



Organizational Resistance in AI-Driven Transformation: A Case Study of PT. Nusantara Komunika

Rini¹, Susanti Hi Djafar², Raudhatul Zannah³, Ari Rahmadani⁴, Emzita Hudaya⁵
STIMI Banjarmasin^{1,2,3,4,5}

ARTICLE INFO

Keywords: Artificial Intelligence; Organizational Change; Organizational Development; Resistance to Change; Telecommunication Industry

ABSTRACT

The rapid advancement of artificial intelligence (AI) and digital technologies has fundamentally reshaped the telecommunications industry. Traditional telecom operators are increasingly pressured to move beyond infrastructure provision and transform into technology driven organizations. PT Nusantara Komunika (NK) initiated the NK-Future program to shift toward an AI-based Telco-Tech business model. However, the transformation process encountered significant organizational resistance. This study aims to analyze the sources of resistance during NK's strategic transformation and to propose appropriate organizational development (OD) interventions. Using a qualitative case study approach, this research applies the Power-Interest Matrix and organizational resistance diagnosis as analytical tools. The findings indicate that resistance emerged from economic insecurity, group inertia, covert resistance, and perceived threats to power and professional identity. The study concludes that technological transformation cannot succeed without parallel human and cultural change. A participative, human-centered OD approach is essential to ensure sustainable digital transformation in legacy organizations.

1. Introduction

Digital transformation has become a strategic imperative for organizations operating in highly competitive and technology-intensive industries. In the telecommunications sector, declining margins from traditional voice and data services have forced companies to explore new value creation through cloud services, Internet of Things (IoT), and artificial intelligence (AI). Consequently, telecom operators are required to evolve into technology-based service providers rather than remaining mere infrastructure owners.

PT Nusantara Komunika (NK) is one of Indonesia's largest telecommunications companies, with more than 30 years of experience in building and managing physical infrastructure such as transmission towers and fiber-optic networks. The organization has historically been characterized by a highly technical, hierarchical culture shaped by field engineers and long-tenured managers. While this legacy culture provided stability, it also created rigidity in adapting to disruptive technological change. In response to external pressures, NK's new leadership launched the NK-Future initiative, which included divisional restructuring, AI-based operational systems, and the adoption of agile organizational principles. Despite its strategic intent, the initiative triggered widespread resistance across multiple organizational levels. This phenomenon raises a critical question: why do well-designed strategic transformations fail at the implementation stage?

Organizations and projects operate within complex environments involving multiple stakeholders with varying expectations, influence, and levels of involvement. Effective stakeholder management has therefore become a central concern in management and project

studies. Freeman (1984) defines stakeholders as individuals or groups that can affect or are affected by the achievement of organizational objectives. To manage stakeholders effectively, several analytical tools have been developed, among which the Power–Interest Matrix is one of the most prominent.

The Power–Interest Matrix provides a systematic approach to categorizing stakeholders and determining appropriate engagement strategies. This literature review explores the origins and conceptual basis of the matrix, its applications across disciplines, and the main critiques identified in academic literature. Despite its usefulness, several scholars have criticized the Power–Interest Matrix. One major limitation is its static nature; stakeholder power and interest can change over time, but the matrix often represents only a single point in time (Reed et al., 2009). This can lead to outdated assumptions if not regularly updated. Another criticism concerns oversimplification. Reducing stakeholders to two dimensions may ignore other important factors such as legitimacy, urgency, and relationships between stakeholders. Mitchell et al. (1997) suggest that more comprehensive models may better capture stakeholder complexity.

Previous studies have examined the application and effectiveness of the Power–Interest Matrix in various contexts. For example, Olander & Landin (2005) demonstrated that stakeholder power and interest significantly influence project outcomes in construction projects, emphasizing the importance of early stakeholder assessment. Bourne & Walker (2006) explored the use of stakeholder mapping tools, including the Power–Interest Matrix, and found that systematic stakeholder analysis contributes to improved project governance. Similarly, Yang et al. (2009) applied stakeholder analysis frameworks in infrastructure projects and highlighted the role of stakeholder influence in project success.

