

Phenomenological Study: Leadership Agility in Digitalization Logistics Transportation

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ABSTRACT

This study examines the role of leadership agility in managing digitalization and regulatory implementation within Indonesia's trucking logistics industry. The main research question explores how logistics company leaders develop adaptive and leadership agility amid increasing digital transformation and government regulations. A qualitative approach using the interpretative phenomenological method was applied to understand the subjective experiences of three groups of participants: logistics regulator, logistic company leader, and logistic company employee. Data were collected through in-depth interviews, field observations, and analysis of digital logistics policy documents. The study focuses on several forms of digitalization implemented in the industry, including the Transport Management System (TMS), Warehouse Management System (WMS), Single Truck Identification Data (STID), and Terminal Booking System (TBS), which have reshaped coordination and operational processes in logistics companies. Findings indicate that leadership agility is reflected in leaders' ability to integrate digital innovation with regulatory compliance, foster adaptive learning cultures, and strengthen cross-stakeholder collaboration. The discussion highlights how balancing leadership flexibility with policy stability becomes a crucial factor for successful digital transformation. The study concludes that leadership agility plays a strategic role as a bridge between technological innovation, regulatory governance, and operational sustainability in Indonesia's logistics sector.

Keywords: *Digitalization in Logistics, Leadership Agility, Regulatory Adaptation, Trucking Transportation.*

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ARTICLE HISTORY

Received : December 14, 2024

Final Revised : May 2, 2025

Accepted : June 13, 2025

Published : June, 30 2025

1. | INTRODUCTION

With the increasing frequency of global disruptions, organizations are required to adopt leadership approaches that go beyond traditional management models by applying adaptive and agile frameworks to navigate dynamic environments (Syamsir et al., 2025). Over the past decade, the pace of disruptions, changes, and uncertainty in the business landscape has significantly accelerated, driven by rapid technological progress, intense market competition, economic fluctuations, and evolving consumer–organization relationships (Mahapatra et al., 2025). Consequently, HR and talent management practitioners must realign their focus and leadership development strategies, as cultivating adaptability and flexibility in thinking has become a critical competency (Lawrence, 2013).

Leadership Agility (LA) refers to the capability of leaders to act swiftly, with focus and flexibility, in addressing the challenges of a VUCA environment (Pasmore & CMC, 2010). The VUCA model represents Volatility, Uncertainty, Complexity, and Ambiguity (Syamsir et al., 2025). While LA is sometimes equated with related concepts such as Leadership Adaptability and Leadership Resilience, it extends beyond these constructs, which primarily relate to psychological capacities that enable leaders to manage disruptions. LA, in contrast, represents a broader skill set entailing the capacity to navigate complex and ambiguous conditions efficiently, make timely and strategic decisions, and take well-calculated risks (Joiner, 2009). Ultimately, it involves not only adapting to disruption but also proactively embracing change, promoting innovation, and motivating others to do likewise.

Within the VUCA framework, volatility refers to the rapid and unpredictable rate of change, often illustrated through events such as technological disruptions or sudden modifications in regulatory policies (Morales et al., 2019). Uncertainty indicates a lack of clarity or assurance concerning potential outcomes or consequences, even when relevant information is accessible (Harrison, 2017). Complexity captures the presence of multiple interrelated factors that complicate organizational analysis and decision-making processes (Cheruiyot & Venter, 2024). Meanwhile, ambiguity refers to the lack of clarity or understanding about the meaning of a specific situation, which often stems from incomplete or conflicting information (Chaudri et al., 2024).

In the context of organizational dynamics, VUCA presents challenges that extend beyond technological aspects, encompassing strategic and structural dimensions as well (Long et al., 2022). Technological disruption serves as a critical element of volatility, wherein advancements such as artificial intelligence, automation, and digital transformation continuously drive organizations to reconfigure their business models (Morales et al., 2019). On a global scale, shifting trade regulations exemplify uncertainty, exerting substantial influence over supply chain operations, investment decisions, and innovation directions. Consequently, the VUCA environment compels leaders to embrace adaptive and forward-looking approaches to effectively manage ongoing transformations.

Within this rapidly evolving environment, the logistics and transportation sector has emerged as a critical field where digital transformation is no longer optional but imperative. However, Indonesia's logistics performance still faces notable challenges. According to the World Bank's Logistics Performance Index (LPI), Indonesia's ranking dropped from 46th in 2018 to 63rd in 2023 out of 139 assessed countries (World Bank, 2023). This decline highlights structural inefficiencies and limited technological adaptation within the sector. Many logistics operators continue to rely on manual processes, with insufficient integration of digital systems for supply chain visibility and transport coordination. Consequently, enhancing digital capabilities and leadership agility has become essential for Indonesia to strengthen its logistics competitiveness and align with global digital transformation trends.

In response to these challenges, even before the LPI was released, the Indonesian government has taken strategic steps to accelerate digital integration within the logistics ecosystem. One of the key policy frameworks is Presidential Instruction (InPres) No. 5 of 2020 on the National Logistics Ecosystem (NLE) Development, which mandates the digitalization and integration of logistics processes across ministries, agencies, and private sectors. The regulation aims to simplify administrative procedures, reduce dwelling time, and enhance transparency through interoperable digital platforms. By promoting data connectivity among port operators, customs, and transport service providers, the NLE initiative serves as a cornerstone for building an end-to-end digital logistics infrastructure. This policy not only supports the implementation of advanced systems such as the Warehouse Management System (WMS), Transportation Management System (TMS), Single Truck Identification Data (STID), and Terminal Booking System (TBS), but also fosters a collaborative environment where leadership agility becomes vital to coordinate cross-sectoral change and ensure the successful adoption of technological innovations (Pemerintah Republik Indonesia, 2020).

