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Digital leadership, learning agility, and employee performance in Indonesia's automotive industry: A view from Islamic economic perspectives

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ABSTRACT

Introduction

Indonesia's automotive industry is facing rapid digital transformation, intensifying global competition, and increasing pressure to improve quality, productivity, and adaptability. These challenges require organizations to strengthen digital leadership, employee competence, organizational commitment, and learning agility. However, the mechanisms through which these factors improve employee performance remain insufficiently explained, especially when viewed from an Islamic economics perspective.

Objectives

This study examines the influence of digital leadership, competence, and motivation on employee performance in Indonesia's automotive industry. It also analyzes the mediating roles of organizational commitment and learning agility and interprets the findings through Islamic economics values, including amanah, ihsan, adl, maslahah, and falah.

Method

This study used a quantitative approach with a survey method. Data were collected from 335 managers, supervisors, and employees in Indonesia's automotive industry who had experience with digital transformation or technology-based work processes. The research model was tested using Partial Least Squares Structural Equation Modeling. Validity and reliability were assessed through factor loading, composite reliability, and average variance extracted, while

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direct and indirect relationships were examined through path analysis and bootstrapping.

Results

The results show that digital leadership has a significant direct effect on employee performance but does not significantly influence learning agility and only marginally affects organizational commitment. Motivation does not significantly affect performance, organizational commitment, or learning agility. Competence has a strong significant effect on organizational commitment, while organizational commitment significantly improves learning agility. Learning agility is the strongest direct predictor of employee performance. The most important indirect pathway is competence → organizational commitment → learning agility → performance.

Implications

This study indicates that improving employee performance in the automotive industry requires more than digital leadership and motivation. Organizations should strengthen employee competence, build organizational commitment, and develop learning agility through fair, ethical, and welfare-oriented human resource practices.

Originality/Novelty

This study contributes an integrated model of digital leadership, competence, organizational commitment, learning agility, and performance in the automotive industry, enriched by an Islamic economics perspective on ethical and sustainable human resource development.

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INTRODUCTION

The automotive industry is undergoing a profound transformation driven by digital technology, global competition, automation, and changing consumer expectations. Digital technologies have altered information flows, value creation, organizational structures, and managerial processes across business and industrial settings (Antonopoulou et al., 2020; Meng, 2022; Niță & Guțu, 2023). In this context, automotive firms are required to respond rapidly to technological disruption, market volatility, and operational complexity. Digital transformation is no longer a peripheral managerial issue but a strategic requirement for competitiveness, efficiency, and long-term sustainability. Firms that fail to develop digitally capable leadership and adaptive human resources may experience declining productivity, weak innovation capacity, and reduced resilience in the face of intense global competition (Bell, 2024; Erhan et al., 2022; Niu et al., 2022).

Indonesia's automotive industry faces similar pressures as it seeks to strengthen competitiveness in the era of Industry 4.0. The sector must manage digitalized production systems, quality assurance, supply-chain complexity, after-sales services, and changing product technologies, including automation and electric vehicle development. At the same time, recurring quality-control problems, including vehicle recalls, show that technological advancement must be accompanied by strong human resource capabilities and adaptive work behavior (Gaikindo, 2021; Sandi, 2022). Performance improvement therefore depends not only on equipment, platforms, or digital infrastructure, but also on the ability of leaders and employees to transform digital opportunities into reliable organizational outcomes. This makes employee performance a strategic concern that must be examined through leadership, competence, motivation, commitment, and learning agility.

The main research problem addressed in this study concerns the limited understanding of how digital leadership, employee competence, and work motivation jointly influence employee performance in the automotive industry. Previous studies have shown that digital leadership can encourage innovation, digital transformation, and performance by helping organizations create a clear vision for technology adoption and execute digital strategies effectively (Behie et al., 2023; Chen et al., 2024; Nasir et al., 2022; Schiuma et al., 2022; Zada et al., 2025). However, leadership alone may not fully explain performance outcomes, especially in structured manufacturing environments where employee behavior is shaped by standardized processes, hierarchical control, technical requirements, and quality targets. Thus, leadership must be examined together with individual and organizational factors that influence employees' willingness and ability to perform.

A general solution proposed in the literature is to integrate leadership and human resource development into a broader organizational performance model. Employee competence is essential because digital transformation requires workers who can master new technologies, solve operational problems, and adapt to changing production systems (Autin et al., 2022; Hernandez-de-Menendez et al., 2020; Ross et al., 2022). Work motivation is also relevant because motivated employees are expected to allocate effort, persistence, and attention to work-related goals (Dorta-Afonso et al., 2021; Iddekinge et al., 2023; Vo et al., 2022). Nevertheless, motivation and competence may not always produce direct performance gains unless they are supported by organizational commitment and adaptive learning behavior. This suggests that performance improvement requires both capability and organizational mechanisms.

More specific solutions have been suggested through the concepts of organizational commitment and learning agility. Organizational commitment refers to employees' attachment to organizational values, willingness to remain in the organization, and sense of responsibility toward organizational goals (Qin, 2024; Silva et al., 2023; Sousa et al., 2022). Employees with strong commitment are more likely to contribute consistently, accept organizational change, and invest effort in long-term organizational success (Jehanzeb & Mohanty, 2020; Sarpong et al., 2021; W. Wang et al., 2020). In industries facing digital disruption, commitment can stabilize employees'

responses to change by strengthening trust, loyalty, and willingness to participate in transformation. Therefore, organizational commitment may mediate the influence of leadership, competence, and motivation on performance outcomes.

Learning agility provides another specific mechanism for improving employee performance under technological change. It refers to employees' willingness and ability to learn from experience and apply that learning to new, complex, or uncertain situations (Carmeli & Hartmann, 2024; Gouda & Tiwari, 2022; Milani et al., 2024; Tripathi et al., 2020). Automotive firms require agile employees who can learn continuously, think critically, adjust to new production technologies, and respond flexibly to operational challenges (Armanious & Padgett, 2021; Caligiuri, 2025; Dupret & Pultz, 2022; Franco & Landini, 2022). Learning agility is particularly important because competence alone may become obsolete when technologies, customer needs, and manufacturing systems change rapidly. Thus, learning agility may translate organizational commitment and employee competence into sustainable performance improvement.

Recent studies have explored digital leadership, competence, motivation, commitment, agility, and performance, but the relationships among these variables remain fragmented. Some research emphasizes digital leadership as a driver of innovation and organizational change (Arsyadona et al., 2025; Erhan et al., 2022; Gilli et al., 2024; M. Malik et al., 2025; T. Wang et al., 2022), while other studies focus on competence development, work motivation, or organizational commitment as predictors of employee outcomes (Boudrias et al., 2020; Fernet et al., 2023; Goetz & Wald, 2022; Heiden et al., 2021; Magson et al., 2022). However, fewer studies examine how digital leadership, competence, and motivation operate simultaneously through organizational commitment and learning agility in the automotive industry (Hsieh et al., 2023; Mehta et al., 2025; Parveen & Alshehri, 2023; Serang et al., 2024; Soomro et al., 2024). This gap is more significant in emerging economies where digital transformation occurs alongside institutional, cultural, and workforce development challenges.

