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Women's Career Resilience in AI-Driven Work: The Roles of Usefulness and Job Demand

ABSTRACT

This research investigates how Perceived Usefulness and Job Demand shape Women's Career Resilience, with Artificial Intelligence Usage examined as the mediating mechanism among women employed in Indonesia's digital business sector. Grounded in the Technology Acceptance Model (Davis, 1989) and the Job Demands-Resources Model (Bakker & Demerouti, 2007), the study evaluated five hypotheses through Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 4.0. A sample of 205 women who actively use AI in their daily work provided responses through an online questionnaire. Results confirm that Perceived Usefulness (β = 0.414, p < 0.001) and Job Demand (β = 0.250, p < 0.001) significantly influence AI Usage, which in turn significantly influences Career Resilience (β = 0.332, p < 0.001). AI Usage partially mediates both relationships (β = 0.138 and β = 0.083, respectively). These findings indicate that AI adoption, whether driven by positive technology perception or occupational pressure, serves as a behavioral mechanism that strengthens women's career resilience amid digital transformation.

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1. INTRODUCTION

Indonesia's digital economy has expanded rapidly in recent years. In 2024, its Gross Merchandise Value reached USD 90 billion, a 13% increase from the previous year and the highest figure in Southeast Asia (Google, Temasek, 2024). Within this landscape, artificial intelligence (AI) has evolved beyond an emerging technology and is now integrated into routine organizational operations. The 2025 Work Trend Index reports that 97% of Indonesian business leaders regard this year as a turning point for strategic reinvention, while 59% have already deployed AI agents, exceeding the Asia-Pacific average of 53% (Microsoft Indonesia, 2025). This growing enthusiasm for AI, however, coexists with a notable paradox: 88% of Indonesian workers report that they still lack sufficient time or energy to complete their work. Technology intended to reduce workload thus appears, in many cases, to intensify it (Green, 2004; Microsoft Indonesia, 2025; Tarafdar et al., 2007).

This paradox is particularly relevant to the position of women in Indonesia's digital economy. Women manage 64.5% of the country's 65.5 million micro, small, and medium enterprises, and approximately 37 million female entrepreneurs contribute 9.1% to national GDP (Ministry of Communication and Digital Affairs, 2025), positioning them as central rather than peripheral actors in this sector. Yet the same environment that creates opportunity for women also introduces additional pressures. Prior research indicates that women in technology-intensive sectors must draw on substantial adaptive capacity to sustain their careers (Collett et al., 2022; Jogulu & Franken, 2023; Tokbaeva & Achtenhagen, 2021). Career resilience, defined by London (1983) as an individual's capacity to withstand disruption under less-than-ideal conditions, therefore constitutes a necessary rather than optional attribute for these women.

Two distinct motivational pathways drive women's adoption of AI, each with different implications for their careers. The Technology Acceptance Model (Davis, 1989) points to Perceived Usefulness, the belief that AI genuinely improves performance as the most reliable predictor of actual usage behavior. This has been validated repeatedly, from large-scale psychometric studies (Ibrahim et al., 2025; Zhao et al., 2025) to Indonesian-specific contexts in banking, mobile services, startups, and higher education (Goli et al., 2023; Ikhsan et al., 2025; Mardiani & Utami, 2026; Purnomo et al., 2021; Wang & Hou, 2025; Winanda et al., 2026). The JD-R Model (Bakker & Demerouti, 2007) tells a different story, high job demands, cognitive overload, time pressure, relentless skill adaptation, can push people toward AI not out of conviction, but out of necessity. That reactive form of adoption carries real costs. Chuang et al. (2025) found it fuels exhaustion and work-family conflict; Hai et al. (2025) linked it to work alienation; and Soulami et al. (2024), Bankins et al. (2024), and Kim & Lee (2024) documented wider psychological strain when AI is adopted under pressure rather than by choice. The motivational source behind AI adoption, in other words, shapes what happens next (Liu et al., 2026).

This study investigates the effects of Perceived Usefulness and Job Demand on Women's Career Resilience by incorporating AI Usage as a mediating variable among women

employed in Indonesia's digital business sector. A growing body of work now connects AI engagement to career resilience and positive career outcomes (Chung et al., 2025; Kong et al., 2023, 2024; Qian et al., 2025; Xu et al., 2023). Yet, to the best of the authors' knowledge, few studies have tested AI Usage itself as the behavioral mechanism linking Perceived Usefulness and Job Demand to women's career resilience, particularly in the Indonesian digital business context. That is the gap this study fills, and it does so in three ways that distinguish it from prior work. First, while TAM-JD-R integration has been explored in general workforce contexts, no study has tested this combined framework with women as the specific population of focus in Indonesia's digital business sector, where gendered career pressures and AI adoption pressures intersect in distinct ways (Jogulu & Franken, 2023; Tokbaeva & Achtenhagen, 2021). Second, prior studies treat AI Usage as an endpoint, measuring adoption intention or actual use as the outcome of interest. This study repositions AI Usage as a behavioral mechanism, a mediator through which antecedent motivations translate into career resilience, extending both TAM and JD-R beyond their conventional boundaries. Third, Indonesia provides a uniquely important and underexplored context: a country with one of the highest AI adoption rates in Asia-Pacific (Microsoft Indonesia, 2025) yet with significant gendered disparities in how that adoption is experienced (Ministry of Communication and Digital Affairs, 2025), and virtually no empirical research connecting these dynamics to women's career outcomes.

