

Agile Leadership and Digital Mindset: Their Impact on Employee Performance through Employee Engagement

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Abstract

Digital transformation has fundamentally altered the paradigm of modern leadership, demanding adaptive leadership strategies that are responsive to technological and innovation dynamics. This study explores how leadership transformation in the digital era can drive an innovation culture and sustainably enhance organizational performance. Utilizing a comprehensive literature review approach, this study analyzes the evolution of leadership styles from traditional models to digital leadership, which integrates technology, virtual collaboration, and data-driven decision-making. The main findings indicate that effective digital leadership is characterized by technological adaptability, digital emotional intelligence, and competence in facilitating collaborative innovation. The integration of transformational leadership and digital competencies has been shown to significantly improve innovation capability, employee engagement, and organizational performance. This study also identifies challenges in implementation, such as the digital divide, resistance to change, and the need for digital skill development. A hybrid leadership model that combines a human-centric approach with technology-enabled processes demonstrates the highest effectiveness in creating sustainable competitive advantage. Practical implications include the importance of systematic leadership development, a digital transformation roadmap, and culture change management to optimize organizational performance in the digital age. This study contributes theoretically to the development of a digital leadership framework and provides practical guidelines for organizations undergoing digital transformation.

Keywords: Leadership transformation; digital leadership; organizational innovation; organizational performance; digital transformation; change management; innovation culture.

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INTRODUCTION

The era of digital disruption has fundamentally and inevitably changed the global business competitive landscape. The exponential digital transformation that has taken place over the past decade has forced organizations to adapt quickly or risk losing relevance and sustainability in the ever-evolving business ecosystem (Westerman et al., 2011; Vial, 2019). This disruption phenomenon is no longer a mere theoretical discourse, but a concrete reality faced by organizations in various sectors and scales. According to a longitudinal study conducted by MIT Sloan Management Review, more than 78% of global executives stated that digital transformation is now the

highest strategic priority on their organization's agenda, up from only 34% in the previous decade (Sebastian et al., 2022). This reflects a paradigmatic shift in how organizations view digital technology from merely an operational enabler to a key driver of business model change and value creation.

The acceleration of digital transformation has been dramatically accelerated by the COVID-19 pandemic, which has forced organizations to adopt digitalization on a large scale and in a very short time frame, often without careful planning (Dwivedi et al., 2023). Organizations that had previously taken a gradual path of digital transformation were suddenly faced with an existential imperative to migrate to a digital operating model in a matter of weeks, not years. Data from the McKinsey Global Institute (2023) shows a surprising phenomenon: digital adoption has accelerated equivalent to a five-year projection in just eight weeks at the start of the pandemic, creating an urgency for transformation that is unprecedented in the history of modern business. This speed of change presents unprecedented adaptation challenges, considering that digital transformation is not just a matter of technology adoption, but also a fundamental transformation in the culture, processes, and mental models of an organization.

Recent empirical research conducted by the Deloitte *Digital Transformation Index* (2023) on 2,860 organizations across 23 countries further revealed that 67% of organizations that successfully demonstrated business resilience during the pandemic were those that had developed robust digital capabilities before the crisis, while 72% of organizations that experienced significant performance declines were those that were lagging behind in their digital transformation agenda. These findings confirm that digital readiness has become a key determinant of organizational resilience to disruption, and the gap between leaders and followers in digital transformation is widening over time. The implication is clear: organizations that fail to adapt quickly to the changing digital landscape risk strategic and operational obsolescence that could threaten their long-term survival.

In the context of digital transformation that is taking place at an exponential pace, the traditional *top-down*, hierarchical, and bureaucratic leadership paradigm has proven incapable of responding to the dynamics and complexity of the contemporary business environment (Denning, 2018; Holbeche, 2019). A longitudinal study conducted by the Harvard Business Review over a five-year period (2018-2023) of 385 global organizations found a significant negative correlation ($r = -0.64$, $p < 0.001$) between the level of organizational hierarchy and the speed of adaptation to market changes, indicating that traditional leadership structures and styles are actually significant obstacles for organizations in navigating the complexity of the VUCA (*Volatile, Uncertain, Complex, Ambiguous*) environment accelerated by digitalization (Hamilton et al., 2023). Consequently, there is an acute leadership crisis in various industrial sectors, where conventional management approaches that are effective in

stable and predictable business environments become counterproductive in the context of the volatility and ambiguity that defines the digital era.

Responding to the need for a more adaptive leadership model, the concept of *AGILE LEADERSHIP* emerged as an alternative leadership approach that emphasizes adaptability, cross-functional collaboration, team empowerment, a psychological climate that supports experimentation, and fast but data-driven decision making (Joiner & Josephs, 2022). The evolution of this concept is inseparable from the success of the *Agile methodology* in software development which was then adapted into a broader organizational leadership context. *AGILE LEADERSHIP* is not just about speed, but more fundamentally about developing the capability to adapt to constant and unpredictable change, and to leverage that change as a source of competitive advantage, not an existential threat.

Several recent empirical studies indicate that *AGILE LEADERSHIP* is positively correlated with improved overall organizational performance. Parker et al. (2022) in a study of 147 technology organizations found that the adoption of *AGILE LEADERSHIP* was significantly associated with improved *time-to-market* ($r = 0.58$, $p < 0.01$) and innovation ($r = 0.62$, $p < 0.01$). Meanwhile, Lee & Edmondson (2020) through a qualitative multi-case study of 18 organizations that adopted *self-management* identified that *AGILE LEADERSHIP* acts as a catalyst in creating an organizational climate that encourages employee engagement, continuous experimentation, and cross-functional collaboration. However, research that specifically examines the effect of *AGILE LEADERSHIP* on employee performance at the individual level, especially in different contexts and stages of digital transformation, is still limited and inconclusive.

This research gap is all the more significant given that organizational performance is ultimately an aggregate of individual performance, and the dynamics between leadership style and employee performance may be mediated by complex psychological and contextual factors. The lack of consensus on the exact mechanisms by which *AGILE LEADERSHIP* translates into improved employee performance is an area that requires further empirical exploration, especially in the context of organizations undergoing digital transformation with varying levels of maturity. Parallel to the need for *agile leadership*, another crucial factor in the era of digital transformation is *DIGITAL MINDSET*, conceptually defined as “a mindset that enables individuals to see how digital technologies can deliver value and competitive advantage, and a willingness to continuously adapt to the changes brought about by digital technologies” (Solberg et al., 2020). *DIGITAL MINDSET* goes beyond digital literacy or technical skills, but encompasses a more fundamental cognitive dimension: a worldview in which digital is not just a tool, but a new paradigm for interacting, collaborating, and creating value.

