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The Effect of Emotional Intelligence, Digital Literacy on Innovative Behavior Through Work Ethic As A Mediation Variable in Generation Z Employees

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Abstract

The purpose of this study is to analyze the influence of emotional intelligence, digital literacy, and work ethic on innovative behavior in Generation Z employees and to analyze the mediating role of work ethic in the relationship between emotional intelligence and innovative behavior in Generation Z employees. The sample used in this study was 190 active employees in companies or agencies in the Greater Jakarta area aged 15-29 years. The results show that emotional intelligence and digital literacy have a positive influence on the work ethic of Generation Z employees. Furthermore, emotional intelligence, digital literacy, and work ethic have a positive influence on the innovative behavior of Generation Z employees. This study also reveals the mediating role of work ethic in the relationship between emotional intelligence and innovative behavior in Generation Z employees.

INTRODUCTION

In the era of globalization and digital transformation, innovation is a crucial factor for an organization's sustainability and competitive advantage. According to Ratasuk & Charoensukmongkol (2020), innovation enables companies to survive amidst dynamic business changes. Employees serve as key agents of innovation because they implement new ideas through the interaction of knowledge, creativity, and work motivation (Diamantidis & Chatzoglou, 2018). Therefore, innovative work behavior is a crucial aspect that must be developed in the modern workplace.

Innovative work behavior (IWB) is defined as an individual's behavior in generating, promoting, and implementing new ideas that benefit the organization (Janssen, 2000). De Jong & Den Hartog (2008) divide innovative behavior into three stages: idea generation, idea promotion, and idea realization. The idea generation stage involves the creation of new ideas through analysis and exploration. The idea promotion stage emphasizes the ability to communicate and gain support for ideas. The idea realization stage focuses on implementing ideas into actions that add value. These three stages form a continuous innovation cycle.

Generation Z is becoming an increasingly dominant group driving organizational innovation. According to the Indonesia Gen Z Report (2024), Generation Z comprises 27.94% of Indonesia's total population, approximately 74.93 million people. They were born and raised in the digital era, demonstrating a high level of adaptability to technology and a tendency to think quickly and creatively. However, the University of Indonesia's Labor Market Brief (2024) shows that the open unemployment rate for Gen Z reaches 9.37%, or approximately 4.84 million people. The Central Statistics Agency (BPS) noted that 70% of the national unemployment rate is among the Gen Z age group. This situation indicates that despite their great potential, many of this generation face challenges in adapting to a workplace that demands discipline, responsibility, and socio-emotional skills.

In organizational practice, Generation Z employees often demonstrate a gap between technical skills and expected work behaviors. Many of them possess creative ideas but are unable

to implement them consistently due to limitations in emotional management, responsibility, and team collaboration. CNBC Indonesia (2025) reported that 60% of companies that laid off Gen Z employees did so due to low motivation, work ethic, and adaptability. Surveys also show that more than 50% of Gen Z employees experience burnout and high emotional distress. This highlights the need to understand the factors influencing Generation Z's innovative behavior to maximize their creative potential.

This phenomenon can be explained through Social Cognitive Theory, which emphasizes the interaction between cognitive, environmental, and behavioral factors in shaping behavior (Bandura, 1986; Firmansyah & Saepuloh, 2022). In the context of Generation Z, cognitive abilities such as emotional intelligence and digital literacy, along with an organizational environment that supports work ethics, interact to shape innovative behavior. Innovative behavior is not only a result of individual abilities but is also influenced by norms, culture, and organizational support.

Emotional intelligence is a key factor influencing innovative behavior. According to Salovey & Mayer (1990), emotional intelligence is the ability to recognize, understand, and effectively manage one's own and others' emotions. Employees with high emotional intelligence are better able to cope with work pressure, build positive interpersonal relationships, and generate new ideas constructively. Jena & Goyal (2022) demonstrated that emotional intelligence is positively related to innovative behavior through increased adaptability and collaboration. In generation Z, emotional intelligence is important to channel creative energy so that ideas can be realized through teamwork.

In addition to emotional aspects, digital literacy also determines innovative behavior. Digital literacy encompasses the skills to access, evaluate, and create digital information effectively and ethically (Ng, 2012). In the era of digital transformation, digital literacy is the foundation for finding technology-based solutions, collaborating through digital platforms, and accelerating innovation. Fransisca et al. (2024) found that digital literacy positively influences the innovative behavior of employees in the banking sector because it supports critical and creative thinking skills.

Work ethic is another factor shaping innovative behavior. Work ethic encompasses moral values and responsibility towards work, including discipline, honesty, integrity, and dedication (Prihartini & Sudirno, 2023). In innovation, work ethic ensures that ideas are implemented within moral and professional boundaries. Wulandharie & Hidayat (2025) emphasize that work ethic is crucial for building a healthy and sustainable digital work culture. Without a strong work ethic, innovation can become unfocused or pose ethical risks.

Based on Social Cognitive Theory, emotional intelligence and digital literacy influence creative actions directly and through interactions with a work environment that emphasizes ethical values (Firmansyah & Saepuloh, 2022). Work ethic serves as a reinforcing factor mediating the relationship between individual competencies and innovative behavior, enabling Generation Z to channel creative ideas productively and ethically.

