From Digital Job Resources to Workplace Attachment: Understanding Intelligent Automation Acceptance among Airport Employees

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Abstract: *Although intelligent automation is transforming airport operations, its impact on employees' acceptance and attachment to the workplace remains insufficiently examined. Drawing on the Technology Acceptance Model (TAM) and the motivational pathway of the Job Demands–Resources (JD-R) framework, this study examines how perceived ease of use, perceived usefulness, and digital job resources influence acceptance of intelligent automation and attachment to the workplace. Data were collected through an online survey administered to 101 frontline and administrative employees working in Romanian airports who regularly interact with automated and AI-based systems. The proposed research model was tested using Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS 4. The findings show that perceived usefulness and digital job resources significantly increase acceptance of intelligent automation, while perceived ease of use is not significant. Acceptance and digital job resources both positively affect workplace attachment, with acceptance partially mediating this relationship. The study contributes theoretically by integrating TAM and JD-R to explain how supportive digital work environments foster not only technology acceptance but also employees' emotional connection to their organization. Practically, the findings highlight the importance of designing automation strategies that emphasize usefulness and invest in digital job resources to sustain employee attachment in highly automated airport environments.*

Key words: *intelligent automation, technology acceptance; digital job resources; workplace attachment; airport employees; PLS-SEM.*

1. INTRODUCTION

In recent years, airport operations have undergone a profound transformation driven by the large-scale integration of intelligent automation technologies. Digital systems such as biometric access control, self-service check-in solutions, AI-supported maintenance platforms, automated baggage processes, and interactive navigation tools are no longer experimental but embedded in the everyday functioning of airports. These technologies are widely promoted as key enablers of operational reliability, process standardization, and improved service quality in complex and time-sensitive environments (Borysiuk & Bugayko, 2025). At the same time, their diffusion has fundamentally reshaped the nature of work for airport employees, whose tasks, responsibilities, and interactions are increasingly mediated by automated systems.

Despite the widespread adoption of intelligent automation, prior research has primarily emphasized performance and efficiency, with limited attention to employees' acceptance and workplace-related attitudes (Scholze & Hecker, 2024). From an employee perspective, intelligent automation can primarily function as a digital job resource, supporting autonomy, perceived efficiency, and collaboration in daily work activities. This perspective aligns with the Job Demands–Resources (JD-R) framework, which emphasizes the motivational role of job resources in shaping positive work-related attitudes and outcomes (Bakker & Demerouti, 2017). In parallel, the Technology Acceptance Model (TAM) provides a well-established lens for explaining how perceived ease of use and perceived usefulness influence employees' acceptance of digital technologies (Davis, 1989).

Although both frameworks are highly relevant, empirical studies integrating JD-R—focused specifically on digital job resources—and TAM to explain not only technology acceptance but also employees' attachment to the workplace in highly automated settings remain limited. Attachment to the

workplace reflects employees' emotional connection, identification, and sense of belonging to their organization (Hassan, 2012) and may be particularly sensitive to how intelligent automation is experienced as supportive or enabling in daily work practices. Understanding whether automation strengthens or weakens this attachment is especially important in continuous-operation environments such as airports, where human–technology interaction is constant.

Against this backdrop, the present study examines the relationships between digital job resources as a second order factor, core TAM variables (perceived ease of use and perceived usefulness), acceptance of intelligent automation technologies, and attachment to the workplace in Romanian airports. Specifically, the research investigates: (1) how perceived ease of use and perceived usefulness shape employees' acceptance of intelligent automation; (2) how digital job resources influence technology acceptance; and (3) how do digital job resources and technology acceptance jointly influence airport employees' attachment to the workplace in highly automated work environments. By addressing these issues, the study contributes to the literature on intelligent automation in tourism and transport and offers practical insights for airport managers seeking to promote technology acceptance while sustaining employees' organizational attachment.

2. LITERATURE REVIEW

2.1. Integrating TAM and the JD-R framework in automated work environments

The Technology Acceptance Model (TAM), originally proposed by Davis (1989), remains one of the most influential frameworks for explaining how individuals come to accept and use new technologies. At its core, TAM posits that perceived ease of use (PEOU) and perceived usefulness (PU) shape users' attitudes and acceptance of technological systems. Although extensively validated across sectors, the model has been criticized for its limited consideration of contextual and organizational factors that influence technology use in real work settings.

