 'Secure Digital Transactions' module was used in 150+ sessions, reaching 10,000+ participants.	Digital trust is the new social capital. Community-based educational approaches have proven effective.

Digital Sociology Perspectives Explain and Encourage Leadership Change

The perspective of digital sociology offers a revolutionary lens for understanding the evolution of leadership in the context of digital transformation. This perspective moves beyond the traditional paradigm that views leadership as a purely individual attribute or hierarchical position, and instead positions leadership as a phenomenon

that is distributed, socially constructed, and embedded in complex socio-technical networks. The analysis of Bank NTT reveals three key paradigm shifts in leadership that are explained and driven by a digital sociology perspective.

The first shift is from a hierarchical leader to a network leader. Network Society theory argues that power in the digital age no longer resides only in traditional institutions, but is spread and flows through a fluid and global network. The data from this study shows how Bank NTT's leadership is actively building and utilizing the network. Collaboration with the Regional Government through 15 Memorandums of Understanding produces social legitimacy as a partner in regional development. Partnerships with fintechs (Privy) provide access to innovation and speed without having to build from scratch. Joining KUB with Bank Jatim increases resilience and economic scale in the face of regulatory pressures. This action shows a shift from power over to power to produce impact through collaboration (power with). (Bimantara et al., 2026)

The second shift is leadership as a participatory social construct. The perspective of digital sociology, influenced by social constructivist thought, views leadership not as an innate essence of an individual, but as a reality constructed through interactions, language, and everyday practices. The statement of a branch head, Adaptive Value was originally from the Director who always asked, Can we try another way? Now, my own subordinates who often propose new ideas, illustrate the process of internalizing values socially. Observations in the townhall meeting, where the President Director opened a long question and answer session through an online platform and the best questions were chosen by the participants, constructing the narrative that the leader is a listener. With 30% of the weight of individual KPIs related to the implementation of STAR values, this process of social construction of leadership is formally institutionalized. (Vavouras et al., 2024) (Vavouras et al., 2024)

The third shift is to encourage change through socio-technical understanding. The concept of socio-technical imagination refers to the capacity to understand and design technologies that are aligned with social values and collective aspirations. The decision to develop services such as Agen Laku Pandai and QRIS TTS is the fruit of this imagination. Statement of the Director of Operations, We do not force rural communities to directly use the application. We send agents, people they know and trust, to be a bridge. Technology must be adaptive to humans, not the other way around, revealing the philosophy underlying those strategic decisions. The feature design process that involves focus group discussions with market traders and PKK mothers ensures a simple and intuitive interface, as well as market research reports that show that 65% of micro merchants prefer one application for all their needs are the basis for the development of QRIS TTS. (Groves -Lleida, 2025) (Lau et al., 2024)

The perspective of digital sociology also explains that Bank NTT's digital leadership succeeds not because of personal charisma alone, but because of the ability to act as a node that is connected in a wide network (network leadership), facilitate the construction of a shared meaning about the future of the organization (leadership as social construction), and has the socio-technical imagination to design technology that is humane and inclusive. These three capacities together form a more open, collaborative, and contextual leadership model, which is urgently needed for navigating the uncertainty of the digital age (Castells, 2000; Marres, 2017).

From the perspective of Parsons (1951) functionalism, the transformation of leadership in Bank NTT can be mapped through the AGIL scheme. Adaptation is reflected in the strengthening of IT infrastructure and the development of new digital services in response to external disruptions. Goal Attainment is evident from the improvement in financial performance (profit +55.59%) and operational performance (digital transactions +78.49%). Integration is realized through STAR's cultural values and a new KPI structure that drives all elements of the organization coherently. Latency is maintained through reward systems and ongoing training programs that maintain and reproduce new patterns of behavior that support digital culture.

The synthesis of three theoretical perspectives results in a holistic understanding: Transformational Leadership acts as a catalyst that provokes change; Digital Sociology provides context and empathy to understand social impact in depth; and Functionalism provides a systematic framework for instituting change and achieving a

new organizational balance. Bank NTT's success is due to its ability to balance the three simultaneously. Leadership without an understanding of sociology will be authoritarian and detached from reality. Understanding sociology without leadership will become passive analysis without the ability to drive change. Both without a functional framework will result in fragmented and non-sustainable initiatives (Bass, 1990; Parsons, 1951; Marres, 2017).