While digital transformation provides the technological foundation for efficiency and transparency, its successful implementation fundamentally depends on leadership agility (AlNuaimi et al., 2022). In the logistics and transportation sector, leaders are required to navigate complex organizational changes, manage technological adoption, and align diverse stakeholders toward shared digital goals. They act as change enablers who balance strategic vision with operational flexibility, ensuring that digital systems such as WMS, TMS, STID, and TBS are not only integrated but also effectively utilized across functions. In the Indonesian context, leadership agility becomes increasingly vital as organizations must synchronize government-led digital initiatives like the National Logistics Ecosystem (NLE) with internal transformation strategies (National Logistics Ecosystem, 2025; Nurul Fikri & Eka Lestiani, 2025).

In light of these dynamics, this paper aims to examine the role of leadership agility in enabling and sustaining digital transformation within Indonesia's logistics and transportation sector. It discusses how agile leadership behaviors and competencies contribute to overcoming organizational, technological, and regulatory challenges in

implementing integrated digital systems (Tagscherer & Carbon, 2023). Academically, this study contributes to the growing body of literature that bridges leadership agility and digital transformation, particularly within the context of emerging economies. From a practical standpoint, the insights derived from this discussion are expected to assist logistics organizations, policymakers, and industry leaders in developing adaptive leadership strategies that accelerate digital readiness and operational efficiency. The following sections elaborate on theoretical foundations, findings, and discussions related to leadership agility in digital logistics transformation.

2. | LITERATURE REVIEW

Leadership Agility

Agile leaders have the capacities to adapt, switch and lead in a variety of situations that are ambiguous, new, difficult and unpredictable (Attar & Abdul-Kareem, 2020). Joiner & Josephs (2007), are among the firsts to introduce the terminology, defining agile leadership as the ability to make wise and practical choices in a complex, volatile, and rapid manner changing environment. Agile leadership is the capacity to acquire new leadership styles and transition between them in response to changed circumstances (Meyer & Rodgers, 2017). Change is inevitable and affects all levels of an organization, and leaders in organizations of all sizes and all industries are looking for methods to implement agile thinking (Prange & Heracleous, 2018).

Leadership Agility (LA) refers to a leader's capacity to respond to the challenges of a VUCA environment by acting with speed, clarity, and adaptability (Pasmore & CMC, 2010). While it is sometimes equated with concepts such as leadership adaptability and leadership resilience both linked to psychological strengths that enable leaders to withstand disruption, LA extends beyond these ideas. It involves the capability to swiftly and effectively manage complexity and ambiguity, make timely and well-judged decisions, and take measured risks (Joiner, 2009). Moreover, LA emphasizes not only the ability to handle disruption but also the willingness to embrace change, drive innovation, and motivate others to follow that direction.

VUCA Environment

The recent business environment is characterized by rising global connectivity through digital networks and a growing tendency toward complex system dynamics (Holland, 2014; Mack & Khare, 2016). This growing complexity inevitably leads to a volatile, uncertain, complex, and ambiguous environment (Eisenhardt & Martin, 2000; Wu, 2010). These effects are referred to as VUCA.

The term VUCA was later adopted by managers and researchers to describe a managerial lens for understanding business environments that are turbulent, unpredictable, and subject to rapid shifts (Bennett & Lemoine, 2014). The first component, volatility, captures the fast-paced nature of change where information may be available, yet its instability and constant fluctuation make it challenging for leaders

to rely on even the most current data when making decisions, especially when trends shift unexpectedly (Bennett & Lemoine, 2014).

The second component, uncertainty, arises when organizations lack sufficient knowledge about key variables in a situation, making it difficult to determine how events evolve or to predict outcomes because cause effect relationships are unclear (Taskan et al., 2022).

The third component, complexity, highlights the presence of multiple interconnected elements or systems, where the high degree of interdependence means that similar external conditions can generate varied responses due to intricate structural relationships (Taskan et al., 2022).

The final component, ambiguity, reflects situations in which events cannot be easily interpreted or assigned to specific rules or established procedures, resulting in unclear meaning and a lack of guidance for decision-making (Bennett & Lemoine, 2014).

Leadership Agility in Digital Transformation

In an era marked by rapid and transformative technological progress, digital transformation has evolved into a strategic necessity for organizations striving to remain relevant and competitive within environments characterized by constant change and uncertainty (Hariyani et al., 2025). Leadership plays an increasingly pivotal role in this process, as leaders serve as the drivers who shape organizational direction and readiness for digital innovation. Strong leadership is needed to communicate a vision aligned with long term sustainability goals, facilitate cultural shifts, empower the workforce, and ensure that digital initiatives are integrated with broader environmental and social priorities (Hariyani et al., 2025). Leadership drives the vision, strategy, and implementation of digital transformation initiative, it shapes the organizational culture, and inspires commitment from stakeholders at all levels, develops effective strategies to overcome various challenges and barriers in promoting digital transformation.

Digitalization in the Logistics Sector in Indonesia

Recent developments in logistics management demonstrate simultaneous progress in technology-driven innovations associated with Industry 4.0 and Logistics 4.0, prompted by ongoing digital transformation and automation initiatives. At the same time, there is a growing emphasis on human-centered organizational models aligned with the emerging paradigms of Industry 5.0 and Logistics 5.0 (Moghaddam & Klumpp, 2025). In several transport sectors and processes, automation and digital transformation are important developments (Akkermans et al., 2024).