2. METHOD

2.1 Research Design

A quantitative explanatory approach was adopted to evaluate the causal relationships among the research variables using hypothesis testing procedures. This approach was adopted because the study seeks to measure and analyze how Perceived Usefulness and Job Demand shape Women's Career Resilience both directly and through the mediating role of AI Usage in Indonesia's digital business sector. Statistical analyses were carried out using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach implemented through SmartPLS version 4.0. This analytical choice reflects PLS-SEM's well-documented strengths: its capacity to handle mediating constructs, its robustness under non-normal data conditions, and its appropriateness for the sample sizes typically encountered in behavioral research (Hair et al., 2019).

2.2 Population and Sample

The target population comprised women actively working in Indonesia's digital business sector who incorporate Artificial Intelligence into their daily professional routines. Since the precise size of this population cannot be determined, sample size was justified through multiple complementary criteria. In accordance with the PLS-SEM guideline proposed by Hair et al. (2019), the recommended minimum sample size corresponds to ten times the largest number of structural paths directed toward a single construct. Since the most complex construct in the proposed model receives five structural paths, a minimum sample of 50

respondents was considered statistically adequate. Applying a more conservative threshold grounded in the total count of measurement items (20 indicators across four constructs), 100 respondents was adopted as the practical minimum. Beyond that, Hair et al. (2019) note that samples of at least 200 yield more stable parameter estimates and greater statistical power for mediation testing a criterion this study meets, having gathered 205 valid responses that simultaneously satisfy all three benchmarks and secure adequate power for the PLS-SEM mediation framework.

Respondents were identified through purposive sampling, whereby participants were selected according to predetermined criteria that aligned with the objectives of the study (Campbell et al., 2020). Three criteria guided selection: (1) female individuals currently employed in Indonesia's digital business sector; (2) active users of Artificial Intelligence tools as part of their daily work; and (3) willingness to complete the questionnaire in its entirety.

2.3 Data Collection

Data collection employed a self-administered questionnaire distributed electronically through Google Form. Distribution was carried out digitally across professional networks and social media channels targeting women in Indonesia's digital business sector who actively draw on AI in their work. All constructs were assessed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), producing a total of 20 measurement items distributed across the four constructs.

2.4 Operational Definition of Variables

This study encompasses four variables, two independent variables (Perceived Usefulness and Job Demand), one mediating variable (AI Usage), and one dependent variable (Women's Career Resilience). Table 1 presents the operational definitions, measurement indicators, and theoretical references for each variable.

Table 1. *Operational Definition of Variables*

Variable	Operational Definition	Indicators	Reference
Perceived Usefulness (X1)	The degree to which a woman working in the digital business sector believes that using AI enhances her job performance, productivity, and task effectiveness (Davis, 1989)	PU1 – PU5	Davis (1989)
Job Demand (X2)	Physical, psychological, and cognitive demands of work in the digital business sector that require sustained effort	JD1 – JD5	Bakker & Demerouti (2007)

Variable	Operational Definition	Indicators	Reference
	and continuous technological adaptation (Bakker & Demerouti, 2007)		
AI Usage (M)	The extent to which women actively and routinely integrate AI tools into their daily work tasks and activities (Venkatesh et al., 2003)	AIU1 – AIU5	Venkatesh et al. (2003)
Women's Career Resilience (Y)	The ability of women to adapt, persist, remain optimistic, and maintain career development amid technological disruption and digital workplace transformation (London, 1983)	WCR1 – WCR5	London (1983)

Source: Compiled by the authors (2025)

2.5. Hypothesis Development

This study proposes five hypotheses grounded in the Technology Acceptance Model (TAM) and the Job Demands-Resources (JD-R) Model, each reflecting theoretically justified relationships among Perceived Usefulness, Job Demand, AI Usage, and Women's Career Resilience in Indonesia's digital business sector.

2.5.1 Perceived Usefulness Positively Influences AI Usage (H1) According to the Technology Acceptance Model (Davis, 1989), Perceived Usefulness represents a primary determinant of actual technology usage behavior and refers to the extent to which individuals believe that a particular technology improves their job performance. When women in the digital business sector believe that AI tools genuinely improve their efficiency and task effectiveness, they are more likely to adopt and actively integrate AI into their daily work routines. This relationship has been validated across diverse digital contexts, including AI-based chatbots (Goli et al., 2023), banking AI adoption in Indonesia (Ikhsan et al., 2025), and higher education AI platforms (Mardiani & Utami, 2026), consistently confirming Perceived Usefulness as a dominant antecedent of AI usage behavior (Ibrahim et al., 2025; Zhao et al., 2025). Based on the proposed theoretical framework, the following hypotheses are formulated:

H1: Perceived Usefulness has a positive and significant influence on AI Usage among women in Indonesia's digital business sector.

