



Determinants of Managerial Performance: The Mediating Role of Work Ethic in Indonesian Batik MSMEs

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ABSTRACT

In this study, how managerial performance is shaped by organizational culture, managerial competence, and the work environment through work ethic in batik micro, small, and medium-sized enterprises (MSMEs) in East Priangan, West Java, is examined. Affective mediators are largely relied on by prior performance studies, and limited explanation of how organizational conditions are translated into value-based managerial behavior is provided by them. Survey data from 258 owner-managers and managers were analyzed using partial least squares structural equation modeling (PLS-SEM). The strongest positive relationship with work ethic was shown by the work environment ($\beta = 0,389$), and it was followed by managerial competence ($\beta = 0,338$) and organizational culture ($\beta = 0,287$). Work ethic was positively related to managerial performance ($\beta = 0,392$), while 96,4% of the variance in work ethic and 63,0% of the variance in managerial performance were explained by the model. Partial mediation across the three pathways is indicated by variance-accounted-for values of 41,3–58,8%. Work ethic is positioned by these findings as a value-based behavioral mechanism rather than merely as an individual antecedent of performance. For batik MSMEs, competence building and workplace improvement should therefore be combined by managerial development with routines by which discipline, responsibility, productive use of time, and community-oriented values are reinforced.

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1. Introduction

Managerial performance in micro, small, and medium-sized enterprises (MSMEs) is increasingly important because people must be coordinated, scarce resources must be allocated, product quality must be maintained, and market uncertainty must be responded to by owner-managers within relatively simple organizational structures. In culture-based industries such as batik, these functions are embedded in local traditions, family and community relationships, and craft-production routines. Not only technical capability but also how organizational values, individual competence, and workplace conditions are translated into consistent managerial behavior is therefore reflected by managerial performance.

It is confirmed by recent studies that organizational culture, competence, and supportive workplace conditions are associated with individual or organizational performance, but it is also shown by them that these relationships are frequently operated through intervening mechanisms. Job satisfaction, organizational innovation, knowledge sharing, and learning agility have been used, so that how organizational conditions are become performance outcomes is explained (Abawa & Obse, 2024; Tripathi & Kalia, 2024; Zulkifli et al., 2023). Although these mediators are useful, affective states, capabilities, or knowledge processes are primarily captured by them, and less explanation of how values and enduring work orientations are internalized is provided.

This limitation is especially relevant in owner-managed, culture-based MSMEs. Owner-manager values are not automatically embedded in daily organizational practices; they must be reinforced through routines, relationships, and repeated managerial action (Asmini & Yusuf. Andi Muhammad, 2025; Oldham, 2024). A value-related construct is therefore needed, so that is why different managerial behavior may be produced by similar organizational resources is explained. Work ethic is appropriate for this purpose because attitudes and beliefs concerning hard work, self-reliance, responsible use of time, and the moral significance of work are represented by it (Arciniega et al., 2024; Miller et al., 2002).

The relevance of mediation in performance research is illustrated by recent evidence. Organizational culture has been linked to performance through job satisfaction, while competence and organizational culture have been linked to employee performance through innovation and knowledge sharing (Abawa & Obse, 2024; Pramudyastuti et al., 2023; Zulkifli et al., 2023). Work ethic has also been tested as a mediator between job satisfaction and performance in a cross-cultural setting (Al Smadi et al., 2023). The need for the internal mechanisms through which managerial performance is shaped by organizational conditions to be examined is supported by these findings.

Nevertheless, work ethic is still commonly treated by recent research as an antecedent of commitment, job attitudes, or performance (Meriac et al., 2023; Udin et al., 2022). A single antecedent-performance pathway is generally examined by studies in which work ethic is used as a mediator (Al Smadi et al., 2023), so that limited evidence on whether organizational culture, managerial competence, and the work environment are simultaneously translated by it into managerial performance is left. Aggregate business outcomes rather than the owner-manager's execution of planning, organizing, decision-making, leadership, and control are also tended to be emphasized by MSME studies.

An analytically relevant setting for the addressing of this gap is provided by East Priangan. A large base of micro and small industrial activity is combined by the region with a batik sector

by which both economic and cultural functions are carried. Batik production is relied on craft knowledge, local motifs, family-based relationships, and close owner involvement, so that organizational values are shaped, competence is deployed, and the immediate work environment is controlled simultaneously by the owner-manager. The setting is made particularly suitable for the observing of the proposed value-internalization mechanism by this concentration of managerial roles (Harsono et al., 2026; Oldham, 2024; UNESCO, 2009).