Digital transformation has become a major driver of efficiency and innovation in Indonesia's logistics sector. Digitalization does not merely focus on the use of software but also emphasizes the integration of information systems that connect the entire supply chain from transportation planning to final distribution. Logistics companies that adopt digital technologies have proven to be more adaptive to market fluctuations, possess greater operational visibility, and are able to enhance service speed and

responsiveness (Minashkina & Happonen, 2023). One of the primary forms of digitalization in logistics is the implementation of a Transportation Management System (TMS), which serves to oversee distribution planning and execution, route optimization, shipment monitoring, and transport cost auditing, modern cloud based TMS enables real-time integration across users within the logistics network, improves the efficiency of goods movement, and reduces operational costs (Dorofeev et al., 2024). The Single Truck Identification Data refers to an electronic system used to record information for every truck operating within a specific port area. This system functions as a unique digital identity for each vehicle and is integrated into the port's IT infrastructure. It stores various data such as the technical eligibility of the truck, driver information, license plate numbers, and the ownership details of the transportation company (Djari & Adilano, 2023). The Terminal Booking System (TBS) is a digital platform designed to manage appointment schedules for the entry and exit of containers. Its primary purpose is to streamline operational procedures at TPKS by introducing digital innovation that enhances efficiency in container receiving and delivery processes (Sun et al., 2022). A Warehouse Management System (WMS) is a database driven application used in warehouse operations to enhance process efficiency. This system supports logistics personnel by guiding the movement of goods and maintaining accurate inventory levels through the recording of all transactions that take place within the warehouse (Shiau & Lee, 2010).

3. | RESEARCH METHOD

This study employs a qualitative approach with a phenomenological research design. This approach was chosen because it enables the exploration of subjective meanings derived from individual experiences, particularly those of leaders and actors in the logistics and transportation sectors who are directly involved in the digitalization process (Mahapatra, et al., 2025). The main focus of this approach is the personal interpretation of experiences in practicing leadership agility when facing technological and digital regulatory changes. Thus, this study aims to deeply understand how leaders interpret their roles, challenges, and adaptive strategies in supporting digital transformation within a dynamic and uncertain work environment.

According to (Mahapatra et al., 2025); Miles et al. (2021), the qualitative approach is used to understand complex social phenomena through in-depth data collection, meaning interpretation, and contextual analysis of the environment in which the phenomenon occurs. Phenomenology, as a qualitative approach, allows researchers to explore how individuals construct meaning from their lived experiences. Neubauer et al. (2019) emphasize that phenomenology does not merely describe experiences but seeks to uncover the essential meaning of those experiences.

Table 1. Participant demographic

Participant ID	Gender	Age Bracket	Current or Designation level	Industry	Years of Experience
A1	M	50-60	Head of Logistics Association	Logistics	15-20
A2	F	50-60	Logistics Company Leader	Logistics	15-20
A3	F	50-40	Logistics Company Employee	Logistics	5-10

Participants

This study uses a purposive participants technique, which involves the deliberate selection of participants based on specific criteria relevant to the research objectives. This technique is suitable for phenomenological studies that prioritize depth of experience over the number of participants (Smith, 2019). Participants were selected based on their direct involvement in the digitalization process in the logistics and transportation sector, as well as their experience in performing leadership roles that demand agility and adaptability toward technological and regulatory changes.

The study involved three key participants, each representing a distinct yet complementary perspective: (1) a policymaker or regulator involved in the formulation of digitalization policies in the logistics and transportation sector (2) a leader or manager directly engaged in the company's digital transformation process, and (3) an operational employee who directly experiences the implementation of digital systems and policies. These three perspectives were selected to provide a holistic understanding of how leadership agility is practiced and perceived across different levels within the industry ecosystem. Although the number of participants is relatively small, this aligns with the principles of phenomenological studies that emphasize depth over breadth of data. The identity of each participant was kept confidential using initials or anonymous codes.

Data Collection

Data collection in this study was conducted through in-depth interviews as the primary method. This method was chosen because it allows the researcher to explore the participants' personal experiences and reflections regarding the digitalization process in the logistics and transportation sectors. The interviews were conducted in a semi-structured format, allowing flexibility for participants to express their experiences, perspectives, and interpretations while maintaining focus on the main research themes (Alase, 2017).

Interviews were conducted with three key informants: a company leader, an operational employee, and a regulator associated with digitalization policies. Each interview was held in a virtual setting, lasting between 30 to 60 minutes, depending on the depth of information provided. All interviews were recorded (with participants' consent) to ensure data accuracy and were later transcribed verbatim. The questions explored participants' experiences with digital transformation, leadership adaptation

strategies, challenges encountered, and reflections on how digitalization influenced work effectiveness and collaboration.

In addition to interviews, non-participatory observations and document analysis were conducted, including internal reports, digitalization policies, and industry publications relevant to logistics. These complementary data sources enriched the researcher's understanding of the participants lived experiences from a broader contextual perspective, which is essential in phenomenological research (Sundler et al., 2020).

Research Location

This study was conducted at a logistics company located in Central Java. The company was selected because it has implemented digitalization processes in its operations, particularly through the use of systems such as the Transportation Management System (TMS) and Warehouse Management System (WMS) to enhance distribution efficiency and supply chain management.

The selection of this location was based on its representativeness of a logistics organization currently adapting to digital transformation in Indonesia. This context allows the researcher to explore how the company's leadership demonstrates leadership agility in managing change, addressing digitalization challenges, and maintaining organizational performance in a dynamic environment. This is consistent with the findings of Taufani and Widjaja (2023), who emphasized that digital transformation in Indonesia's logistics sector requires leaders to be flexible, adaptive, and responsive to technological developments to achieve sustainable efficiency and competitiveness.

Data Analysis Technique

Data were analyzed using a qualitative approach based on the interactive model developed by Miles & Huberman (1994). This model was chosen because it aligns with phenomenological research, which seeks to understand the meanings of participants' lived experiences in a deep and systematic way. The interactive analysis model consists of three main components: data reduction, data display, and conclusion drawing and verification.

