



## LINKING ETHICAL LEADERSHIP TO INNOVATIVE PERFORMANCE: THE ROLE OF INTELLECTUAL CAPITAL IN BUMDES TOURISM SECTOR IN INDONESIA

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### ABSTRACT

*This study examines the role of ethical leadership in the innovative performance of employees in Village-Owned Enterprises (BUMDes). Furthermore, the purpose of the study is to investigate the mediating effects of human capital and social capital on the relationship between ethical leadership and employees' innovative performance in the tourism sector of BUMDes in Indonesia. Primary data were collected from managerial-level employees of tourism-based BUMDes in Indonesia. Structural Equation Modelling (SEM) was employed to analyze the data and to identify both direct and indirect effects. The findings reveal a significant positive impact of ethical leadership on the innovative performance of BUMDes employees. In addition, ethical leadership was found to have both direct and indirect effects on innovative performance, with the indirect effect being mediated by intellectual capital (IC). The study highlights that IC and ethical leadership are critical resources in fostering a knowledge-driven culture and enhancing innovative performance among employees of BUMDes in the tourism sector. This research represents a novel attempt to explore the nexus between ethical leadership, IC, and innovative performance in the context of BUMDes in Indonesia. Moreover, it offers practical strategies for BUMDes managers to optimize business processes and promote innovative practices among employees, particularly within the rural tourism sector.*

**Keywords:** *Ethical leadership, Intellectual capital, Innovative performance, Human capital, Social capital, Mediation analysis, Knowledge management.*

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## **INTRODUCTION**

The dynamics of today's business environment have transformed the way organizations perceive and operate. Increased competition, technological revolutions, and changing consumer demands have heightened the complexity of the working environment (Hua, 2016; Jordão et al., 2020; Ullah et al., 2021). These transformations and variations have made innovation and change essential for organizational survival. Organizations have realized that innovation is the only way to remain competitive, thus adopting a responsive and adaptive attitude that encourages innovativeness in their daily practices (Ullah et al., 2021). Consequently, innovation has become the core of the modern knowledge economy—an economy that relies more on intangibles such as skills, knowledge assets, and intellectual capital (IC), in addition to traditional production processes (Sharma & Sharma, 2023). As a result of these shifts, economies have transformed labor- and capital-intensive businesses into knowledge-intensive enterprises (Ahmed et al., 2016; Busoi, 2014; Ullah et al., 2018). Overall, intangible resources, coupled with continuous innovation and learning, provide businesses with a competitive edge in today's contemporary world.

Innovation does not occur instantly; rather, it depends on an organization's ability to manage rare and valuable knowledge resources, collectively referred to as intellectual capital (IC) (Grant, 1996; Ullah et al., 2017). IC comprises intangible knowledge assets, including individual knowledge, organizational knowledge, and competencies that provide competitive advantage (Kang & Snell, 2009; Schneider & Samkin, 2008; Ullah et al., 2017). The effective utilization of IC is strongly influenced by leadership, as leaders build structures, cultures, and ethical environments that foster creativity and innovation (Friedrich et al., 2010; Jong & Hartog, 2007; Lundqvist et al., 2023; Petrovic et al., 2017). Ethical leadership, in particular, creates a trustworthy organizational culture that encourages knowledge sharing and enhances innovative performance (Su, 2014; Schermuly et al., 2022; Shafique et al., 2020). Thus, ethical leadership is recognized as a key predictor of innovation (Friedrich et al., 2010; Javed et al., 2017; Shafique et al., 2020; Ullah et al., 2021).

Previous studies have separately examined the influence of intellectual capital (IC) and social capital (SC) on employees' innovative performance (Donker et al., 2008; Freire & Bettencourt, 2020; Garba et al., 2018; Migdadi, 2021; Ozer et al., 2015; Shafique et al., 2020; Youndt et al., 2004). Nevertheless, despite the growing relevance of IC, SC, and innovation in the modern economy, there remains a scarcity of literature exploring the interplay between IC, SC, employees' innovative performance, and the mediating role of knowledge management (KM) (Castilla-Polo & Gallardo-Vázquez, 2008; Su, 2014). Therefore, this study seeks to investigate the impact of IC and SC on employees' innovative performance by incorporating KM as a mediating construct within the conceptual framework.

This research is conducted in the context of Village-Owned Enterprises (BUMDes) in the tourism sector in Indonesia, where IC and SC are considered critical resources for strengthening competitiveness in knowledge-based organisations. By examining the mediating role of KM, the study contributes to a deeper understanding of the underlying mechanisms through which IC and SC can be translated into tangible outcomes such as enhanced employees' innovative performance. The findings are expected to provide meaningful implications for scholars, practitioners, and policymakers in addressing the complexities of strategic management and organisational dynamics within knowledge-driven enterprises in rural economies.