2.5.2. Job Demand Positively Influences AI Usage (H2) The JD-R Model (Bakker & Demerouti, 2007) posits that when job demands escalate, individuals actively seek resources, including technological ones, to manage their workload and sustain performance. In digitally intensive work environments, high cognitive demands, time pressure, and continuous requirements for technological adaptation motivate women to adopt AI tools as a coping mechanism. This reactive yet adaptive adoption pathway is supported by empirical evidence showing that rising job demands drive technology-related behavioral responses (Chen et al., 2024; Liu et al., 2026; Sen et al., 2022), even as scholars caution that excessive demand-driven AI engagement may carry unintended costs (Chuang et al., 2025; Hai et al., 2025). On this basis, the following hypothesis is put forward:

H2: Job Demand has a positive and significant influence on AI Usage among women in Indonesia's digital business sector.

2.5.3. AI Usage Positively Influences Women's Career Resilience (H3) Career Resilience, defined by London, (1983) as an individual's resistance to career disruption in less-than-optimal environments, is increasingly shaped by engagement with digital tools in technology-driven workplaces. When women actively and routinely integrate AI into their work tasks, they develop adaptive capacity, task mastery, and technological confidence that collectively strengthen their resilience in the face of workplace uncertainty. Empirical evidence links AI-related behavioral engagement to career sustainability and positive career outcomes (Kong et al., 2023, 2024), proactive skill development (Qian et al., 2025), and workplace well-being closely associated with career resilience (Chung et al., 2025; Xu et al., 2023). This leads to the formulation of the following hypothesis:

H3: AI Usage has a significant and positive influence on Women's Career Resilience among women in Indonesia's digital business sector.

2.5.4. AI Usage Mediates the Influence of Perceived Usefulness on Women's Career Resilience (H4) While Perceived Usefulness directly motivates AI adoption, the career resilience consequences of that adoption emerge through the behavioral act of actually using AI in daily work. Women who perceive AI as beneficial are not only more inclined to adopt it but also develop resilience-enhancing skills and confidence through sustained AI engagement. This sequential mechanism, from perception to behavior to career outcome, extends the TAM framework beyond adoption intention toward downstream career consequences, a trajectory supported by evidence that perceived usefulness and AI engagement jointly influence positive behavioral and career-related outcomes (Kong et al., 2023; Wang & Hou, 2025; Xu et al., 2023). In light of this argument, the following hypothesis is proposed:

H4: AI Usage mediates the influence of Perceived Usefulness on Women's Career Resilience among women in Indonesia's digital business sector.

2.5.5. AI Usage Mediates the Influence of Job Demand on Women's Career Resilience (H5)

High job demands, while potentially exhausting, can motivate women to mobilize AI as a coping resource. When this resource mobilization is realized through actual AI usage, the resulting behavioral engagement can transform occupational pressure into a resilience-building opportunity rather than a purely depleting experience. This mediation pathway is grounded in the JD-R Model's resource mobilization mechanism (Bakker & Demerouti, 2007) and supported by evidence that adaptive AI-related behaviors mediate the relationship between work demands and positive outcomes (Collett et al., 2022; Soulami et al., 2024). Given this theoretical grounding, the study advances the following hypothesis:

H5: AI Usage mediates the influence of Job Demand on Women's Career Resilience among women in Indonesia's digital business sector.

Figure 1 illustrates the conceptual framework of this study, depicting the hypothesized relationships among Perceived Usefulness, Job Demand, AI Usage, and Women's Career Resilience.

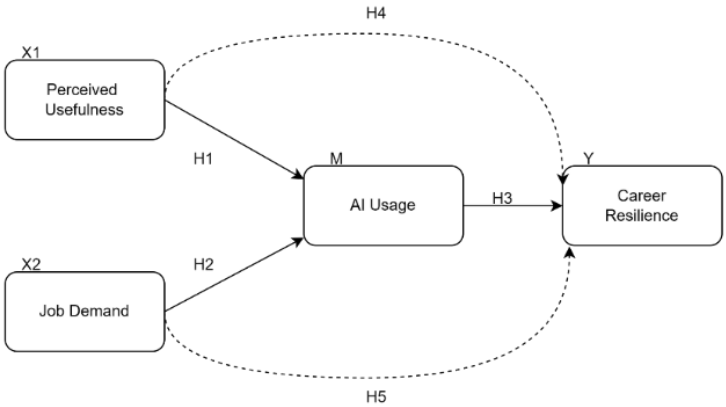


Figure 1 *Conceptual Framework*

2.6. Data Analysis Technique

The analytical procedure followed a sequential two-stage process using PLS-SEM in SmartPLS 4.0, as outlined by Hair et al. (2019).