DIGITAL MINDSET construct encompasses several key dimensions, including the willingness to adopt new technologies (*technology adoption readiness*), the capacity to think experimentally and iteratively (*experimental thinking*), the ability to identify value creation opportunities through digital technologies (*digital value creation*), and an ecosystem perspective that enables individuals to understand the interconnections between technology, processes, and people in a digital context (*ecosystem perspective*) (Naeini et al., 2022). These dimensions collectively form the cognitive capabilities that are essential for individuals to contribute optimally in the context of digital transformation.

Kane et al. (2019) in a comprehensive global survey of over 4,800 executives from various industries and geographies found an interesting *insight* : *organizations that succeed in digital transformation are not just those that invest in technology, but those that cultivate a DIGITAL MINDSET across the organization*. The study revealed that 70% of organizations that succeed in digital transformation emphasize the development of a *DIGITAL MINDSET as a key component of their transformation strategy, compared to only 14% of less successful organizations*. This finding confirms the hypothesis that *successful digital transformation depends more on mindset transformation than just technology investment, challenging the technology-centric view that often dominates the digital transformation discourse*.

However, there is a significant research gap in understanding how *DIGITAL MINDSET* empirically influences employee performance at the individual level, especially in the context of emerging markets such as Indonesia which have different socio-cultural characteristics and digital infrastructures than developed markets. The majority of research on *DIGITAL MINDSET* has been conducted in the context of organizations in developed economies with mature digital infrastructures and relatively high digital literacy, leaving open the question of the generalizability of the findings across different contexts. Furthermore, while an important aspect of *DIGITAL MINDSET* is its adaptive capacity to technological change, there have been few studies exploring how *DIGITAL MINDSET* interacts with specific leadership approaches in shaping employee attitudes and behaviors that support optimal performance in the context of digital transformation.

A study conducted by Capgemini Research Institute (2023) of 1,500 employees in 35 organizations undergoing digital transformation found that only 39% of employees felt they had an adequate *DIGITAL MINDSET to contribute optimally to their organization's transformation agenda, while 82% identified the lack of DIGITAL MINDSET as a major barrier to adopting new ways of working supported by digital technology*. This gap indicates the urgency to understand how *DIGITAL MINDSET* can be developed and cultivated, and how this construct relates to employee performance in the context of digital transformation.

Integrating the two constructs *AGILE LEADERSHIP* and *DIGITAL MINDSET* – this study identifies a significant theoretical gap in explaining the mechanisms by which both influence Employee Performance in the context of digital transformation. Current literature suggests that the relationship is likely mediated by motivational and psychological factors (Hartwell & Toth, 2021), but there is little research that specifically positions *EMPLOYEE ENGAGEMENT* as a mediating variable in this relationship, even though the construct has been identified as a strong predictor of performance in various organizational contexts.

The concept of *EMPLOYEE ENGAGEMENT* itself, defined as "a positive psychological state characterized by dedication, vigor, and absorption in work" (Schaufeli & Bakker, 2010), has been proven to be a strong determinant of individual and organizational performance through various empirical studies. Bailey et al. (2022) through a longitudinal study of 2,468 employees from various sectors found that *EMPLOYEE ENGAGEMENT* significantly mediates the relationship between management practices and employee performance. Meanwhile, Harter et al. (2020) in a comprehensive meta-analysis of 456 studies with a total sample of 1.7 million employees confirmed a consistent positive relationship between *EMPLOYEE ENGAGEMENT* and various indicators of organizational performance, including productivity, service quality, employee retention, and profitability. The latest meta-analysis conducted by Schneider et al. (2022) even showed a substantial correlation of 0.43 between *EMPLOYEE ENGAGEMENT* and Employee Performance, indicating that *EMPLOYEE ENGAGEMENT* explains almost 20% of the variance in employee performance.

However, although the relationship between *EMPLOYEE ENGAGEMENT* and performance has been well documented in the literature, understanding of the antecedent factors in the context of digital transformation, specifically how *AGILE LEADERSHIP* and *DIGITAL MINDSET* play a role in shaping *EMPLOYEE ENGAGEMENT*, is still limited. This gap is all the more significant given that digital transformation fundamentally changes the nature of work, social interactions in the workplace, and employee expectations, all of which have the potential to influence engagement dynamics. This study seeks to fill this gap by building and testing an integrated model that explains how and why *AGILE LEADERSHIP* and *DIGITAL MINDSET* influence Employee Performance, positioning *EMPLOYEE ENGAGEMENT* as a mediating mechanism.

The ontological position of this research is rooted in the post-positivist paradigm that acknowledges the objective reality of the phenomena studied, but at the same time accepts that our understanding of this reality is never perfect and is always influenced by the social context, values adopted, and subjective experiences of researchers and research participants. In this context, the study acknowledges the causal relationship

between the variables studied (*AGILE LEADERSHIP* , *DIGITAL MINDSET* , *EMPLOYEE ENGAGEMENT* , and Employee Performance), but also realizes that the relationship is probabilistic and contextual, not deterministic and universal.

Epistemologically, this study adopts a deductive-quantitative approach to test conceptual models built from established theories, but with an awareness of the complexity of the social phenomena studied. This approach allows researchers to test specific hypotheses about the relationships between constructs with a relatively high degree of precision and objectivity, while remaining open to nuances and contexts that may not be fully captured in a purely quantitative analysis. In this regard, the study combines a positivistic approach in data collection and analysis with interpretivist sensitivity in understanding the meaning and implications of empirical findings.

The theoretical foundation of this study is built from the integration of two main theoretical perspectives. First, *Social Exchange Theory* (SET) developed by Blau (1964) and expanded by Cropanzano & Mitchell (2005) provides a conceptual framework for understanding how social interactions in organizations are based on the exchange of material and non-material resources, with the principle of reciprocity as a core mechanism. In the context of this study, SET suggests that *AGILE LEADERSHIP* creates a work environment that supports autonomy, collaboration, and continuous learning, which is then perceived by employees as an investment by the organization in them, triggering the norm of reciprocity that is manifested in the form of emotional and cognitive ties to their work (*EMPLOYEE ENGAGEMENT*).