This study aims to test and analyze the influence of digital leadership, competence, and motivation on employee performance in Indonesia's automotive industry, with organizational commitment and learning agility as mediating variables. The novelty of the study lies in its integrated model, which positions performance as the outcome of direct leadership influence and sequential human resource mechanisms. The study also offers an Islamic economics perspective by interpreting competence, commitment, learning agility, and performance through values such as amanah, ihsan, adl, maslahah, and falah. This perspective broadens the performance discussion from a purely technical and economic issue to an ethical and welfare-oriented organizational concern. The study is limited to automotive-industry respondents in Indonesia and uses a quantitative approach with Partial Least Squares Structural Equation Modeling.

LITERATURE REVIEW

Digital Leadership and Employee Performance in Digital Transformation

Digital leadership has become a critical construct in explaining how organizations respond to technological disruption, market turbulence, and Industry 4.0 transformation. It refers to the capacity of leaders to articulate a meaningful digital vision, mobilize people around technological change, and reconfigure work systems through data, collaboration, and innovation (Eberl & Drews, 2022; Türk, 2023; Wrede et al., 2020). In digitally transforming industries such as automotive manufacturing, digital leadership is not merely a technical capability but also a strategic and behavioral process. Leaders must align digital tools, human competencies, and organizational routines so that technology adoption improves operational efficiency, learning, and employee performance (Senadjki et al., 2024; Zada et al., 2025).

The relationship between digital leadership and employee performance can be explained through the resource-based view and dynamic capabilities theory. From the resource-based view, digital leadership becomes valuable when it enables organizations to develop human capital, knowledge resources, and learning routines that competitors cannot easily imitate (Barney et al., 2021; Xiao et al., 2025). From the dynamic capabilities perspective, digital leaders help organizations sense technological opportunities, seize digital resources, and transform work systems to fit new market conditions (Zada et al., 2025). In this sense, employee performance improves when leadership converts digital transformation into practical capabilities embedded in daily work processes.

However, digital leadership does not automatically create organizational commitment or learning agility. Evidence from digitally transforming organizations indicates that digital leadership is most effective when it is accompanied by relational trust, psychological safety, coaching, and transparent communication (Kurnia et al., 2022; Suhermin et al., 2024; Wrede et al., 2020). The original study similarly found that digital leadership significantly influenced performance but did not significantly affect learning agility and only marginally affected organizational commitment. This suggests that digital leadership may improve task execution directly, while its deeper influence on commitment and learning depends on whether employees experience digital transformation as supportive rather than merely controlling.

Employee Competence in Industry 4.0 and Automotive Organizations

Employee competence is central to digital transformation because Industry 4.0 requires workers who can operate, interpret, and improve technology-based systems. Competence includes technical skills, digital literacy, problem-solving ability, managerial knowledge, and the capacity to apply expertise in changing work environments (Hernandez-de-Menendez et al., 2020; Vinodh & Wankhede, 2021). In automotive organizations, competence is particularly important because production systems increasingly depend on automation, quality control, digital supply chains, electric vehicle technologies, and cyber-physical systems. Without adequate

competence, technological investment may fail to generate sustainable performance because employees cannot translate digital tools into reliable work outcomes (Gajendragadkar et al., 2024; Wankhede et al., 2025).

Recent literature emphasizes that competence strengthens organizational commitment when employees interpret training and development as evidence of organizational support. Social exchange theory explains this mechanism: when organizations invest in employee capability, employees tend to reciprocate with loyalty, attachment, and willingness to contribute (Fahim et al., 2023; Xiao et al., 2026). In the automotive sector, Training 4.0 and employee competency have been shown to mediate the relationship between Industry 4.0 adoption and retention, indicating that competence development can strengthen commitment by reducing uncertainty and improving career confidence (Fahim et al., 2023). Thus, competence is not only a technical variable but also a relational and psychological resource.

Competence also contributes to learning agility, although the relationship may not always be direct. Learning agility requires curiosity, openness to feedback, experimentation, reflection, and readiness to apply prior experience in new situations (DeRue et al., 2012; Milani et al., 2021). Technical competence may provide a foundation for adaptation, but it must be supported by learning culture, knowledge sharing, and opportunities to experiment (Gonzalez & Martins, 2014; Zada et al., 2025). This helps explain why the original study found that competence strongly influenced organizational commitment but did not directly influence learning agility or performance. Competence becomes performance-relevant when it is activated through commitment, learning orientation, and adaptive work systems.

Work Motivation in Structured Manufacturing Environments

Work motivation is commonly understood as the internal and external force that directs employees' effort, persistence, and goal-oriented behavior (Dorta-Afonso et al., 2021; Iddekinge et al., 2023; Vo et al., 2022). In theory, motivated employees should perform better, show stronger organizational commitment, and engage more readily in learning. Self-determination theory further explains that autonomous motivation grows when employees experience competence, autonomy, relatedness, and meaningful work (Ryan & Deci, 2023). In manufacturing contexts, however, the effect of motivation may be weakened by rigid procedures, strict production targets, shift systems, standardized tasks, and hierarchical control.

The literature on structured manufacturing environments shows that motivation often fails to produce direct performance effects when employees have limited discretion to convert effort into meaningful action. Rigid authority-based structures can restrict experimentation, knowledge exchange, and real-time problem solving, thereby weakening the link between motivation and performance (Roscoe et al., 2019). Similarly, studies on total productive maintenance and lean implementation show that organizational, cultural, behavioral, operational, and technological barriers may prevent motivated employees from improving outcomes unless the organization

provides enabling systems (Ahuja & Khamba, 2008; Munir et al., 2019; Saini & Singh, 2022).

This explanation is consistent with the original study, where motivation did not significantly influence performance, organizational commitment, or learning agility. Such a result does not mean motivation is irrelevant; rather, motivation may require mediating conditions such as supportive leadership, fair rewards, learning infrastructure, and employee involvement in decision-making (Mahmutoğlu et al., 2025; Widjaja, 2023). In automotive organizations, motivation may remain latent if employees perceive limited autonomy, limited career pathways, or insufficient recognition. Therefore, motivation should be understood as a potential energy that requires organizational design, learning systems, and fair human resource practices to become measurable performance.

Organizational Commitment as a Relational and Strategic Resource

Organizational commitment refers to employees' psychological attachment, loyalty, and willingness to remain with and contribute to the organization. It includes affective commitment, continuance commitment, and normative commitment (Meyer & Allen, 1991). In digitally transforming organizations, commitment is important because employees must often accept uncertainty, learn new systems, and support changes that may disrupt established routines. Committed employees are more likely to trust organizational goals, participate in change initiatives, and invest effort in capability development (Jehanzeb & Mohanty, 2020; Silva et al., 2023; Sousa et al., 2022).

From a social exchange perspective, organizational commitment develops when employees perceive fairness, support, trust, and developmental investment from their organization (Kurnia et al., 2022; Suhermin et al., 2024; Xiao et al., 2026). Competence development, transparent leadership, and inclusive communication can strengthen commitment because they signal that the organization values employees as long-term contributors rather than replaceable labor. In the automotive industry, this is especially important because digital transformation can create insecurity about skill obsolescence, automation, and job redesign. Commitment can therefore become a stabilizing force that allows employees to face technological change with confidence.