Against this empirical and conceptual background, work ethic is positioned by this study as a value-based behavioral mechanism by which organizational culture, managerial competence, and the work environment are connected with managerial performance. Shared values are supplied by organizational culture, the capacity to act is supplied by competence, and enabling or constraining conditions are provided by the work environment; how these inputs are internalized into disciplined, responsible, and results-oriented managerial behavior is reflected by work ethic (Arciniega et al., 2024; Miller et al., 2002).

Micro and small batik enterprises are focused on by the study because managerial authority in these firms is highly concentrated in the owner or a small management team, formal systems are limited, and day-to-day performance is directly depended on individual managerial conduct (Atiase et al., 2023; Oldham, 2024). Its purpose is that the direct relationships of organizational culture, managerial competence, and the work environment with managerial performance and their indirect relationships through work ethic are analyzed. A contribution is made by the study through the testing of an integrated value-based mediation model in a cultural-industry setting and through the identifying of practical levers by which managerial performance in batik MSMEs is strengthened. Unlike previous studies that conceptualize work ethic as an antecedent or individual characteristic, this study repositions work ethic as a value internalization mechanism through which strategic organizational resources are transformed into managerial performance.

2. Literature Review

Managerial Performance in MSMEs

Managerial performance refers to the effectiveness with which planning, organizing, decision-making, leadership, coordination, and control are carried out by managers. In MSMEs, these functions are commonly performed by the business owner, so that performance is strongly depended on the individual's ability to be combined strategic judgment with daily operational execution (Atiase et al., 2023). Consistent with Indonesian policy usage, MSMEs is used by this article for the broader sector and micro and small enterprises (MSEs) for the empirical sample, by which medium-sized firms are not included.

The measurement of managerial performance has consequently been moved beyond administrative task completion, so that behavioral and competency-based effectiveness is included. The classical managerial-function perspective is remained relevant, but decision quality, adaptive capacity, coordination, and the ability by which limited resources are converted into workable managerial action are emphasized by recent MSME research (Atiase et al., 2023; Rao, 2016). The inclusion of work values and behavior in the explaining of managerial performance is supported by this broader perspective.

Most MSME studies, however, aggregate firm outcomes such as sales growth, profitability, innovation, or productivity are measured by them. These outcomes are important, but how

effectively daily managerial functions are performed by the owner-manager is not directly revealed by them. It is further suggested by evidence that MSME productivity is affected by top-manager human capital through innovation that managerial inputs must be converted through internal processes before they are appeared as organizational outcomes (Timothy, 2022).

It is similarly shown by recent studies that organizational factors and performance are often connected through behavioral or organizational mechanisms, including job satisfaction, learning agility, innovation, and knowledge sharing (Abawa & Obse, 2024; Tripathi & Kalia, 2024; Zulkifli et al., 2023). Managerial performance should therefore be examined as the result of both organizational resources and the process by which those resources are translated by owner-managers into consistent action.

Accordingly, a process-oriented explanation of managerial performance is needed. Not only what resources and conditions are possessed by an MSME, but also how the manager's work orientation and execution of managerial responsibilities are shaped by those resources, should be identified by such an explanation. The foundation for the examining of work ethic as an internal behavioral mechanism is provided by this logic.

Organizational Determinants of Managerial Performance

Organizational culture

Organizational culture is a system of shared assumptions, values, and practices by which how situations are interpreted and acted upon by members is guided. Clan, adhocracy, market, and hierarchy orientations, by each of which different criteria of effectiveness are emphasized, are differentiated by the Competing Values Framework (Cameron & Quinn, 2011). In owner-managed MSMEs, culture is often less formally codified and is communicated through the owner's example, everyday routines, and interpersonal relationships (Oldham, 2024).

Organizational culture is linked by empirical research with employee and firm performance, while it is also shown that its effects may be depended on intervening social and attitudinal processes. The culture-performance relationship is mediated by job satisfaction, and a similar function is performed by organizational social capital in family firms (Abawa & Obse, 2024; Stasa Ouzký & Machek, 2024). It is indicated by these findings that a behavioral or relational channel is required by cultural values before performance is consistently influenced by them.

Performance can therefore be affected by culture both directly and indirectly. In Indonesian organizations, competence and organizational culture have been shown to be operated through organizational innovation and knowledge sharing, although not all paths are equally strong (Zulkifli et al., 2023). More broadly, their values must be repeatedly embedded into organizational practices by owner-managers rather than it being assumed that behavior is automatically become by shared values (Muthoni Nduati & Wanyoike, 2022; Oldham, 2024).

In culture-based MSMEs such as batik enterprises, both business values and heritage responsibilities are incorporated by organizational culture. Local motifs, craftsmanship, intergenerational knowledge, and community relationships can be coexisted with market, innovation, and efficiency demands (Ratten & Usmanij, 2021; UNESCO, 2009). The translation of culture into managerial conduct is made especially important by this dual orientation.