## **LITERATURE REVIEW**

The changing business landscape emphasizes the importance of internal resources as highlighted in the Resource-Based View (RBV) (Barney, 1991), where intellectual capital (IC) fulfils the VRIN criteria (Valuable, Rare, Inimitable, and Non-Substitutable) and is thus considered a strategic resource for achieving sustainable competitive advantage (Barney, 1991; Wang et al., 2017). Complementing RBV, the Resource Orchestration Theory (ROT) underscores the critical

role of leaders in structuring, bundling, and leveraging resources to foster innovation (Sirmon et al., 2011), while the Knowledge-Based View (KBV) extends the focus to knowledge as a dynamic capability in the digital era (Grant, 1996; Pereira & Bamel, 2021). The foundations of ethical leadership are rooted in social learning theory (Bandura & Walters, 1977) and social exchange theory (Walumbwa et al., 2011), which explain how employees emulate leader behaviours and reciprocate through trust-based relationships, as well as in cognitive evaluation theory, which posits that environmental and social factors enhance employee competence and autonomy, thereby fostering innovation (Yidong & Xinxin, 2013). Thus, ethical leadership functions as a dynamic capability that leverages IC to cultivate a knowledge-driven, ethical, and innovative organizational environment.

The responsibility of driving organizations toward success and growth rests on the shoulders of leaders, who must possess not only skills and abilities but also ethical values to manage effectively. Ethical leadership is defined as the demonstration of normatively appropriate behavior through personal actions and interpersonal relationships, while promoting such behavior among followers through two-way decision-making, communication, and reinforcement (Brown et al., 2005). By fostering an open environment that encourages communication, self-efficacy, and knowledge sharing, ethical leaders stimulate creativity and innovative work behaviour (Amabile et al., 2004; Brown et al., 2005; Hoogh & Hartog, 2008; Piccolo et al., 2010; Pless & Maak, 2004; Madjar et al., 2002; Walumbwa et al., 2011). Since innovative performance is considered a core competence for organizational survival and success (Ullah et al., 2021; Yidong & Xinxin, 2013), leaders are expected to cultivate innovative work practices. Innovative work behaviour refers to employees' deliberate efforts to initiate and introduce new and useful ideas, processes, products, or procedures within their roles, groups, or organizations (Yidong & Xinxin, 2013).

Previous studies have shown that ethical leadership enhances innovative work practices and supports organizational survival in dynamic environments. Leaders influence employees' innovative behavior through their actions, vision, and support, fostering a culture of innovation (Jong & Hartog, 2007; Hunter & Cushenbery, 2011; Sarros et al., 2008). Ethical leadership also promotes psychological safety, enabling employees to share and implement new ideas (Brown et al., 2005; Walumbwa et al., 2011).

Cross-country evidence further confirms this relationship, with transformational and ethical leadership positively affecting innovation in Turkey, China, Australia, the UK, and Pakistan (Gumusluoglu & Ilsev, 2009; Yidong & Xinxin, 2013; Demircioglu & Audretsch, 2020; Iqbal et al., 2020; Ullah et al., 2020). Recent studies (Liu et al., 2023; Albdareen et al., 2024) emphasize that ethical leaders foster reciprocal relationships and organizational commitment, which mediate the link between ethical leadership and innovative performance.

Thus, the body of literature substantiates the proposition that ethical leadership fosters innovative work behaviour and practices among employees, leading to the following hypothesis:

*H1. Ethical leadership has a significant impact on the innovative performance of employees.*

Leaders, as the core strength of an organization, create the necessary atmosphere for the smooth implementation of change (De Brún and McAuliffe, 2022). However, to perform their role effectively and utilize knowledge resources more efficiently, an ethical business environment is required. Su's (2014) study on Taiwanese companies found that strengthened ethics align with the development of intellectual capital (IC) within organizations. Ethical leadership helps attract and retain talented employees (human capital), build stronger stakeholder relationships, and meet customer needs (social capital), thereby enabling organizations to achieve better financial performance (Fritz et al., 1999; Gullett et al., 2009; Johnson, 2003; Vilanova et al., 2009). Supporting the RBV and ROT, several studies emphasize that ethical leadership can enhance, build, and utilize crucial resources (IC) effectively and efficiently. Ethical leadership has been associated with IC, comprising human and social capital, thus providing organizations with a comprehensive view of their resources (Subramaniam and Youndt, 2005; Ullah et al., 2017, 2021, 2022). Ethical leadership fosters a culture of trust that strengthens stakeholder relationships and enhances social capital (Jamali et al., 2011; Ullah et al., 2022; Youndt et al., 2004). Moreover, an ethical and trustworthy environment helps retain good employees, as they feel valued, thereby increasing human capital (Donker et al., 2008; Fritz et al., 1999; Pennings et al., 1998; Youndt and