Zhu et al. (2024) stated that stakeholders such as the supervision company, supplier, and subcontractor play key roles at specific stages, with varying levels of salience throughout the project lifecycle, reflecting shifts in their influence and involvement. In the context of public and environmental management, Reed et al. (2009) reviewed stakeholder analysis methods and identified the Power–Interest Matrix as a commonly used but often static tool, noting the need for more dynamic approaches. Aaltonen & Kujala (2016) argued that traditional stakeholder analysis tools, including the Power–Interest Matrix, may oversimplify complex stakeholder relationships in highly uncertain project environments.

Tjandra et al. (2019) found that not all stakeholders can be involved in co-creation activities. To ensure the effectiveness of co-creation activities, it is important to assess the level of stakeholders' power, which indicates the strength of relationship and influence on providers, and their interest in co-creation activities. The co-creator power/interest matrix can be used to identify viable co-creating partners in an organization's relationship network. Moreover, Maqbool et al. (2022) stated that in order to have prosperous renewable energy projects the influence of both internal and external stakeholder satisfaction is important alongside five critical success factors (CSFs); however, the role of internal stakeholder satisfaction is more critical to consider for such sustainable projects.

Despite the extensive use of the Power–Interest Matrix, existing studies tend to focus on its practical application rather than critically synthesizing its theoretical foundations, strengths, and limitations across disciplines. Moreover, limited attention has been given to comparing the matrix with more dynamic and multidimensional stakeholder models. Therefore, this literature review aims to address this gap by systematically examining prior research on the Power–Interest Matrix, identifying its contributions, limitations, and potential areas for future development. This synthesis provides novelty by integrating insights from project management, strategic management, and public policy literature to offer a more comprehensive understanding of the matrix's role in stakeholder management. This study seeks to examine the organizational resistance encountered during NK's transformation and to identify intervention

strategies grounded in organizational development theory. Organizational transformation refers to large-scale, fundamental change that alters an organization's strategy, structure, processes, and culture. Organizational Development (OD) provides a planned, systematic approach to managing such change by emphasizing human processes, participation, and learning (Cummings & Worley, 2019). OD views organizations as social systems rather than mechanical entities, highlighting the importance of aligning technical change with human behavior and organizational culture.

Resistance to change is a common response when individuals or groups perceive threats arising from uncertainty, loss of control, or disruption of established routines. Resistance can manifest in overt forms, such as open opposition, or covert forms, including reduced performance and passive noncompliance (Robbins & Judge, 2018). Economic insecurity, fear of skill obsolescence, and threats to professional identity are frequently identified as primary drivers of resistance in technology-driven change initiatives. At the group level, shared norms and collective identity can intensify resistance, particularly when change is perceived as externally imposed and misaligned with existing values. The Power–Interest Matrix is a stakeholder analysis tool used to classify actors based on their level of influence and degree of interest in a change initiative. Stakeholders with high power and low or negative interest pose significant risks if not adequately engaged (Kotter, 1996). Effective change management requires tailored strategies for each stakeholder category to reduce resistance and build commitment.

The Power–Interest Matrix is commonly attributed to work in project and strategic management, particularly by (Mendelow, 1991). The matrix classifies stakeholders according to two dimensions: Power, the ability of a stakeholder to influence decisions or outcomes; and Interest, the level of concern or involvement a stakeholder has in the project or organization. By plotting stakeholders on a two-by-two grid, managers can identify four main categories: High Power–High Interest (Manage Closely), High Power–Low Interest (Keep Satisfied), Low Power–High Interest (Keep Informed), and Low Power–Low Interest (Monitor with Minimal Effort).