Taken together, it is suggested by these studies that the identifying of a cultural profile is insufficient. How shared values are become disciplined and responsible work practices must

also be explained by research. Work ethic is relevant because the owner's or manager's internalized orientation toward effort, responsibility, time, and the meaning of work is captured by it.

Managerial Competence

Managerial competence is comprised of the knowledge, skills, judgment, and interpersonal capacity by which managerial roles are required to be performed. For MSME owner-managers, technical and resource-management skills, leadership, opportunity assessment, adaptive decision-making, and relationship building are included by it (Atiase et al., 2023; Mitchelmore & Rowley, 2010). These competencies are particularly important where specialized staff and formal managerial systems are limited.

Managerial competence or top-manager human capital is generally connected by empirical studies with MSME effectiveness, innovation, and productivity. Enterprise performance can be supported by managerial competence through entrepreneurial orientation and willingness to change, while the types of innovation that are pursued by MSME managers are affected by education and experience (Timothy, 2022; Zecca & Dayan, 2018). Effectiveness is also improved by managerial training when its content and accessibility are matched to managers' capability needs (Atiase et al., 2023).

It is not implied by these findings that performance is automatically produced by competence. Innovation or another behavioral mechanism may be required by human capital before productivity is improved by it, and the influence of managerial competence may be varied with managers' willingness to be applied what is known by them (Timothy, 2022; Zecca & Dayan, 2018). The key issue is therefore not only whether competence is possessed, but whether it is enacted consistently in everyday managerial work.

It is also shown by evidence from Indonesia that competence-performance pathways are not uniform: not all intermediate processes were equally improved by competence and organizational culture in a model of bank employee performance (Zulkifli et al., 2023). The need for a mechanism by which the manager's willingness to be translated competence into disciplined, responsible, and results-oriented action is captured is reinforced by this.

Managerial competence is thus best understood as performance potential. One way in which sustained managerial action is become by this potential is represented by work ethic: what to do is enabled to be known by the manager through competence, whereas the consistency, responsibility, and persistence with which that competence is applied are influenced by work ethic.

Work environment

The work environment is comprised of physical, psychological, social, and structural conditions by which work experience and behavior are shaped (Parker et al., 2017). In micro and small firms, these conditions are made especially visible by proximity between owners, managers, and workers. Managerial work can be directly enabled or constrained by workspace adequacy, access to tools and materials, role clarity, communication, trust, and social support (Ángeles López-Cabarcos et al., 2022).

It is shown by recent studies that social support and perceived workplace conditions are important configurations of job performance. Organizational outcomes are also influenced by

supportive work environments through learning agility and innovation, while additional pathways from workplace conditions to performance are explained by diversity, procedural justice, self-efficacy, and work engagement (Ángeles López-Cabarcos et al., 2022; Chen & Lin, 2024; Tripathi & Kalia, 2024).

Performance is not necessarily generated on its own by a positive work environment. Opportunities and support are created by it, but engagement, learning, disciplined effort, and responsible action must still be responded with by individuals. This enabling character of the work environment is demonstrated by the documented mediating roles of learning agility, innovation, self-efficacy, and work engagement (Chen & Lin, 2024; Tripathi & Kalia, 2024).

In East Priangan batik enterprises, the work environment is additionally shaped by family ties, informal role allocation, community relations, craft-production space, and access to local materials and networks. Cooperation and heritage continuity can be strengthened by these conditions, but accountability and work standards may also be blurred by informality. Their effect is therefore depended on how they are interpreted and internalized by owner-managers into daily work behavior (Oldham, 2024).

The work environment should consequently be treated as an enabling context whose influence is partly behavioral. The internalization of supportive or constraining workplace conditions into disciplined, responsible, and results-oriented managerial conduct can be represented by work ethic.

Work Ethic

Work ethic is a value-related construct that is comprised of attitudes and beliefs about the centrality and moral meaning of work, hard work, self-reliance, delayed gratification, leisure, and productive use of time (Miller et al., 2002). It is treated by contemporary research as a multidimensional orientation that is related to, but distinct from, personality and other perseverance constructs (Arciniega et al., 2024; Meriac et al., 2013, 2023).

Established measures of these dimensions are provided by the Multidimensional Work Ethic Profile (MWEP) and its short form (Meriac et al., 2013; Miller et al., 2002). It is also shown by recent longitudinal evidence that employees can be grouped into distinct work-ethic profiles and that the prevalence of those profiles may be changed as working conditions are changed, even when their underlying structure is remained stable (Arciniega et al., 2024).