Important dimensions of *AGILE LEADERSHIP* that are relevant in the SET context are empowerment , where leaders delegate authority and encourage participation in decision-making; transparency, where information is shared openly and honestly; and learning orientation, where mistakes are viewed as learning opportunities rather than grounds for punishment. Through these practices, *agile leaders* build high-quality social exchange relationships with employees that are characterized by trust, belonging, and commitment. From a SET perspective, this relational model encourages employees to respond with higher levels of engagement as a form of reciprocity, which in turn has a positive impact on performance.

Second, *the Resource-Based View* (RBV) proposed by Barney (1991) and extended to the digital context by Fitzgerald et al. (2020) provides a foundation for understanding how intangible assets such as *DIGITAL MINDSET* become strategic resources that contribute to competitive advantage through enhancing employee adaptive capabilities. RBV emphasizes that sustainable competitive advantage comes from resources that are valuable, rare, difficult to imitate, and non-substitutable (VRIN: *Valuable, Rare, Inimitable, Non-substitutable*). In this context, *DIGITAL MINDSET* can be viewed as a dynamic capability that allows organizations to reconfigure resources in response to changes in the digital environment.

The RBV perspective suggests that employees with a strong *DIGITAL MINDSET* have a greater capacity to identify and exploit digital opportunities, adapt to technological change, and integrate new technologies into their work practices. These capabilities act as individual resources that contribute to *EMPLOYEE ENGAGEMENT* through increased *self-efficacy*, *sense of competence*, and the ability to see the meaning and relevance of their work in the context of the organization's digital transformation. The resulting *engagement*, in turn, *positively impacts employee performance through increased effort*, persistence in the face of challenges, and innovative behavior.

The integration of these two theoretical perspectives—SET and RBV—allows for a more comprehensive understanding of how leadership factors (*AGILE LEADERSHIP*) and individual factors (*DIGITAL MINDSET*) interact to shape employee attitudes and behaviors (*EMPLOYEE ENGAGEMENT*) that ultimately impact performance. This integrative framework also considers recursive dynamics, where good performance can strengthen engagement, which then drives further development of *DIGITAL MINDSET*, *creating a positive spiral in the context of digital transformation*.

The practical significance of this research lies in the urgency to understand how organizations can optimize employee performance in a complex and uncertain digital era, especially in the context of emerging markets such as Indonesia that are experiencing accelerated digital transformation. Data from the World Economic Forum (2023) shows an alarming projection that 50% of jobs will require substantial change or even be replaced by automation in the next five years, while 97% of global executives anticipate significant digital disruption in their industries in the same period. In the Southeast Asian context, McKinsey (2022) predicts that 28 million jobs in Indonesia are at high risk of being disrupted by automation and artificial intelligence in the next decade, underscoring the urgency for organizations to prepare their employees for this transformation.

In this turbulent landscape, understanding how *AGILE LEADERSHIP* and *DIGITAL MINDSET* affect employee performance through *EMPLOYEE ENGAGEMENT* becomes crucial for organizations to develop effective human capital development strategies. Practical implications of this study include identifying specific interventions to develop *agile leadership capabilities*, strategies to cultivate *DIGITAL MINDSET* at various levels of the organization, and targeted approaches to enhance *EMPLOYEE ENGAGEMENT* in the context of digital transformation. This understanding will help organizations to allocate limited development resources optimally, as well as align digital transformation initiatives with *human capital development strategies*.

The selection of Master of Management students as the subjects of this study was not merely a *convenience sampling consideration*, but was based on accountable methodological considerations. First, postgraduate students in management, especially executive management master's programs, are generally cross-industry professionals with substantive work experience (average 5-10 years) and managerial or supervisory positions, so they have adequate contextual understanding of the organizational phenomena studied. Second, they come from a variety of industry sectors and organizational sizes, allowing for the variability needed to test the conceptual model in various organizational contexts. Third, as

students who are pursuing higher education in the field of management, they have a theoretical understanding of the management concepts discussed, increasing the validity of the responses to the research instrument.

Previous research suggests that samples of working graduate management students can provide valuable insights into contemporary organizational dynamics, with a reasonable degree of generalizability to broader organizational contexts. Anderson et al. (2021) in a meta-analysis of 83 studies comparing student and non-student samples found that for constructs related to workplace attitudes and behaviors, results from samples of working graduate students did not differ significantly from those from samples of general employees. Similarly, Zhao & Liden (2020) documented that executive MBA students provide valid and *reliable data* for research on leadership and organizational performance.

In addition, this sample selection also allows control of exogenous variables such as education level and basic understanding of management concepts, which can be *confounding factors* in the relationship between the variables studied. Given that the *DIGITAL MINDSET construct* requires a basic understanding of digital technology and its implications for business, the population of master's degree students in management who are generally exposed to digital transformation discourse through their academic curriculum minimizes the risk of misunderstanding the construct studied.

DIGITAL MINDSET can also be understood as "a way of thinking and acting that adapts to current and future developments in digital technology" (Hazni & Nurhaida, 2023). This concept includes a series of attitudes, behaviors, and skills that enable individuals and organizations to utilize digital tools and platforms effectively in achieving goals. According to Albinson et al. (2019), important characteristics of *DIGITAL MINDSET* include: technology-oriented, adaptive and flexible, innovative and proactive, collaborative, data-driven in decision making, and user experience-oriented.

Research from Neeley and Leonardi (2022) shows that *DIGITAL MINDSET* plays a significant role in the success of digital transformation and individual career development. They argue that developing *a DIGITAL MINDSET* is essential for leaders and employees to be able to manage their organizations to achieve success and build workforce resilience in the digital age. Employees who adopt *a DIGITAL MINDSET* tend to be more successful in their jobs, have higher job satisfaction, are more likely to be promoted, and develop skills useful for changing the way they work in an ever-evolving business environment.

AGILE LEADERSHIP means implementing flexible adaptive strategies based on connected external and internal experiences to provide value among all stakeholders (Chatwani, 2019). Employee performance is the result produced by a job function at a certain time, which indicates the quality and quantity of work (Adhari, 2020). *AGILE LEADERSHIP* is a representation of flexibility, adaptability, and team collaboration which are expected to have a positive and significant influence on employee performance. Based on previous research, it can be assumed that the hypothesis is:

H1: *AGILE LEADERSHIP* has a significant influence on *EMPLOYEE ENGAGEMENT*

H2: *AGILE LEADERSHIP* has a significant influence on employee performance.

The ability of employees to understand and prioritize user needs in a digital context, including focusing on values and solutions that meet digital user expectations. Based on previous research, it can be assumed that the hypothesis is:

H3: *DIGITAL MINDSET* has a significant influence on *EMPLOYEE ENGAGEMENT*

H4: *DIGITAL MINDSET* has a significant influence on employee performance.