A pre-survey of 30 Generation Z employees showed that most respondents possessed strong emotional intelligence, digital literacy, and work ethic. However, some respondents lacked consistency in innovative behavior, such as low participation in innovative activities and a lack of encouragement to propose new ideas. These results suggest that strengthening the integration of work ethic values is necessary for the holistic development of innovative behavior.

Previous research has shown a significant relationship between emotional intelligence, digital literacy, work ethic, and innovative behavior. Jena & Goyal (2022) examined the effect of emotional intelligence on innovation through the mediation of person-group fit and adaptive performance, demonstrating a positive influence of emotional intelligence on innovative behavior. Ratasuk (2023) found that emotional intelligence influences innovation through job satisfaction and knowledge sharing, indicating that individuals with high emotional abilities are more capable of contributing to the innovative process. Fransisca et al. (2024) emphasized that digital literacy

positively contributes to innovative behavior, despite being limited by industry regulations. Wulandharie & Hidayat (2025) emphasized the importance of work ethics for creating an effective and ethical digital work culture.

Research gaps underlying this study include: the limited number of studies simultaneously examining the influence of emotional intelligence and digital literacy on innovative behavior, with work ethics acting as a mediator; most studies only examining the direct relationship without considering the mediation of work ethics; the lack of research on the innovative behavior of Generation Z in Indonesia; and the scarcity of studies on the role of work ethics in bridging the influence of emotional intelligence and digital literacy.

The novelty of this study lies in the comprehensive examination of the model of the influence of emotional intelligence and digital literacy on work ethics, as well as the direct influence of both variables on the innovative behavior of Generation Z. This study also enriches the literature with empirical evidence regarding the role of work ethics in driving innovative behavior and explains the mediating mechanisms of work ethics.

Based on theoretical studies, empirical findings, and research gaps, the researcher chose the thesis title "The Influence of Emotional Intelligence and Digital Literacy on Innovative Behavior with Work Ethic as a Mediating Variable in Generation Z Employees." This title is crucial for understanding the factors that enhance the innovative behavior of Generation Z, who are now a major force in modern organizations. This research is expected to provide practical contributions to HR management strategies and theoretical contributions to enrich the literature on the relationship between emotional competence, digital capabilities, and ethical values on innovative behavior in the digital era. Based on the above background, the objectives of this study were formulated to provide a clearer picture and analysis of the influence of the factors studied on the innovative behavior of Generation Z employees. The objectives of the study are: (1) To analyze the influence of emotional intelligence on work ethics in Generation Z employees. (2) To analyze the influence of digital literacy on work ethics in Generation Z employees. (3) To analyze the influence of emotional intelligence on innovative behavior in Generation Z employees. (4) To analyze the influence of digital literacy on innovative behavior in Generation Z employees. (5) To analyze the influence of work ethics on innovative behavior in Generation Z employees. (6) To analyze the mediating role of work ethics in the relationship between emotional intelligence and innovative behavior in Generation Z employees. (7) To analyze the mediating role of work ethics in the relationship between digital literacy and innovative behavior in Generation Z employees.

Hypothesis

H1: Emotional intelligence has a positive effect on the work ethics of Generation Z employees.
H2: Digital literacy has a positive effect on the work ethics of Generation Z employees.
H3: Emotional intelligence has a positive effect on the innovative behavior of Generation Z employees.
H4: Digital literacy has a positive effect on the innovative behavior of Generation Z employees. Z.
H5: Work ethic has a positive effect on the innovative behavior of Generation Z employees.
H6: Work ethic mediates the effect of emotional intelligence on the innovative behavior of Generation Z employees.
H7: Work ethic mediates the effect of digital literacy on the innovative behavior of Generation Z employees.

METHODS

This study used a quantitative method with a descriptive-verification approach to describe the variable conditions and examine the influence of emotional intelligence and digital literacy on the innovative behavior of Generation Z employees, with work ethic as a mediating variable. The quantitative approach refers to Sugiyono (2021:16), who states that quantitative research is based

on positivism, uses research instruments, is analyzed statistically, and aims to test hypotheses. Questionnaire data were analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS) because it can test measurement and structural models simultaneously through a bootstrapping procedure to determine the significance of the relationship.

The study was conducted on Generation Z employees aged 15–29 in the Greater Jakarta area from October 2025 to January 2026. The population comprised all Generation Z employees in the region, as defined by Amin et al. (2023), but the exact number was unknown. The sample size was determined using the formula of Hair et al. (2022:26), which is 5–10 times the number of indicators. With 19 indicators, an optimal sample size of 190 respondents was obtained. The sampling technique used purposive sampling according to Razali et al. (2023:52) with the criteria of active employees, aged 15–29, and willing to complete the questionnaire.

The research data consisted of quantitative data consisting of primary and secondary data according to Abdullah et al. (2023:64). Primary data were obtained through a questionnaire measuring dimensions of emotional intelligence, digital literacy, work ethic, and innovative behavior, while secondary data came from books and scientific journals. Data collection techniques included a questionnaire according to Ardiansyah et al. (2023) with a Likert scale according to Tanujaya et al. (2022), documentation according to Soesana et al. (2023:57) and Fiantika et al. (2022:25), semi-structured interviews according to Sahoo (2022) and Pahwa et al. (2023), and observation according to Kumar (2022) and Wahyuni et al. (2023).