The theoretical model resulting from this study illustrates that the successful digital leadership transformation at Bank NTT is the result of dynamic interactions between: external pressures that trigger change (fintech disruptions, OJK regulations, changes in customer behavior); transformational leadership that leads adaptation through the four digitized 4I dimensions; multi-dimensional strategic actions implemented through three pillars; a deep sociological understanding of the impact of change; and the achievement of outcomes that strengthen the entire system through reinforcing feedback. This model offers a blueprint that can be adapted by other organizations facing similar digital transformation challenges, especially in developing regions with specific socio-economic characteristics.

Overall, this study proves that the digital sociological perspective is not only useful for describing change, but also has a strong impetus for designing more inclusive and contextual leadership transformation strategies. Bank NTT, although perhaps without explicitly formulating it in an academic framework, has managed to practice a synthesis between visionary leadership (Transformational Leadership), which is able to read the social map of NTT society carefully (Digital Sociology), and managing change through clear structures, processes, and incentive systems (Functionalism). This theoretical triangulation not only provides richer explanations but also offers a template that can be a valuable lesson for other organizations.

Table 4, Data and Empirical Confirmation of Network Leadership at Bank NTT

Types of Networks	Forms of Collaboration	Supporting Documents	Value Created	Types of Networks
Government Network	Collaboration with local governments for the integration of PAD payments, regional taxes, and social benefits.	Memorandum of Understanding with 15 Regencies/Cities. Siskeudes system integration report.	Social legitimacy. The Bank strengthens its position as a regional development partner.	Government Network
Fintech/Startup Network	Strategic partnership with Privy for digital identity verification and development of TTS QRIS features.	Technical cooperation contract. API implementation reports.	Access to innovation and speed of adoption of leading-edge technologies without building from scratch.	Fintech/Startup Network
Banking Network	Join the Bank Business Group (KUB) with Bank	KUB Cooperation Act. Consolidation strategic plan.	Resilience and economies of scale. Increase resilience	Banking Network

Types of Networks	Forms of Collaboration	Supporting Documents	Value Created	Types of Networks
	Jatim to share resources and comply with regulations.		to disruption and regulatory pressures.	

CONCLUSION

This study examines the transformation of banking leadership in the digital era through a digital sociology perspective at Bank NTT Kupang Head Office, and produces five main findings. First, Bank NTT's digital leadership capacity develops multidimensionally, including techno-strategic understanding, the ability to formulate a contextual digital vision, and a commitment to invest in differentiated training of IDR 21.60 billion that builds digital competencies according to the needs of each employee. Second, the leadership's strategic actions are based on three mutually reinforcing pillars: strengthening infrastructure and cybersecurity (Data Center Tier-3, DRC, ISO 27001:2022 certification), service innovation based on local needs (Digital Loan, QRIS TTS, digital payments for PDAM and schools), and organizational culture transformation through the internalization of BINTANG values that are integrated with the KPI and reward system. Third, the digital sociology perspective maps the structural-geographical digital gap between urban and rural areas, the shift in social relations from personal to impersonal-efficient, and the construction of digital trust as a new social capital built through community-based education and system reliability. Fourth, this perspective reconfigures the essence of leadership itself: from a command model to collaborative network leadership, understood as a participatory social construct, and driven by the socio-technical imagination that designs humane and contextual technologies. Fifth, the synthesis of three theoretical perspectives of Transformational Leadership as a catalyst for change, Digital Sociology as a lens of context and empathy, and Functionalism as a framework for institutionalizing change proved to complement each other and explain the success of Bank NTT's digital transformation as a result of the simultaneous balance of the three.

Theoretically, this study contributes by offering a triangulation framework of the three perspectives as an analytical model to read the digital transformation of regional banking, an approach that has rarely been used in an integrated manner in the study of banking leadership which generally stops at the managerial perspective alone. In practical terms, these findings offer a reference for other Regional Development Banks facing similar conditions: that sustainable digital transformation demands a balance between infrastructure-technology investment, service innovation that is responsive to the local context, and leadership that is able to read the socio-cultural dynamics of the communities it serves, rather than simply the adoption of technology an sich.

This research has limitations that need to be considered in the use of its findings. As a single case study, these findings are contextual to Bank NTT and cannot necessarily be generalized directly to BPDs with different geographical characteristics, organizational culture, or digital transformation stages. In addition, data is collected over specific periods so that it has not captured the long-term dynamics of leadership changes and their impact on bank performance. Further research is recommended to conduct comparative studies on multiple BPDs in different regions to test the transferability of this theoretical model, as well as longitudinal studies to observe the evolution of digital leadership and its impact on performance indicators such as deposit growth and credit quality over a longer period of time.

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