Snell, 2004). Similarly, Morgeson et al. (2010) revealed that leaders ensure employees possess the skills and knowledge forming human capital, while also fostering cohesion, trust, and a sharing culture that contributes to social capital. Thus, the literature suggests that business ethics are essential for the development of holistic and critical organizational resources in the form of IC; therefore, the following hypotheses are formulated:

*H2. Ethical leadership has a significant impact on human capital.*

*H3. Ethical leadership has a significant impact on social capital.*

The intangible resources possessed by companies in today's business environment play a critical role in fostering innovation for business success, survival, and gaining a competitive edge. Chahal and Bakshi (2015) argued that to facilitate innovative practices, companies require human, structural, and relational capital, which together constitute intellectual capital (IC). Supporting the perspective of ROT, several studies have found that the efficient utilization of IC resources leads to innovative performance, thereby indicating a positive relationship (Allameh, 2018; Subramaniam & Youndt, 2005; Wu et al., 2008; Zerenler et al., 2008). Along these lines, empirical studies by Alrowwad et al. (2020) on bank employees in Irbid City and Yitmen (2011) on the Turkish construction sector also revealed that IC and its components exert a significant positive impact on innovation. A literature review conducted by Altındağ et al. (2019), which examined the influence of IC on innovation, also highlighted that IC is a strategic resource that equips organizations with innovative solutions and enhances their performance. Furthermore, exploring the interaction effects among IC components, Wu and Sivalogathan (2013) observed a mediating influence of organizational motivation on companies' innovative capabilities. Similarly, Kianto et al. (2014), in a study of Spanish companies, found that successful innovation is largely a human- and knowledge-related issue, underscoring the essential role of knowledge resources in the form of IC.

To further examine the relationship between IC and innovative performance, Ali et al. (2023) conducted a systematic review of 128 papers and reported a significant impact of IC on innovative performance, moderated by dynamic capabilities. Their findings also revealed that factors such as culture and trust influence IC components within Iraqi banks. Likewise, a systematic review of 30 articles by Utami et al. (2024) found that ethical leadership, IC, and organizational culture significantly affect employees' ability to innovate. Extending the proposition that appropriate IC within organizations facilitates innovation and escalates innovative behavior among employees (Allameh, 2018; Alrowwad et al., 2020; Kianto et al., 2017; Martínez-Pérez et al., 2016; Subramaniam & Youndt, 2005; Wu & Sivalogathan, 2013; Yitmen, 2011; Zerenler et al., 2008), the following hypothesis is proposed:

*H4. Human capital has a significant impact on innovative performance.*

*H5. Social capital has a significant impact on innovative performance.*

Firms have increasingly sought to leverage their intellectual capital (IC) efficiently to foster innovation and derive sustainable benefits. Rashid et al. (2012), in their study of Malaysian small and medium-sized enterprises (SMEs), demonstrated the positive impact of IC on both innovation and organisational performance. However, firms require appropriate skills, knowledge, networks, and capabilities in the form of human and social capital to achieve competitive advantage through the effective utilisation of IC (Subramaniam & Youndt, 2005; Ullah et al., 2021). Moreover, although these strategic assets are vital, their development is largely dependent upon managers and leaders, whose efforts and activities play a critical role. Consequently, organisational investments in fostering ethical leadership become crucial for harnessing IC and enhancing innovative performance (Ullah et al., 2018, 2021).

In line with this perspective, Musenze and Mayende (2023), in their study of universities in Uganda, highlighted the significance of organisational support. They argued that perceived organisational support strengthens ethical leadership practices, nurturing fairness, care, and honesty, which in turn enhance employees' innovative work practices. This underscores the importance of exploring the interconnections between ethical leadership, IC, and innovative performance, although empirical research in this area remains limited. Drawing on social learning theory, Ullah et al. (2018) examined these linkages within software houses and manufacturing firms in Pakistan and found that ethical leadership positively influenced employees' innovative

performance through the mediating role of IC.

Similarly, Norena-Chavez and Thalassinos (2023) investigated the relationship between entrepreneurial leadership, IC, and innovation among 422 senior IT employees in Peru. Grounded in the resource-based view (RBV) and dynamic capability theory, their findings revealed that entrepreneurial leadership is a key determinant of the human, relational, and structural components of IC. Furthermore, they contended that by strengthening these IC components, entrepreneurial leadership fosters an organisational climate conducive to employees' innovative performance.