The original study found that organizational commitment significantly influenced learning agility but had only a marginal direct effect on performance. This finding suggests that commitment may function more strongly as a developmental antecedent than as an immediate productivity driver. Employees who feel attached to the organization may be more willing to learn, adapt, and participate in change, but performance improvement occurs when this commitment is translated into learning agility and new work behavior. Therefore, organizational commitment should be viewed as a relational resource that prepares employees for adaptive performance rather than merely as a direct predictor of output.

Learning Agility and Adaptive Employee Performance

Learning agility is the willingness and ability to learn from experience and apply that learning effectively in new or changing conditions (Carmeli & Hartmann, 2024; DeRue et al., 2012; Milani et al., 2021). It is increasingly important in automotive organizations because employees must respond to automation, digital production systems, electric vehicle technologies, artificial intelligence, changing customer expectations, and supply-chain uncertainty. Learning agility differs from competence because it emphasizes adaptability, reflection, experimentation, and transfer of learning across unfamiliar situations (Armanious & Padgett, 2021; Franco & Landini, 2022).

Organizational learning theory explains why learning agility is critical to performance. Organizations improve when individuals and teams acquire knowledge, share experience, revise routines, and institutionalize better practices (Zada et al., 2025). Digital leadership and competence development may create the conditions for learning, but learning agility determines whether employees can convert these conditions into adaptive action. In technology-intensive environments, employees with high learning agility can respond more quickly to process failures, quality issues, customer demands, and new technological requirements. Thus, learning agility operates as a dynamic capability at the individual level.

The empirical results of the original study identify learning agility as the strongest direct predictor of employee performance. The significant pathway from competence to organizational commitment, then to learning agility, and finally to performance confirms that adaptive learning is the key mechanism linking human resource capability to performance outcomes. This finding is consistent with research showing that learning agility supports high-potential development, innovation, resilience, and performance in uncertain environments (Milani et al., 2021; Tripathi et al., 2020). In the automotive context, learning agility is therefore essential for transforming competence and commitment into competitive performance.

Islamic Economics Principles and Human Resource Performance

Islamic economics offers a normative framework for enriching human resource theory by linking performance to ethical responsibility, justice, welfare, and holistic success. Five principles are particularly relevant: amanah, ihsan, maslahah, adl, and falah. Amanah refers to trustworthiness and responsibility in fulfilling obligations; ihsan emphasizes excellence, benevolence, and doing work in the best possible manner; maslahah prioritizes public welfare and beneficial outcomes; adl requires justice, fairness, and balanced treatment; and falah represents holistic success that includes material, moral, spiritual, and social well-being (Bhuiyan et al., 2020; Kaharudin et al., 2025; N. Malik et al., 2019; Mushthafa et al., 2025; Nurdiana et al., 2025).

These principles enrich the theoretical understanding of competence, motivation, commitment, learning agility, and performance. Competence becomes an expression of amanah because employees are entrusted to perform tasks responsibly and must develop the capability to fulfill that trust. Motivation is strengthened by ihsan because employees are encouraged to pursue excellence beyond minimum compliance.

Organizational commitment is supported by adl and amanah when employees experience fairness, transparency, and ethical leadership. Learning agility reflects maslahah when learning is directed toward collective benefit, organizational resilience, and stakeholder welfare. Performance is broadened by falah because success is not limited to productivity but includes ethical and sustainable contribution.

Integrating Islamic economics with dynamic capabilities theory, organizational learning theory, and social exchange theory provides a richer model for Muslim-majority developing economies. Islamic values explain why employees should learn, commit, and perform ethically, while mainstream theories explain how capabilities, exchanges, and learning routines influence outcomes. In automotive organizations, this integration is relevant because digital transformation should not only improve efficiency but also protect fairness, worker dignity, customer safety, and social welfare. Therefore, Islamic economics can provide a moral foundation for digital leadership and human resource development in industries facing technological disruption.

Research Gap and the Significance of the Study

Previous studies have examined digital leadership, competence, motivation, organizational commitment, learning agility, and employee performance, but the relationships among these constructs remain fragmented. Much of the literature explains digital leadership through technological capability, competence through training, motivation through psychological theory, and commitment through social exchange. However, fewer studies integrate these variables into a sequential model that explains how competence strengthens commitment, how commitment promotes learning agility, and how learning agility improves performance in automotive organizations. This gap is more visible in Muslim-majority developing economies, where digital transformation occurs within distinctive ethical, social, and institutional contexts.

The significance of this study lies in its attempt to connect digital leadership and human resource capability with organizational commitment, learning agility, and performance while introducing Islamic economics as an ethical and theoretical lens. By incorporating amanah, ihsan, maslahah, adl, and falah, the study can move beyond a purely instrumental view of performance toward a more holistic understanding of responsible, adaptive, and welfare-oriented human resource development. This contribution is important for Indonesia's automotive industry because competitiveness in the digital era depends not only on technology adoption but also on competent, committed, agile, and ethically grounded employees.

METHOD

Research Design

This study employed a quantitative research design to examine the relationships among digital leadership, competence, motivation, organizational commitment, learning agility, and employee performance in Indonesia's automotive industry. A quantitative approach was considered appropriate because the study aimed to test a theoretically derived structural model and evaluate the magnitude, direction, and

statistical significance of relationships among latent variables. The model positioned digital leadership, competence, and motivation as exogenous variables, organizational commitment and learning agility as mediating variables, and employee performance as the final endogenous variable. This design enabled the study to assess both direct and indirect effects within a single analytical framework. The quantitative strategy was also consistent with prior organizational and human resource studies that used survey-based data to test relationships among leadership, competence, commitment, agility, and performance constructs in complex organizational settings.

The study was grounded in an explanatory research orientation because it did not merely describe employee perceptions but sought to explain how selected human resource and leadership factors contribute to performance under conditions of digital transformation. The use of a structured survey allowed standardized measurement across respondents from automotive organizations that had experienced digitalization in production, management, supply-chain coordination, or customer-service processes. This design was suitable for capturing employees' and supervisors' perceptions of organizational practices, individual capabilities, adaptive learning behavior, and performance outcomes. It also enabled the study to generate empirical evidence relevant to the Indonesian automotive sector, where technological disruption, quality demands, and competitive pressure require stronger human resource capability and organizational adaptability.

Population, Sample, and Respondent Criteria

The population of this study consisted of managers, supervisors, and employees working in Indonesia's automotive industry. These groups were selected because they are directly involved in implementing operational routines, responding to technological change, and translating organizational strategies into work performance. Managers and supervisors are particularly relevant because they often play a role in coordinating digital initiatives, monitoring employee capability, and ensuring that production, service, and administrative processes align with organizational goals. Employees were also included because their learning agility, competence, motivation, and commitment determine whether digital transformation can be effectively implemented at the operational level. Therefore, the selected population reflected both strategic and operational dimensions of automotive organizational performance.

The study used purposive sampling to identify respondents who had relevant experience with digital transformation or technology-based work processes in automotive companies. This technique was appropriate because the research required respondents who could meaningfully assess digital leadership, competence development, organizational commitment, learning agility, and performance in their work context. The sample size followed the guideline proposed by Hair et al. (2021), which recommends determining the minimum sample based on the number of indicators in the structural model, commonly using five to ten times the number of measurement indicators. Based on this guideline, the study obtained data from 335 respondents, a number considered adequate for Partial Least Squares Structural

Equation Modeling and for testing a model involving multiple latent constructs and mediation pathways.