In culture-based MSMEs, an additional contextual dimension is had by work ethic because work is connected with craft identity, heritage continuity, family responsibility, and community reputation. Productivity is not the only consideration; cultural authenticity and social relationships must also be safeguarded by the manager (Oldham, 2024; Ratten & Usmanij, 2021; UNESCO, 2009). The core MWEP dimensions are not replaced by these contextual elements but how they are expressed is affected.

Work ethic is commonly positioned by recent empirical research as a predictor of commitment, job attitudes, or performance (Meriac et al., 2023; Udin et al., 2022). It is tested as a mediator by a smaller body of work, for example between job satisfaction and job performance (Al Smadi et al., 2023). Room for work ethic to be tested as an integrated mechanism by which multiple organizational antecedents are connected to managerial performance is left by this imbalance.

Within the present framework, values are supplied by organizational culture, capacity is supplied by managerial competence, and enabling or constraining conditions are supplied by the work environment. These inputs are linked to managerial performance by work ethic, in that the consistency with which effort, responsibility, time discipline, and moral commitment are applied by owner-managers in their daily managerial roles is reflected by it.

Current mediation research is extended by this positioning. Whereas affective, knowledge, or capability mediators such as job satisfaction, knowledge sharing, innovation, and learning agility are emphasized by prior studies (Abawa & Obse, 2024; Tripathi & Kalia, 2024; Zulkifli et al., 2023), a value-based behavioral orientation is captured by work ethic. It is demonstrated by (Al Smadi et al., 2023) that such a mediating role is empirically plausible, but the integrated three-antecedent model is remained underexamined.

Organizational resources are therefore connected by the placing of work ethic as a mediator with the behavioral process through which managerial performance is formed. The distinctive value-laden context of owner-managed cultural enterprises is also allowed to be addressed by the model without work ethic being reduced to a synonym for organizational culture.

Mediation Mechanisms in Performance Studies

How an outcome is influenced by an antecedent through an intervening mechanism is explained by mediation analysis. It is especially useful when direct-effect models are theoretically incomplete because attitudes, capabilities, or behavior must first be shaped by organizational resources before performance is affected (Hair et al., 2022; Hayes, 2022).

A wide range of mediators in culture- and performance-related models, including job satisfaction, organizational innovation, knowledge sharing, and learning agility, are used by recent studies (Abawa & Obse, 2024; Tripathi & Kalia, 2024; Zulkifli et al., 2023). The importance of indirect pathways is established by these studies, but affective or capability-based mechanisms are primarily concentrated on by them.

Less integrated attention has been received by value-related mechanisms. An ongoing embedding process is required by owner-manager values, and a distinct predictor of work-related behavior and outcomes is remained by work ethic (Arciniega et al., 2024; Oldham, 2024). It is further suggested by the mediation evidence that is reported by (Al Smadi et al., 2023) that an antecedent can be connected to performance by work ethic rather than it being operated only as an independent variable.

This limitation matters in MSMEs because structural resources and formal controls are limited, while immediate organizational consequences are had by owner-manager behavior. A closer explanation of managerial performance than an exclusively affective construct can therefore be provided by a mediator by which values, discipline, responsibility, and work orientation are integrated.

This integrative perspective is offered by work ethic. The value-internalization process through which consistent managerial behavior and, ultimately, managerial performance are become by organizational culture, managerial competence, and workplace conditions is represented by it.

Research Gap and Research Position

Three unresolved issues are identified by the literature. First, culture, competence, and the work environment are often modeled as direct determinants of performance or are connected through affective and capability-based mediators (Abawa & Obse, 2024; Tripathi & Kalia, 2024; Zulkifli et al., 2023). Second, work ethic is more commonly treated as an independent predictor than as a value-based mediator (Meriac et al., 2013, 2023; Udin et al., 2022). Third, firm-level outcomes are tended to be prioritized by MSME research, and less attention is given to the formation of owner-manager performance.

These issues are particularly important in culture-based industries. Commercial performance must be reconciled by batik firms with heritage preservation and community obligations, while managerial authority is concentrated in the owner-manager by their small scale (Oldham, 2024; Ratten & Usmanij, 2021; UNESCO, 2009). Value internalization is made theoretically salient rather than merely contextual by such a setting.

An integrated model in which the relationships of organizational culture, managerial competence, and the work environment with managerial performance are mediated by work ethic is therefore tested by this study. Its novelty lies in the combining of three organizational antecedents with a value-based mediator and an individual managerial outcome in batik MSEs. The study is differentiated by this position from models that are centered on affective mediators or aggregate business performance.