To address this limitation, recent research has increasingly combined TAM with the Job Demands–Resources (JD-R) framework (Bakker & Demerouti, 2017). While the JD-R model traditionally distinguishes between demands and resources, a growing body of literature emphasizes the motivational pathway driven by job resources, particularly in digitally intensive environments. Job resources such as autonomy, efficiency-enhancing systems, and collaboration opportunities support goal achievement and foster positive work-related attitudes (Scholze & Hecker, 2024).

In highly automated contexts such as airports, where employees interact continuously with biometric systems, automated check-in, and AI-supported operational tools, integrating TAM and JD-R offers a comprehensive lens. This combined approach allows for capturing both employees' cognitive evaluations of technology (ease of use and usefulness) and the supportive role of digital job resources in shaping technology-related attitudes.

2.2. Perceived Ease of Use, Perceived Usefulness, and Acceptance of Intelligent Automation

Perceived Ease of Use (PEOU) refers to the extent to which individuals believe that using a technology requires minimal effort (Davis, 1989). In complex operational environments, systems perceived as intuitive and easy to operate are more likely to be accepted by employees, as they reduce learning costs and cognitive strain. Prior studies in tourism and transport contexts have consistently shown that PEOU plays a central role in shaping employees' willingness to interact with digital and AI-based systems (Auer et al., 2024). Accordingly, we propose: *H1: Perceived Ease of Use (PEOU) positively influences Acceptance of Intelligent Automation Technologies (ACC).*

Perceived Usefulness (PU), the second core TAM construct, reflects the degree to which a technology enhances job performance (Davis, 1989). In automation-intensive workplaces, employees are more inclined to accept systems that demonstrably improve efficiency, accuracy, or decision-making. Meta-analytic evidence confirms PU as one of the strongest predictors of technology acceptance in tourism and service industries (Li et al., 2024). Thus, we hypothesize: *H2: Perceived Usefulness (PU) positively influences Acceptance of Intelligent Automation Technologies (ACC).*

2.3. Digital Job Resources and Acceptance of Intelligent Automation

Within the Job Demands–Resources (JD-R) framework, job resources are defined as physical, social, or organizational aspects of work that support goal achievement, reduce job strain, and stimulate

learning, growth, and motivation (Bakker & Demerouti, 2007; Bakker & Demerouti, 2017). In increasingly digitalized work environments, these resources take on technology-specific forms and can be conceptualized as Digital Job Resources (DJR).

In the present study, DJR is specified as a second-order construct, composed of three first-order dimensions: collaboration, autonomy, and efficiency. Collaboration reflects the extent to which intelligent systems support coordination and information sharing; autonomy captures the degree to which automation enables independent decision-making; and efficiency refers to employees' perceptions that digital technologies enhance task performance. This multidimensional view aligns with recent JD-R extensions emphasizing that job resources in digital work settings are increasingly embedded in technological infrastructures (Scholze & Hecker, 2024). When intelligent automation is perceived as a resource rather than a constraint, it is more likely to be viewed as supportive of employees' goals, reducing uncertainty and cognitive effort while enhancing perceptions of competence and control. From a Technology Acceptance Model (TAM) perspective, these conditions reinforce perceptions of usefulness and facilitate positive acceptance judgments (Davis, 1989; Venkatesh & Davis, 2000).

Empirical studies provide consistent support for this argument. Research shows that when digital systems enhance collaboration, efficiency, and autonomy, employees report higher performance expectancy and stronger acceptance of technology (Walczuch et al., 2007; Miskolczi et al., 2021). More recently, Scholze and Hecker (2024) demonstrate that digital job resources activate the motivational pathway of the JD-R model, explaining why digitization can lead to positive employee outcomes when supportive resources outweigh perceived constraints. In automation-intensive settings such as airports, where intelligent systems are deeply embedded in everyday workflows, digital job resources therefore represent a key contextual driver of technology acceptance. Based on this theoretical reasoning and prior empirical evidence, the following hypothesis is proposed: *H3: Digital Job Resources (DJR) positively influence Acceptance of Intelligent Automation Technologies (ACC).*

2.4. Digital Job Resources, Acceptance of Intelligent Automation, and Attachment to the Workplace

Beyond their role in shaping technology-related attitudes, job resources are considered fundamental drivers of long-term organizational outcomes within the JD-R framework (Bakker & Demerouti, 2007). In digitally intensive environments, Digital Job Resources (DJR) play a critical role in shaping not only how employees evaluate intelligent technologies but also how they relate emotionally to their workplace (Scholze & Hecker, 2024).