Instrument testing was conducted through evaluation of the outer model in PLS-SEM referring to Abdillah & Hartono (2015:188) with convergent validity criteria through loading factor ≥ 0.5, discriminant validity through cross-loading, composite reliability ≥ 0.7, Average Variance Extracted > 0.5, and VIF < 5 to avoid multicollinearity. Data analysis included descriptive analysis according to Sugiyono (2019:206) and evaluation of the inner model through path coefficient, R-Square, and Q-Square. Hypothesis testing used bootstrapping with p-value criteria < 0.05 as explained by Hair et al. (2022:134), and included direct and indirect influence tests according to Chin (1998).

RESULTS AND DISCUSSION

Respondent Characteristics

This study involved 190 active employees aged 15–29 in companies and agencies in the Greater Jakarta area. The measurement tool used was a questionnaire consisting of two parts: respondent identity and statements related to the research variables. Based on respondent characteristics, there were more women than men, with 107 (56.3%) and 83 (43.7%). The most dominant respondents were in the 21–25 age range (110) (57.9%), followed by 26–29 (49) (25.8%), and 15–20 (31) (16.3%). Regarding length of service, the majority of respondents had worked for less than five years, with 128 (67.4%), while 62 (32.6%) had worked for five years or more. This data indicates that the majority of respondents were young women with less than five years of work experience.

Descriptive Statistical Analysis

Table 1. Descriptive Statistics

Variable	Indicator	Mean	Standard deviation
Emotional Intelligence	KE1	3.8684	.85977
	KE2	3.8632	1.04005
	KE3	3.8105	.93486
	KE4	3.8579	.88838
	KE5	3.7684	.84769
	KE6	3.7789	.86897
	KE7	3.8474	.88663
	KE8	4.1421	1.00043

Variable	Indicator	Mean	Standard deviation
Average		3.8671	0.91584
Digital Literacy	LD1	3.9263	.78669
	LD2	3.8421	.89461
	LD3	3.9105	.74705
	LD4	3.8474	.87461
	LD5	4.1211	.99261
	LD6	3.8579	.82026
	LD7	3.8211	.87866
	LD8	3.8947	.76944
	LD9	3.8474	.77177
	LD10	3.6421	.86576
	LD11	3.8263	.87671
	LD12	3.8368	.83553
	LD13	3.9000	.84547
	LD14	3.9632	.79263
	LD15	3.9368	.82693
	LD16	3.6842	.96788
Average		3.8661	0.84666
Work Ethics	EK1	3.9316	.86100
	EK2	3.8895	.86275
	EK3	4.1211	1.00847
	EK4	4.0579	1.00886
	EK5	4.1421	.98444
	EK6	3.9105	.83406
	EK7	3.9263	.86974
	EK8	3.9000	.84547
Average		3.9848	0.90934
Innovative Behavior	PI1	3.7789	.78584
	PI2	3.8947	.72701
	PI3	3.7105	.84540
	PI4	3.8895	.85039
	PI5	3.8105	.97909
	PI6	3.9842	.99457
Average		3.8447	0.86371

The results showed that the emotional intelligence variable, with 8 indicators, had a mean of 3.8671 and a standard deviation of 0.9158, indicating that respondents tended to agree with the statement and were in the good category. The digital literacy variable, with 16 indicators, had a mean of 3.8661 and a standard deviation of 0.8466, indicating that respondents' digital literacy levels were also in the good category. The work ethic variable, with 8 indicators, had a mean of 3.984 and a standard deviation of 0.9093, indicating that respondents' work ethics were considered good. Meanwhile, the innovative behavior variable, with 6 indicators, had a mean of 3.844 and a standard deviation of 0.8637, indicating that respondents' levels of innovative behavior were generally in the good category. Overall, respondents showed a positive tendency towards all variables studied.

Inferential Statistical Analysis

To facilitate understanding of the causal relationships under study, the theoretical model formulated in the hypothesis will be presented in the form of a flowchart.