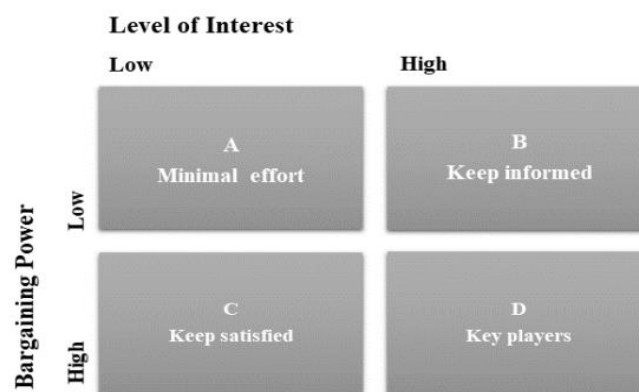


Figure 1. The Power–Interest Matrix (Mendelow, 1991)

This framework offers a clear and practical method for prioritizing stakeholder engagement efforts. The Power–Interest Matrix has been widely applied in project management literature. According to the Project Management Institute (Project Management Institute, 2017), stakeholder identification and analysis are essential processes for project success, and the matrix serves as a recommended tool for this purpose. It helps project managers allocate communication resources efficiently and anticipate potential support or resistance. Beyond project management, the matrix has also been applied in public policy analysis, environmental management, and corporate strategy. Bryson (2004) notes that stakeholder mapping

techniques, including the Power–Interest Matrix, are useful for understanding complex governance environments and improving strategic decision-making.

One of the main strengths of the Power–Interest Matrix is its simplicity and ease of use. It allows practitioners to quickly visualize stakeholder positions and develop engagement strategies without requiring complex data. Ackermann & Eden (2011) argue that such visual tools enhance managerial understanding and facilitate communication among decision-makers. Additionally, the matrix is flexible and can be adapted to different contexts, from small projects to large organizations. Its intuitive structure makes it particularly suitable for practitioners with limited experience in stakeholder analysis.

2. Research Methods

This study employs a qualitative descriptive approach using a case study design to explore organizational resistance during NK's transformation. Data were collected through:

- 1) Analysis of organizational case documentation describing the NK-Future initiative;
- 2) Conceptual observation of resistance patterns and behaviors;
- 3) Review of relevant academic literature on organizational change and development.

The analysis involved:

- a. Mapping internal stakeholders using the Power–Interest Matrix;
- b. Diagnosing sources of resistance based on established change management theories;
- c. Interpreting the alignment between transformation strategies and organizational culture.

3. Results And Discussion

The analysis reveals multiple interconnected sources of resistance within PT Nusantara Komunika. First, field engineers experienced strong economic insecurity, perceiving AI-based monitoring systems as a direct threat to their job security and long-established technical expertise. Second, middle and senior managers demonstrated group-level resistance by collectively rejecting AI training programs. This behavior was reinforced by shared beliefs that digital systems failed to capture field realities. Third, covert resistance emerged in the form of delayed responses to customer complaints and increased operational disruptions. Such behavior indicated low psychological safety and distrust toward top management. Finally, senior managers perceived digital transparency and data-driven decision-making as threats to their informal authority and control, leading to political resistance. Resistance to the NK-Future transformation was not a singular phenomenon, but a multi-layered organizational response rooted in structural, psychological, and political dynamics across four dominant patterns:

Economic Insecurity and Skill Obsolescence Anxiety

Field engineers, who historically constituted the backbone of NK's operational excellence, perceived the introduction of AI-based monitoring systems as a direct challenge to their occupational security. The automation of tower supervision and predictive maintenance reduced the visibility of manual expertise that had previously defined professional value within the organization. This perception triggered anxiety regarding skill obsolescence, particularly among long-tenured employees whose professional identity was closely tied to physical infrastructure management. Rather than viewing AI as a complementary tool, employees interpreted it as a substitute for human labor. This resulted in defensive attitudes, reluctance to engage with digital training programs, and scepticism toward management narratives emphasizing efficiency and innovation.

Group-Level Resistance and Informal Coalition Formation

At the middle-management level, resistance evolved from individual concerns into collective action. Informal coalitions emerged among managers who shared similar tenure,

technical backgrounds, and hierarchical interests. These groups collectively resisted AI-related initiatives by delaying participation in training programs and questioning the applicability of data-driven systems to field realities. Such group-level resistance was reinforced by shared cognitive frames rooted in NK's legacy culture, which prioritized experiential judgment over algorithmic decision-making. The collective nature of this resistance amplified its impact, as it normalized opposition and reduced the perceived risk of non-compliance within managerial peer groups.