Previous research has shown that ethical leadership positively influences innovative performance (Demircioglu & Audretsch, 2020; Jong & Hartog, 2007; Gumusluoglu & Ilsev, 2009; Iqbal et al., 2020; Ullah et al., 2020; Yidong & Xinxin, 2013), while intellectual capital (IC) significantly contributes to enhancing employees' innovative performance (Allameh, 2018; Subramaniam & Youndt, 2005; Wu et al., 2008; Zerenler et al., 2008). However, limited studies have examined the underlying mechanisms linking ethical leadership, IC, and innovative performance.

This study seeks to address this gap by emphasizing the mediating role of IC in the relationship between ethical leadership and innovative performance, with a particular focus on India's rapidly growing IT sector. An integrative approach is employed to explore these relationships while mitigating common method bias often present in survey-based research. Moreover, national policy initiatives such as Skill India (2015), Digital India (2015), and the Intellectual Property Rights Policy (2016) further strengthen the importance of IC in fostering innovation and organizational competitiveness.

*H6. Human capital mediates the relationship between ethical leadership and the innovative performance of employees.*

*H7. Social capital mediates the relationship between ethical leadership and the innovative performance of employees.*

## **METHODOLOGY**

This study employs a hypothetico-deductive approach and a causal research design to examine the relationships among ethical leadership, intellectual capital (IC), and employees' innovative performance. Following prior studies (Ullah et al., 2018; 2021), the approach proceeds from theory and literature review to hypothesis formulation, model development, and data collection. The causal design is then applied to empirically test the proposed hypotheses and validate the conceptual model.

Knowledge-based industries have gained increasing global attention due to the transition towards a knowledge-driven economy. In Indonesia, the rural tourism sector managed through Village-Owned Enterprises (BUMDes) has emerged as a critical area of interest for exploring the relevance and importance of intellectual capital (IC). BUMDes in the tourism sector are regarded as the backbone of rural economic development, as they contribute to local growth, enhance community welfare, and create sustainable entrepreneurial opportunities. Therefore, the present study focuses on BUMDes in the tourism sector of Lebak Regency, which are experiencing rapid development through innovation and the transition towards a knowledge-based economy.

The sampling framework of this study is Lebak Regency, Indonesia, which has demonstrated significant growth in the development of Village-Owned Enterprises (BUMDes) in the tourism sector as part of efforts to strengthen the local knowledge-based economy. Lebak Regency consists of 28 districts and 340 villages, many of which have active BUMDes managing natural and cultural tourism potential. The respondents in this study are permanent managerial-level employees working in tourism-sector BUMDes in Lebak Regency, namely those involved in management and decision-making related to the sustainable operation and development of BUMDes businesses. Respondent selection employed purposive sampling, with the criteria of being permanent managerial-level employees in tourism-sector BUMDes who have both superiors and subordinates, and at least three years of work experience, to ensure that the data collected are relevant, representative, and reflective of organizational realities.

The study was conducted using a survey method with a five-point Likert scale questionnaire (1 = strongly disagree to 5 = strongly agree). The questionnaire was distributed to permanent managerial-level employees in the tourism sector BUMDes in Lebak Regency.

Ethical leadership was measured using the scale by Yukl et al. (2013), which was refined through exploratory and confirmatory factor analysis into nine items reflecting integrity, morality, honesty, fairness, and ethics (Brown et al., 2005). Factor analysis conducted on a sample of 177 managers using SPSS 23 indicated KMO = 0.942 (adequate for factor analysis) and a significant Bartlett's test ( $\chi^2 = 3078.936$ ;  $p < 0.05$ ), confirming that the items were reliable and intercorrelated.

The factor analysis results indicated that the nine items loaded onto a single factor, accounting for 69.467% of the variance in the ethical leadership construct. The component matrix and communalities for all items exceeded 0.5. Furthermore, the correlation between each item and the construct was above 60%, demonstrating that the items were highly correlated with the construct and effectively measured it. These statistics supported the suitability of using nine items to assess ethical leadership. Accordingly, following the approach of Hughes et al. (2004), a nine-item short scale was finalized, and data were subsequently collected from the respondents.

Intellectual capital (IC) was assessed through its two principal dimensions: human capital and social capital. Social capital was measured using the scale developed by Ullah et al. (2021), comprising nine items in total, with three items each representing network ties, trust, and shared goals. These items were adapted from the scales of Chiu et al. (2006), Chow and Chan (2008), and Mooradian et al. (2006). Human capital was measured using a scale adapted from Skaggs and Youndt (2004) and Subramaniam and Youndt (2005), as employed by Ullah et al. (2021).

Innovative performance was measured using the scale given by Janssen (2000). The scale covers the three stages of innovative performance; idea generation, idea promotion and idea realisation with three items each.