Data reduction involves selecting, simplifying, and organizing data obtained from interviews, observations, and documents. It refers to the process of focusing, condensing, abstracting, and transforming data that appear in written field notes or transcripts (Miles & Huberman, 2014). In this study, data reduction was conducted by identifying information relevant to the research focus, particularly the manifestations of leadership agility in the context of digital transformation in logistics. The reduced data were then categorized into major themes, such as leaders' adaptability to technological changes.

The next step, data display, refers to the organized and compressed presentation of information that enables drawing conclusions and taking action (Miles & Huberman, 2014). In this study, reduced data were systematically presented in narrative form to facilitate the identification of patterns, relationships, and dynamics among themes. Data

display was conducted through thematic narratives that illustrated patterns of agile leadership behavior in the digital logistics context, highlighting the connections between leaders' roles, responses to new technologies, and adaptation to digital work demands.

The final stage involves drawing and verifying conclusions, which requires reflecting on the meaning of analyzed data and evaluating its implications for the research questions. Verification entails revisiting the data as needed to confirm the emerging conclusions (Miles & Huberman, 1994).

In this stage, the researcher interpreted the analysis results to uncover the essence of agile leadership in digital logistics transformation. Interpretations of emerging themes were related to theoretical frameworks and previous findings. Verification was performed through member checking, where participants reviewed and confirmed the accuracy of the researcher's interpretations to ensure that they reflected their intended meanings.

4. | RESULTS

This section discusses the research findings focusing on Leadership Agility and the factors that enable leaders to navigate VUCA conditions and uncertainty in the era of logistics digitalization. Based on interview analysis and a review of supporting theories, this study identifies several key factors that allow leaders in the logistics sector to act with agility and respond effectively to technological changes.

Table 2. Leadership Agility themes

Frist-order categories	Theoretical categories	Generalized Dimension
Managing self and evolving being self-aware and confident Ability to reflect on personal actions	Emotional Intelligence	Inward Focus
Sense of humility and gratitude	Strong Value Orientation	
Being practical, detail-oriented Evidence-based approach	Reality Orientation	Outward Focus
Enabler and drive others Invest in people development	Coach	
Display qualities of being adaptive and agile Take initiative	Chage Champion	

Inward Focus

Two inward-focused dimensions: emotional intelligence and strong value orientation emerged as key resources utilized by agile leaders. These dimensions reflect the internal aspects of leadership that help maintain balance, composure, and the ability to effectively manage disruptions and uncertainty (Mahapatra, 2025).

Emotional intelligence (EI) can be defined as the capacity to recognize and express emotions, integrate emotional information with thinking, comprehend and analyze emotions, and manage emotional responses both within oneself and in interactions with others (Mayer et al., 2000; Salovey & Mayer, 1993).

Our findings confirm some critical features of EI, such as being self-aware and confident.

“As leaders, we need to be prepared for ongoing regulatory changes, as the business environment is becoming increasingly dynamic and competitive. In the current era, it is no longer possible for the logistics industry to operate without digital applications or systems. This represents one of the major challenges for logistics businesses, and it is essential for us to understand these new systems so that we can still compete.” (A2)

A leader’s self-awareness prompts them to reflect on their current actions and allows them to evolve personally. Beside that, A leader should have emotional intelligence such as managing self and evolving through the process.

“Because there are many regulatory changes and new systems, we also need to adapt to them. Employees must adjust as well, so as leaders, we have to explain things in a simple way so they can understand. Of course, they often express their difficulties, so we also need to listen and find solutions. One way we do this is by holding regular meetings to hear about the challenges they are facing.” (A2)

This view was further supported by another participant who mentioned,

“In my opinion, I prefer a leader who is patient, willing to listen, and able to explain things in a simple way. Such a leader doesn’t just give orders but also takes the time to see the challenges employees face firsthand. When a leader can understand the actual conditions in the field, the process of digitalization runs more smoothly.” (A3)

Emotional intelligence has been proven to be a key capability that strengthens leadership agility, enabling leaders to navigate digital transformation effectively while maintaining personal and team stability.

The personal values held by leaders exert a substantial influence on their behavioral patterns and their overall effectiveness (Reid & Dold, 2018; Kouzes & Posner, 1993). These values eventually become internalized within a personal values system that contributes to the development of one’s character (Rokeach, 1973).

“Because I don’t work alone I have a team. It is important for me to provide support. Therefore, as a leader, I must be both firm and supportive. The leader’s role is to empower all employees. I support this by providing opportunities for both internal and external training or coaching, depending on the employees’ needs and levels. The approach is also adjusted to accommodate the different generations within the workforce. ” (A2)

A similar perspective was shared by another participant, who emphasized the importance of personal values in shaping adaptive leadership behavior.

“As employees, we actually want a leader who can build teamwork, not someone who only gives orders. It feels better when a leader is willing to be directly involved and appreciates the team’s opinions. Because if the leader doesn’t do that, we tend to lose motivation, feel excluded, and eventually the teamwork becomes less cohesive.” (A3)

This illustrates how leaders in the logistics sector view leadership agility not only as the ability to act swiftly but also as the capacity to uphold core values of empathy, teamwork, and fairness in guiding their teams through digital transformation. This illustrates how leaders in the logistics sector view leadership agility not only as the ability to act swiftly but also as the capacity to uphold core values of empathy, teamwork, and fairness in guiding their teams through digital transformation. Such value-based leadership is essential in maintaining employee engagement and organizational integrity during times of change (Copeland, 2014).

Outward Focus

This dimension reflects a leader's capacity to think logically, act pragmatically, and base decisions on evidence when facing disruptions. Agile leaders adopt an evidence-driven mindset, which is particularly suitable in a VUCA environment where constant uncertainty and complexity make it difficult to depend on previous mental frameworks (Syamsir et al., 2025).