1. *Vigor* can be characterized by having high energy and tenacity accompanied by joy, willingness to put in maximum effort in completing work which is characterized by perseverance in the face of difficulties.
2. *Dedication* is a condition where workers are very involved in their work. This condition is characterized by feelings of meaning, challenge, high enthusiasm and provides significant inspiration for themselves both personally and socially.
3. *Absorption* can be defined as a stage marked by concentration and pleasure and deep interest in the work. It is characterized by a feeling of difficulty in detaching oneself from the work and feeling that time passes very quickly when doing the work. Based on previous research, it can be assumed that the hypothesis is:

H5: *EMPLOYEE ENGAGEMENT* has a significant influence on employee performance.

METHODOLOGY

This type of research is quantitative research. The research design used in quantitative research is explanatory research *on* the results of hypothesis testing related to the variables *AGILE LEADERSHIP*, *DIGITAL MINDSET*, *Employee Engagement* and *Employee Performance*. This study uses a *survey method*, namely research that takes samples from a population and uses a questionnaire as a data collection instrument. Respondents in this study were master of management students at the Harapan Bangsa Bandung School of Economics Batch 4, 5, 6 and 7. This research was conducted on the Harapan Bangsa Bandung School of Economics campus. The research period is March to June 2025. Based on Chin (in Zuhdi et al., 2016) states that the minimum sample size in SEM-PLS analysis is 30 - 100. Meanwhile, according to Hair et al (2010) states that the right sample size should be between 100 - 200 and the sample is 5 to 10 times the number of existing indicators. This study has 18 indicators. So, based on this formula, the determination of the number of samples in this study is:

$$N = 7 \times (\text{number of Indicators})$$

$$N = 7 \times 18 = 126$$

Based on the formula above, the number of samples in this study is 126 user respondents and it can be said that the number of samples has met the requirements and criteria of the related theory. In this study, the type of data used is primary data. Data is obtained directly from respondents. Data collection techniques are specific

methods that researchers use to collect data. The questionnaire technique is a technique used by asking written questions or statements to research respondents. Questions and statements in the questionnaire must refer to the formulation of the research problem and indicators in the operational concept of the research variables (Sugiyono, 2022). The data collection technique used in this study is a survey method using a questionnaire. In this study, the questionnaire was conducted online using the Google Form service, then distributed using the Whatsapp application.

RESULTS AND DISCUSSION

Respondent Description

Respondents in this study were master of management students at Harapan Bangsa Bandung School of Economics Batch 4, 5, 6 and 7. Where students who have *employee status* (workers) and come from various cities in Indonesia. The total respondents successfully obtained from the distribution of questionnaires were 126 respondents.

Table 1 Respondent Profile Based on Gender

Jenis Kelamin	Jumlah	Persentase
A.Pria	94	75%
B.Wanita	32	25%
Grand Total	126	100%

Source: Questionnaire Data Processing Results (2025)

From this study, it can be seen that the majority are men, 94 people (75%) and women, 32 people (25%).

For the age or generation category, the majority are aged 30-44 years or generation Y born in the 1981-1995 range, as many as 58 people (46%). The following is a table of respondent profiles based on age/generation:

Table 2. Respondent Profile by Age/Generation

Usia/Generasi	Jumlah	Persentase
A.Generasi Baby Boomers (1946-1964)	1	1%
B.Generasi X (1965-1980)	50	40%
C.Generasi Y / Millennial (1981-1995)	58	46%
D.Generasi Z (1996-2010)	17	13%
Grand Total	126	100%

Source: Questionnaire Data Processing Results (2025)

The majority of respondents were Master of Management students in batch 6, namely 59 people (47%).

The following is a table of respondent profiles based on *batch* :

Table 3 Respondent Profile Based on Batch

Batch	Jumlah	Persentase
A.Batch 4	9	7%
B.Batch 5	17	13%
C.Batch 6	59	47%
D.Batch 7	41	33%
Grand Total	126	100%

Source: Questionnaire Data Processing Results (2025)

The majority of respondents are managers at their workplace, which is 62 people (49%). The following is a table of respondent profiles based on job level:

Table 4. 4 Respondent Profile Based on Job Level

Jabatan	Jumlah	Persentase
A. Staff	31	25%
B. Supervisor	24	19%
C. Manager	62	49%
D. Direksi	9	7%
Grand Total	126	100%

Source: Questionnaire Data Processing Results (2025)

The majority of respondents are workers who have worked for >10 years at their workplace, which is 91 people (72%). The following is a table of respondent profiles based on the level of length of service:

Table 5 Respondent Profile Based on Job Level

Lama Bekerja	Jumlah	Persentase
A. <1 Tahun	2	2%
B. 1–5 Tahun	23	18%
C. 6–10 Tahun	10	8%
D. >10 Tahun	91	72%
Grand Total	126	100%

Source: Questionnaire Data Processing Results (2025)

Research Result Data Analysis

The research data was processed using SmartPLS with the following chart: Analysis of Research Data:

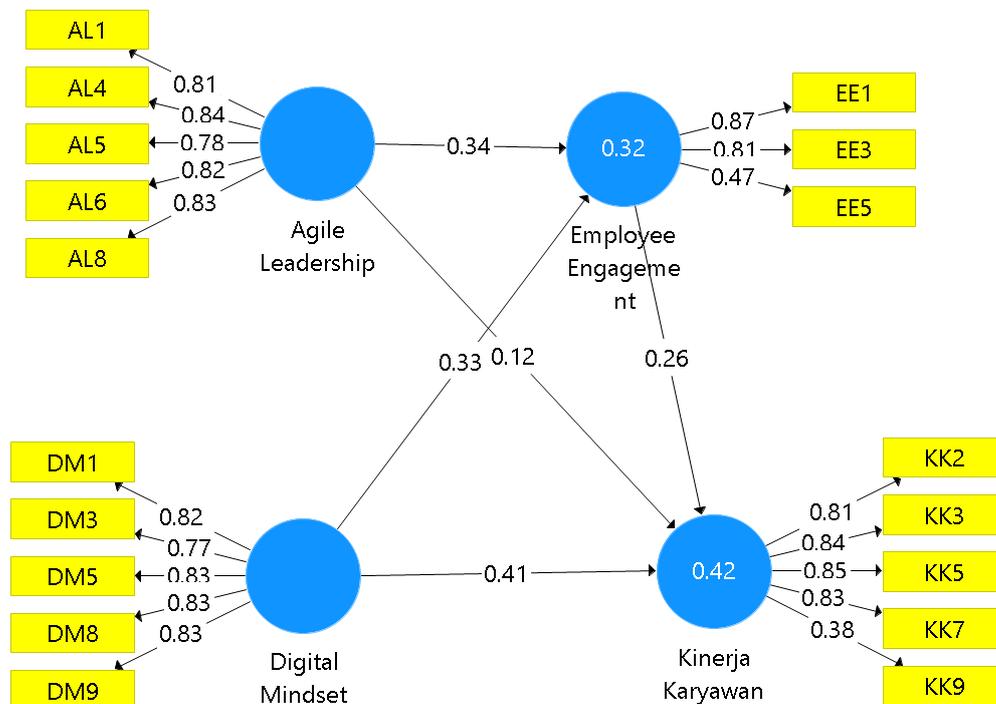


Figure 1 Data Processing Results Phase 1

Measurement Model (Outer Model)