To avoid spurious results, age, education, managerial level and experience of employees have been controlled. These demographic factors could influence the innovative performance of employees (Gu et al., 2015; Iqbal et al., 2020; Javed et al., 2017, 2019; Van der Wal and Demircioglu, 2020), and thus, these were controlled in the study. The research model for the study has been presented in Figure 1.

## **RESULT AND DISCUSSION**

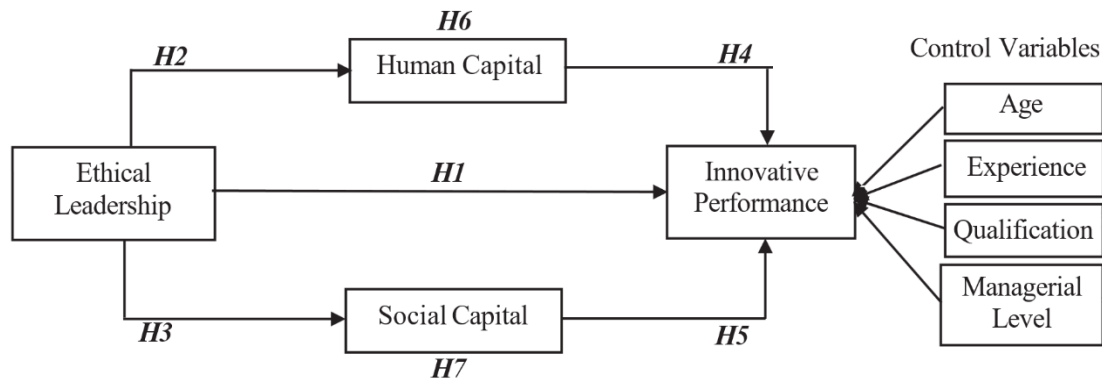
### **Descriptive statistics**

Table 1 below depicts the mean, standard deviations, skewness and kurtosis values, along with the collinearity statistics. The skewness and kurtosis values were below  $\pm 2$  and  $\pm 7$ , respectively, ensuring the normality of the data (Byrne, 2001). Further, there was no problem with multicollinearity, as the variance inflation factor (VIF) and tolerance values were also  $< 3$  and  $> 0.10$  respectively (Hair, 2010). Table 2 represents the correlation matrix, indicating a significant positive correlation between all the variables at a 1% level of significance except for controls.

Table 3 below provides details about the demographic profile of the respondents. Of the total 386 managers, the majority belonged to the 18–30 age group (238), and only four were in the category of 50 years and above. Concerning managerial level, 265 belonged to the middle level, 84 were from the lower level management and 37 were from the top-level management.

### **Confirmatory factor analysis**

The variables were measured through a standardised questionnaire; therefore, CFA was undertaken on the structural model before hypothesis testing. The results of the structural model are presented in Figure 2 below.



Source(s): Authors' own creation

**Figure 1. Research model**

**Table 1. Descriptive and collinearity statistics**

	Mean	Std. Dev.	Skewness	Kurtosis	Tolerance	VIF
Innovative performance	1.8569	0.63476	0.612	0.708		
Ethical leadership	1.2165	0.51432	1.124	1.334	0.772	1.295
Human capital	1.0617	0.48455	0.205	0.349	0.754	1.326
Social capital	1.3706	0.40299	0.562	0.935	0.661	1.513

Source(s): Authors' own creation

**Table 2. Correlation matrix**

	1	2	3	4	5	6	7	8	9
1 Gender	1								
2 Age	-0.075	1							
3 Qualification	0.148**	0.002	1						
4 Managerial level	0.026	-0.219**	0.018	1					
5 Experience	-0.157**	0.765**	-0.085	-0.258**	1				
6 Ethical leadership	0.064	-0.046	0.038	0.017	-0.009	1			
7 Social capital	0.141**	-0.037	0.165**	0.035	-0.036	0.464**	1		
8 Human capital	0.134**	-0.012	0.035	0.034	-0.001	0.324**	0.483**	1	
9 Innovative performance	0.090	0.019	0.112*	0.030	0.023	0.438**	0.627**	0.586**	1