When intelligent automation enhances employees' autonomy, improves coordination with colleagues, and increases perceived efficiency, it contributes to a more supportive and enabling work environment. Such environments reduce feelings of technological uncertainty and role ambiguity, facilitate learning, and strengthen employees' confidence in their ability to cope with digital change (Tarafdar et al., 2015; Venkatesh et al., 2000). Prior research indicates that supportive technological infrastructures positively influence both perceived usefulness and ease of use, thereby reinforcing acceptance of advanced digital systems (Walczuch et al., 2007; Miskolczi et al., 2021).

Importantly, digital job resources may also exert a direct influence on Attachment to the Workplace (ATC). Workplace attachment reflects employees' emotional bond with their organization, encompassing feelings of pride, identification, and belonging. Organizational research consistently shows that supportive work environments foster stronger affective ties to the workplace and higher levels of commitment (Hassan, 2012). In the context of digital transformation, Scholze and Hecker (2024) argue that digital resources can become stabilizing forces, helping employees reinterpret automation as an organizational investment in their well-being rather than a threat to their roles.

Acceptance of intelligent automation further strengthens this relationship. Once accepted, intelligent automation can reinforce employees' perception that their organization is modern, supportive, and aligned with their needs, thereby strengthening emotional attachment. Prior studies suggest that technology acceptance can function as a psychological mechanism linking work design characteristics to organizational attitudes (Molino et al., 2020).

Taken together, these arguments suggest both direct and indirect pathways linking digital job resources to workplace attachment. Accordingly, the following hypotheses are advanced:

H4: Digital Job Resources (DJR) positively influence Acceptance of Intelligent Automation Technologies (ACC).

H5: Digital Job Resources (DJR) positively influence Attachment to the Workplace (ATC).

2.5. Acceptance of Intelligent Automation as a mediator

Although digital job resources are expected to strengthen employees' attachment to the workplace, this relationship may not occur solely through a direct pathway. Instead, Acceptance of Intelligent Automation Technologies (ACC) may serve as a key psychological mechanism through which digital job resources translate into stronger organizational attachment.

Digital job resources enhance employees' perceptions of control, efficiency, and autonomy, which facilitate acceptance of intelligent automation. Once accepted, these technologies become integrated into everyday work practices and employees' professional identity, reinforcing positive feelings toward the organization (Bakker & Demerouti, 2007). In this sense, acceptance functions as a bridge between supportive digital work conditions and employees' emotional connection to the workplace. Prior studies indicate that technology acceptance can mediate the effects of workplace characteristics on employee attitudes and organizational outcomes (Molino et al., 2020). Building on this logic, we propose: *H6: Acceptance of Intelligent Automation Technologies (ACC) mediates the relationship between Digital Job Resources (DJR) and Attachment to the Workplace (ATC).*

Informed by the theoretical arguments above, Figure 1 illustrates a research model that integrates TAM and DJR constructs to test the hypothesized relationships.
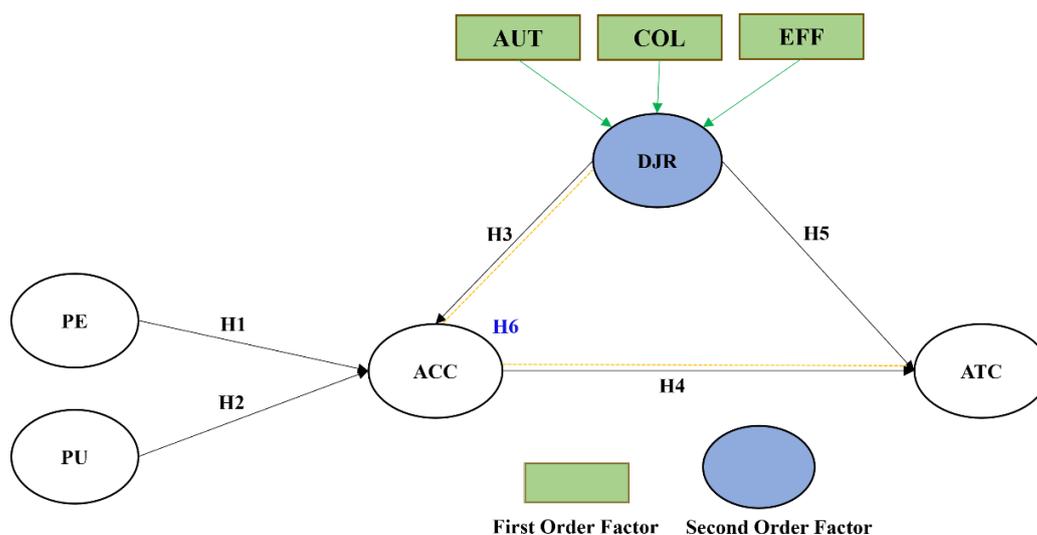
Figure 1. *Research Framework*