Data Collection Procedure

Data were collected using an online questionnaire distributed to eligible respondents in automotive companies operating in Indonesia. The online format was selected to reach respondents across different organizational locations and to improve the efficiency of data collection. Before completing the questionnaire, respondents were informed about the academic purpose of the study and the relevance of their participation. The questionnaire was designed to obtain perceptual data on the six main constructs: digital leadership, motivation, competence, organizational commitment, learning agility, and employee performance. Each item was arranged in a structured format so that respondents could provide consistent evaluations based on their actual work experience.

The instrument used a five-point Likert scale ranging from 1, indicating strongly disagree, to 5, indicating strongly agree. This scale was suitable for measuring attitudes, perceptions, and behavioral tendencies in organizational research because it provides sufficient variation while remaining easy for respondents to understand. The questionnaire items were adapted from previous studies that had examined related constructs and had undergone validity and reliability testing. The adaptation process was intended to ensure conceptual consistency with prior literature while making the instrument relevant to the automotive industry context. By using established indicators, the study strengthened the content validity of the measurement model and reduced the risk of constructing variables that were disconnected from existing theoretical and empirical foundations.

Measurement of Variables

Digital leadership was measured as the ability of leaders to guide employees and organizations through digital transformation, including the capacity to encourage technology adoption, support innovation, and improve digital work processes. Competence was measured through employees' perceived knowledge, skills, and ability to perform tasks in a changing technological environment. Motivation captured employees' willingness, effort, and persistence in carrying out work-related responsibilities. Organizational commitment represented employees' attachment, loyalty, and willingness to remain involved in the organization. Learning agility referred to the ability and willingness to learn from experience and apply new knowledge in unfamiliar or changing situations. Performance was measured as employees' perceived effectiveness, productivity, quality of work, and contribution to organizational goals.

These constructs were selected because they represent a logical sequence in human resource performance development. Digital leadership provides strategic direction for transformation, while competence and motivation represent individual-level resources that may influence behavior and outcomes. Organizational

commitment reflects the relational bond between employees and the organization, whereas learning agility captures adaptive capability in the face of technological and market change. Performance represents the final outcome expected from these organizational and individual processes. This measurement structure made it possible to test whether leadership, competence, and motivation directly improve performance or whether their influence operates through commitment and learning agility.

Data Analysis Technique

The data were analyzed using Partial Least Squares Structural Equation Modeling with SmartPLS software. PLS-SEM was chosen because it is appropriate for analyzing complex models involving several latent variables, multiple indicators, and mediation effects. This method is also suitable for prediction-oriented research and can be applied when the objective is to explain variance in endogenous constructs such as organizational commitment, learning agility, and employee performance. In this study, PLS-SEM allowed the simultaneous examination of measurement quality and structural relationships among variables. It also enabled the estimation of direct and indirect pathways, including the mediating roles of organizational commitment and learning agility.

The analysis was conducted in several stages. First, the measurement model was evaluated through convergent validity and reliability testing. Convergent validity was assessed using factor loading and Average Variance Extracted values. Indicators were considered acceptable when their factor loadings exceeded 0.70, while constructs were considered valid when the Average Variance Extracted value exceeded 0.50. Reliability was evaluated using Composite Reliability and Cronbach's Alpha, with values above 0.70 indicating acceptable internal consistency (Fornell & Larcker, 1981; Hair et al., 2021). Second, the structural model was tested through path coefficients, t-statistics, and p-values. A bootstrapping procedure was applied to assess the significance of direct and mediating effects.

Model Evaluation and Hypothesis Testing

The final stage of analysis involved evaluating the overall suitability and explanatory capacity of the model. Model fit was assessed using the Standardized Root Mean Square Residual, with a value below 0.08 indicating acceptable fit (Henseler, 2020). The Normed Fit Index was also considered as an additional indicator of model adequacy. Although the Normed Fit Index is not the primary criterion in PLS-SEM, it provides supplementary information regarding the extent to which the proposed model represents the observed data. The coefficient of determination was used to assess how much variance in endogenous variables could be explained by the exogenous and mediating variables.

Hypothesis testing focused on evaluating whether digital leadership, competence, and motivation significantly influenced organizational commitment, learning agility, and employee performance. The study also tested whether organizational commitment influenced learning agility and performance, and whether learning agility

influenced performance. Mediation analysis was conducted to determine whether organizational commitment and learning agility transmitted the effects of digital leadership, competence, and motivation on employee performance. This analytical sequence provided a systematic basis for identifying the strongest mechanisms in the model and for explaining whether performance improvement in the automotive industry occurs directly through leadership and individual resources or indirectly through commitment and adaptive learning capability.

RESULTS

Respondent Profile

The study collected data from 335 respondents working in Indonesia's automotive industry. The respondent profile shows that the sample was dominated by male employees, representing 267 respondents or 79.70%, while female respondents accounted for 68 respondents or 20.30%. This composition indicates that the automotive industry remains relatively male-dominated, especially in managerial, supervisory, and operational roles related to production, quality control, technology adoption, and organizational performance. In terms of educational background, most respondents held a bachelor's degree, with 189 respondents or 56.42%, followed by 128 respondents or 38.21% holding a master's degree. Only 18 respondents or 5.37% had a senior high school educational background. This profile suggests that the sample had sufficient educational capacity to understand digital leadership, competence, motivation, organizational commitment, learning agility, and performance as organizational constructs.

Respondents also had substantial work experience, which strengthened the relevance of their responses. The largest group consisted of employees with 11–15 years of work experience, totaling 137 respondents or 41%. This was followed by 116 respondents or 34.6% with 6–10 years of experience, 75 respondents or 22.38% with 16–20 years of experience, and only 7 respondents or 2.1% with 1–5 years of experience. In terms of age, the majority of respondents were 46–55 years old, comprising 180 respondents or 53.7%. The second largest group was 36–45 years old, with 95 respondents or 28.3%, while 60 respondents or 18% were 25–35 years old. These data indicate that the sample was composed largely of mature and experienced automotive personnel.

Table 1

Demographic Profile of Respondents (N = 335)

Respondent Profile	Category	Frequency	Percentage
Gender	Male	267	79.70%
	Female	68	20.30%
Education	Senior High School	18	5.37%
	Bachelor's Degree	189	56.42%
	Master's Degree	128	38.21%
Work Experience	1–5 years	7	2.10%
	6–10 years	116	34.60%

Respondent Profile	Category	Frequency	Percentage
	11–15 years	137	41.00%
	16–20 years	75	22.38%
Age	25–35 years old	60	18.00%
	36–45 years old	95	28.30%
	46–55 years old	180	53.70%

Source: Primary data. Authors' estimation.

Measurement Model Evaluation

Before testing the structural model, the study evaluated the validity and reliability of the measurement instruments. The analysis focused on factor loading, composite reliability, and average variance extracted. The results show that all retained indicators had factor loading values above 0.700, indicating acceptable convergent validity. This means that each indicator sufficiently represented its respective construct. The finding is consistent with Hair et al. (2021), who state that factor loading values above 0.70 indicate strong indicator reliability. Because all indicators met this threshold, no indicator needed to be removed from the measurement model. This result confirms that the questionnaire items used to measure digital leadership, motivation, competence, organizational commitment, learning agility, and performance were empirically adequate.