a. Convergent Validity

The following is the first data processing based on 4 variables with a total of 18 statements:

Table 6 Outer Loadings

	<i>AGILE LEADERSHIP</i>	<i>DIGITAL MINDSET</i>	<i>EMPLOYEE ENGAGEMENT</i>	Employee performance
AL1	0.814			
AL4	0.837			
AL5	0.780			
AL6	0.819			
AL8	0.826			
DM1		0.821		
DM3		0.770		
DM5		0.828		
DM8		0.833		
DM9		0.831		
EE1			0.865	
EE3			0.810	
EE5			0.474	
KK2				0.806
KK3				0.836
KK5				0.851
KK7				0.830
KK9				0.381

outer loadings table in the table above and the validity limit ≥ 0.70 , the following is an explanation of each construct and item:

1. *AGILE LEADERSHIP*

Indicator Explanation:

- AL1 = 0.814
- AL4 = 0.837
- AL5 = 0.780
- AL6 = 0.819
- AL8 = 0.826

Conclusion: all indicators meet validity requirements (>0.70) and can be used.

2. *DIGITAL MINDSET*

Indicator Explanation:

- DM1 = 0.821
- DM3 = 0.770
- DM5 = 0.828
- DM8 = 0.833
- DM9 = 0.831

Conclusion: all indicators meet validity requirements (>0.70) and can be used.

3. *EMPLOYEE ENGAGEMENT*

Indicator Explanation:

- EE1 = 0.865
- EE3 = 0.810
- EE5 = 0.474 (Invalid)

Conclusion: EE5 should be removed because its value is <0.70.

4. Employee performance

Indicator Explanation:

- KK2 = 0.806
- KK3 = 0.836
- KK5 = 0.851
- KK7 = 0.830
- KK9 = 0.381(Invalid)

Conclusion: KK9 should be removed because its value is <0.70.

In order to meet the required *convergent validity* , which is higher than 0.70, a second data processing was carried out by removing the EE5 and KK9 indicators from the model. The following is the second data processing:

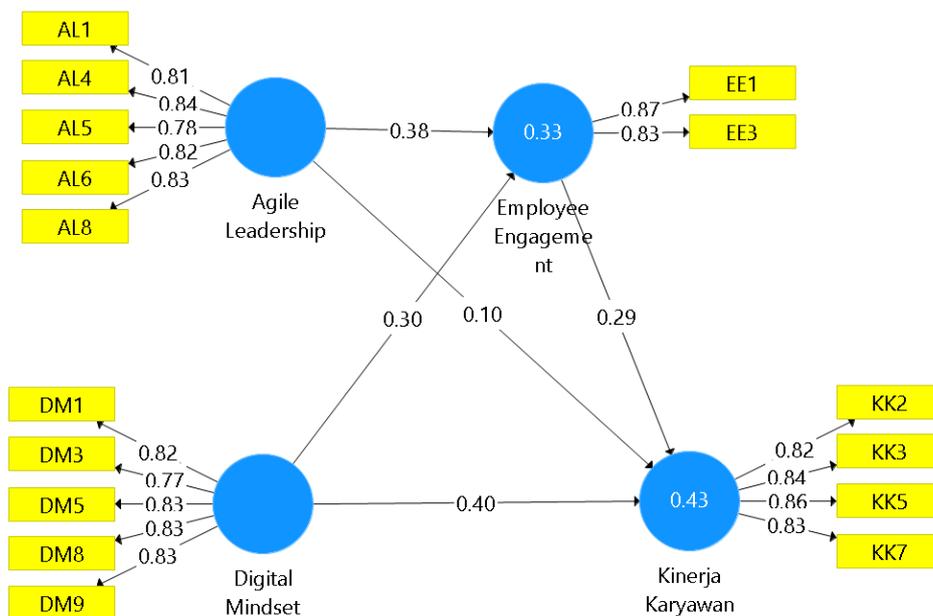


Figure 2 Results of Data Processing Phase 2

Table 7 Outer Loadings

Indicator	AGILE LEADERSHIP	DIGITAL MINDSET	EMPLOYEE ENGAGEMENT	Employee performance
AL1	0.812			
AL4	0.837			
AL5	0.779			
AL6	0.821			
AL8	0.827			
DM1		0.825		
DM3		0.770		

DM5	0.830	
DM8	0.829	
DM9	0.828	
EE1		0.873
EE3		0.826
KK2		0.818
KK3		0.843
KK5		0.859
KK7		0.832

outer loadings table in the table above and the validity limit ≥ 0.70 shows the contribution value of each indicator to the latent construct in this research model, namely *AGILE LEADERSHIP*, *DIGITAL MINDSET*, *EMPLOYEE ENGAGEMENT*, and Employee Performance. In PLS-SEM-based research, the *outer loading value* is used to assess the validity of the indicator against its construct. Generally, the value considered valid is at least 0.70.

In the *AGILE LEADERSHIP* construct, all indicators used, namely AL1 (0.812), AL4 (0.837), AL5 (0.779), AL6 (0.821), and AL8 (0.827) – show *outer loading values* above 0.70. This shows that all indicators have good convergent validity and can consistently represent the *AGILE LEADERSHIP* construct.

Likewise in the *DIGITAL MINDSET* construct, all indicators used, namely DM1 (0.825), DM3 (0.770), DM5 (0.830), DM8 (0.829), and DM9 (0.828), have adequate *outer loading values* and are above the threshold of 0.70. Thus, these indicators are considered valid in measuring *DIGITAL MINDSET*.

In the *EMPLOYEE ENGAGEMENT* construct, there are two indicators, namely EE1 and EE3, with *outer loading values* of 0.873 and 0.826 respectively. Both of these values are classified as very high, indicating that these indicators have very good strength in reflecting the employee engagement construct.