Source: Developed by authors

Green lines are formative indicators and bold lines are hypotheses. Orange dotted lines denote mediated role (H6).

3. METHODOLOGY

3.1. Measurements

Drawing on the Job Demands–Resources (JD-R) model and the Technology Acceptance Model (TAM), this quantitative, cross-sectional study examines the impact of intelligent automation on technology acceptance and employee attachment for workplace in Romanian airports.

Data were collected through an anonymous online survey administered between March 2025 and November 2025 to frontline and administrative employees who regularly interact with biometric gates, automated baggage handling, AI-based maintenance systems, and digital wayfinding technologies. Participation was voluntary, resulting in 101 valid responses. Measurement items were adapted from

established and scientifically validated scales and pilot-tested for contextual suitability. Perceived Ease of Use (PE) was measured with items such as "Interacting with intelligent automation systems is clear and easy to understand," while Perceived Usefulness (PU) included statements like "Using intelligent automation systems improves my job performance" (Pizzi et al., 2020). Digital Job Resources (DJR)— including collaboration, perceived efficiency, and autonomy—were captured through statements such as "Automation systems help me decide independently how to perform my tasks" and "In general, I believe that intelligent automation systems have effectively improved my productivity in the workplace." (Malinowska et al., 2018). Attachment to the Workplace (ATC) was measured using items reflecting employees' emotional connection and identification with their organization, such as "I am proud to be part of this company" (Scholze & Hecker, 2024).

Given the presence of multiple latent constructs, including higher-order variables, Partial Least Squares Structural Equation Modeling (PLS-SEM) was applied using SmartPLS 4. This method is well suited for complex models and small-to-medium samples, and the final sample of 101 responses satisfies the "10-times rule" and minimum power requirements, enabling robust estimation of direct and mediating effects (Hair et al., 2024).

3.3. Profile respondents

As shown in Table 1, the sample consists of 101 respondents, with a slightly higher share of female participants (53.5%) compared to males (44.6%). The age distribution is dominated by young adults, with most respondents being under 25 (31.7%) or aged 25–34 (32.7%), followed by those aged 35–44 (28.7%). In terms of work experience, the majority report limited professional tenure, with 38.6% having less than three years of experience and 23.8% reporting three to five years. Regarding education, most respondents have completed high school (42.6%) or hold a bachelor's degree (35.6%), while 21.8% possess a master's degree. Finally, most participants indicate intermediate (41.6%) or advanced (33.7%) experience with intelligent automation systems, suggesting a generally moderate to high level of familiarity with such technologies.

Table 1. *Profile respondens*

Characteristics	N (101)	% (100)	Characteristics	N (101)	% (100)
Gender			**Work experience**		
Female	54	53.5	Less than 3 years	39	38.6
Male	45	44.6	3–5 years	24	23.8
Prefer not to say	2	2.0	6–10 years	11	10.9
Age (years)			11–15 years	9	8.9
Under 25	32	31.7	16–20 years	10	9.9
25–34	33	32.7	21–25 years	6	5.9
35–44	29	28.7	Over 25 years	2	2.0
45–54	6	5.9	**Experience with intelligent**		
55 and above	1	1.0	**automation systems**		
Education level			Beginner	17	16.8
High school	43	42.6	Intermediate	42	41.6
Bachelor's degree	36	35.6	Advanced	34	33.7
Master's degree	22	21.8	Expert	8	7.9

Source: Developed by the authors

4. RESULTS AND DISCUSSION

4.1 Measurement model

To assess the measurement model's reliability and convergent validity, Cronbach's alpha (α), composite reliability (CR), and average variance extracted (AVE) were examined for all reflective constructs (see Table 2). In line with the recommendations of Hair et al. (2020), values exceeding 0.700 for α and CR and 0.50 for AVE were considered indicative of satisfactory internal consistency and convergent validity.