Reliability testing also showed satisfactory results. Digital leadership had a composite reliability value of 0.893 and an average variance extracted value of 0.677. Motivation had a composite reliability value of 0.881 and an average variance extracted value of 0.598. Competence showed a composite reliability value of 0.949 and an average variance extracted value of 0.652. Organizational commitment had a composite reliability value of 0.957 and an average variance extracted value of 0.651. Learning agility showed the strongest reliability, with a composite reliability value of 0.971 and an average variance extracted value of 0.708. Performance also had a strong composite reliability value of 0.962 and an average variance extracted value of 0.643. These results exceed the recommended minimum values of 0.70 for composite reliability and 0.50 for average variance extracted (Fornell & Larcker, 1981; Hair et al., 2021).

Table 2

Validity and Reliability of Research Instruments

Variable	Indicator	Factor Loading	Composite Reliability	Average Extracted	Variance
Digital Leadership	DL5	0.820	0.893	0.677	
	DL7	0.854			
	DL8	0.843			
	DL9	0.772			
Motivation	Mo1	0.705	0.881	0.598	
	Mo8	0.777			

Variable	Indicator	Factor Loading	Composite Reliability	Average Extracted	Variance
	Mo9	0.737			
	Mo10	0.870			
	Mo11	0.769			
Competence	Kom1	0.790	0.949	0.652	
	Kom2	0.858			
	Kom3	0.838			
	Kom4	0.838			
	Kom5	0.755			
	Kom6	0.828			
	Kom7	0.870			
	Kom8	0.766			
	Kom9	0.798			
	Kom10	0.724			
Organizational Commitment	KO2	0.796	0.957	0.651	
	KO3	0.762			
	KO4	0.724			
	KO5	0.777			
	KO6	0.736			
	KO7	0.855			
	KO8	0.837			
	KO9	0.849			
	KO10	0.818			
	KO11	0.836			
	KO12	0.849			
	KO13	0.829			
Learning Agility	LA1	0.770	0.971	0.708	
	LA2	0.830			
	LA3	0.857			
	LA4	0.830			
	LA5	0.860			
	LA6	0.740			
	LA7	0.868			
	LA8	0.865			
	LA9	0.876			
	LA10	0.873			
	LA11	0.871			
	LA12	0.845			
	LA13	0.809			

Variable	Indicator	Factor Loading	Composite Reliability	Average Extracted	Variance
	LA14	0.870			
Performance	Kin1	0.810	0.962	0.643	
	Kin2	0.731			
	Kin3	0.797			
	Kin4	0.801			
	Kin5	0.814			
	Kin6	0.854			
	Kin8	0.812			
	Kin9	0.867			
	Kin10	0.820			
	Kin11	0.771			
	Kin12	0.869			
	Kin13	0.765			
	Kin14	0.734			
	Kin16	0.766			

Source: Primary data. Authors' estimation.

Model Fit

The structural model was evaluated using Partial Least Squares Structural Equation Modeling with SmartPLS version 4.0. The model included digital leadership, motivation, competence, organizational commitment, learning agility, and performance. The Standardized Root Mean Square Residual value for both the saturated and estimated models was 0.046. Because this value is below the recommended threshold of 0.08, the model can be considered to have an acceptable fit with the empirical data (Henseler, 2020). This result indicates that the discrepancy between the observed covariance matrix and the estimated model was relatively low. Therefore, the proposed model was adequate for further hypothesis testing.

Additional model fit indicators also supported the acceptability of the model. The d_ULS value was 3.744 and the d_G value was 2.815 for both the saturated and estimated models, indicating a tolerable level of difference between the observed and estimated covariance structures. The Chi-Square value was 4698.702, although this indicator was not treated as the primary determinant of model fit because it is sensitive to sample size in PLS-SEM. The Normed Fit Index was 0.776. Although the ideal value is commonly above 0.90, values above 0.70 are still considered acceptable in prediction-oriented PLS-SEM research (Hair et al., 2021). Thus, the model was suitable for analyzing relationships among the latent variables.

Direct Effects

The path analysis showed that digital leadership had a positive and significant effect on performance, with a coefficient of 0.166, a t-value of 2.372, and a p-value of 0.018. This result indicates that leaders who are able to guide digital transformation,

encourage technology-based work systems, and support digital innovation contribute directly to stronger employee performance. However, digital leadership had only a marginal effect on organizational commitment, with a coefficient of 0.091, a t-value of 1.967, and a p-value of 0.050. Digital leadership did not significantly affect learning agility, as indicated by a coefficient of -0.025, a t-value of 0.469, and a p-value of 0.346. Therefore, digital leadership appears more influential in improving performance directly than in shaping adaptive learning behavior.

The results also show that motivation did not significantly affect any endogenous variable. Its effect on performance was negative and not significant, with a coefficient of -0.033, a t-value of 0.384, and a p-value of 0.402. Motivation also had no significant effect on organizational commitment, with a coefficient of 0.058, a t-value of 1.167, and a p-value of 0.169. Its effect on learning agility was positive but not statistically significant, with a coefficient of 0.080, a t-value of 1.588, and a p-value of 0.078. These findings suggest that motivation alone may not be sufficient to improve performance, commitment, or learning agility in a structured automotive work environment.

Competence had a strong and significant effect on organizational commitment, with a coefficient of 0.538, a t-value of 16.618, and a p-value of 0.000. This was one of the strongest relationships in the model, indicating that employees with stronger competence tend to show higher commitment to their organization. However, competence did not significantly affect performance directly, with a coefficient of 0.095, a t-value of 1.498, and a p-value of 0.093. Competence also did not significantly affect learning agility, with a coefficient of 0.067, a t-value of 1.080, and a p-value of 0.195. These results imply that competence improves performance primarily through indirect pathways rather than through a direct effect.

Mediating Effects of Organizational Commitment and Learning Agility

Organizational commitment had a significant positive effect on learning agility, with a coefficient of 0.565, a t-value of 16.355, and a p-value of 0.000. This finding indicates that employees who feel attached to their organization are more willing to learn, adapt, and respond to changing work demands. However, organizational commitment had only a marginal effect on performance, with a coefficient of 0.134, a t-value of 1.890, and a p-value of 0.059. In contrast, learning agility had a strong and significant effect on performance, with a coefficient of 0.370, a t-value of 5.237, and a p-value of 0.000. These results demonstrate that learning agility is a key driver of performance in the automotive industry.

The mediation analysis showed that most indirect effects were not statistically significant, except for the pathway from competence to organizational commitment, learning agility, and performance. The indirect effect of competence through organizational commitment and performance was marginal, with a coefficient of 0.104, a t-value of 1.875, and a p-value of 0.061. However, the sequential mediation pathway of competence → organizational commitment → learning agility → performance was significant, with a coefficient of 0.234, a t-value of 4.993, and a p-value of 0.000. This result confirms that competence contributes to performance most effectively when it

first strengthens organizational commitment, which then improves learning agility and ultimately enhances employee performance.