In the Employee Performance construct, there are four indicators that all meet the validity criteria. The *outer loading value* for KK2 is 0.818; KK3 is 0.843; KK5 is 0.859; and KK7 is 0.832. These values indicate that the four indicators strongly and validly measure the Employee Performance construct.

The conclusion from the explanation above is that all indicators in this model have an *outer loading value* > 0.70 , which means that all indicators are feasible and valid to be used in the measurement process of each construct. Thus, it can be concluded that the instrument used has adequate convergent validity, and is ready to be used in further testing such as reliability evaluation, discriminant validity, and hypothesis testing in the structural model.

b. Discriminant Validity

Discriminant validity assessment has become a generally accepted prerequisite for analyzing relationships between latent variables. For variance-based structural equation modeling, such as partial least squares, the Fornell-Larcker criterion and *cross-loading examination* are the dominant approaches to evaluate discriminant validity. *Discriminant validity* is the level of differentiation of an indicator in measuring the construct of the instrument. To test *discriminant validity*, it can be done by

examining *the Cross Loading*, namely the correlation coefficient of the indicator to its association construct (*cross loading*) compared to the correlation coefficient with other constructs (*cross loading*). The value of the indicator correlation construct must be greater than its association construct than other constructs. The greater value indicates the suitability of an indicator to explain its association construct compared to explaining other constructs. (Jorg Henseler et al., 2014).

Table 8 Fornell-Larcker Criterion Discriminant Validity

	Agile Leadership	Digital Mindset	Employee Engagement	Kinerja Karyawan
Agile Leadership	0,815			
Digital Mindset	0,443	0,817		
Employee Engagement	0,484	0,476	0,737	
Kinerja Karyawan	0,429	0,586	0,513	0,763

From the results of table 4.8, it shows that the *loading value* of each indicator item on its construct is greater than the *cross loading value*. Thus, it can be concluded that all constructs or latent variables already have good *discriminant validity*, where the indicator block of the construct is better than the indicators of other blocks.

c. Composite Reliability

After testing the construct validity, the next test is the construct reliability test measured by *Composite Reliability* (CR) from the indicator block that measures the CR construct is used to display good reliability. A construct is declared reliable if the *composite reliability value* is > 0.6. According to Hair et al. (2014) the *composite reliability coefficient* must be greater than 0.7 although a value of 0.6 is still acceptable. However, the internal consistency test is not absolute to be carried out if the construct validity has been met, because a valid construct is a reliable one, conversely a reliable construct is not necessarily valid (Cooper and Schindler, 2014).

Table 9 Construct Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
AGILE LEADERSHIP	0.874	0.879	0.908	0.665
DIGITAL MINDSET	0.876	0.885	0.909	0.667
EMPLOYEE ENGAGEMENT	0.616	0.625	0.838	0.722
Employee performance	0.859	0.861	0.904	0.702

Based on table 4.9. The results of the *composite reliability test* show a value of > 0.6, which means that all variables are declared reliable.

d. Alpha Cronbach's Correlation

Based on table 4.8. The results of the *Cronbach's Alpha test* show a value of > 0.6 on

AGILE LEADERSHIP (0.874), DIGITAL MINDSET (0.876), EMPLOYEE ENGAGEMENT (0.616) and Employee Performance (0.859). The AVE value shows a value of > 0.6 on AGILE LEADERSHIP (0.665), DIGITAL MINDSET (0.667), EMPLOYEE ENGAGEMENT (0.722) and Employee Performance (0.702). From the results of Cronbach's Alpha and AVE, it can be concluded that this construct is very reliable and valid.

Inner Model

After conducting a model evaluation and finding that each construct has met the requirements of *Convergent Validity*, *Discriminant Validity*, and *Composite Reliability*, the next step is to evaluate the structural model which includes testing the suitability of the model (*model fit*), *Path Coefficient*, and *R²*. *Model fit* testing is used to determine whether a model fits the data.

1. Path Coefficient

Based on Figure 4.2 which is the result of eliminating several invalid statements, the AGILE LEADERSHIP variable has an influence on the Employee Performance variable of 0.10 or 10%. The DIGITAL MINDSET variable has an influence on the Employee Performance variable of 0.40 or 40%. The Employee Engagement variable has an influence on the Consumer Satisfaction variable of 0.29 or 29.0%.

2. R Square

Inner model (*inner relation*, *structural model*, and *substantive theory*) describes the relationship between latent variables based on substantive theory. The *structural model* is evaluated using R-square for the dependent construct. The R² value can be used to assess the influence of certain endogenous variables and exogenous variables whether they have a *substantive influence* (Ghozali, 2014). The R² results of 0.67, 0.33, and 0.19 indicate that the model is "good", "moderate", and "weak" (Ghozali, 2014).

Table 10 R Square Table

	R Square	R Square Adjusted
Employee Engagement	0,319	0,308
Kinerja Karyawan	0,425	0,411

Based on table 4.10, the endogenous construct of EMPLOYEE ENGAGEMENT obtained an Adjusted R Square value of 0.308, indicating that 30.8% of the variation in the construct can be explained by the exogenous variables that influence it in the research model. Meanwhile, the endogenous construct of Employee Performance showed a more substantial Adjusted R Square value, namely 0.411, indicating that 41.1% of the variation in the construct can be explained by the predictors in the model. Referring to the classification proposed by Hair et al. (2019), the Adjusted R Square value for EMPLOYEE ENGAGEMENT is in the moderate category, while the value for Employee Performance is close to the substantial category. This finding implies that the research model has sufficient explanatory ability, especially in predicting the variability of Employee Performance. However, it must be acknowledged that there is still a fairly large proportion of variance in both endogenous constructs that cannot be explained by the model, namely 69.2% for EMPLOYEE ENGAGEMENT and 58.9% for Employee Performance, which

indicates the existence of other factors outside the model that have the potential to influence these two constructs.