"From our perspective as regulators, leadership should be cooperative, because when leaders and regulatory bodies can work well together, policy implementation becomes much smoother. Leaders who understand and comply with regulations are able to translate policy goals into organizational practices, thereby reducing the risk of violations. This way, a shared sense of responsibility can be built between organizations and regulators." (A1)

This view was also supported by other participants, who highlighted that cooperation and regulatory awareness are key for organizations to adapt effectively and stay competitive.

"Regulations among ASEAN countries are also evolving. Indonesia must remain competitive compared to other ASEAN nations. For instance, ASEAN has established collaborations with China and Europe. If Indonesian businesses fail to adapt and not be cooperative, other ASEAN countries may gain a competitive advantage; therefore, it is essential to stay aware of the growing business competition. Besides that, there are also many foreign competitors entering Indonesia." (A2)

Coaching in leadership has evolved beyond merely transferring knowledge from a leader to their subordinates; it now emphasizes empowering others to reach their potential. In leadership contexts, coaching plays a crucial role as it drives employees to achieve higher performance levels (Kim et al., 2013). Agile leaders demonstrate a genuine commitment to the comprehensive development of their team members, recognizing it as essential for both succession planning and retaining skilled, motivated employees within the organization (Mahapatra et al., 2025)

This perspective was further supported by participants who emphasized the importance of a leader's role in developing and guiding employees during digital transformation.

"Another challenge lies in human resources. As leaders, we need to conduct regular briefings or socialization regarding regulatory changes, since not all employees possess

an educational background aligned with the logistics field. Therefore, it is important to provide employees with up-to-date information on a regular basis. Socialization, training, and workshops as preparation before the implementation of a digital logistics system are highly necessary and must be carried out to ensure that the system runs effectively. In addition to technical preparation, it is also important at this stage to emphasize the benefits of implementing the digital system, in order to reduce reluctance or hesitation among the personnel involved.” (A2)

This view was also supported by other participants.

“It is necessary to conduct socialization through training or workshops, as without such initiatives, adaptation to digitalization will be more difficult to achieve.” (A1)

Another participant also agreed with the importance of a coaching approach, highlighting that leaders play a crucial role in motivating and guiding employees to embrace digital transformation.

“Some yes, some not yet. We are usually given training only after the system has been implemented. We hope the training can be provided from the beginning, because when it was given at the end, it was not effective. It would be better if we were involved early in the digital system training process so that we can adapt more easily to the digitalization of logistics being implemented.” (A3)

These findings indicate that a leader’s ability to practice effective coaching is a key factor in enhancing organizational responsiveness to digital change. Leaders who act as coaches do not merely transfer knowledge but foster a spirit of learning and shared accountability among employees. This aligns with Ellinger et al. (2011), who argue that coaching-oriented leadership enhances employees' adaptability to change and fosters a culture of continuous learning within organizations. Thus, coaching practices among leaders in the logistics sector strengthen leadership agility in navigating the dynamic challenges of digital transformation.

Leadership adaptability refers to a leader’s capacity to modify their style, strategies, or ways of leading in accordance with shifting circumstances or situational demands, in order to support and enhance the performance of their team (Kaiser & Overfield, 2010). An adaptable leader should be able to balance these dualities both directive and collaborative, self assertive and supportive.

This perspective is reflected in the views of the participants, who describe how adaptability is demonstrated in their leadership practices within the logistics sector.

“Nowadays, leaders must be able to adapt to regulations and the implementation of IT systems. In my opinion, it is essential for leaders to be agile and adaptive, because if we are not, we will be left behind by continuously changing regulations. And if we fall behind, we will not be able to compete with other companies.” (A1)

Another participant further illustrated this perspective by explaining how digitalization trends in the logistics industry have compelled leaders to transform their business mindset in order to survive and grow.

“The digitalization trend in logistics forces companies to change their business approach if they wish to remain competitive. As a leader, I used to focus on maintaining a comfortable work environment, stable operations, and competitiveness in pricing and service. However, now I must be more dynamic, adaptive, and innovative so that the entire team shares the same mindset, viewing change as a challenge and responding to it proactively.” (A2)

Consistent with the adaptive leadership perspective, effective leaders must continuously reassess and refine their approaches in response to changing circumstances. The flexible application of leadership behaviours involves ongoing reflection and adjustment, enabling leaders to respond appropriately to dynamic situations; this behavioural flexibility is a core aspect of adaptive leadership (Heifetz et al., 2009).

The findings presented in this chapter demonstrate that the characteristics displayed by leaders such as adaptability, evidence-based decision making, emotional intelligence, coaching capability, and strong value orientation are closely aligned with the demands of a VUCA environment (Mahapatra et al., 2025). These qualities enable leaders in the logistics sector to remain responsive amid instability, navigate regulatory uncertainties, manage rapid technological shifts, and sustain team performance during ongoing digital transformation. Such leadership behaviors are not only relevant but essential for ensuring organizational resilience and competitiveness in an industry characterized by volatility, uncertainty, complexity, and ambiguity.

5. | DISCUSSION

Given the evolving nature of today’s workplace, the necessity for leadership agility (LA) has become unavoidable (Mahapatra, 2025). The findings of this study align with existing conceptual frameworks of LA while also uncovering distinctive themes that extend the current understanding of agile leadership in the context of digitalization. These newly identified dimensions stem from the specific challenges of technological adaptation, regulatory shifts, and workforce transitions faced by logistics organizations. Insights from the interviews illustrate how leaders engage in experiences that demand LA, reflecting both inward-and outward-focused aspects consistent with the internal capacities and external skills model proposed by Joiner (2008). The inward-focused elements particularly highlight how leaders regulate their thoughts and emotions through self-reflection, construct self-models, and derive meaning not only for themselves but also for those they lead.