Table 3

Path Analysis Results

Relationship	Estimated Coefficient	t-Value	p-Value
Digital Leadership → Performance	0.166	2.372	0.018
Digital Leadership → Organizational Commitment	0.091	1.967	0.050
Digital Leadership → Learning Agility	-0.025	0.469	0.346
Motivation → Performance	-0.033	0.384	0.402
Motivation → Organizational Commitment	0.058	1.167	0.169
Motivation → Learning Agility	0.080	1.588	0.078
Competence → Performance	0.095	1.498	0.093
Competence → Organizational Commitment	0.538	16.618	0.000
Competence → Learning Agility	0.067	1.080	0.195
Organizational Commitment → Learning Agility	0.565	16.355	0.000
Organizational Commitment → Performance	0.134	1.890	0.059
Learning Agility → Performance	0.370	5.237	0.000
Digital Leadership → Organizational Commitment → Performance	0.018	1.203	0.159
Digital Leadership → Organizational Commitment → Learning Agility → Performance	0.040	1.785	0.075
Motivation → Organizational Commitment → Performance	0.011	0.615	0.261
Motivation → Organizational Commitment → Learning Agility → Performance	0.043	1.480	0.097
Competence → Organizational Commitment → Performance	0.104	1.875	0.061
Competence → Organizational Commitment → Learning Agility → Performance	0.234	4.993	0.000

Source: Primary data. Authors' estimation.

DISCUSSION

The Influence of Digital Leadership on Performance, Organizational Commitment, and Learning Agility

The results of the analysis in this study show that digital leadership has a significant direct effect on employee performance, with a coefficient of 0.166 (t = 2.372; p = 0.018). These findings reinforce the theory from Kane et al. (2015) that digital leadership is able to encourage increased organizational effectiveness through the use of information technology to speed up work processes, increase collaboration, and strengthen data-driven decision-making. In the context of the automotive industry in Indonesia, which is currently shifting towards automation and digitalization in various production lines

and after-sales services, digital leadership is increasingly crucial in maintaining productivity, operational efficiency, and process innovation (Azzam et al., 2023; Kusuma et al., 2024; Setiawan et al., 2025).

Leaders who are able to understand and adopt technologies such as Internet of Things (IoT)-based manufacturing systems, big data for supply chain analysis, or digital platforms for customer service, can facilitate work culture change and accelerate the achievement of organizational targets. This is in line with previous research by Hamzah et al. (2021) and Robertson et al. (2022), which confirmed that digital leadership not only impacts technological transformation, but also improves the performance of individuals and work teams.

However, the influence of digital leadership on organizational commitment in this study was only marginally significant ($\beta = 0.091$; $t = 1.967$; $p = 0.050$), and had no significant effect on learning agility ($\beta = -0.025$; $t = 0.469$; $p = 0.346$). This indicates that while digital leaders are able to improve their work results directly, they are not yet fully able to build affective commitment and create a flexible and participatory learning environment.

These findings are consistent with a study from Sosik & Godshalk (2000), which states that technology-based leadership tends to place more emphasis on efficiency and speed, but pays less attention to the relational dimension and interpersonal communication. In the context of the automotive industry, where organizational structures are often hierarchical and production schedule-intensive, a leadership approach that focuses too much on digital systems can reduce the frequency of personal interactions and two-way dialogues, which are actually important for building commitment and encouraging adaptive learning behaviors among employees (Popaitoon et al., 2026; Y. Wang et al., 2025; Zhu et al., 2022)

Thus, while digital leadership has proven to be effective in improving performance, this approach needs to be complemented by strategies to strengthen social relationships in the workplace, such as coaching, mentoring, and empathic communication, in order to strengthen organizational commitment and drive learning agility more significantly (Alexandro & Basrowi, 2024; Galanti & Fantinelli, 2025; Khalil & Samhan, 2025). This is especially important for automotive companies that want to not only excel operationally, but also build loyal and adaptive human resources to technological changes.

The Effect of Motivation on Performance, Organizational Commitment, and Learning Agility

The results showed that work motivation did not have a significant direct effect on performance ($\beta = -0.033$; $p = 0.402$), organizational commitment ($\beta = 0.058$; $p = 0.169$), or learning agility ($\beta = 0.080$; $t = 1.588$; $p = 0.078$). Nonetheless, the p-value for the relationship between motivation and learning agility that is close to significant provides an early indication that increased motivation can encourage employee enthusiasm and adaptability, especially in the face of an ever-changing work environment such as in the automotive industry.

Theoretically, this result is in line with Ozsoy (2019) view in the motivator-hygiene theory, which states that intrinsic motivations such as achievement, recognition, and responsibility will only have an optimal impact if basic needs (hygiene factors) such as work environment, salary, and job security have been met. In the context of Indonesia's automotive industry, which is often characterized by shift work patterns, strict production targets, and hierarchical organizational structures, unfavorable work environment conditions can weaken the influence of motivation on work outcomes and other positive behaviors (Chang & Octoyuda, 2024).

These findings also indicate that external factors such as job satisfaction, leadership style, and organizational culture likely play a greater role in mediating or even preceding the influence of motivation on other variables such as performance and commitment. As revealed by Ryan & Deci (2023) in the theory of self-determination, autonomous motivation only develops if the individual feels that he or she has control and value over his or her work. In the automotive industry, where many work processes are standardized and tightly structured, opportunities for employees to feel autonomy and meaning in work may be limited, reducing the effectiveness of motivation for behavior change or improved work outcomes (Gunawan et al., 2024; Zeshan et al., 2023)

Thus, the insignificance of the influence of motivation in this study does not necessarily indicate that motivation is not important, but rather reflects the need for a more comprehensive managerial approach to build a work system that supports the creation of intrinsic motivation. This can be done through providing positive feedback, employee involvement in operational decision-making, and recognition of individual contributions, especially in mechanistic manufacturing work environments.

Implicitly, automotive companies in Indonesia need to integrate motivation-building strategies into holistic HR management policies, not only with financial incentives, but also by creating a work environment that supports employees' personal and professional growth. This effort is expected to increase learning agility and strengthen the long-term commitment to the organization.

The Influence of Competency on Performance, Organizational Commitment, and Learning Agility

The results showed that employee competence did not have a significant direct effect on performance ($\beta = 0.095$; $t = 1.498$; $p = 0.093$). Nevertheless, competence had a very significant influence on organizational commitment ($\beta = 0.538$; $t = 16.618$; $p < 0.001$). These findings confirm that individuals who have adequate skills and knowledge will tend to show higher levels of attachment to the organization, both in the form of affective (emotional), normative (moral), and continuance commitments.

Competence is an important aspect considering that this sector is highly dependent on technical skills, precision, and understanding of automation technology and digital-based production systems. However, technical competence alone does not automatically guarantee performance improvement if it is not accompanied by a work system that allows the optimal application of these competencies. This is in line with

the opinion of Spencer & Spencer (1993), who stated that competence will only contribute to performance when supported by a conducive work environment, empowering leadership, and a fair reward system.

Furthermore, the effect of competency on learning agility was also not significant ($\beta = 0.067$; $t = 1.080$; $p = 0.195$). These findings suggest that technical or functional competencies do not necessarily affect an individual's ability to adapt to change or learn new things quickly. This can be explained through the theory of learning agility De Meuse (2022), which emphasizes that learning agility is more related to psychological characteristics such as curiosity, flexibility of thinking, courage to face challenges, and reflection on experience, rather than simply technical mastery (Azzam et al., 2023; Franco & Landini, 2022).