3. *Fit Model*

Table 11 Model Fit Table

	Saturated Model	Estimated Model
NFI	0,744	0,744

From the results of table 4.11, the NFI value ranging from 0 to 1 is derived from the comparison between the hypothesized model and a certain independent model. The model has a high fit if the value is close to 1. Based on the table above, the NFI value is at 0.744, which means it has a model fit that can be stated as good. (Ghozali, 2014)

4. *Effect Size (f²)*

Table 12 f square table

	Agile Leadership	Digital Mindset	Employee Engagement	Kinerja Karyawan
Agile Leadership			0,136	0,018
Digital Mindset			0,125	0,207
Employee Engagement				0,080
Kinerja Karyawan				

f Square table, the effect size analysis represented by the f^2 value in the SmartPLS output shows the relative contribution of each exogenous construct to the coefficient of determination of the endogenous construct. Based on the data presented, the *DIGITAL MINDSET* construct demonstrates a substantive contribution to Employee Performance with an f^2 value of 0.207, which based on the evaluation criteria of Hair et al. (2019) is interpreted as a moderate effect. Meanwhile, the *AGILE LEADERSHIP* and *DIGITAL MINDSET* constructs show a relatively equivalent contribution to *EMPLOYEE ENGAGEMENT* with f^2 values of 0.136 and 0.125 respectively, reflecting an effect in the small to moderate range. Furthermore, *EMPLOYEE ENGAGEMENT* shows a relatively small contribution to Employee Performance with an f^2 value of 0.080, while *AGILE LEADERSHIP* shows a relatively minimal contribution to Employee Performance with an f^2 value of 0.018.

This finding implies that within the framework of the hypothesized model, *DIGITAL MINDSET* has a more dominant role in explaining the variability of Employee Performance compared to other constructs. This indicates that interventions aimed at improving *DIGITAL MINDSET* have the potential to provide a more significant impact on improving Employee Performance. In contrast, the relatively small contribution of *AGILE LEADERSHIP* to Employee Performance suggests that its effect may be mediated by other variables or require certain moderating conditions to produce a more substantial impact. Evaluation of this effect size provides valuable insight into identifying key constructs that contribute to the variability of endogenous constructs, so that it can be used as a basis for developing a more

comprehensive model and formulating more effective intervention strategies in a managerial context.

Hypothesis Testing

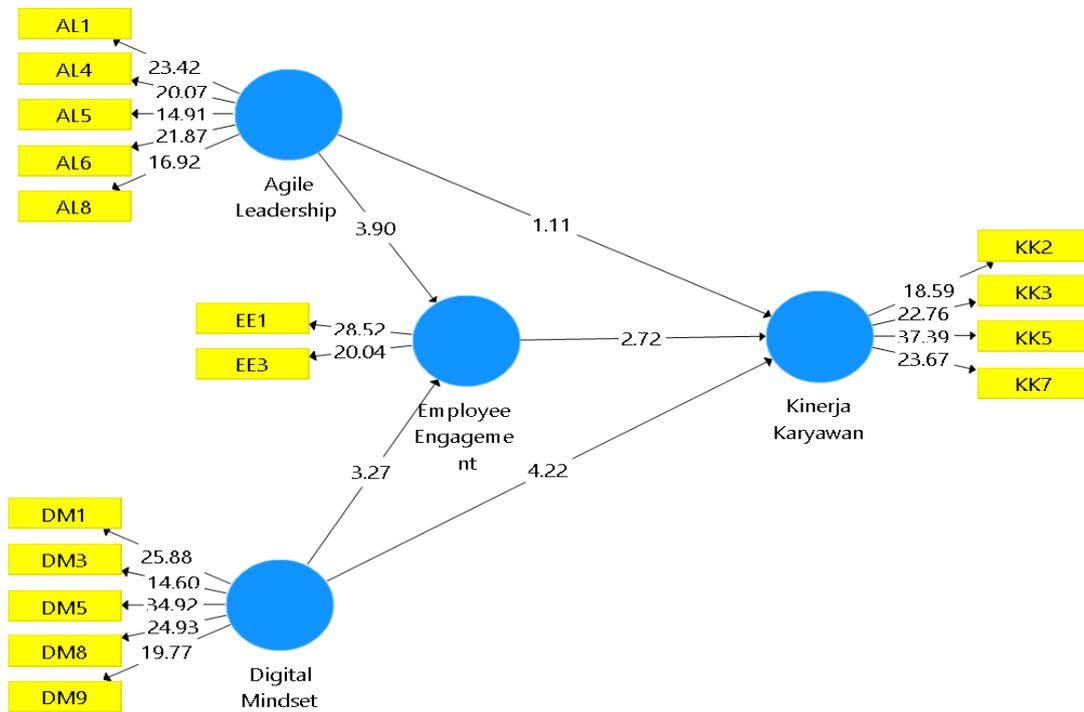


Figure 3 Hypothesis Testing Results

Table 13 Table of Mean, STDEV, T-Values, P-Values

	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation (STDEV)</i>	<i>T Statistics (O/STDEV)</i>	<i>P Values</i>
Agile Leadership -> Employee Engagement	0.378	0.380	0.097	3,904	0.000
Agile Leadership -> Kinerja Karyawan	0.100	0.101	0.091	1,106	0.269
Digital Mindset -> Employee Engagement	0.301	0.303	0.092	3,265	0.001
Digital Mindset -> Kinerja Karyawan	0.400	0.408	0.095	4,222	0.000
Employee Engagement -> Kinerja Karyawan	0.288	0.281	0.106	2,717	0.007

To find out the *structural relationship* between latent variables, hypothesis testing must be carried out on the path coefficients between variables by comparing the *p-value* with alpha (0.005) or t-statistics of (>1.96). The magnitude of the *P-value* and also the t-statistics are obtained from the output on SmartPLS using the *bootstrapping method*. This test is intended to test the following hypotheses:

1. H1: AGILE LEADERSHIP has a significant influence on EMPLOYEE ENGAGEMENT

Original Sample (β): 0.378

T-Statistic : 3.904

P-Value : 0.000

Significant: *AGILE LEADERSHIP* has a significant influence on *EMPLOYEE ENGAGEMENT*.

2. H2: *AGILE LEADERSHIP* has a significant influence on employee performance.

Original Sample (β): 0.100

T-Statistic : 1.106

P-Value : 0.269

Not Significant: *AGILE LEADERSHIP* does not have a significant direct effect on Employee Performance

3. H3: *DIGITAL MINDSET* has a significant influence on *EMPLOYEE ENGAGEMENT*

Original Sample (β): 0.301

T-Statistic : 3.265

P-Value : 0.001

Significant: *DIGITAL MINDSET* has a significant influence on *EMPLOYEE ENGAGEMENT*.

4. H4: *DIGITAL MINDSET* has a significant influence on employee performance.

Original Sample (β): 0.400

T-Statistic : 4.222

P-Value : 0.000

Significant: *DIGITAL MINDSET* has a significant influence on Employee Performance.