2.6.1. Outer Model Evaluation

The measurement model evaluation assesses the validity and reliability of all constructs. Convergent validity is confirmed when indicator loadings are at least 0.70 and the Average Variance Extracted (AVE) exceeds 0.50. Discriminant validity is assessed using the Heterotrait-Monotrait Ratio (HTMT), where values below 0.85 indicate satisfactory discriminant validity. Internal consistency reliability is established when Composite Reliability (CR) and Cronbach's Alpha (α) both exceed the recommended threshold of 0.70 (Hair et al., 2019).

2.6.2. Inner Model Evaluation

Structural model assessment examines the relationships among latent variables using the Coefficient of Determination (R^2), Effect Size (f^2), and Predictive Relevance (Q^2). The proposed hypotheses were evaluated using a bootstrapping procedure with 5,000 resamples, where support for each hypothesis required a t-value exceeding 1.96 and a p-value below 0.05 in a two-tailed significance test (Hair et al., 2019).

2.6.3. Mediation Analysis

Probes the indirect role of AI Usage through the same bootstrapping-based indirect effect procedure, constructed around a 95% Confidence Interval (CI). Mediation is established when zero falls outside the CI bounds. Whether mediation is full or partial depends on whether the direct path from the independent to the dependent variable retains significance once the mediator enters the model (Hair et al., 2019).

3. RESULTS AND DISCUSSION

3.1. Respondent Profile

The demographic characteristics of the 205 respondents were examined first to confirm that the sample fitted the criteria of the study. The distribution of respondents by age, employment status, length of employment, and field of work is summarized in Table 2.

Table 2. *Respondent Profile*

Category	Group	Frequency	Percentage (%)
Age	18-22 years	54	26.2
	23-27 years	118	57.8
	28-35 years	33	16.0
Employment Status	Full-time	83	40.3
	Part-time	47	22.8
	Freelance	36	17.5
	Internship	27	13.1
	Digital Entrepreneur	12	5.8
	Others	1	0.5
Length of Employment	< 1 year	22	10.7
	1-3 years	121	59.2

	4-6 years	52	25.2
	> 6 years	10	4.9
Field of Work	Content Creator/Social Media	40	19.4
	E-Commerce	36	17.5
	Digital Marketing	27	13.1
	Business/Data Analyst	23	11.2
	Freelance Digital	20	9.7
	Start-Up	18	8.7
	UI/UX Design	18	8.7
	Digital Entrepreneur	13	6.3
	Digital Customer Service	9	4.4
	Others	2	1.0

Source: *Author's Google Form (2026)*

Table 2 captures the demographic profile of the 205 respondents. Age distribution skews toward younger professionals, with the 23–27 year bracket forming the largest segment (57.8%), trailed by the 18–22 year group (26.2%) and the 28–35 year cohort (16.0%). This predominantly young adult composition mirrors the generation that has come of age alongside Indonesia's digital economy expansion (Suhendra et al., 2025).

On employment status, full-time workers constitute the largest share (40.3%), with part-time employees (22.8%), freelancers (17.5%), interns (13.1%), digital entrepreneurs (5.8%), and others (0.5%) accounting for the remainder. The spread across employment arrangements reflects the flexible, non-traditional character of Indonesia's digital business workforce, where freelancing and entrepreneurship have become increasingly normalized (Pranitasari et al., 2026).

In terms of length of employment, the largest group has worked in the digital business sector for 1–3 years (59.2%), followed by 4–6 years (25.2%), less than 1 year (10.7%), and more than 6 years (4.9%). This distribution indicates that the majority of respondents are in

the early-to-mid stages of their digital careers, making the examination of career resilience particularly relevant as these women navigate the challenges of establishing themselves in a rapidly evolving technological landscape (London, 1983).

Across fields of work, Content Creator and Social Media roles lead (19.4%), followed by E-Commerce (17.5%), Digital Marketing (13.1%), Business and Data Analysis (11.2%), Freelance Digital (9.7%), Start-Up (8.7%), UI/UX Design (8.7%), Digital Entrepreneur (6.3%), Digital Customer Service (4.4%), and others (1.0%). The breadth of sub-sectors represented confirms that the sample captures a genuinely diverse cross-section of women active across the core pillars of Indonesia's digital business industry (Pranitasari et al., 2026).=

3.2. Outer Model Evaluation

3.2.1 Convergent Validity

Factor loadings, AVE, Composite Reliability, and Cronbach's Alpha for all four constructs are reported in Table 3. Every indicator loading falls between 0.881 and 0.928, well above the 0.70 threshold. AVE values span 0.805 to 0.839, surpassing the 0.50 minimum, while CR ranges from 0.954 to 0.963 and Cronbach's Alpha from 0.939 to 0.952, both comfortably exceeding 0.70. Taken together, these figures establish strong convergent validity and internal consistency reliability across all constructs (Hair et al., 2019). This range is comparable to, and in several respects exceeds, the loadings and reliability figures reported in similar TAM-based PLS-SEM studies on AI adoption, such as Ikhsan et al. (2025), who reported outer loadings between 0.756 and 0.893 and AVE between 0.615 and 0.761 in an extended TAM model of AI adoption in Indonesian banking, and Zhao et al. (2025), who reported loadings between 0.708 and 0.923 and AVE between 0.560 and 0.809 in a PLS-SEM study of AI tool adoption among university students.