Outward Focus

Developing emotional intelligence (EI) has been shown to enhance conflict management skills (Winardi et al., 2021), and in professional environments, leaders with high EI can increase employee engagement and reduce turnover, that concludes reinforcing the value of EI as a vital leadership competency (Kane et al. 2025). The leaders further highlighted the significance of demonstrating empathy in their communication with others, reflecting the key characteristics of leadership agility as

previously outlined by McKenzie and Atken (2012). EI involves recognizing, understanding, and managing our own emotions while also empathizing with and influencing the emotions of others (Dennett & Dedonno, 2024). Along with that, in this study EI with dimensions such as managing self and evolving, being self-aware and confident, and having the ability to reflect on personal actions can help leaders' agility to work through digital transformation in logistic transformation.

Two inward focused factors identified in this study, strong value orientation and emotional intelligence, may not fully align with previously established Leadership Agility models. However, both dimensions reflect essential leadership traits such as empathy, integrity, and self-awareness, which are particularly significant in navigating organizational transformation in the logistics sector.

These findings align with the principles of leadership agility, in which leaders inspire and motivate employees through shared values, emotional understanding and purpose driven engagement (Hetland et al., 2011; Bass & Riggio, 2006). In the Indonesian context, where workplace culture tends to emphasize collectivism and collaboration, value based and emotionally intelligent leadership becomes essential for managing resistance and fostering trust throughout the process of digital transformation (Sudirman et al., 2024).

Furthermore, the integration of emotional intelligence and strong value orientation provides leaders with inner stability, helping them maintain composure and ethical clarity amid the complexities of regulatory changes and technological disruptions (Mayer et al., 2000). These findings indicate that the success of digital transformation in logistics companies depends not only on technological readiness but also on the leader's ability to balance human connection and adaptive agility as a foundation for organizational sustainability in the digital era (Mahapatra et al., 2025)

This study highlights the importance of strengthening internal leadership competencies such as emotional intelligence, and value orientation through targeted development and digital readiness programs. These efforts prepare leaders to remain agile and responsive amid the rapid transformation of the logistics sector.

The outward focused dimension contains reality orientation, coach, and change champion encompasses being practical and detail oriented, evidence-based approach, enabler and drive others, invest in people development, display qualities of being adaptive and agile, and also take initiative. The rapidly developing market requires the constantly evolving generation of new ideas, processes, and even whole new economies (Esenyel, 2024). Furthermore, a reality-oriented leader who has awareness, pragmatism and cautious experimentation becomes crucial in situations where the industry exhibits a lack of stability (Mahapatra, 2025).

The findings indicate that coaching has emerged as a critical leadership skill in supporting leadership agility during the digital transformation process in the logistics sector. In this context, coaching extends beyond giving instructions or sharing

knowledge, it involves the leader's ability to guide, motivate, and empower employees to adapt effectively to rapid changes.

The leader's role as coach becomes increasingly important as organizations face the challenges of digitalization, where the success of new systems and technology implementation largely depends on the readiness of human resources. Through a coaching approach, leaders can cultivate a learning culture, encourage cross functional collaborations, and reduce resistance to change. This approach enables employees to better understand the benefit of digital transformation and feel more engaged in the organizational change process.

These findings are consistent with Goleman (2000), who emphasize that leaders who adopt a coaching role not only develop employees' technical capabilities but also enhance their confidence and motivation. Coaching helps create an agile organization by fostering individual growth and building a culture of adaptability and shared responsibility.

As Joiner and Joseph (2007) note, the ability to coach and develop others represents a dimension of self-leadership agility, in which leaders demonstrate personal adaptability while also enabling agility at the team and organisational levels. Similarly, McKenzie and Atken (2012) argue that leaders who prioritize learning and empowerment play a central role in developing organizations that are innovative, resilient, and responsive to external dynamics.

Throughout the interviews, the leaders exhibited a proactive stance, naturally positioning the role of change champion by actively supporting and driving change initiatives. The change champion included not only displaying qualities of being adaptive and agile but also taking the initiative for certain things. Yalçinkaya et al. (2021) similarly found that initiative taking behaviour of school principals had a significant and positive relationship with teachers' internal motivation. Another research by Belschak & Hartog (2025) supports the idea that leaders serve as role models for proactive behavior among their followers and indicate that followers' positive emotions and self-efficacy function as moderating factors in the link between leader and follower proactive actions.

The findings of this study emphasize that leadership agility in the logistics sector is not solely determined by technological readiness but also by the leader's ability to integrate emotional intelligence, strong value orientation, and adaptive decision making. Emotional intelligence enables leaders to manage pressure and maintain empathy within teams (Goleman, 2000), while value-based leadership ensures ethical consistency during change (Kouzes & Posner, 1993). These results align with Mahapatra et al. (2025) and Joiner & Josephs (2007), who highlight that agile leaders combine internal reflection and adaptability with external skills such as collaboration and coaching. For logistics organizations, this suggests that leadership development should focus not only on digital competence but also on human centered agility that

fosters learning, resilience, and collective adaptability amid continuous digital transformation.

Limitations

This study has several limitations that should be acknowledged. The research was conducted in a single logistics company located in Central Java, which provides valuable insights into leadership agility within a specific organizational setting. However, because the study focuses on one company only, the findings cannot be widely generalized to represent the entire logistics sector in Indonesia, which varies greatly in terms of organizational scale, operational complexity, and level of digital maturity. Differences in company culture, resources, and management structure across logistics organizations may lead to diverse leadership dynamics that were not fully captured in this study.

This study lies in the availability of secondary data and supporting literature. Finding government regulations and policies that specifically address digitalization in the logistics sector remains a challenge, as most existing policies are still general in nature. This limitation makes it difficult to conduct a comprehensive analysis of the regulatory framework that supports digital transformation within this sector.