As shown in Table 2, the reflective measurement model demonstrates strong psychometric properties. Cronbach's alpha values range from 0.942 to 0.972, indicating a high level of internal consistency across all constructs. This is further supported by composite reliability (CR) values, which vary between 0.943 and 0.973, exceeding the recommended threshold and confirming adequate construct reliability.

Convergent validity is also well established, as AVE values range from 0.853 to 0.967, all surpassing the minimum criterion of 0.50. Furthermore, all indicator loadings are substantial, with values ranging from 0.906 to 0.983, well above the recommended cutoff of 0.700, indicating that the observed variables strongly reflect their corresponding latent constructs. Overall, these results confirm that the measurement model exhibits adequate internal consistency, construct reliability, and convergent validity, supporting the suitability of the constructs for subsequent structural model analysis.

Table 2. *Factor loadings, reliability, and validity (n=101)*

Variables / Items	ACC	ATS	AUT	COL	EFF	PE	PU	FL	α	CR	AVE
Acceptance of intelligent automation technologies									0.955	0.956	0.917
ACC1								0.952			
ACC2								0.960			
ACC3								0.961			
Attachment to the worlplace									0.943	0.948	0.946
ATS1								0.970			
ATS2								0.975			
Autonomy									0.958	0.959	0.923
AUT1								0.957			
AUT2								0.971			
AUT3								0.954			
Collaboration									0.942	0.943	0.853
COL1								0.906			
COL2								0.938			
COL3								0.938			
COL4								0.912			
Effiency									0.965	0.965	0.967
EFF1								0.983			
EFF2								0.983			
Perceived ease of use									0.972	0.973	0.947
PE1								0.964			
PE2								0.979			
PE3								0.976			
Perceived usefullness									0.958	0.960	0.889
PU1								0.954			
PU2								0.925			
PU3								0.937			
PU4								0.954			

Note. ACC = Acceptance of Intelligent Automation Technologies; ATS = Attachment to the Workplace; AUT = Autonomy; COL = Collaboration; EFF = Efficiency; PE = Perceived Ease of Use; PU = Perceived Usefulness; α = Cronbach's Alpha; CR = Composite Reliability; AVE = Average Variance Extracted.

Source: Developed by the authors based on calculations from SmartPLS

Discriminant validity was assessed using the Heterotrait–Monotrait (HTMT) ratio of correlations, which is widely regarded as a robust and conservative criterion for evaluating whether latent constructs are empirically distinct within a structural equation model. Following the recommendations of Henseler et al. (2015), HTMT values equal to or below the threshold of 0.900 were considered indicative of adequate discriminant validity (see Table 3).

As shown in Table 3, all HTMT values fall below the conservative threshold of 0.900, supporting adequate discriminant validity. The coefficients range from 0.579 to 0.890, indicating acceptable inter-construct correlations and no evidence of problematic overlap. Consequently, the results support the discriminant validity of the measurement model and reinforce confidence in the interpretation of subsequent structural relationships.

Table 3. *Discriminant validity using HTMT*

	ACC	ATS	AUT	COL	EFF	PE	PU
ACC							
ATS	0.749						

AUT	0.772	0.642				
COL	0.815	0.700	0.847			
EFF	0.816	0.666	0.862	0.864		
PE	0.768	0.685	0.633	0.579	0.698	
PU	0.890	0.752	0.755	0.770	0.791	0.765

Source: Developed by the authors based on calculations from SmartPLS

Digital Job Resources (DJR) were specified as a formative second-order construct compoed of Collaboration, Efficiency, and Autonomy. As shown in Table 3, all outer weights are positive and statistically significant ($p < 0.001$), indicating that each first-order factor contributes meaningfully to the formation of the higher-order construct. In addition, all outer loadings exceed the recommended threshold of 0.50 (ranging from 0.899 to 0.955), supporting the relevance of the first-order factors. The VIF values range from 3.664 to 4.125, remaining below the conservative cutoff of 5 and indicating that multicollinearity is not a concern.