Table 3. *Convergent Validity and Reliability*

Construct	Indicator	Loading	AVE	CR	Cronbach's α
Perceived Usefulness	PU1	0.903	0.805	0.954	0.939
	PU2	0.881			
	PU3	0.906			
	PU4	0.890			
	PU5	0.906			
Job Demand	JD1	0.905	0.819	0.958	0.945
	JD2	0.909			
	JD3	0.908			

Construct	Indicator	Loading	AVE	CR	Cronbach's α
AI Usage	JD4	0.902	0.810	0.955	0.941
	JD5	0.900			
	AIU1	0.924			
	AIU2	0.903			
	AIU3	0.885			
	AIU4	0.893			
	AIU5	0.894			
Women's Career Resilience	WCR1	0.912	0.839	0.963	0.952
	WCR2	0.917			
	WCR3	0.928			
	WCR4	0.921			
	WCR5	0.900			

Source: SmartPLS 4.0 Output (2026)

3.2.2. Discriminant Validity

HTMT ratios for all construct pairs are presented in Table 4. Every value falls between 0.289 and 0.585, substantially below the 0.85 ceiling. The lowest ratio appears between Perceived Usefulness and Job Demand (0.289), confirming their empirical separability despite both functioning as antecedents in the model. The highest ratio, observed between AI Usage and Career Resilience (0.585), remains comfortably within the acceptable range. These results provide clear evidence that all constructs are empirically distinct (Hair et al., 2019).

Table 4. *Discriminant Validity – HTMT Ratio*

Construct Pair	HTMT Value	Threshold	Result
AI Usage → Career Resilience	0.585	< 0.85	Valid
Job Demand → AI Usage	0.384	< 0.85	Valid
Job Demand → Career Resilience	0.461	< 0.85	Valid
Perceived Usefulness → AI Usage	0.513	< 0.85	Valid
Perceived Usefulness → Career Resilience	0.537	< 0.85	Valid
Perceived Usefulness → Job Demand	0.289	< 0.85	Valid

Source: SmartPLS 4.0 Output (2026)

The structural model estimated through SmartPLS 4.0 is presented in Figure 2.

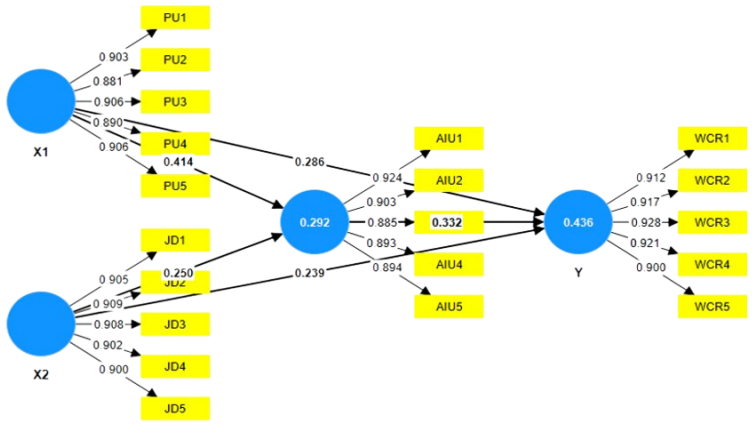


Figure 2 *PLS-SEM Path Diagram*

Source: SmartPLS 4.0 Output (2026)

3.3. Inner Model Evaluation

3.3.1. Coefficient of Determination (R^2)

The R^2 for AI Usage stands at 0.292, meaning Perceived Usefulness and Job Demand together account for 29.2% of the variance in AI Usage. Women's Career Resilience yields an R^2 of 0.436, indicating that the full model inclusive of the mediator explains 43.6% of its variance. Both figures fall between the 0.25 and 0.50 benchmarks and therefore reflect weak-to-moderate explanatory power, a level that Hair et al. (2019) regard as acceptable in behavioral and social science contexts.

3.3.2. Effect Size (f^2)

Beyond the five hypothesized paths, the structural model also estimates direct coefficients from Perceived Usefulness and Job Demand to Career Resilience as structural components necessary for cleanly isolating the indirect effects. The corresponding effect sizes (f^2) for these non-hypothesized paths are included here for completeness and to anchor the partial mediation interpretation developed in the following section.