Note(s): \*\* significance at 0.01 level \*significance at 0.05 level

Source(s): Authors' own creation

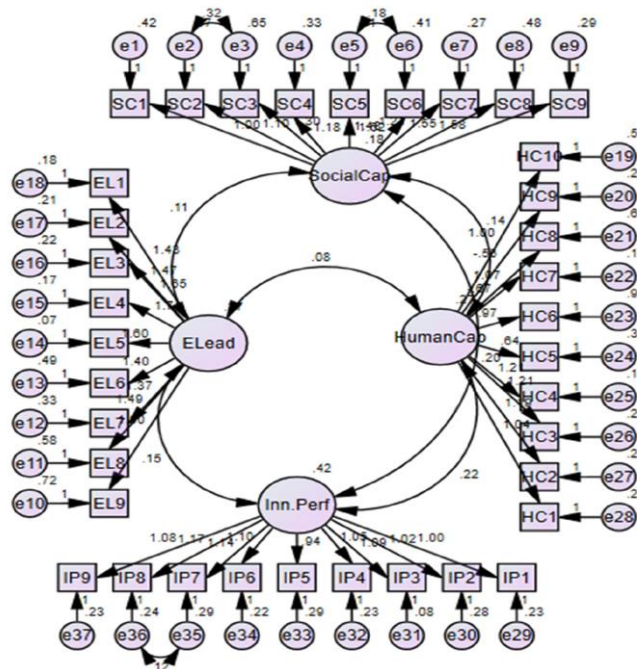
**Table 3. Demographic profile of respondents**

	Frequency	Percentage
Age	18–30	238
	30–50	144
	50 and above	4
Education	Graduate	130
	Postgraduate	256
Managerial level	Top level	37
	Middle level	265
	Lower level	84
Experience	Less than 1	22
	1–5 years	175
	6–10 years	102
	11–15 years	62
	16–20 years	13
	More than 20 years	12

Source(s): Authors' own creation

The value of minimum discrepancy of confirmatory factor analysis/degrees of freedom (CMIN/DF) was 2.657, indicating that the model and the sample data were an excellent fit for the analysis (Kline, 2023). Values of goodness-of-fit measures were above 0.80 with comparative fit index (CFI) 5 0.90, incremental fit index (IFI) 5 0.900, Tucker–Lewis index (TLI) 5 0.893, goodness-of-fit index (GFI) 5 0.802, normed fit index (NFI) 5 0.849 and relative fit index (RFI) 5 0.838 (Baumgartner and Homburg, 1996; Doll et al., 1994). The badness-of-fit measures reported an root mean square residual (RMR) value of 0.045 and an root mean square error of approximation (RMSEA) value of 0.066, which were below the threshold limit of 0.05 and 0.07, respectively, indicating a very good fit (Diamantopoulos and Sigauw, 2006; Steiger, 2007). Parsimony-adjusted measures were also closer to 1, representing a good model fit (P ratio 5 0.931, parsimony comparative fit index (PCFI) 5 0.838).

Further, the reliability and validity of the constructs were also within acceptable limits. The reliability measured through Cronbach’s alpha for all the constructs was above 0.70, and for the ethical leadership construct, it was 0.94, ensuring consistency of the nine-item scale used for its measurement (Malhotra, 2019). The convergent and discriminant validities were within the permissible bounds. For the ethical leadership construct, the composite reliability was 0.944 (above 0.7) and average variance extracted (AVE) was 0.657 (above 0.5), justifying the convergent validity of the construct (Malhotra, 2019). The value of maximum shared variance (0.245) was below AVE and higher than the correlation values of the construct with other latent variables (Malhotra, 2019).



Note(s): ELead = Ethical leadership; SocialCap = Social capital; HumanCap = Human capital;  
 Inn.Perf = Innovative performance  
 Source(s): Authors’ own creation

**Figure 2. Measurement model**

### Common method bias

Common method bias is a phenomenon resulting in common variation amongst responses due to the measurement method employed (Kock, 2015). The data has been collected from the same respondents at one point in time. Thus, to avoid the problem of common method bias, certain steps as suggested in the past have been taken (Anwar and Li, 2021; Henri et al., 2017). Respondents’ confidentiality was assured, making them less likely to alter the answers as per the expectations of others. Further, Harmon’s single-factor test was employed to check the bias. The results revealed a value of 37.81, implying that the factors have resulted in a total of 37.81% of variance; thereby, there is no issue of common method bias in the responses as the value is much less than 50%. Lastly, a full collinearity test using the Warp PLS 7.0 has been undertaken, and the

VIF values have been reported in Table 4 below. The VIFs of all the variables were below the threshold of 3.3, indicating that there is no pathological collinearity and the model is free from common method bias (Kock, 2015).