3. Research Method

Research Design

A quantitative explanatory, cross-sectional design was used by this study, so that the relationships of organizational culture, managerial competence, and the work environment with managerial performance, both directly and indirectly through work ethic, were examined. The individual owner-manager or manager who was responsible for managerial decisions in a batik enterprise was the unit of analysis.

Partial least squares structural equation modeling (PLS-SEM) was selected because several latent constructs and simultaneous direct and indirect paths are contained by the model, and the explaining of variance in managerial performance is oriented toward by it (Hair et al., 2022). All constructs were specified as first-order reflective constructs, and each indicator was entered directly into the measurement model.

Data were collected once from the same respondents. Accordingly, associations that are consistent with the proposed theoretical model are represented by the estimated paths, and they should not be interpreted as definitive longitudinal causation.

Batik Industry in East Priangan

An economic activity is combined by batik with a recognized cultural-heritage function in Indonesia (UNESCO, 2009). 16,425 batik MSMEs in West Java in 2023 were projected by Open Data Jabar (Open Data, 2025). Garut Regency, Tasikmalaya Regency and City, Ciamis Regency, Banjar City, and Pangandaran Regency are covered by East Priangan. Across these six jurisdictions, 169,959 units were reached by the 2023 number of micro and small industrial establishments: Garut 41,183; Tasikmalaya Regency 46,827; Ciamis 33,831; Pangandaran 25,842; Tasikmalaya City 17,234; and Banjar 5,042 (BPS. Provinsi Jawa Barat, 2025). The region

is established by these data as a substantial micro- and small-industry environment within which batik enterprises are operated.

The setting is theoretically appropriate because batik production is labor-intensive, closely connected to local motifs and craft knowledge, and commonly managed through owner-led or family-based structures. In such firms, work norms are frequently established, resources are allocated, production is supervised, external relationships are maintained, and cultural continuity is safeguarded by the same owner-manager. East Priangan batik MSEs are made suitable by the proximity between organizational conditions and individual managerial action for the testing of whether culture, competence, and the work environment are translated by work ethic into managerial performance (Oldham, 2024).

Population and Sample

Micro and small batik enterprises in the six East Priangan jurisdictions were comprised by the population. It was required by purposive sampling that enterprises had been operated for at least five years, at least five workers were employed, batik that was grounded in local cultural motifs or practices was produced, and an owner-manager or managerial role was assigned to the respondent. The empirical sample was deliberately focused by the criteria on MSEs because managerial authority and daily work behavior are more directly concentrated in their owners or small management teams. Of 320 questionnaires that were distributed, 258 usable responses were returned, so that a response rate of 80.6% was given. The sample size was adequate for the estimating of the specified PLS-SEM model (Hair et al., 2022). Respondents were predominantly 31–50 years old, at least secondary education was had by them, and 5–10 years of managerial experience was commonly reported, so that their capacity to be evaluated the managerial practices that were measured in the study was supported.

3.4. Research Variables and Measurement

Five first-order reflective constructs were operationalized by the study. Organizational culture was measured through clan, adhocracy, market, and hierarchy orientations from the Competing Values Framework, and it was supplemented by cultural-preservation items that are relevant to heritage enterprises (Cameron & Quinn, 2011; Oldham, 2024; Ratten & Usmanij, 2021). Technical, interpersonal, leadership, resource-management, adaptive decision-making, and cultural-stewardship capabilities were covered by managerial competence (Atiase et al., 2023; Mitchelmore & Rowley, 2010).

Physical working conditions, organizational structure, communication, social support, and access to local resources were covered by the work environment (Ángeles López-Cabarcos et al., 2022; Parker et al., 2017). Work ethic was based on the Multidimensional Work Ethic Profile and its short form, including hard work, self-reliance, morality and ethics, leisure, centrality of work, delay of gratification, and productive use of time; cultural and community responsibility were captured by contextual items without the core dimensions being replaced (Arciniega et al., 2024; Meriac et al., 2013; Miller et al., 2002).

Planning, organizing, decision-making, leadership, coordination, and control were covered by managerial performance, with contextual items concerning cultural entrepreneurship and community-oriented management (Chandler & Hanks, 1993; Dess & Robinson, 1984; Rao, 2016; Wiklund & Shepherd, 2005). A five-point Likert response scale (1 = strongly disagree to 5 = strongly agree) was used by all items. For descriptive purposes,

construct-item responses were averaged, not summed, so that the original 1–5 scale was retained. The raw item responses were used by PLS-SEM; latent scores were estimated by the algorithm rather than by manual aggregation.