Turning to effect sizes, Perceived Usefulness registers the strongest influence on AI Usage (f^2 = 0.224, medium), followed by AI Usage on Career Resilience (f^2 = 0.138, small-to-medium), Perceived Usefulness on Career Resilience (f^2 = 0.109, small-to-medium), Job Demand on Career Resilience (f^2 = 0.086, small), and Job Demand on AI Usage (f^2 = 0.082, small). Using Hair et al. (2019) benchmarks of 0.02, 0.15, and 0.35 for small, medium, and large effects respectively, these figures reinforce Perceived Usefulness as the dominant force driving AI Usage, while confirming that AI Usage itself carries meaningful predictive weight toward career resilience.

3.3.3. Predictive Relevance (Q^2)

Predictive relevance was assessed through the blindfolding procedure with an omission distance of 7, and the resulting Q^2 values for the two endogenous constructs are reported in Table 5. A Q^2 value above zero indicates that the model has predictive relevance for the corresponding construct (Hair et al., 2019).

Table 5. Predictive Relevance (Q^2) Test Results

Endogenous Construct	SSO	SSE	Q^2 (1 – SSE/SSO)	Predictive Relevance
AI Usage	1025	787.467	0.232	Yes ($Q^2 > 0$)
Women's Career Resilience	1025	655.457	0.361	Yes ($Q^2 > 0$)

Source: SmartPLS 4.0 Output (2026)

As reported in Table 5, the Q^2 value for AI Usage was 0.232, while Women's Career Resilience recorded a Q^2 value of 0.361. Because both values exceeded zero, the model demonstrated predictive relevance for each endogenous construct. The larger Q^2 value for Women's Career Resilience indicates that the model predicts the ultimate outcome more accurately than it predicts the mediator, which is consistent with the higher R^2 of Women's Career Resilience reported earlier. Perceived Usefulness and Job Demand are exogenous constructs that are not predicted by any other construct in the model, so Q^2 was not evaluated for them.

3.3.4. Direct Effects and Hypothesis Testing

All hypotheses were tested using a bootstrapping procedure comprising 5,000 subsamples within SmartPLS 4.0. The direct effect test results for H1, H2, and H3 are presented in Table 6.

Table 6. *Direct Effect Test Results (H1, H2, H3)*

Hyp.	Path	β	t-value	p-value	Decision
H1	Perceived Usefulness → AI Usage	0.414	7.071	0.000	Supported
H2	Job Demand → AI Usage	0.250	4.019	0.000	Supported
H3	AI Usage → Career Resilience	0.332	5.293	0.000	Supported

Source: SmartPLS 4.0 Output (2026)

3.3.5. Indirect Effects and Mediation Testing

The indirect effect test results for H4 and H5, including the 95% bias-corrected confidence intervals, are presented in Table 7.

Table 7. *Indirect Effect Test Results – Mediation (H4, H5)*

Hyp.	Path	β	t-value	p-value	95% CI (Bias-Corrected)	Decision
H4	PU → AI Usage → Career Resilience	0.138	4.196	0.000	0,079 – 0,207	Supported
H5	JD → AI Usage → Career Resilience	0.083	3.227	0.001	0,039 – 0,142	Supported

Source: SmartPLS 4.0 Output (2026)

As shown in Table 7, the indirect effect of Perceived Usefulness on Women's Career Resilience through AI Usage was significant (β = 0.138, t = 4.196, p < 0.001), with a 95% bias-corrected confidence interval ranging from 0.079 to 0.207. Likewise, the indirect effect of Job Demand through AI Usage was significant (β = 0.083, t = 3.227, p = 0.001), with a 95% bias-corrected confidence interval ranging from 0.039 to 0.142. Because neither interval includes zero, the mediating role of AI Usage was statistically confirmed for both pathways (Hair et al., 2019)

Beyond the three hypothesized paths reported in Table 6, the same bootstrapping procedure also estimated two non-hypothesized direct paths, not presented in a separate table, that are needed to determine whether AI Usage acts as a full or partial mediator: the direct effects of Perceived Usefulness (β = 0.286, t = 4.678, p < 0.001) and Job Demand (β = 0.239, t = 4.256, p < 0.001) on Career Resilience when AI Usage is simultaneously held in the model as a mediator. The concurrent significance of both direct and indirect pathways establishes AI Usage as a partial mediator in both chains, meaning that AI Usage channels part though not all of the influence that Perceived Usefulness and Job Demand exert on Women's Career Resilience.