In addition, academic publications focusing on digitalization in Indonesia's logistics industry are still limited. The scarcity of empirical and contextual studies made it challenging to find directly comparable literature to support or contrast the findings of this research. Despite these limitations, this study contributes valuable insights into how leadership agility manifests in the logistics sector amid digital transformation. The findings provide a foundation for future studies to explore leadership practices across multiple organizational settings, supported by richer data and broader empirical evidence.

6. | CONCLUSION

This study concludes that leadership agility plays a crucial role in enabling digital transformation within Indonesia's logistics sector. Through a phenomenological exploration of leaders, employees, and regulators, the findings show that agile leadership emerges from the integration of inward-focused capacities, such as emotional intelligence and strong value orientation, and outward-focused behaviors, including reality orientation, coaching, and championing change. These capabilities allow leaders to navigate technological disruptions, regulatory shifts, and workforce adaptation challenges while maintaining clarity, empathy, and evidence-based decision-making. The study highlights that successful digital transformation is not solely dependent on system implementation but is deeply influenced by human-centered leadership. Leaders who are reflective, value-driven, and proactive are better equipped to foster learning cultures, strengthen collaboration, and sustain organizational readiness in a rapidly evolving logistics environment. As the sector continues to advance in line with digital ecosystem initiatives, leadership agility will

remain a strategic foundation for achieving long-term competitiveness and operational resilience.

Acknowledgment

We gratefully acknowledge the contributions of individuals who supported the completion of this article.

Funding Information

This research did not receive any funding.

Conflict of Interest Statement

The authors declare that there is no conflict of interest.

Ethical Approval and Originality Statement

Ethical approval was obtained for this study. The manuscript represents original work and has not been previously published, nor is it under consideration by another journal.

Data Disclosure Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

REFERENCES

- Akkermans, H., van der Valk, W., Van Wassenhove, L.N. and Wynstra, F. (2024), "All along the asset life cycle: research opportunities for operations and supply chain management", *Journal of Operations Management*, Vol. 70 No. 6, pp. 864-874, doi: 10.1002/joom.1326.
- Alase, A. (2017). The Interpretative Phenomenological Analysis (IPA): A Guide to a Good Qualitative Research Approach. *International Journal of Education and Literacy Studies*, 5(2), 9. <https://doi.org/10.7575/aiac.ijels.v.5n.2p.9>
- AlNuaimi, B. K., Kumar Singh, S., Ren, S., Budhwar, P., & Vorobyev, D. (2022). Mastering digital transformation: The nexus between leadership, agility, and digital strategy. *Journal of Business Research*, 145, 636–648. <https://doi.org/10.1016/j.jbusres.2022.03.038>
- Bass, B.M. and Riggio, R.E. (2006), *Transformational Leadership*, Erlbaum, Mahwah, NJ.
- Belschak, F. D., & Hartog, D. N. D. (2025). When Leaders Act as Role Models of Proactive Behavior. *Journal of Business and Psychology*. <https://doi.org/10.1007/s10869-025-10060-5>
- Cheruiyot, R., & Venter, R. (2024). Complex Systems and Sustainable Leadership: Enhancing Resilience and Sustainability of Community-Based Social Enterprises in Soweto, South Africa. *Sustainability (Switzerland)*, 16(19). <https://doi.org/10.3390/su16198555>.
- Copeland, M. K. (2014). *The Emerging Significance of Values Based Leadership: A Literature Review*. https://fisherpub.sjf.edu/business_facpub.
- Dennett, S. K., & Dedonno, M. A. (2024). Resilience and Emotional Intelligence: A Dynamic Partnership for Human Resources Professionals in Today's Workplace. *Journal of Human Resource Management - HR Advances and Developments*, 2024(1), 1–13. <https://doi.org/10.46287/ucdc3457>.
- Djari, J. A., & Adilano, Y. A. D. (2023). Constraints In The Application of Single Truck Identification Data For Operations At Tanjung Emas Port, Semarang. *RSF Conference Series: Engineering and Technology*, 3(1), 170–174. <https://doi.org/10.31098/cset.v3i1.742>.
- Dorofeev, A., Kurganov, V., Filippova, N., Petrov, A., Zakharov, D., & Iarkov, S. (2024). Improving Transportation Management Systems (TMSs) Based on the Concept of Digital Twins of an Organization. *Applied Sciences (Switzerland)*, 14(4). <https://doi.org/10.3390/app14041330>.
- Esenyel, V. (2024). Evolving Leadership Theories: Integrating Contemporary Theories for VUCA Realities. *Administrative Sciences*, 14(11). <https://doi.org/10.3390/admsci14110270>.
- Goleman, D. (2000), "Leadership that gets results", *Harvard Business Review*, Vol. 78 No. 2, pp. 78-89.