Data Analysis Techniques

PLS-SEM in two stages was used by data analysis (Hair et al., 2022). First, the reflective measurement model was evaluated through indicator loadings (>0.50), average variance extracted (AVE >0.50), composite reliability, and Cronbach's alpha (>0.70). Discriminant validity was assessed using the Fornell–Larcker criterion and cross-loadings (Fornell & Larcker, 1981). Indicators below the minimum loading threshold were removed only when construct quality was improved by their deletion without theoretical coverage being weakened.

Second, the structural model was evaluated using path coefficients, coefficients of determination (R^2), variance inflation factors (VIF), and the standardized root mean square residual (SRMR). The mediation paths were assessed from the product of the relevant path coefficients and were interpreted with variance accounted for (VAF = indirect effect / total effect). VAF values below 20%, between 20% and 80%, and above 80% were interpreted as no mediation, partial mediation, and full mediation, respectively (Hair et al., 2022).

4. Results and Discussion

Results

Description of Respondent Data

The profile of the 258 respondents and their enterprises is described by Table 1. 55.04% of the sample was represented by women, the largest age group was 41–50 years (35.27%), and senior secondary or vocational education had been completed by 40.31%. Most respondents were business owners (65.12%), and 5–10 years of experience was had by the largest managerial-experience group (39.92%). Hand-drawn batik was the dominant business type (59.69%), 1–5 workers were employed by half of the enterprises, and training had been participated in by 54.65% of respondents. It is confirmed by the profile that experienced owner-managers of micro and small, craft-based enterprises are primarily represented by the sample.

Table 1. Respondent Profile and Business Characteristics

Aspect	Dominant Category	Percentage (%)
Gender	Woman	55.04
Age	41–50 years	35.27
Education	High School/Vocational School	40.31
Type of business	Hand-drawn Batik	59.69
Length of Business	5–10 years	34.88
Number of Workers	1–5 people	50.00
Position	Business Owner	65.12
Management Experience	5–10 years	39.92
Training	Have you ever participated?	54.65

Source: Data Processed, 2025

Outer Model

The reliability and convergent-validity results are displayed by Table 2. Above 0.50 were loaded by all retained indicators, and 0.70 was exceeded by most. Cronbach's alpha was ranged

from 0.752 to 0.901, composite reliability from 0.818 to 0.928, and AVE from 0.504 to 0.763; thus, the stated thresholds were met by every construct. Two managerial-performance indicators (Z1 and Z2) were removed because their loadings were below 0.50. After their removal, adequate reliability and convergent validity for structural analysis were provided by the measurement model.

Table 2. Results of Reliability and Construct Validity Evaluation

Variables	Cronbach's Alpha	Composite Reliability	AVE
Organizational Culture (X1)	0.888	0.918	0.691
Managerial Competence (X2)	0.901	0.922	0.629
Work Environment (X3)	0.896	0.928	0.763
Work Ethic (Y)	0.901	0.919	0.558
Managerial Performance (Z)	0.752	0.818	0.504

Source: Data Processed, 2025

Inner Model

The estimated PLS-SEM model is presented by Figure 1. The retained indicator loadings are the values that are adjacent to the measurement arrows, the standardized path coefficients are the values on the structural arrows and R^2 are the values inside the endogenous constructs. Both the adequacy of the retained indicators and the relative strength of the proposed structural relationships are therefore shown by the figure.