Covert Resistance and Behavioral Withdrawal

Beyond overt opposition, the study identified covert resistance behaviors at the operational level. These behaviors included slower response times to customer complaints, reduced cooperation with central monitoring units, and an unusual increase in equipment malfunction reports. These actions functioned as symbolic expressions of dissatisfaction rather than deliberate sabotage. They reflected a psychological withdrawal from organizational goals and indicated a breakdown in trust between employees and top management. The prevalence of covert resistance suggests that employees lacked safe channels to voice concerns openly, leading them to express opposition indirectly through work behaviors.

Perceived Threats to Power, Status, and Authority

Senior managers experienced the transformation as a disruption to established power structures. AI-enabled dashboards and transparent performance metrics diminished the discretionary authority previously exercised through experience-based decision-making. As data became accessible across organizational levels, managerial control over information was weakened. This shift was perceived as a loss of status and legitimacy, particularly for senior leaders whose authority was historically derived from tenure and technical mastery rather than digital competence. Consequently, resistance at this level was political in nature, aimed at preserving influence and maintaining control over decision-making processes.

The findings suggest that NK's transformation challenges stemmed less from technological complexity and more from inadequate management of human and political dynamics. The top-down communication approach and abrupt structural changes intensified fear and mistrust among employees. From an OD perspective, the absence of participative diagnosis and dialogue prevented employees from making sense of the change. The Power–Interest Matrix indicates that stakeholders with high power and negative interest were insufficiently engaged, allowing resistance to consolidate at critical organizational levels. Furthermore, the rapid elimination of hierarchical symbols under the banner of agility overlooked the deeply embedded legacy culture. This misalignment underscores the importance of contextualizing agile practices rather than applying them uniformly.

The findings highlight that resistance at PT Nusantara Komunika cannot be adequately explained through individual attitudes alone. Instead, resistance must be understood as a systemic organizational response to perceived disruptions in identity, power, and meaning. From an organizational development perspective, NK's transformation failed to sufficiently address the symbolic dimension of change. The organization's identity had long been anchored in physical engineering expertise and hierarchical authority. The abrupt shift toward AI-centric operations disrupted this identity without providing a clear narrative for continuity. Change initiatives that challenge deeply embedded identities often provoke defensive responses, particularly when employees are unable to reconcile past competencies with future expectations. In NK's case, the absence of identity reframing mechanisms intensified resistance, as employees struggled to locate themselves within the emerging organizational vision.

The reliance on centralized, one-way communication mechanisms—such as short internal video announcements—proved inadequate for facilitating sensemaking among geographically dispersed employees. Rather than reducing uncertainty, this approach amplified ambiguity

regarding job security, role expectations, and career prospects. Organizational development theory emphasizes dialogue and participation as critical elements of successful change. Without opportunities for feedback and collective interpretation, employees constructed their own meanings of the transformation, often framing it as a threat rather than an opportunity.

The application of the Power–Interest Matrix reveals that NK underestimated the influence of stakeholders with high power but negative interest in the transformation. Senior and middle managers, who possessed the capacity to shape implementation outcomes, were not adequately engaged as partners in the change process. This oversight allowed political resistance to consolidate within influential groups, thereby undermining execution at the operational level. The findings reinforce the argument that effective change management requires not only technical alignment but also deliberate negotiation of power and interests.

The introduction of agile principles, including the removal of formal titles, was intended to foster flexibility and speed. However, within NK's legacy culture, these changes were perceived as destabilizing rather than empowering. Hierarchical structures had historically provided clarity, status, and psychological safety. Without gradual cultural adaptation and contextual translation, agile practices conflicted with existing norms and increased uncertainty. This finding supports the view that organizational culture cannot be engineered through structural changes alone but must evolve through shared learning and experimentation. The study underscores the necessity of adopting a human-centered OD approach in digital transformation initiatives. Interventions should prioritize participative diagnosis, psychological safety, and the co-construction of new professional identities. By integrating legacy expertise with digital capabilities, organizations can reduce defensive resistance and foster ownership of change.