- Hariyani, D., Hariyani, P., & Mishra, S. (2025). The role of leadership in sustainable digital transformation of the organization. In *Sustainable Futures* (Vol. 10). Elsevier Ltd. <https://doi.org/10.1016/j.sftr.2025.101130>.
- Harrison, R. T. (2017). Leadership, leadership development and all that jazz. *Leadership*, 13(1), 81–99. <https://doi.org/10.1177/1742715016681120>.
- Hetland, H., Hetland, J., Schou Andreassen, C., Pallesen, S. and Notelaers, G. (2011), “Leadership and fulfillment of the three basic psychological needs at work”, *Career Development International*, Vol. 16 No. 5, pp. 507-523, doi: 10.1108/13620431111168903
- Joiner, B. (2009). Creating a culture of agile leaders. *People and Strategy*, 32, 28.
- Joiner, B., & Josephs, S. (2007). Developing agile leaders. *Industrial and Commercial Training*, 39(1), 35–42. <https://doi.org/10.1108/00197850710721381>.
- Kane, M., Smith, M., Modi, S., Shults, T., & Miller, P. H. (2025). *Strengthening Leadership Readiness With Competence and Emotional Intelligence*. www.nurseleader.com.
- Lawrence, K. (2013). *Developing Leaders in a VUCA Environment*. www.execdev.unc.edu
- Long, N. D. B., Ooi, P. T., Le, T. V., Thiet, L. T., Ai, T. Van, An, L. Q., Hudson, A., Tan, K. S., & Van, N. T. Le. (2022). Leading in the Age of the Fourth Industrial Revolution – A Perspective from Vietnam. *International Journal of Technology*, 13(5), 949–957. <https://doi.org/10.14716/ijtech.v13i5.5839>.
- Mahapatra, G., Dash, S., Pradhan, S., & Sharma, I. (2025). Leadership agility in India – a grounded theory approach. *Journal of Organizational Change Management*. <https://doi.org/10.1108/JOCM-09-2024-0522>.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2021). *Qualitative Data Analysis: A Methods Sourcebook*. SAGE Publications.
- Minashkina, D., & Happonen, A. (2023). Warehouse Management Systems for Social and Environmental Sustainability: A Systematic Literature Review and Bibliometric Analysis. In *Logistics* (Vol. 7, Issue 3). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/logistics7030040>.
- Moghaddam, M., & Klumpp, M. (2025). Conceptualizing cognitive and physical worker-technology symbiosis in manufacturing: Lessons from J.A.R.V.I.S. *Procedia Computer Science*, 253, 661–672. <https://doi.org/10.1016/j.procs.2025.01.128>.
- Morales, S. N., Martínez, L. R., Gómez, J. A. H., López, R. R., & Torres-Argüelles, V. (2019). Predictors of organizational resilience by factorial analysis. *International Journal of Engineering Business Management*, 11. <https://doi.org/10.1177/1847979019837046>.
- Muhammad Taufani, & Anton Wachidin Widjaja. (2023). The Manifestation Of Digital Transformation Concept In Indonesian Logistic Firms. *Jurnal Manajemen*, 27(3), 428–448. <https://doi.org/10.24912/jm.v27i3.1383>.

- Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8(2), 90–97. <https://doi.org/10.1007/s40037-019-0509-2>.
- Nurul Fikri, F., & Eka Lestiani, M. (2025). *Pengaruh Agile Leadership dan Logistic Competency terhadap Transformasi Digital serta Implikasinya pada Kualitas layanan logistik (LSQ) PosInd*. 6(6). <https://doi.org/10.38035/jmpis.v6i6>.
- Pasmore, B. S. V. P. and C. T. O. S. (2010). *Leadership Agility: A Business Imperative for a VUCA World*. www.hrps.org.
- Pemerintah Republik Indonesia. (2020). Instruksi Presiden Republik Indonesia Nomor 5 Tahun 2020 tentang Penataan Ekosistem Logistik Nasional. *Sekretariat Kabinet Republik Indonesia*.
- Reid, W. M., & Dold, C. J. (2018). Burns, Senge, and the Study of Leadership. *Open Journal of Leadership*, 07(01), 89–116. <https://doi.org/10.4236/ojl.2018.71006>.
- Shiau, J. Y., & Lee, M. C. (2010). A warehouse management system with sequential picking for multi-container deliveries. *Computers and Industrial Engineering*, 58(3), 382–392. <https://doi.org/10.1016/j.cie.2009.04.017>.
- Sudirman, A., Sari, D. P., & Lestari, E. (2024). The role of emotional intelligence in digital leadership: Evidence from Indonesian logistics firms. *International Journal of Innovation and Business Strategy*, 18(1), 45–60.
- Sun, S., Zheng, Y., Dong, Y., Li, N., Jin, Z., & Yu, Q. (2022). Reducing external container trucks' turnaround time in ports: A data-driven approach under truck appointment systems. *Computers and Industrial Engineering*, 174. <https://doi.org/10.1016/j.cie.2022.108787>.
- Syamsir, S., Saputra, N., & Mulia, R. A. (2025). Leadership agility in a VUCA world: a systematic review, conceptual insights, and research directions. *Cogent Business and Management*, 12(1). <https://doi.org/10.1080/23311975.2025.2482022>.
- Tagscherer, F., & Carbon, C. C. (2023). Leadership for successful digitalization: A literature review on companies' internal and external aspects of digitalization. In *Sustainable Technology and Entrepreneurship* (Vol. 2, Issue 2). Elsevier B.V. <https://doi.org/10.1016/j.stae.2023.100039>.
- Taskan, B., Junça-Silva, A., & Caetano, A. (2022). Clarifying the conceptual map of VUCA: a systematic review. In *International Journal of Organizational Analysis* (Vol. 30, Issue 7, pp. 196–217). Emerald Publishing. <https://doi.org/10.1108/IJOA-02-2022-3136>.
- The World Bank. (2023). *Connecting to Compete 2023 Trade Logistics in the Global Economy The Logistics Performance Index and Its Indicators*. <https://lpi.worldbank.org/>.
- Yalçinkaya, S., Dağlı, G., Aksal, F. A., Gazi, Z. A., & Kalkan, Ü. (2021). The effect of leadership styles and initiative behaviors of school principals on teacher motivation. *Sustainability (Switzerland)*, 13(5), 1–19. <https://doi.org/10.3390/su13052711>.
- Winardi MA, Prentice C, Weaven S. (2021). Systematic literature review on emotional intelligence and conflict management. *J Glob Scholars Mark Sci*. 2022;32(3):372–397. <https://doi.org/10.1080/21639159.2020.1808847>.

Wu, L. Y. (2010), “Applicability of the resource-based and dynamic-capability views under environmental volatility”, *Journal of Business Research*, Vol. 63 No. 1, pp. 27-31, doi: 10.1016/j.jbusres.2009.01.007.