**Table 4. Full collinearity VIFs**

Ethical leadership	Social capital	Social capital	Innovative performance
1.347	1.962	1.609	2.063

Source(s): Authors' own creation

**Table 5. Direct effects**

		Estimate	C.R.	P
Innovative performance ← Ethical leadership	H1	0.567	10.144	***
Human capital ← Ethical leadership	H2	0.320	6.957	***
Social capital ← Ethical leadership	H3	0.411	12.339	***
Innovative performance ← Human capital	H4	0.384	9.376	***
Innovative performance ← Social capital	H5	0.838	14.793	***
Innovative performance ← Age		0.031	0.835	0.404
Innovative performance ← Managerial level		0.023	0.653	0.514
Innovative performance ← Qualification		0.038	0.952	0.341
Innovative performance ← Experience		0.028	1.619	0.105

Note(s): \*\*\* less than 0.001

Source(s): Authors' own creation

**Table 6. Indirect effects**

		Estimate	P
Innovative performance ← Human capital ← Ethical leadership	H6	0.247	0.001
Innovative performance ← Social capital ← Ethical leadership	H7	0.487	0.001

Source(s): Authors' own creation

### Structural model

After undergoing CFA, SEM using IBM SPSS Amos 23 was done. Similar studies in the past have also employed SEM as the analysis tool to draw direct and indirect effects amongst the study variables (Alrowwad et al., 2020; Ullah et al., 2017, 2020). Tables 5 and 6 below represent the direct and indirect results, respectively, for the proposed hypothesis.

### Direct effects

The results of the direct effects revealed a significant positive impact of ethical leadership on innovative performance ( $\beta = 0.567$ , C.R. = 10.144, p-value < 0.05), thereby favouring hypothesis 1. Further analysis of the impact of ethical leadership on IC revealed that ethical leadership has a significant positive impact on both human capital and social capital, with beta values of 0.320 (C.R. = 6.957) and 0.411 (C.R. = 12.339), respectively, and p-values less than 0.001, hence supporting hypotheses 2 and 3. Likewise, both human and social capital were observed to have a significant positive impact on innovative performance; human capital resulted in a  $\beta = 0.384$  (C.R. = 9.376, p-value < 0.001) and social capital resulted in a  $\beta = 0.838$  (C.R. = 14.793, p-value < 0.001), hence supporting hypotheses 4 and 5. The results have further revealed that age, managerial level, qualification and education (controls) do not have any significant impact on innovative performance.

### Indirect effects

Using the Baron and Kenny (1986) approach, mediation analysis was undertaken. Acceptance of hypotheses 1–5 fulfilled the preconditions for undergoing the mediation analysis. The predictor was observed to have a relationship with the mediator and predicted variable. A relationship was also observed between the mediator and the predicted variable.

## **Discussion**

Ethical leadership has been shown to have a significant positive impact on employees' innovative performance in previous studies (Iqbal et al., 2020; Ullah et al., 2021; Yidong & Xinxin, 2013). However, the influence of the resources and capabilities possessed by village-owned enterprises (BUMDes) has not been extensively explored. Therefore, this study attempts to integrate the Intellectual Capital (IC) framework with ethical leadership and innovative performance by examining these relationships within tourism-based BUMDes in Lebak Regency. Supporting arguments from social learning and social exchange theories, ethical leadership was found to have a significant positive effect on employees' innovative performance, thereby supporting Hypothesis 1. These findings are consistent with previous literature (Albdareen et al., 2024; Iqbal et al., 2020; Liu et al., 2023; Van der Wal & Demircioglu, 2020; Yidong & Xinxin, 2013), indicating that leaders' behaviors and attitudes influence employees' innovative performance (Hambrick & Mason, 1984).

Ethical behaviors exhibited by leaders encourage BUMDes employees to demonstrate skills and propose novel ideas. Ethical leaders have been observed as a primary driving force fostering innovation within organizations (Demircioglu & Audretsch, 2020; Ullah et al., 2020; Walumbwa et al., 2011; Zhang et al., 2015). In line with previous research (Morgeson et al., 2010; Su, 2014; Ullah et al., 2017, 2020), ethical leadership was found to significantly influence the components of IC—human and social capital—thereby supporting Hypotheses 2 and 3. The study indicates that when BUMDes employees interact with their leaders, they internalize ethical values into their behaviors, creating a trustworthy environment for leveraging intellectual resources effectively and fostering innovation (Eisenbeiss et al., 2015; Shafique et al., 2020). Accordingly, strengthening ethics and establishing an ethical organizational environment in BUMDes positively affect the development of IC resources within the organization (Morgeson et al., 2010; Su, 2014).

Furthermore, this study tests the Resource-Based View (RBV) and Resource-Organisation Theory (ROT), which emphasize the importance of intellectual resources in dynamic environments to enhance innovative performance. Consistent with resource-based theory, a significant positive impact of IC, measured through human and social capital, was observed on the innovative performance of BUMDes employees, thereby supporting Hypotheses 4 and 5. Thus, the effective utilization of intangible resources, such as networks, knowledge, skills, and relationships, fosters employees' innovative performance in BUMDes (Allameh, 2018; Wu et al., 2008). IC serves as a strategic resource, equipping BUMDes with innovative solutions and enhancing organizational performance (Altındag̃ et al., 2019; Subramaniam & Youndt, 2005; Zerenler et al., 2008).