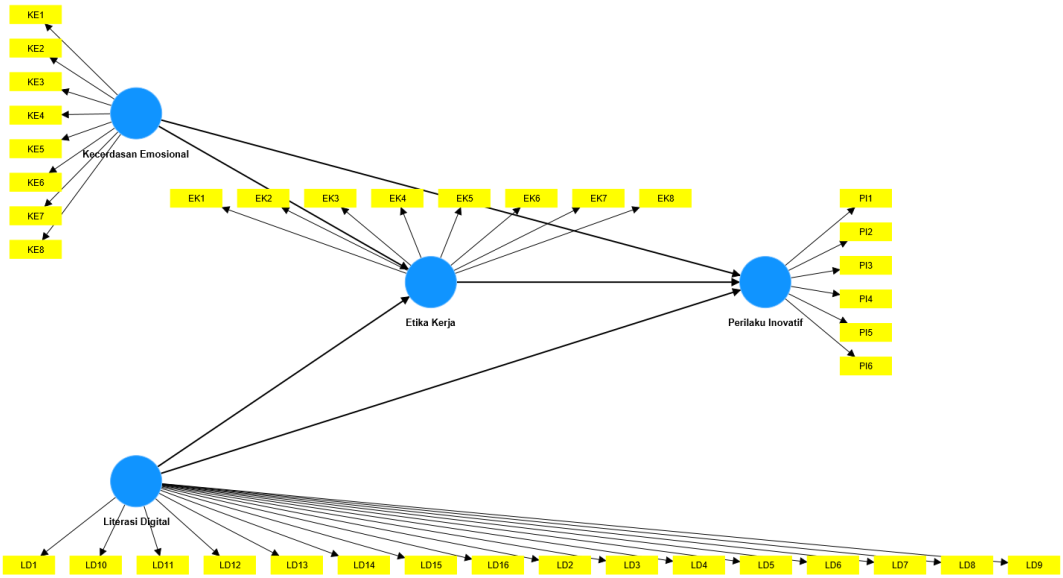

Figure 1. Research Flowchart

The blue circles in the figure represent the observation variables, and the yellow boxes represent the statement indicators used to express the observation variables. Each indicator also serves as a foundation for the other structures. In PLS applications, causal relationships between variables can be displayed through flowcharts.

Outer Model Evaluation

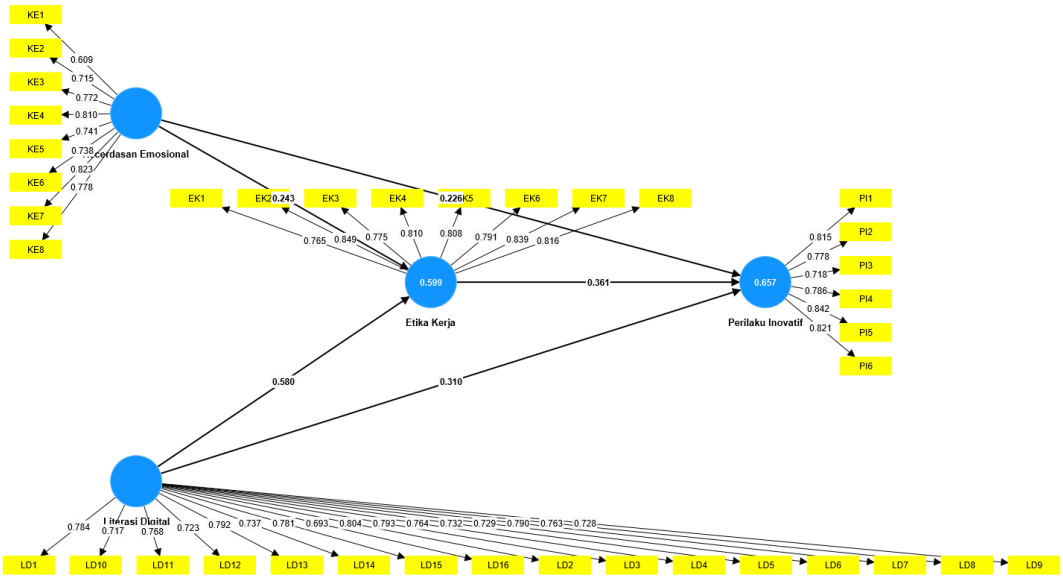

Figure 2. Outer Model

Convergent validity is assessed based on the loading factor. If the loading factor reaches a value of 0.5 or higher, the indicator is considered to have a high level of validity related to the relevant construct or latent variable. The results of this validity test were obtained from data collected through questionnaires distributed to one hundred and two research participants.

Table 3. Loading Factor Validity Test

	Work Ethics	Emotional Intelligence	Digital Literacy	Innovative Behavior
EK1	0.765			
EK2	0.849			

EK3	0.775			
EK4	0.810			
EK5	0.808			
EK6	0.791			
EK7	0.839			
EK8	0.816			
KE1		0.609		
KE2		0.715		
KE3		0.772		
KE4		0.810		
KE5		0.741		
KE6		0.738		
KE7		0.823		
KE8		0.778		
LD1			0.784	
LD2			0.804	
LD3			0.793	
LD4			0.764	
LD5			0.732	
LD6			0.729	
LD7			0.790	
LD8			0.763	
LD9			0.728	
LD10			0.717	
LD11			0.768	
LD12			0.723	
LD13			0.792	
LD14			0.737	
LD15			0.781	
LD16			0.693	
PI1				0.815
PI2				0.778
PI3				0.718
PI4				0.786
PI5				0.842
PI6				0.821

The results of the table above can be concluded that all statement indicators can be considered accurate because the loading factor values obtained are ≥ 0.50. Therefore, the model evaluation process can continue. The next step is to conduct the AVE test, where the AVE value is determined to be greater than 0.50. The following are the steps for calculating AVE:

Table 4. Validity Test of Average Variance Extracted (AVE)

Variables	Average variance extracted
Work Ethic	0.651

Emotional Intelligence	0.564
Digital Literacy	0.573
Innovative Behavior	0.631

The AVE values for each research variable are shown in the table above. Because they meet the minimum standard of AVE > 0.5, it can be concluded that the AVE test has met the criteria.

Discriminant validity is the assessment of how much a construct differs from another construct. Discriminant validity can be measured using the Fornell-Larcker value. The criterion that must be met is that the indicator value for each variable is greater than the correlation between the row or column with the other variables.