In the automotive context, although many workers have competencies in mechanical, automotive, or mechatronics engineering, they do not necessarily have the speed or readiness to adopt new technologies such as electric vehicles (EVs), AI-based production systems, or digital-based service models. This signifies the importance of employee development programs that not only focus on improving technical competencies, but also foster an agile and adaptive learner mindset (Bilderback & Miller, 2023; Chanana & Sangeeta, 2021; Khalayleh et al., 2024; P. Malik & Garg, 2020; Nazaretsky et al., 2022).

Thus, these findings indicate that competencies play a strategic role in building employee loyalty and attachment to the organization, but to encourage learning agility and performance, organizations need to strengthen a holistic approach through experiential training, leadership coaching, and the formation of an organizational culture that values continuous learning. This is very important for automotive companies that want to remain competitive in the face of technological transformation and increasingly fierce global competition (Paais & Pattiruhu, 2020).

The Role of Organizational Commitment in Improving Performance and Learning Agility

The results showed that organizational commitment had a significant influence on learning agility ($\beta = 0.565$; $t = 16.355$; $p < 0.001$). These findings suggest that employees who have a strong psychological attachment to the organization tend to be more open to learning, have a desire to grow, and are better prepared for change. In the context of the automotive industry in Indonesia, this is especially relevant considering that market dynamics and changing technology require companies to have a workforce that is agile, adaptive, and ready to continue learning.

Organizational commitment—especially affective commitment, which refers to employees' emotional attachment to organizational values and goals Meyer & Allen (1991) —serves as an important foundation in fostering a spirit of learning. Employees who feel valued, involved in decision-making, and believe in the company's future, will be more motivated to invest in self-development, take training, and try new approaches to work (Broeck et al., 2021; Good et al., 2022; Howard et al., 2021; Ryan et al., 2022)

However, the effect of organizational commitment on performance was marginal (β = 0.134; t = 1.890; p = 0.059), indicating that commitment does not necessarily directly contribute to the achievement of work or productivity targets. This leads to the possible role of mediation by other variables, particularly learning agility. In other words, organizational commitment may drive performance not directly, but through improving employees' ability to learn and adapt first. This model is supported by the Resource-Based View (RBV) theory, which states that human resources who have high commitment and the ability to learn quickly can be a competitive advantage that is difficult to replicate (Barney et al., 2021; Paais & Pattiruhu, 2020).

Companies often face changing pressures such as production line automation, service digitization, and the shift towards electric vehicles. In these conditions, organizational commitment is an important catalyst that allows employees to face change with a positive attitude and readiness to adapt through continuous learning (Azzam et al., 2023).

The practical implication of these findings is that automotive companies in Indonesia need to strengthen organizational commitments through corporate culture development programs, increased transparent internal communication, and recognition of individual contributions. By building trust and loyalty, organizations can create a workforce that is not only loyal, but also ready to continue learning and improving performance in the long run.

The Role of Learning Agility as a Mediating Variable

The results showed that learning agility had a strong and significant direct influence on performance (β = 0.370; t = 5.237; p < 0.001). These findings reinforce the argument that an individual's ability to learn quickly, adapt to change, and make appropriate decisions in new situations, is a crucial factor in improving work performance, especially in the era of digital disruption and massive technological innovation.

Learning agility is becoming increasingly important given the challenges faced, such as the transition to electric vehicles (EVs), the digitalization of supply chains, and the increase in automation in the production line. Employees who have high agility will be better prepared to accept change, take part in new technology-based training, and carry out more dynamic roles. This is in line with the concept of dynamic capability theory, which emphasizes the importance of the ability of organizations and individuals to respond quickly and effectively to environmental changes (Franco & Landini, 2022; Teece, 2023).

Apart from being an independent variable, learning agility also plays an important role as a mediating variable. The results of the mediation pathway test showed that the organization's competence → commitment → learning agility → performance had a very significant influence (β = 0.234; t = 4.993; p < 0.001). This means that highly competent employees are more committed to the organization, and this commitment encourages their openness to learning and change—ultimately contributing positively to improved performance.

These findings support a sequential mediation model, where competence is the foundation, commitment is the emotional driver, and learning agility is the catalyst for adaptive action that impacts work outcomes. This finding is consistent with previous studies by DeRue et al. (2012) and Franco & Landini (2022), which stated that learning agility plays an important role in linking personal attributes to performance outcomes in dynamic organizational contexts.

These results indicate that although they have not yet reached a full level of statistical significance, both pathways have the potential to be partial mediation, which can be strengthened in an organizational context through an appropriate managerial approach. For example, in the automotive industry, strengthening digital leadership through technology-based training and improving two-way communication can magnify the indirect influence on performance through the path of commitment and agility (Khalayleh et al., 2024).

Thus, it can be concluded that learning agility is a key link between internal employee factors (competence and commitment) and external results in the form of work performance. The implication is that automotive companies in Indonesia need to invest in soft skills development programs and learning mindsets, so that technological transformation is not only technically mastered, but also internalized as an adaptive and sustainable work culture.

Discussion from an Islamic Economics Perspective

Competence, Amanah, and Organizational Commitment

The finding that employee competence strongly influences organizational commitment can be interpreted through the Islamic economics principle of amanah, which emphasizes trust, responsibility, and reliable fulfillment of obligations. In this perspective, competence is not merely a technical asset but also a moral responsibility because employees are entrusted to perform their duties effectively, honestly, and professionally. When organizations invest in employee competence, they demonstrate amanah in managing human resources, while employees respond with stronger commitment to organizational goals. This interpretation is consistent with Islamic human resource management literature, which links amanah, governance credibility, trust-based leadership, and organizational commitment (Ali et al., 2024; Herijanto, 2022; Ibrahim & Kamri, 2017).

This result contributes to Islamic economics by showing that human capital development should be understood as both an economic and ethical process. The strong relationship between competence and organizational commitment supports the argument that firms can strengthen employee loyalty when capability development is perceived as fair, trustworthy, and beneficial. In Islamic economics, such development is aligned with maslahah, because training and competence improvement benefit employees, organizations, customers, and the broader industry. This study therefore extends Islamic economics beyond financial transactions by demonstrating how amanah-based competence development can function as a

foundation for ethical productivity, organizational resilience, and sustainable performance in digitally transforming automotive organizations.

Organizational Commitment, Learning Agility, and Ihsan

The finding that organizational commitment significantly improves learning agility can be explained through the Islamic principle of ihsan, which refers to excellence, sincerity, and continuous improvement in conduct and work. Employees who are committed to their organization are more likely to learn, adapt, and contribute beyond minimum task requirements. From an Islamic economics perspective, learning agility reflects the practice of ihsan because it encourages employees to improve their knowledge, refine their skills, and respond constructively to technological change. In digitally transforming industries, ihsan-oriented commitment can create a learning climate that supports knowledge sharing, self-development, and adaptive behavior (Amin & Hassan, 2022; Azmi, 2022).