Table 3. *Second Order Factor (SOF) Validity*

SOF	FOF	Outer Weight	T Statistics	P Values	Outter Loadings	VIF
DJR	COL	0.473	24.801	0.000	0.955	3.664
	EFF	0.408	19.750	0.000	0.947	4.125
	AUT	0.382	10.312	0.000	0.899	3.756

Note. SOF = Second Order Factor, FOF = First Order Factor, T = t – statistics, P = Probability (P) value, VIF = Variance Inflation Factor.

Source: Developed by the authors based on calculations from SmartPLS

4.2. Structural model

Since the data did not meet the assumption of multivariate normality, hypothesis testing was conducted using the PLS-SEM bootstrapping procedure with 5,000 resamples, as recommended by Hair et al. (2020). This non-parametric approach provides robust estimates of path coefficients (β), standard deviations, t-values, and p-values, allowing for an accurate assessment of the strength and statistical significance of the hypothesized relationships (see Table 5). Regarding the model's explanatory power, the results indicate substantial predictive accuracy for the endogenous constructs. Specifically, the model explains 80.0% of the variance in Acceptance of Intelligent Automation Technologies (ACC) ($R^2 = 0.800$), which can be considered very strong explanatory power. In addition, 53.8% of the variance in Attachment to the Workplace (ATC) is explained by the model ($R^2 = 0.538$), indicating moderate-to-strong predictive capability according to established PLS-SEM guidelines.

As reported in Table 5, the hypothesized relationships are largely supported. Perceived Ease of Use does not exert a statistically significant effect on Acceptance (H1: β = 0.189, t = 1.702, p = 0.089) and is therefore not confirmed. In contrast, Perceived Usefullness has a strong and significant positive effect on Acceptance (H2: β = 0.435, t = 3.898, p < 0.001), indicating that perceived usefulness plays a key role in shaping acceptance of intelligent automation technologies. Similarly, Digital Job Resources significantly influence Acceptance (H3: β = 0.353, t = 3.996, p < 0.001), further supporting the relevance of work-related contextual factors. With respect to Attachment to the Workplace, Acceptance shows a strong positive effect (H4: β = 0.463, t = 3.732, p < 0.001), suggesting that higher acceptance of intelligent automation technologies enhances employees' emotional and psychological attachment to their workplace. In addition, Digital Job Resources also have a significant direct effect on Attachment to the Workplace (H5: β = 0.305, t = 2.266, p = 0.024), highlighting their complementary role alongside acceptance in shaping workplace attachment.

Table 5. *Hypotheses testing*

	(β)	STDEV	t	p	Result
H1: Perceived ease of use → Acceptance	0.189	0.111	1.702	0.089	Not confirmed
H2: Perceived usefullness → Acceptance	0.435	0.112	3.898	0.000	Confirmed
H3: Digital Job Resources → Acceptance	0.353	0.088	3.996	0.000	Confirmed
H4: Acceptance → Attachment to the workplace	0.463	0.124	3.732	0.000	Confirmed
H5: Digital Job Resources → Attachment to the workplace	0.305	0.134	2.266	0.024	Confirmed

Note. β = Beta Coefficient (Path Coefficient), STDEV = Standard Deviation, T = t – statistics, P = Probability* value; *Relationships are significant at P-value < 0.05.

Source: Developed by the authors based on calculations from SmartPLS

4.3. Mediation analysis

Hypothesis H6 tests whether Acceptance of Intelligent Automation Technologies (ACC) functions as a mediating mechanism between Digital Job Resources (DJR) and Attachment to the Workplace (ATC). As shown in Table 6, the indirect pathway linking DJR to ATC via ACC is positive and statistically significant, demonstrating that acceptance plays an important mediating role.

The results indicate that digital job resources have a strong overall effect on attachment to the workplace ($\beta = 0.468$, t = 4.218). After accounting for acceptance, the direct relationship between DJR and ATC remains significant ($\beta = 0.353$, t = 3.996), while the indirect effect transmitted through ACC is also significant ($\beta = 0.163$, t = 3.234, p = 0.001). These findings provide empirical support for H6. Overall, the pattern of results suggests a partial mediation, whereby digital job resources enhance employees' attachment to the workplace both directly and indirectly by increasing their acceptance of intelligent automation technologies.