5. H5: *DIGITAL MINDSET* has a significant influence on Employee Performance

Original Sample (β): 0.288

T-Statistic : 2.717

P-Value : 0.007

Significant: *EMPLOYEE ENGAGEMENT* has a significant influence on Employee Performance.

The conclusion of the hypothesis test is as follows:

H1: **Accepted** : *AGILE LEADERSHIP* has a significant influence on *EMPLOYEE ENGAGEMENT*

H2: **Rejected**: *AGILE LEADERSHIP* has a significant influence on employee performance.

H3: **Accepted** : *DIGITAL MINDSET* has a significant influence on *EMPLOYEE ENGAGEMENT*

H4: **Accepted** : *DIGITAL MINDSET* has a significant influence on employee performance.

H5: **Accepted** : *EMPLOYEE ENGAGEMENT* has a significant influence on employee performance.

Hypothesis testing in this study was conducted using *the Partial Least Squares – Structural Equation Modeling (PLS-SEM)* method with the help of SmartPLS

software. The results of testing the relationship between constructs are displayed in the *path coefficients table* which includes the path coefficient value (*original sample*), *T- statistic* value, and *P- value* for each hypothesis relationship path. The results of testing each hypothesis are explained as follows:

1. The Influence of *AGILE LEADERSHIP* on *EMPLOYEE ENGAGEMENT*

The test results show that *AGILE LEADERSHIP* has a significant effect on *EMPLOYEE ENGAGEMENT* with a coefficient value of 0.378, *T- statistic* 3.904, and *P- value* 0.000. Because the *T- statistic* value > 1.96 and *P- value* < 0.05, the H1 hypothesis is accepted.

2. The Influence of *AGILE LEADERSHIP* on Employee Performance

The direct path from *AGILE LEADERSHIP* to Employee Performance produces a coefficient value of 0.100, *T- statistic* 1.106, and *P- value* 0.269. Since *T- statistic* < 1.96 and *P- value* > 0.05, the H2 hypothesis is rejected, which means that *AGILE LEADERSHIP* does not have a significant direct effect on Employee Performance.

3. The Influence of *DIGITAL MINDSET* on *EMPLOYEE ENGAGEMENT*

DIGITAL MINDSET has a significant influence on *EMPLOYEE ENGAGEMENT* with a coefficient value of 0.301, *T- statistic* 3.265, and *P- value* 0.001. So the hypothesis H3 is accepted.

4. The Influence of *DIGITAL MINDSET* on Employee Performance

DIGITAL MINDSET has an influence and is significant towards Employee Performance. This path shows an influence and is significant with a coefficient of 0.400, *T- statistic* 4.222, and *P- value* 0.000, so that the H4 hypothesis is accepted.

5. The Influence of *EMPLOYEE ENGAGEMENT* on Employee Performance

EMPLOYEE ENGAGEMENT is proven to have a significant effect on Employee Performance with a coefficient value of 0.288, *T- statistic* 2.717, and *P- value* 0.007. So the H5 hypothesis is accepted.

Of the five hypotheses proposed, four hypotheses were accepted and one was rejected. This finding indicates that *EMPLOYEE ENGAGEMENT* plays an important role as a bridging mechanism between the influence of *AGILE LEADERSHIP* and *DIGITAL MINDSET* on improving Employee Performance. The direct path from *AGILE LEADERSHIP* to Employee Performance is not significant, indicating that its influence is indirect and mediated by employee engagement.

A. *Research Findings Based on Hypothesis Test Results*

This study aims to analyze the influence of *AGILE LEADERSHIP* and *DIGITAL MINDSET* on Employee Performance, with *EMPLOYEE ENGAGEMENT* as an *INTERVENING variable*. Based on the results of hypothesis testing using the PLS-SEM method, several important findings were obtained as follows:

1. *AGILE LEADERSHIP* has a significant influence on *EMPLOYEE ENGAGEMENT*

The coefficient value of 0.378 and *P- value* of 0.000 indicate that the higher the *agile leadership capability* (adaptive, responsive, and collaborative), the higher the level of employee engagement in their work. This finding supports the *Social Exchange theory* which states that empowering leadership will create positive reciprocal relationships from employees in the form of engagement.

2. *AGILE LEADERSHIP* does not have a direct effect on Employee Performance

With a coefficient value of only 0.100 and a *P-value* of 0.269, the direct effect of *AGILE LEADERSHIP* on Employee Performance is not statistically significant. This shows that agile leadership does not immediately improve performance, but needs to be facilitated through mediating factors such as *EMPLOYEE ENGAGEMENT*. In other words, the effect of *AGILE LEADERSHIP* on performance is indirect.

3. The influence of *DIGITAL MINDSET* has a significant influence on *EMPLOYEE ENGAGEMENT*

The coefficient of 0.301 and *P-value* of 0.001 indicate that a good digital mindset (adaptive to technology, open to change, collaborative, and data-driven) will increase employee engagement. This finding shows that *DIGITAL MINDSET* is not only a technical competence, but also has an impact on employee motivation and psychological commitment.

4. *DIGITAL MINDSET* has a significant influence on Employee Performance

With a coefficient of 0.400 and a *P-value* of 0.000, *DIGITAL MINDSET* has a strong direct influence on employee performance. This shows that employees who have a digital mindset are able to work more efficiently, innovatively, and adaptively in facing work challenges in the digital era.

5. *EMPLOYEE ENGAGEMENT* has a significant influence on Employee Performance

The coefficient value of 0.288 and *P-value* of 0.007 indicate that employee engagement significantly improves the quality of their performance. *Engaged employees* are more enthusiastic, focused, and highly dedicated in completing tasks – which ultimately has a positive impact on performance.

CONCLUSION

This study concludes that both Agile Leadership and Digital Mindset have a significant and positive impact on Employee Engagement, which in turn influences Employee Performance significantly. The empirical findings indicate that employee engagement plays a mediating role in strengthening the effect of agile leadership and digital mindset on performance outcomes. This suggests that organizations or academic institutions that invest in fostering leadership agility and cultivating a digital mindset are more likely to experience enhanced employee involvement and improved performance levels. Furthermore, the results confirm that employee engagement is a strategic internal factor that bridges leadership styles and mindset with organizational effectiveness. It implies that even in an academic context, such as among postgraduate students in a management program, the adoption of agile leadership and digital orientation contributes to higher levels of performance when employees or participants are meaningfully engaged.

Overall, this research highlights the importance of aligning leadership behavior and digital capabilities with human capital strategies to foster a dynamic, engaged, and high-performing academic or organizational environment in the digital era.

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