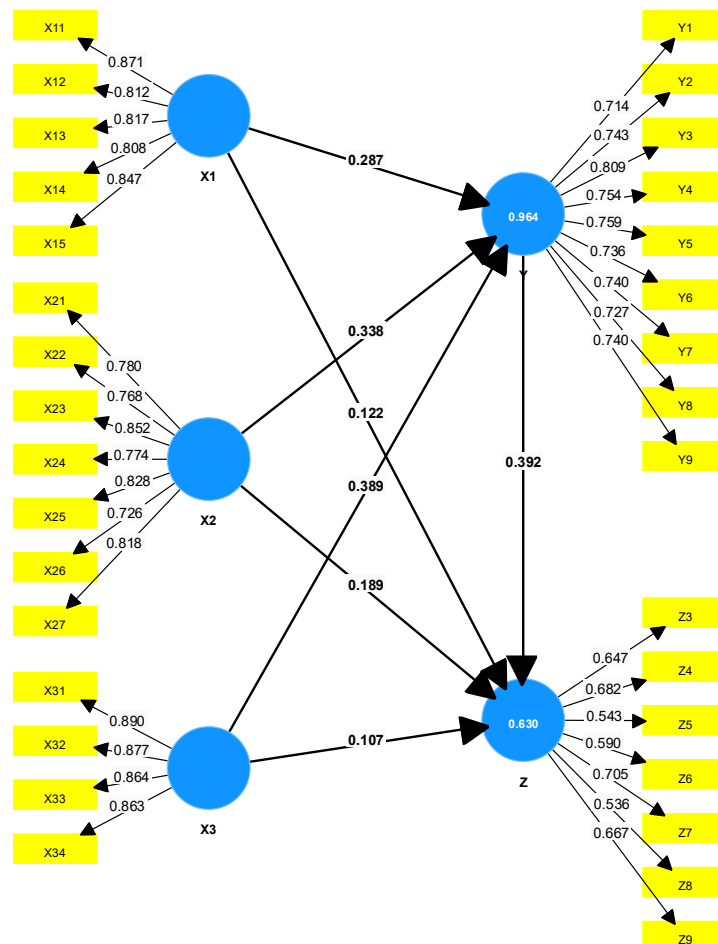


Figure 1. Estimated PLS-SEM Structural Model

Source: Data Processed, 2025

The standardized structural-model path coefficients are shown by Table 3, while the coefficients of determination are summarized by Table 4. The strongest positive relationship with work ethic was had by the work environment ($\beta = 0.389$), and it was followed by managerial competence ($\beta = 0.338$) and organizational culture ($\beta = 0.287$). Work ethic was positively related to managerial performance ($\beta = 0.392$). The direct coefficients from managerial competence, organizational culture, and the work environment to managerial performance were 0.189, 0.122, and 0.107, respectively. 96.4% of the variance in work ethic and 63.0% of the variance in managerial performance were explained by the model. Strong in-sample explanatory power is indicated by the unusually high R^2 for work ethic, and it is interpreted cautiously in the limitations section because all constructs were measured from the same respondents.

Table 3. Path Coefficients of Structural Model

Relationship between Variables	Coefficient (β)
Organizational Culture $\rightarrow$ Work Ethic	0.287
Managerial Competence $\rightarrow$ Work Ethic	0.338
Work Environment $\rightarrow$ Work Ethic	0.389
Work Ethic $\rightarrow$ Managerial Performance	0.392
Organizational Culture $\rightarrow$ Managerial Performance	0.122
Managerial Competence $\rightarrow$ Managerial Performance	0.189
Work Environment $\rightarrow$ Managerial Performance	0.107

Source: Data Processed, 2025

Table 4. Value of the Coefficient of Determination (R^2)

Endogenous Variables	R^2	Category
Work Ethic (Y)	0.964	Very strong
Managerial Performance (Z)	0.630	Strong

Source: Data Processed, 2025

Mediation Analysis of Work Ethic

The direct and indirect effects and the VAF calculation are reported by Table 5. The indirect effect was 0.113 for organizational culture, 0.133 for managerial competence, and 0.153 for the work environment. Their corresponding total effects were 0.235, 0.322, and 0.260, so that VAF values of 48.1%, 41.3%, and 58.8% were produced. Under the criterion that is specified in the method, partial mediation is indicated by all three values. The direct effect was exceeded by the indirect effect only for the work-environment pathway; therefore, an important but not exclusive mediating role for work ethic is supported by the results.

Table 5. Work Ethic Mediation Results

Mediation Path	Direct Effect	Indirect Effect	VAF (%)
Organizational Culture $\rightarrow$ Work Ethic $\rightarrow$ Managerial Performance	0.122	0.113	48.1
Managerial Competence $\rightarrow$ Work Ethic $\rightarrow$ Managerial Performance	0.189	0.133	41.3
Work Environment $\rightarrow$ Work Ethic $\rightarrow$ Managerial Performance	0.107	0.153	58.8

Source: Data Processed, 2025

Discussion

The central finding is that all three organizational pathways to managerial performance are partially mediated by work ethic. It is shown by the VAF values of 41.3–58.8% that direct relationships with performance are retained by organizational culture, managerial competence, and the work environment while a value-based behavioral mechanism is also operated through. This is more precise than it being claimed that its direct counterpart is exceeded by every indirect effect: that pattern is had only by the work-environment pathway. Work ethic is therefore positioned by the results as an important translator of organizational conditions, not as their substitute.

A positive relationship with work ethic was had by organizational culture ($\beta = 0.287$), but the weakest of the three antecedents was it. This result is consistent with research by which it is shown that performance is influenced by culture through job satisfaction or organizational social capital rather than through an automatic direct process (Abawa & Obse, 2024; Stasa Ouzký & Machek, 2024). (Oldham, 2024) conclusion that repeated embedding in routines and relationships is required by owner-manager values is also supported by it. In batik MSEs, culturally familiar values may be widely shared but remain implicit; without explicit work standards, feedback, and role modeling, their influence on individual work ethic can be made weaker than more immediate capability and workplace factors.