3.4. Discussion

3.4.1. H1: Perceived Usefulness Positively and Significantly Influences AI Usage

Perceived Usefulness emerges as the single strongest predictor of AI Usage (β = 0.414, t = 7.071, p = 0.000) across all antecedent paths in the model. Women employed in the digital business sector are more likely to integrate AI into their routine work activities when they perceive the technology as beneficial for accelerating task completion, improving work effectiveness, and enhancing overall productivity. This outcome is theoretically grounded in the Technology Acceptance Model, which identifies Perceived Usefulness as the primary driver of actual technology use behavior (Davis, 1989). Empirically, it aligns with Ibrahim et al. (2025), who identified Perceived Usefulness as the most powerful predictor of AI usage behavior, and with Zhao et al. (2025), who reported that it outweighs digital literacy, self-efficacy, and institutional support as an adoption antecedent. Parallel evidence drawn from Indonesian digital contexts, spanning banking AI adoption (Ikhsan et al., 2025), mobile banking AI services (Winanda et al., 2026), startup environments (Purnomo et al., 2021), and higher education AI platforms (Mardiani & Utami, 2026) collectively affirms that usefulness

perceptions consistently function as a key catalyst for AI-related work behavior (Goli et al., 2023; Wang & Hou, 2025).

3.4.2. H2: Job Demand Positively and Significantly Influences AI Usage

Job Demand registers a significant positive effect on AI Usage (β = 0.250, t = 4.019, p = 0.000), lending support to the JD-R perspective that escalating work demands activate resource-seeking behavior, including the adoption of technological tools (Bakker & Demerouti, 2007). As women in digitally intensive roles encounter mounting workloads, sustained time pressure, and continuous expectations to upgrade their competencies, AI emerges as a practical resource for managing task complexity and sustaining competitive performance. This reactive yet adaptive adoption pathway is reinforced by empirical work showing that rising job demands shape technology-related behavioral responses (Chen et al., 2024; Liu et al., 2026; Sen et al., 2022), even as scholars caution that unchecked demand-driven AI engagement may carry unintended costs (Chuang et al., 2025; Hai et al., 2025). In the present study, however, demand-driven AI adoption among women in Indonesia's digital sector appears to function primarily as a proactive coping mechanism that ultimately strengthens rather than undermines career resilience.

3.4.3. H3: AI Usage Significantly Influences Women's Career Resilience

AI Usage exerts a significant positive effect on Women's Career Resilience (β = 0.332, t = 5.293, p = 0.000), indicating that active, routine integration of AI tools into work tasks translates into meaningful gains in women's adaptive capacity, optimism, and persistence amid digital transformation. This finding advances Career Resilience Theory (London, 1983) by identifying AI-related behavioral adaptation as a concrete mechanism through which resilience is cultivated in technology-intensive work settings. The result converges with Kong et al. (2023) and Kong et al. (2024), who linked employee-AI collaboration and positive AI perception to career sustainability and resilience, and with Chung et al. (2025), Qian et al. (2025), and Xu et al. (2023), whose findings connect AI awareness and usage to adaptive capacity, proactive skill development, and workplace well-being all dimensions closely aligned with career resilience. Collectively, these patterns reinforce the arguments of Tokbaeva & Achtenhagen (2021) and Jogulu & Franken (2023) that active engagement with digital tools is integral to sustaining women's career resilience in technology-driven sectors.

3.4.4. H4: AI Usage Mediates the Influence of Perceived Usefulness on Women's Career Resilience

The indirect effect of Perceived Usefulness on Women's Career Resilience via AI Usage is significant (β = 0.138, t = 4.196, p = 0.000). Because the direct effect of Perceived Usefulness on Career Resilience (β = 0.286, p = 0.000) also retains significance alongside this indirect effect, partial mediation is confirmed. This means AI Usage channels part of the influence of Perceived Usefulness while Perceived Usefulness simultaneously retains an independent direct pathway to career resilience. The finding extends TAM beyond technology adoption by demonstrating downstream career consequences: women who regard AI as genuinely useful are more apt to integrate it actively into their routines, and that behavioral engagement

subsequently fortifies career resilience through skill accumulation, task mastery, and growing technological confidence. The partial mediation pattern further implies that the psychological empowerment derived from positive AI perceptions contributes to resilience through channels beyond actual usage behavior resonating with Wang & Hou (2025), Kong et al. (2023), and Xu et al. (2023).

3.4.5. H5: AI Usage Mediates the Influence of Job Demand on Women's Career Resilience

The indirect effect of Job Demand on Women's Career Resilience through AI Usage is significant (β = 0.083, t = 3.227, p = 0.001). With the direct effect of Job Demand on Career Resilience also significant (β = 0.239, p = 0.000), partial mediation is confirmed. This reveals a critical pathway: occupational pressure drives women to adopt AI as a coping resource, and that AI adoption subsequently reinforces career resilience. Rather than constituting a purely depleting experience, demanding digital work conditions are transformed through AI engagement into a resilience-building opportunity. This mechanism is rooted in the JD-R Model's resource mobilization logic (Bakker & Demerouti, 2007), wherein technological resources mediate the journey from demands to positive adaptive outcomes. While Chuang et al. (2025) and Hai et al. (2025) document the darker dimensions of demand-driven AI engagement, the present findings demonstrate that among women in Indonesia's digital sector, this pathway can be constructive. This resonates with Collett et al. (2022), who noted that AI-induced occupational pressures on women's working lives may catalyze skill development and career persistence, and with Soulami et al. (2024), who positioned adaptive behavioral responses to AI as foundational to positive worker outcomes in AI-transformed workplaces.