Table 5. Fornell-Larcker Validity Test

Variable	Work Ethic	Emotional Intelligence	Digital Literacy	Innovative Behavior
Work Ethic	**0.807**			
Emotional Intelligence	0.662	**0.751**		
Digital Literacy	0.755	0.723	**0.757**	
Innovative Behavior	0.745	0.690	0.747	**0.794**

The results in the table indicate that the Fornell-Lacker value for each variable indicator is greater than the row or column correlation with other variables. Therefore, it can be concluded that the overall construct of each variable has good discriminant validity, or can be declared valid using Fornell-Lacker validity.

Furthermore, discriminant validity can also be seen from the cross-loading value. If the cross-loading value for each variable statement item for that variable is greater than the correlation value for the other variables, the criterion is considered to have been met.

Table 6. Cross-Loading Validity Test

	Work Ethic	Emotional Intelligence	Digital Literacy	Innovative Behavior
EK1	**0.765**	0.461	0.558	0.582
EK2	**0.849**	0.567	0.692	0.662
EK3	**0.775**	0.568	0.527	0.570
EK4	**0.810**	0.556	0.582	0.575
EK5	**0.808**	0.509	0.580	0.526
EK6	**0.791**	0.542	0.643	0.573
EK7	**0.839**	0.585	0.655	0.659
EK8	**0.816**	0.482	0.622	0.649
KE1	0.354	**0.609**	0.435	0.463
KE2	0.436	**0.715**	0.500	0.512
KE3	0.489	**0.772**	0.568	0.485
KE4	0.659	**0.810**	0.697	0.618
KE5	0.470	**0.741**	0.501	0.510
KE6	0.418	**0.738**	0.503	0.494
KE7	0.571	**0.823**	0.577	0.540
KE8	0.510	**0.778**	0.513	0.500
LD1	0.613	0.586	**0.784**	0.558
LD2	0.637	0.582	**0.804**	0.594

LD3	0.586	0.543	**0.793**	0.549
LD4	0.574	0.586	**0.764**	0.583
LD5	0.529	0.500	**0.732**	0.472
LD6	0.464	0.508	**0.729**	0.554
LD7	0.626	0.596	**0.790**	0.588
LD8	0.613	0.536	**0.763**	0.595
LD9	0.603	0.556	**0.728**	0.625
LD10	0.498	0.501	**0.717**	0.569
LD11	0.562	0.566	**0.768**	0.653
LD12	0.480	0.507	**0.723**	0.526
LD13	0.621	0.531	**0.792**	0.526
LD14	0.562	0.578	**0.737**	0.553
LD15	0.616	0.598	**0.781**	0.583
LD16	0.520	0.454	**0.693**	0.480
PI1	0.615	0.565	0.619	**0.815**
PI2	0.596	0.542	0.626	**0.778**
PI3	0.531	0.444	0.551	**0.718**
PI4	0.577	0.620	0.618	**0.786**
PI5	0.610	0.517	0.549	**0.842**
PI6	0.618	0.584	0.588	**0.821**

Based on the table above, it can be determined that the cross-loading validity test has been met. This can be seen from the cross-loading value for each variable statement item for that variable itself being greater than the correlation value for the other variables. Therefore, a reliability test for the research variables can be conducted.

Furthermore, discriminant validity can also be seen from the Heterotrait Monotrait Ratio (HTMT) value. The criterion that must be met is that the HTMT value for each variable indicator is <0.9.

Table 7. Heterotrait Monotrait Ratio (HTMT) Validity Test

	Work Ethic	Emotional Intelligence	Digital Literacy	Innovative Behavior
Work Ethic				
Emotional Intelligence	0.720			
Digital Literacy	0.801	0.779		
Innovative Behavior	0.823	0.774	0.813	

The results in the table above indicate that the HTMT value for each variable indicator is less than 0.9. This indicates that the overall construct of each variable has good discriminant validity and can be declared valid using HTMT validity.

Reliability testing is an indicator that represents the extent to which a research instrument is reliable or represents accurate results. To test reliability, composite reliability and Cronbach's alpha are used. Composite reliability and Cronbach's alpha values >0.7 are considered indicators of instrument reliability.

Table 8. Reliability Test

Variable	*Cronbach's alpha*	*Composite reliability*

Work Ethic	0.923	0.937
Emotional Intelligence	0.888	0.911
Digital Literacy	0.950	0.955
Innovative Behavior	0.882	0.911

The results previously presented indicate that the composite reliability and alpha coefficient (Cronbach's alpha) both had values >0.7. Therefore, this indicates that the research variable demonstrates a high level of accuracy in determining its status as a research variable, as it has been proven to have good or very reliable reliability.

Collinearity testing is performed using the VIF statistic, which should be less than 5. If the value exceeds 5, the construct should be considered for removal or exclusion from the structural model, or it can also be combined with other constructs. Below are the VIF values obtained using the SmartPLS application.

Table 9. VIF Values

Variables	VIF
Work Ethic -> Innovative Behavior	2.493
Emotional Intelligence -> Work Ethic	2.096
Emotional Intelligence -> Innovative Behavior	2.243
Digital Literacy -> Work Ethic	2.096
Digital Literacy -> Innovative Behavior	2.934

The results above indicate that the VIF value obtained for each variable is <5. This indicates that all research variables do not need to be considered for deletion or removal from the structural model because they meet the specified minimum value.