Table 6. *Mediation analysis*

	Total Effects		Direct Effects			Indirect Effects			Results
H	β	T	β	T	H6:	β	T	P	
DJR-ATC	0.468	4.218	0.353	3.996	DJR-ACC-ATC	0.163	3.234	0.001	Confirmed

Note. H = Hypothesis, β = Beta Coefficient, T = t – statistics, P = Probability* value; *Relationships are significant at P-value < 0.05.

Source: Developed by the authors based on calculations from SmartPLS

5. CONCLUSION

This study deepens current understanding of employee responses to intelligent automation by integrating the Technology Acceptance Model (TAM) with the motivational pathway of the Job Demands–Resources (JD-R) framework. The findings highlight that acceptance of intelligent automation and attachment to the workplace are shaped by both employees' cognitive evaluations of technology and the availability of supportive digital job resources.

5.1. Theoretical implications

From a theoretical perspective, the results partially confirm and refine the assumptions of TAM. While Perceived Usefulness (PU) emerges as a strong predictor of Acceptance of Intelligent Automation Technologies, Perceived Ease of Use (PEOU) does not exert a significant effect. This contrasts with the original TAM formulation, where PEOU is expected to play a central role (Davis, 1989), but aligns with later extensions suggesting that in mandatory or highly standardized technological environments, ease of use becomes a hygiene factor rather than a differentiator (Venkatesh & Davis, 2000). Similar findings have been reported in automation-intensive contexts, where usefulness outweighs simplicity in shaping acceptance (Li et al., 2024).

The study also extends the JD-R framework by demonstrating that Digital Job Resources (DJR)—such as autonomy supported by automation, perceived efficiency, and collaboration—are critical drivers of both technology acceptance and attachment to the workplace. Consistent with Bakker and Demerouti (2007, 2017), the results support the motivational pathway of JD-R, showing that job resources foster positive work-related attitudes. In line with previous research, resource-rich digital environments enhance employees' willingness to accept and internalize new technologies (Walczuch et al., 2007; Miskolczi et al., 2021).

Importantly, this study contributes to the literature by linking acceptance of intelligent automation to attachment to the workplace, an outcome that has received limited attention in prior automation research. While earlier studies focused primarily on engagement or performance outcomes (Molino et al., 2020), the present findings show that acceptance also strengthens employees' emotional connection and identification with their organization, echoing insights from organizational attachment and commitment research (Hassan, 2012). The mediation analysis further advances theory by demonstrating that Acceptance of Intelligent Automation Technologies partially mediates the relationship between digital job resources and workplace attachment. This supports and extends prior evidence that technology acceptance functions as a psychological mechanism through which supportive work

conditions translate into positive employee outcomes (Molino et al., 2020). Thus, acceptance should be viewed not merely as an endpoint of technology adoption, but as a dynamic process linking work design and organizational attachment.

5.2. Practical implications

From a practical standpoint, the findings suggest that airport managers should prioritize technological usefulness over purely usability-oriented improvements. Automation systems need to demonstrably support employees' performance to foster acceptance. At the same time, organizations should invest systematically in digital job resources, including training, autonomy-supporting tools, and responsive support structures, to reinforce positive perceptions of automation. Involving frontline employees in the design and implementation of intelligent systems can further strengthen acceptance and, ultimately, attachment to the workplace. Overall, the study underscores that intelligent automation delivers sustainable organizational benefits only when technological investments are accompanied by supportive work environments that allow employees to interpret and internalize automation positively.

6. LIMITATIONS AND FUTURE RESEARCH

Despite its contributions, the study is limited by its cross-sectional design and focus on a single national and sectoral context. Future research could employ longitudinal or mixed-method approaches to capture how acceptance and attachment evolve over time and test the model across different automation-intensive industries and cultural settings. Further integrating organizational factors such as leadership support or digital readiness may also enrich understanding of how intelligent automation becomes embedded in everyday work practices.

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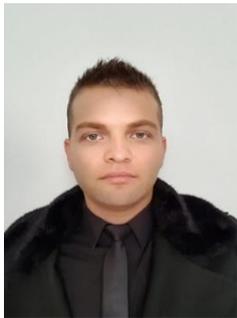
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