In line with prior studies (Ali et al., 2023; Alrowwad et al., 2020; Altındag̃ et al., 2019; Yitmen, 2011), the findings suggest that innovation in BUMDes is largely a human- and knowledge-related issue, emphasizing the critical role of IC in the form of human and social capital (Kianto et al., 2014). Moreover, by integrating these relationships into a single framework, this study examines the mediating effects of the two forms of IC on the relationship between ethical leadership and innovative performance, which has not been extensively explored previously. The results reveal that both human and social capital partially mediate the relationship between ethical leadership and innovative performance, as the significant beta values decreased when the mediators were introduced (Baron & Kenny, 1986), thereby supporting Hypotheses 6 and 7.

## **Implications**

The research certainly has various theoretical, social, practical and managerial implications for the researchers, academicians and managers. Theoretically, the research study adds value to the ethical leadership, IC and innovative performance literature. The research supports the RBV and ROT, marking the uniqueness of intellectual resources and further provides evidence in favour of social learning and social exchange theory. Academicians and researchers can further explore the dynamics and mechanisms amongst these variables and the integrated framework in other knowledge-intensive industries and different cultural settings. The comprehensive model explored in the research has important implications for theoretical development and thus provides a coherent theoretical foundation for future research. Further, building an ethical environment, being socially

responsible, retaining talented employees and considering their well-being would generate economic and social gains, benefiting the organisation and society in the long term.

From a practical perspective, organisations can utilise the findings and reap benefits. The research sheds light on incorporating a learning organisation culture through knowledge management strategies and ethical leadership programmes, stimulating effective utilisation of IC and improving the efficiency of business processes. The organisations can develop a culture of ethical leadership by building an environment of trust, openness and inclusivity amongst the employees. These initiatives and programmes would enhance human and social capital. Further, to facilitate the exchange of ideas and knowledge sharing, cross-functional collaboration could be undertaken to provide employees with a platform to work together and share their insights and ideas. These knowledge management strategies and platforms would capture and leverage the IC resources of the organisations, creating a positive impact on employees' innovative performance. From a managerial perspective, business leaders can leverage the insights to enhance business management practices, fostering a culture of continuous learning and thereby improving the performance outcomes in dynamic business environments. Furthermore, they should align ethical leadership and IC principles with the company goals, incorporating them as part of strategic planning and decision-making. The research holds useful implications for performance management literature as well as emphasising the role of IC in organisational learning and innovation, thereby enhancing the organisations' overall performance, growth and competitiveness. Thus, companies can effectively utilise their intellectual resources to attain a sustainable competitive advantage. Managers need to recognise ethical leadership's positive impact on innovative performance and thereby should work to support and develop ethical leadership and IC management practices to strengthen innovative performance

## **CONCLUSION**

The complexity of the environment and evolving dynamics have made innovation and ethical leadership essential for fostering innovation within organizations. This contemporary study examined how ethical leadership and the efficient utilization of Intellectual Capital (IC) influence employees' innovative performance. The results revealed that, although ethical leadership directly affects employees' innovative performance, IC (human and social capital) partially mediates this relationship. Supporting social learning and social exchange theories, the present study emphasizes the importance of ethical leadership and effective resource utilization in promoting innovative employee performance. Accordingly, the study provides valuable insights into the dynamics of knowledge management, highlighting the role of IC and ethical leadership in driving business performance and enhancing efficiency in business process management. This research makes a significant contribution to the literature on business process and performance management, offering practical recommendations for organizations seeking to optimize efficiency, foster innovation, and achieve sustainable growth in the knowledge-based era.

Despite its contributions, the findings of this study should be interpreted cautiously due to certain limitations. First, the study focused only on managerial-level employees in tourism-based BUMDes within specific areas of Lebak Regency. Future research should explore these relationships across different BUMDes, business sectors, and organizational cultures to enhance the generalizability of the findings. Second, the study employed a cross-sectional design conducted at a single point in time. Longitudinal research could be undertaken in the future to provide stronger support for the causal relationships observed. Third, the constructs in this study were measured using survey questionnaires; additional objective measures and multiple sources of data could be employed in future studies to improve validity and generalizability.

Finally, this study examined IC as a mediator, although other mediators and moderators may also influence the relationship between ethical leadership and employees' innovative performance in BUMDes. Future studies could explore how employees' experience, personality traits, organizational culture, BUMDes characteristics, and creativity affect the impact of ethical leadership on innovative performance. Moreover, future research could employ comparative and intervention studies to investigate the effects of leadership programs and knowledge management

strategies, providing a broader understanding of these relationships. Further exploration of these aspects could reveal detailed insights into the influence of ethical leadership on employees' innovative performance in BUMDes.

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