The contribution of this finding to Islamic economics lies in its clarification of how ethical commitment becomes productive when it is translated into learning behavior. Islamic economics does not view commitment as passive loyalty, but as active responsibility to improve oneself and contribute to collective welfare. The significant role of learning agility shows that ihsan can become a practical mechanism for enhancing performance under Industry 4.0 pressures. This study therefore enriches Islamic human resource theory by positioning learning agility as a bridge between moral attachment and economic outcomes. It suggests that Islamic work ethics can support digital transformation when commitment is accompanied by continuous learning, reflection, and readiness to adapt.

Learning Agility, Adl, Maslahah, and Falah-Oriented Performance

The finding that learning agility is the strongest predictor of employee performance is highly relevant to Islamic economics because adaptive learning can be linked to adl, maslahah, and falah. Learning agility enables employees to respond to changing technologies, production systems, and market demands, but Islamic economics requires that learning opportunities be distributed fairly. The principle of adl demands transparent access to training, unbiased evaluation, and just reward systems. Maslahah further frames learning investment as a welfare-enhancing strategy, while falah broadens performance from short-term productivity to ethical, sustainable, and socially beneficial success (Hasan, 2020; Nugraheni et al., 2024).

This result contributes to Islamic economics by demonstrating that performance in the automotive industry should not be reduced to efficiency or output alone. The sequential pathway from competence to organizational commitment, learning agility, and performance indicates that sustainable performance emerges when organizations develop employees fairly, build commitment, and create learning systems that support long-term welfare. In Islamic economics, this aligns with falah because organizational success must include employee well-being, ethical conduct, customer safety, and societal benefit. Therefore, the study offers a maqāṣid-informed interpretation of digital transformation: automotive firms should strengthen

performance through fair competence development, trustworthy leadership, welfare-oriented learning ecosystems, and sustainable human resource governance.

CONCLUSION

This study concludes that employee performance in Indonesia's automotive industry is shaped by a complex interaction between digital leadership, competence, organizational commitment, and learning agility. Digital leadership has a significant direct effect on performance, indicating that leaders who can guide digital transformation contribute to productivity and organizational competitiveness. However, digital leadership does not substantially strengthen learning agility and only marginally affects organizational commitment. Motivation also does not show a significant effect on performance, organizational commitment, or learning agility. These findings suggest that in structured automotive organizations, performance cannot be improved merely through motivational encouragement or technological leadership without supportive learning systems and human resource development.

The most important finding is the sequential pathway linking competence, organizational commitment, learning agility, and performance. Competence strongly improves organizational commitment, while organizational commitment significantly enhances learning agility. Learning agility, in turn, becomes the strongest predictor of employee performance. This indicates that competence contributes to performance not mainly through a direct mechanism, but through employees' emotional attachment to the organization and their readiness to learn, adapt, and apply new knowledge. From an Islamic economics perspective, this pathway reflects the values of amanah, ihsan, adl, maslahah, and falah, because competence development, ethical commitment, fair learning opportunities, and sustainable performance are mutually connected.

The study contributes to the literature by integrating digital leadership, human resource competence, organizational commitment, learning agility, and performance into a single empirical model in the automotive industry. It also extends the discussion by introducing Islamic economics as an ethical lens for interpreting human resource development in digitally transforming organizations. The findings imply that automotive firms should strengthen fair competence development, build trustworthy leadership, promote continuous learning, and evaluate performance beyond short-term productivity. Future research should further examine these relationships across automotive subsectors, compare Muslim-majority economies, and develop more explicit measures of Islamic economics values in human resource and digital transformation studies.

Limitation of the Study

This study has several limitations that should be acknowledged. First, the research used a quantitative survey design based on respondents' perceptions, which may not fully capture the complexity of digital transformation, leadership behavior, and employee performance in the automotive industry. Although the sample size was adequate for

Partial Least Squares Structural Equation Modeling, the data were collected at one point in time. Therefore, the study cannot establish long-term causal changes among digital leadership, competence, organizational commitment, learning agility, and performance. The findings should be interpreted as evidence of structural relationships rather than definitive proof of temporal causality.

Second, the study focused on employees, supervisors, and managers in Indonesia's automotive industry, which may limit generalization to other countries, industries, or organizational cultures. The automotive sector includes diverse subsectors, such as manufacturing, distribution, components, after-sales service, and electric vehicle development, but this study did not distinguish these segments in detail. The Islamic economics perspective was also used as an interpretive addition rather than as a fully measured construct. As a result, values such as amanah, ihsan, adl, maslahah, and falah were discussed conceptually but not tested empirically within the structural model.

Recommendations for Future Research

Future studies should use longitudinal research designs to examine how digital leadership, competence development, organizational commitment, learning agility, and performance evolve over time. Such designs would allow researchers to determine whether competence first strengthens commitment, whether commitment subsequently promotes learning agility, and whether learning agility produces sustained performance improvement. Future research could also combine quantitative surveys with interviews, case studies, or workplace observations to capture deeper organizational processes. This mixed-methods approach would be useful for understanding how automotive employees experience digital transformation, training systems, leadership practices, and learning opportunities in daily work.

Further research should also develop and validate Islamic economics-based measurement instruments for human resource and organizational behavior studies. Constructs such as amanah, ihsan, adl, maslahah, and falah could be operationalized as leadership values, governance practices, fairness indicators, welfare-oriented learning systems, and holistic performance outcomes. Comparative studies across Muslim-majority countries, automotive subsectors, and levels of digital maturity would help clarify whether Islamic economics values strengthen the relationship between competence, commitment, learning agility, and performance. Future research may also examine additional variables, such as organizational culture, employee engagement, psychological safety, digital maturity, and ethical leadership.

Author Contributions

Conceptualization	A.G., I.S., D.H.K., N.S., & I.R.M.	Resources	A.G., I.S., D.H.K., N.S., & I.R.M.
Data curation	A.G., I.S., D.H.K., N.S., & I.R.M.	Software	A.G., I.S., D.H.K., N.S., & I.R.M.
Formal analysis	A.G., I.S., D.H.K., N.S., & I.R.M.	Supervision	A.G., I.S., D.H.K., N.S., & I.R.M.

Funding acquisition	A.G., I.S., D.H.K., N.S., & I.R.M.	Validation	A.G., I.S., D.H.K., N.S., & I.R.M.
Investigation	A.G., I.S., D.H.K., N.S., & I.R.M.	Visualization	A.G., I.S., D.H.K., N.S., & I.R.M.
Methodology	A.G., I.S., D.H.K., N.S., & I.R.M.	Writing – original draft	A.G., I.S., D.H.K., N.S., & I.R.M.
Project administration	A.G., I.S., D.H.K., N.S., & I.R.M.	Writing – review & editing	A.G., I.S., D.H.K., N.S., & I.R.M.

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The study was approved by Program Studi Manajemen (S1), Universitas Pelita Bangsa, Kab. Bekasi, Indonesia.

Informed Consent Statement

Informed consent was obtained before respondents answered questions for this study.

Data Availability Statement

The data presented in this study are available on request from the corresponding author.

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Conflicts of Interest

The authors declare no conflicts of interest.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

During the preparation of this work the authors used ChatGPT, Grammarly, and PaperPal in order to translate from Bahasa Indonesia into American English, and to improve clarity of the language and readability of the article. After using these tools, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

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