The Standardized Root Mean Square Residual (SRMR) is part of the model fit measurement tool. An SRMR value below 0.08 indicates a good model fit.

Table 10. Fit Summary Test

Indikator	**Value**
SRMR	0.056
NFI	0.794

Based on the table above, the obtained SRMR value is 0.056, which is less than 0.08. Therefore, the model meets the model fit criteria.

Inner Model Evaluation

Table 11. Coefficient of Determination (R-Square) Test

	R-square
Work Ethic	0.599
Innovative Behavior	0.657

Referring to the table above, the R2 value for work ethics is 0.599, meaning that emotional intelligence and digital literacy account for 59.9% of the work ethics variable, with the remainder explained by other elements not included in the model. Furthermore, the R2 value for innovative behavior is 0.657, meaning that emotional intelligence, digital literacy, and work ethics account for

65.7% of the innovative behavior variable, with the remainder explained by other elements not included in the model.

The Q-square test can assess how well a model represents its predictive capabilities. A Q-square value greater than zero indicates that the reconstructed values are effective and have relevant predictive capabilities.

Table 11. Q-square test

	SSO	SSE	Q^2
Work Ethic	1520.000	940.222	0.381
Emotional Intelligence	1520.000	1520.000	0.000
Digital Literacy	3040.000	3040.000	0.000
Innovative Behavior	1140.000	682.662	0.401

Based on the table, the Q^2 values of 0.381 and 0.401 are greater than zero (0). This proves that the research model has predictive relevance.

The f2 value represents the extent to which the latent variable contributes to the model's influence at the structural level. This influence can be categorized as very small, small, medium, or large. The thresholds used to classify these influence categories are: $f2 < 0.02$ represents a very small influence, $0.02 < f2 < 0.15$ represents a small influence, $0.15 < f2 < 0.35$ represents a medium influence, and $f2 > 0.35$ represents a large influence.

Table 12. Effect Size Test Results

Variable	f-square
Work Ethic -> Innovative Behavior	0.153
Emotional Intelligence -> Work Ethic	0.070
Emotional Intelligence -> Innovative Behavior	0.067
Digital Literacy -> Work Ethic	0.400
Digital Literacy -> Innovative Behavior	0.095

Based on the table above, the relationship between work ethics and innovative behavior has an f2 value of 0.153, representing a medium effect size. Furthermore, the relationship between emotional intelligence and work ethics has an f2 value of 0.070, representing a small effect size. Meanwhile, the relationship between emotional intelligence and innovative behavior has an f2 value of 0.067, representing a small effect size. Furthermore, the relationship between digital literacy and work ethics has an f2 value of 0.400, representing a large effect size. The relationship between digital literacy and innovative behavior has an f2 value of 0.095, representing a small effect size.

Hypothesis Testing

Table 13. Hypothesis Test Results

Hypothesis	Original sample	T statistics	P values
Emotional Intelligence -> Work Ethic	0.243	3.019	0.003
Digital Literacy -> Work Ethic	0.580	7.294	0.000
Emotional Intelligence -> Innovative Behavior	0.226	3.077	0.002
Digital Literacy -> Innovative Behavior	0.310	4.071	0.000
Work Ethic -> Innovative Behavior	0.361	4.707	0.000
Emotional Intelligence -> Work Ethic -> Innovative Behavior	0.088	2.303	0.021

Digital Literacy -> Work Ethic -> Innovative Behavior	0.210	4.212	0.000

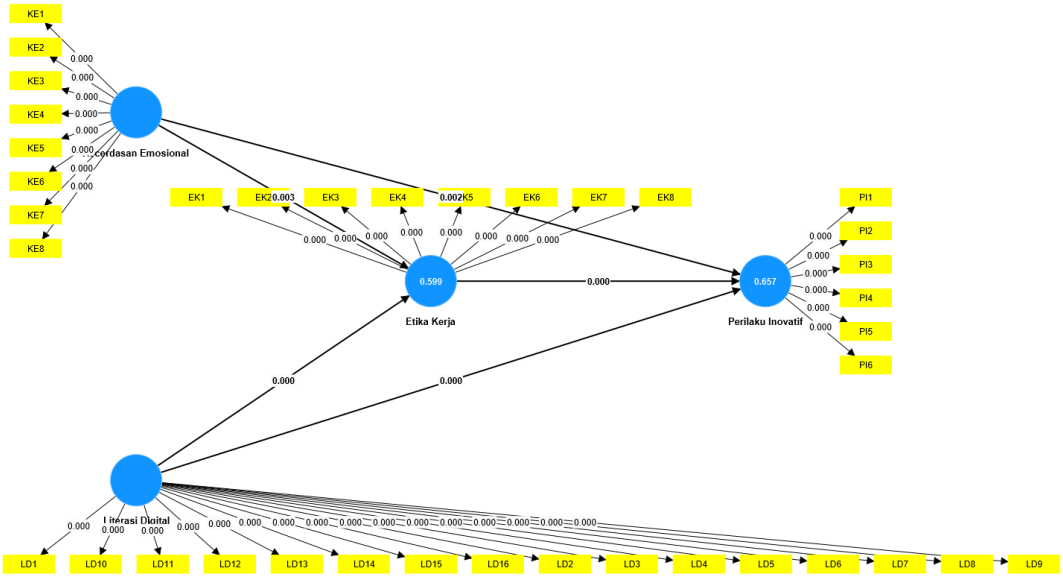

Figure 3. Bootstrapping Model Output

The results of the data processing and analysis in the table above indicate the following hypothesis testing results:

1. The T-statistic value is > 1.96, or equal to 3.019, with a p-value < 0.05, or equal to 0.003. This indicates that emotional intelligence influences work ethics, with a magnitude of 0.243.
2. The T-statistic value is > 1.96, or equal to 7.294, with a p-value < 0.05, or equal to 0.000. This indicates that digital literacy influences work ethics, with a magnitude of 0.580.
3. The T-statistic value is > 1.96, or equal to 3.077, with a p-value < 0.05, or equal to 0.002. This indicates that emotional intelligence influences innovative behavior, with a magnitude of 0.226.
4. The T-statistic value is > 1.96, or equal to 4.071, with a p-value < 0.05, or equal to 0.000. This indicates that digital literacy influences innovative behavior, with a magnitude of 0.310.
5. The T-statistic value is > 1.96, or equal to 4.707, with a p-value < 0.05, or equal to 0.000. This indicates that work ethic influences innovative behavior, with a magnitude of 0.361.
6. The T-statistic value is > 1.96, or equal to 2.303, with a p-value < 0.05, or equal to 0.021. This indicates that work ethic mediates the influence of emotional intelligence on innovative behavior, with a magnitude of 0.088. 7. The T statistic value is > 1.96 or equal to 4.212 with a p value < 0.05 or equal to 0.000. This shows that work ethics mediates the influence of digital literacy on innovative behavior with a magnitude of impact of 0.210.

Discussion of Research Results

The Effect of Emotional Intelligence on Work Ethic

The first hypothesis test showed that the hypothesis "Emotional intelligence has a positive effect on the work ethic of Generation Z employees" was accepted with a significant effect size of 0.243, indicating that good emotional intelligence significantly contributes to improving work ethics. According to Goleman (2001), emotional intelligence is an individual's ability to recognize, understand, and regulate their own and others' feelings in social and work contexts. Individuals with high emotional intelligence tend to be able to control themselves, show empathy, and work ethically and with discipline. This aligns with Bandura's Social Cognitive Theory (1986), which states that behavior is shaped through the interaction of personal, behavioral, and environmental

factors. Emotional intelligence, as a personal factor, enables emotional management, understanding of social consequences, and internalization of work ethic values through social learning and work experience. Several empirical studies support this relationship, such as those by Jena & Goyal (2022), who demonstrated that emotional intelligence improves person-group fit and adaptive performance related to professional and ethical behavior, and by Abdullah et al. (2021) found that self-management, as a dimension of emotional intelligence, significantly influences professional behavior.

The Influence of Digital Literacy on Work Ethic

The second hypothesis test showed that the hypothesis "Digital literacy has a positive effect on the work ethic of Generation Z employees" was accepted with a significant effect size of 0.261, indicating that good digital literacy significantly contributes to improving work ethics. Digital literacy is an individual's ability to understand, evaluate, and utilize digital technology effectively in professional and social contexts (Ng, 2012). Employees with high digital literacy tend to be more adaptable to technological changes, able to access information efficiently, and implement ethical and productive work practices. This aligns with Bandura's (1986) Social Learning Theory, which emphasizes the interaction between personal, behavioral, and environmental factors in shaping behavior; digital literacy, as a personal factor, helps individuals understand work norms and ethics in the digital environment through direct experience and practice. Previous research also supports this relationship, such as that of Tarhini et al. (2019) who stated that digital literacy contributes to professional performance and ethical compliance, and Chou & Chen (2020) who found that digital literacy improves employee discipline and work responsibility.

The Influence of Emotional Intelligence on Innovative Behavior

The third hypothesis test showed that the hypothesis "Emotional intelligence has a positive effect on the innovative behavior of Generation Z employees" was accepted with a significant effect size of 0.226, indicating that good emotional intelligence significantly contributes to increased innovative behavior. According to Goleman (2021), emotional intelligence is an individual's ability to recognize, understand, and regulate their own and others' feelings in social and work contexts. Individuals with high emotional intelligence are better able to adapt to change, think creatively, and generate new ideas in the workplace. This relationship aligns with Social Cognitive Theory, which emphasizes the role of cognition and affect in shaping adaptive behavior. The ability to manage emotions and work experiences enables employees to cope with stress and uncertainty while simultaneously generating innovation. Previous research supports these findings, such as Abdullah et al. (2021) who found that emotional intelligence has a significant effect on innovative work behavior with self-management as the dominant dimension, Ratasuk (2023) who showed the direct and indirect influence of emotional intelligence on innovation through job satisfaction and knowledge sharing, and Jena and Goyal (2022) who reported that emotional intelligence increases innovation through the mediation of person-group fit and adaptive performance.