4. Conclusion And Suggestion

This study concludes that resistance to AI-driven transformation at PT Nusantara Komunika was driven by economic insecurity, group inertia, covert opposition, and perceived threats to power and identity. The case demonstrates that digital transformation initiatives are unlikely to succeed without parallel attention to organizational culture and human processes. Organizational Development provides a relevant framework for managing such transformations through participative, incremental, and human-centered interventions. Ultimately, sustainable transformation requires integrating technological innovation with social system change.

Based on the findings, this study recommends that the company implement continuous, two-way communication to foster shared understanding of change objectives, adopt a gradual approach to cultural change that respects legacy values while introducing new practices, and design reskilling pathways that integrate field experience with digital competencies. Future research should employ empirical methods, such as in-depth interviews and surveys, to validate and extend these findings across sectors.

REFERENCES

- Aaltonen, K., & Kujala, J. (2016). Towards an improved understanding of project stakeholder landscapes. *International Journal of Project Management*, 34(8), 1537–1552. <https://doi.org/10.1016/j.ijproman.2016.08.009>
- Ackermann, F., & Eden, C. (2011). Strategic Management of Stakeholders: Theory and Practice. *Long Range Planning*, 44(3), 179–196. <https://doi.org/10.1016/j.lrp.2010.08.001>

- Bourne, L., & Walker, D. H. T. (2006). Visualizing stakeholder influence—Two Australian examples. *Project Management Journal*, 37(1), 5–21. <https://doi.org/10.1177/875697280603700102>
- Bryson, J. M. (2004). What to Do When Stakeholders Matter: Stakeholder Identification and Analysis Techniques. *Public Management Review*, 6(1), 21–53. <https://doi.org/10.1080/14719030410001675722>
- Cummings, T. G., & Worley, C. G. (2019). *Organization Development and Change* (11th ed.). Cengage Learning.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Pitman.
- Kotter, J. P. (1996). *Leading Change*. Harvard Business School Press.
- Maqbool, R., Deng, X., & Rashid, Y. (2022). Evaluating the internal versus external stakeholder satisfaction for sustainable renewable energy projects. *Sustainable Development*, 30(5), 1084–1098. <https://doi.org/10.1002/sd.2303>
- Mendelow, A. L. (1991). Environmental Scanning: The Impact of the Stakeholder Concept. *Proceedings of the Second International Conference on Information Systems*, 407–418.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. *Academy of Management Review*, 22(4), 853–886. <https://doi.org/10.5465/amr.1997.9711022105>
- Olander, S., & Landin, A. (2005). Evaluation of stakeholder influence in the implementation of construction projects. *International Journal of Project Management*, 23(4), 321–328. <https://doi.org/10.1016/j.ijproman.2005.02.002>
- Prima Jaya, F. (2025). Filsafat & Metodologi Penelitian.
- Project Management Institute. (2017). *A Guide to the Project Management Body of Knowledge (PMBOK Guide)* (6th ed.). Project Management Institute.
- Reed, M. S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Quinn, C. H., & Stringer, L. C. (2009). Who's in and why? A typological approach to stakeholder analysis. *Journal of Environmental Management*, 90(5), 1933–1949. <https://doi.org/10.1016/j.jenvman.2009.01.001>
- Robbins, S. P., & Judge, T. A. (2018). *Organizational Behavior* (18th ed.). Pearson.
- Tjandra, N. C., Ensor, J., Omar, M., & Tao, Y. (2019). The co-creator power/interest matrix: identifying viable co-creating partners. *Qualitative Market Research: An International Journal*, 22(5), 732–758. <https://doi.org/10.1108/QMR-03-2018-0036>
- Yang, J., Shen, G. Q., Drew, D. S., & Ho, M. (2009). Critical success factors for stakeholder management: Construction practitioners' perspectives. *International Journal of Project Management*, 27(2), 159–166. <https://doi.org/10.1016/j.ijproman.2008.01.001>
- Zhu, H., Zhang, L., & Dong, Y. (2024). Dynamic stakeholder salience in off-site construction projects. *Journal of Construction Engineering and Management*, 150(3), 04023165. <https://doi.org/10.1061/JCEMD4.COENG-13565>