4. CONCLUSION

This research set out to examine how Perceived Usefulness and Job Demand influence Women's Career Resilience through the mediating mechanism of AI Usage, drawing on data from 205 women in Indonesia's digital business sector analyzed through PLS-SEM in SmartPLS 4.0. All five hypotheses received empirical support. Perceived Usefulness positively shapes AI Usage (β = 0.414, p < 0.001), affirming that women who regard AI as genuinely beneficial to their work performance are far more inclined to incorporate it into daily routines. Job Demand, too, positively drives AI Usage (β = 0.250, p < 0.001), reflecting how escalating occupational pressure motivates women to seek AI as an adaptive resource. AI Usage in turn strengthens Career Resilience (β = 0.332, p < 0.001), while also partially mediating both the Perceived Usefulness–Career Resilience path (β = 0.138, p < 0.001) and the Job Demand–Career Resilience path (β = 0.083, p = 0.001) positioning AI Usage as a behavioral bridge through which both value-driven and pressure-driven motivations converge into resilience outcomes.

Theoretically, this study advances the field by bringing TAM (Davis, 1989) and the JD-R Model (Bakker & Demerouti, 2007) into a single mediation framework, a combination that remains underexplored in research on women's career resilience. It extends TAM beyond

adoption outcomes by repositioning AI Usage as a behavioral mediator carrying downstream career consequences, and it advances JD-R theory by demonstrating that demand-driven AI adoption can yield constructive rather than purely negative outcomes. Practically, organizations operating in Indonesia's digital business sector are encouraged to cultivate positive AI perceptions among women employees through structured training and capability-building initiatives given that Perceived Usefulness stands as the most powerful driver of both AI adoption and career resilience in this study. At the same time, managers should ensure that heightened job demands are matched with sufficient technological support, so that workplace pressure becomes a catalyst for resilience rather than a pathway to burnout.

What distinguishes this study from prior research is the specific combination of population, mechanism, and context it brings together. Studies such as Kong et al.,(2023, 2024) examined AI and career outcomes but without isolating AI Usage as a formal mediator or focusing specifically on women. Studies applying TAM to AI adoption in Indonesia (Ikhsan et al., 2025; Mardiani & Utami, 2026) measured adoption behavior as the terminal outcome without connecting it to downstream career consequences. Studies applying JD-R to AI contexts (Chuang et al., 2025; Hai et al., 2025) focused on burnout and alienation rather than resilience, and without a gender-specific lens. This study brings these threads together into a single empirical framework, producing evidence that is actionable for organizations seeking to support women's career resilience in Indonesia's rapidly AI-transforming digital economy. The finding that both motivational pathways, proactive and pressure-driven, ultimately strengthen career resilience when AI Usage is the mediating mechanism offers a more nuanced picture than either purely optimistic or purely cautionary accounts of AI's effects on workers.

Despite its contributions, this study is subject to several limitations that should be taken into consideration. First, the study was conducted using data collected from 205 respondents, while exceeding the minimum threshold required for PLS-SEM estimation, falls below the 250–400 range recommended by Hair et al. (2019) for achieving more stable parameter estimates and stronger statistical power in mediation analysis; future studies should therefore consider larger samples to strengthen the robustness of similar mediation models. The focus on women actively using AI in Indonesia's digital business sector may constrain generalizability to other sectors, non-AI users, or different cultural settings. Furthermore, the cross-sectional nature of this study reflects conditions at a single point in time and therefore does not permit conclusions regarding causal relationships across different periods. Future research is encouraged to employ longitudinal designs to examine the dynamic development of AI Usage and career resilience as technological advancement continues. Finally, with $R^2 = 0.436$ for Career Resilience, constructs such as organizational support, digital self-efficacy, and gender-specific career barriers likely offer additional explanatory power. Future research is encouraged to bring these variables into the model, extend the sample to cross-sector or cross-cultural comparisons, and probe the moderating roles of AI literacy and organizational culture in shaping the AI Usage career resilience relationship among women in the digital economy. In addition, because respondents were

selected specifically for their active use of AI, the study captures a sample with relatively little variance in baseline AI engagement, which may understate relationships that would emerge in a more heterogeneous population that includes non-users. The sample also skewed toward younger, early-career respondents, with the majority reporting one to three years of experience in the sector; career resilience may operate differently for women at later career stages, and this should be considered when generalizing the findings.

5. AUTHORS' NOTE

The authors declare that no conflicts of interest exist in relation to the publication of this manuscript. This manuscript represents original scholarly work and has neither been published previously nor submitted concurrently to another publication. All sources referenced in this manuscript have been appropriately acknowledged in accordance with accepted academic standards, and the authors affirm the originality of the submitted work. Prior to submission, the manuscript underwent a similarity assessment using plagiarism detection software to verify compliance with academic integrity and originality requirements.

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