The second-largest relationship with work ethic ($\beta = 0.338$) and the largest direct relationship with managerial performance ($\beta = 0.189$) were had by managerial competence. This finding is agreed with evidence that MSME effectiveness is improved by managerial training, top-manager human capital, and managerial competence when acquired capability can be applied by managers to actual business problems (Atiase et al., 2023; Timothy, 2022; Zecca & Dayan, 2018). An important qualification is added by the mediation result: knowledge and skill are productive when they are accompanied by disciplined application, responsibility, persistence, and purposeful use of time. Competence development should therefore be paired with mechanisms by which learning is turned into repeated managerial practice.

The strongest relationship with work ethic ($\beta = 0.389$) was had by the work environment, and its direct effect (0.107) was exceeded by its indirect effect (0.153). This pattern is consistent with studies by which it is shown that performance is shaped by social support and workplace conditions through engagement, learning agility, innovation, and self-efficacy (Ángeles López-Cabarcos et al., 2022; Chen & Lin, 2024; Tripathi & Kalia, 2024). In small batik workshops, tools, workspace, material access, communication, trust, and role clarity are directly experienced by the owner-manager and workers. Performance appears to be improved by a supportive environment largely when it is internalized as orderly, responsible, and persistent work behavior.

The strongest direct relationship with managerial performance among the endogenous paths ($\beta = 0.392$) was had by work ethic itself. This is accorded with evidence that work ethic is associated with performance, commitment, retention-related attitudes, and other work outcomes (Al Smadi et al., 2023; Meriac et al., 2023; Udin et al., 2022), by whom a mediating role for work ethic in a single job-satisfaction-performance relationship was documented, are also extended by it. It is demonstrated by the present study that cultural, capability, and environmental antecedents can be simultaneously connected by one value-based mechanism with an individual managerial outcome in owner-managed cultural enterprises.

The theoretical contribution lies in the shifting of the explanation from what organizational resources are possessed by an MSE to how those resources are enacted. How individuals feel is explained by affective mediators, whereas a relatively enduring orientation toward effort, responsibility, time, and the meaning of work is explained by work ethic (Arciniega et al., 2024; Miller et al., 2002). Models that are based on job satisfaction, engagement, innovation, or knowledge sharing are thus complemented, rather than displaced, by the findings. They are most likely to be generalized to owner-managed, labor-intensive, culture-based MSEs in which organizational conditions and individual managerial behavior are closely coupled; generalization to large, highly formalized firms or different national cultures is required to be tested further.

The practical and policy implication is that stand-alone technical training is unlikely to be sufficient. Cultural values should be translated by owners into observable routines—clear production targets, quality checks, role allocation, time discipline, feedback, and recognition for responsible behavior while workspace adequacy, communication, and access to tools and materials are improved. Managerial training should be combined by local industry and cooperative agencies, batik associations, and business-support institutions with mentoring, peer learning, and follow-up assessments by which whether newly acquired competence is actually applied is evaluated. Cultural stewardship should also be protected by programs through the linking of productivity and quality standards with motif authenticity, community responsibility, and intergenerational knowledge transfer.

5. Conclusion

Whether organizational culture, managerial competence, and the work environment are connected by work ethic with managerial performance in East Priangan batik MSMEs was examined by this study. The strongest relationship with work ethic was had by the work environment, and it was followed by managerial competence and organizational culture; work ethic, in turn, was positively related to managerial performance. Partial mediation across all three pathways is indicated by VAF values between 41.3% and 58.8%.

Theoretically, performance research is extended by the findings through the positioning of work ethic as a value-based behavioral mechanism by which affective and capability-based mediators are complemented. Managerial performance in owner-managed cultural enterprises is depended not only on available values, skills, and working conditions, but also on the disciplined and responsible manner in which they are enacted by managers. Practically, competence development, workplace improvement, and explicit work-value routines should be integrated by batik owners and support institutions. Training should be followed by mentoring and application reviews, while time discipline, responsibility, quality control, and results orientation should be connected by enterprise routines with cultural preservation and community obligations.

Several limitations are had by this study. Temporal causality is not established by its cross-sectional, single-source design, and relationships may be inflated through common-method variance; this concern is especially relevant to the high R^2 for work ethic. Statistical generalization is also limited by purposive sampling from one cultural-industry region, and further validation is required by the culturally adapted items. Longitudinal or multi-wave designs should be used by future research, performance assessments should be obtained from

multiple sources, East Priangan should be compared with other batik and cultural-industry clusters, measurement invariance across regions should be tested, and whether the mediating role of work ethic is conditioned by firm size, organizational formalization, owner generation, or market orientation should be examined.

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