The Influence of Digital Literacy on Innovative Behavior

The fourth hypothesis test showed that the hypothesis "Digital literacy has a positive effect on the innovative behavior of Generation Z employees" was accepted with a significant effect size of 0.310, indicating that good digital literacy significantly contributes to increased innovative behavior. According to Ng (2012) and Naufal (2021), digital literacy is an individual's ability to utilize digital technology efficiently, ethically, and responsibly in searching, evaluating, and processing information. In the era of digital transformation, this ability is crucial for creating innovation, increasing productivity, and facilitating cross-platform collaboration. This finding aligns with Social Cognitive Theory, which emphasizes the role of the environment in social

learning. The digital environment provides examples of innovative practices that can be observed and implemented, thus enhancing digital literacy's cognitive ability to transform information into innovative behavior in the workplace. Previous research supports this, including Fransisca et al. (2024) found that digital literacy positively influences innovative behavior in the Islamic banking sector, Alfyoni & Rostiana (2024) stated that digital literacy increases work engagement and innovative behavior among Generation Z employees, and Halimatusa'diah et al. (2024) emphasized that digital literacy contributes to learning motivation and organizational performance, which indirectly encourages innovative behavior.

The Influence of Work Ethic on Innovative Behavior

The fifth hypothesis test showed that the hypothesis "Work ethic positively influences the innovative behavior of Generation Z employees" was accepted with a significant effect size of 0.361, indicating that a good work ethic significantly contributes to increased innovative behavior. According to Prihartini & Sudirno (2023), work ethic is a set of moral values and principles that guide individuals in carrying out their duties and responsibilities in the workplace, reflecting discipline, responsibility, and integrity as the foundation of professional behavior. Individuals with a strong work ethic tend to maintain the quality of their work, are enthusiastic, and strive for continuous innovation. Work ethic also mediates the influence of emotional intelligence and digital literacy on innovative behavior, in accordance with the concept of triadic reciprocal relationships in Social Cognitive Theory (SCT), where emotional intelligence and digital literacy form a cognitive structure that is internalized in work ethics and becomes the basis for the emergence of innovative behavior that is responsible and aligned with organizational norms. Research by Wulandharie & Hidayat (2025) shows that work ethics are important in improving the quality of technology-based services through discipline and responsibility, while Bahagia et al. (2024) emphasizes that the combination of emotional intelligence and work ethics encourages innovative behavior through knowledge sharing and team collaboration, indicating that a strong work ethic creates a conducive environment for innovation based on moral values and professionalism.

The Effect of Emotional Intelligence on Innovative Behavior with Work Ethic as Mediator

The sixth hypothesis test showed that the hypothesis "Work ethic mediates the effect of emotional intelligence on the innovative behavior of Generation Z employees" was accepted with a significant effect size of 0.088, indicating that strong emotional intelligence, when supported by a strong work ethic, significantly contributes to increased innovative behavior. Work ethic acts as a mediator because it enables individuals with high emotional intelligence—who are able to recognize, manage, and channel their emotions effectively—to apply these abilities in ethical and productive innovative decision-making. A strong work ethic, encompassing discipline, responsibility, integrity, and a commitment to quality work, ensures the optimal effect of emotional intelligence on innovation. Previous research supports this finding, such as Ratasuk (2023) and Bahagia et al. (2024), which showed that knowledge sharing and disciplined professional behavior as part of a work ethic mediate the effect of emotional intelligence on innovative behavior, indicating that emotional intelligence fosters creativity and responsible adaptability when combined with work ethic.

The Influence of Digital Literacy on Innovative Behavior with Work Ethic as Mediator

The seventh hypothesis test showed that the hypothesis "Work ethic mediates the influence of digital literacy on innovative behavior among Generation Z employees" was accepted with a significant effect size of 0.210. This means that good digital literacy, when supported by a strong work ethic, significantly contributes to increased innovative behavior. Work ethic acts as a mediator because it ensures that employees' abilities to access information, utilize technology, and develop new ideas are implemented responsibly, according to professional standards, and in line with the organization's moral values. The influence of digital literacy on innovation is maximized when

combined with a disciplined work ethic and high integrity. Previous research supports this finding, such as Halimatusa'diah et al. (2024) who stated that digital literacy increases learning motivation, organizational performance, and professional integrity, thereby encouraging innovative behavior through work ethic. Fransisca et al. (2024) also demonstrated that digital literacy influences employee innovation through the application of ethical work principles, resulting in ideas that are not only creative but also sustainable.

CONCLUSION

This study aims to determine and analyze the influence of emotional intelligence, digital literacy, and work ethics on the innovative behavior of Generation Z employees, both directly and indirectly through the mediating role of work ethics. A total of 190 Generation Z employees working in various industrial sectors in the Greater Jakarta area were involved as respondents. The results of the study show that emotional intelligence has a positive effect on work ethics, which means that employees with good emotional intelligence tend to have a high work ethic. Likewise, digital literacy also has a positive effect on work ethics, indicating that good digital skills encourage an increase in the work ethics of Generation Z employees. In addition, emotional intelligence and digital literacy also directly have a positive effect on innovative behavior, so that good emotional and digital skills will increase employees' ability to innovate. Work ethics itself has been shown to have a positive effect on innovative behavior, so that good work ethics encourages increased innovation. Furthermore, work ethic mediates the influence of emotional intelligence and digital literacy on innovative behavior, which indicates that the combination of emotional intelligence or digital literacy with strong work ethic will make a real contribution to increasing the innovative behavior of generation Z employees. Overall, these findings confirm that emotional intelligence, digital literacy, and work ethic are interrelated and together play an important role in driving innovation among generation Z employees.

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