

Original Article

Factors Affecting User Acceptance of ERP Systems in SMEs

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ABSTRACT

This study aimed to examine the factors affecting the adoption of ERP in Pakistan's small and medium enterprises (SME) sector. With a sample size of 251 individuals, a quantitative methodology was used. A survey method approach is employed to gather data from a diverse sample with experience as a small enterprise targeted explicitly in Pakistan. Through statistical analysis, the study explored the relationship between these independent variables and the impact of ERP in small organisational settings. It investigates how attitudes towards ERP influence its adoption and utilisation, how the perceived effort required affects ERP implementation, how performance expectations influence organisational outcomes, and how facilitating conditions contribute to successful ERP integration. The findings provide insights into the significant role of performance and facilitating conditions in shaping the impact of ERP in organisational settings.

Keywords: Employee performance, Enterprise resource planning, Organisational performance, Performance ERP user, Small and medium enterprises

INTRODUCTION

Information Systems (IS) have played a critical role in the business world as new technological advancements and trends emerge. The introduction of enterprise resource planning (ERP) systems has sparked a surge of new system advancements (Le, 2021). ERP is the most effective information management system as it enhances the effectiveness and efficiency of a company's operation and processes and positively impacts employee performance. Implementing ERP software in a small or medium-sized business might provide considerable advantages compared to other firms, but certain circumstances may result in significant downsides (Crespo et al., 2023). In many organisations, user behaviour and adoption are influenced by the high cost and complexity of the system, (Chou & Hong, 2013) end-user acceptance, and possible managerial and socio-environmental factors during the implementation phase (Kwak et al., 2012).

ERP systems are a growing concept that allows many organisations to attain a competitive advantage. However, the efficiency and effectiveness of ERP systems are often underutilized as their perceived usage and usefulness depend on certain factors which shape the users' attitudes and intentions towards ERP. User acceptance is influenced by 'personal and psychological', 'organisational', and 'system and technological' characteristics. Personal and psychological characteristics include 'computer self-efficacy' and 'job relevance'. The organisational characteristics may depend on 'managerial support' and 'ERP training'. The system and technological characteristics comprise system complexity and compatibility.

The paucity of study can be linked to that ERP systems were historically underutilised by small businesses, primarily due to a lack of understanding and resources (Malhotra & Temponi, 2010). To fill this gap and to gain a better understanding of the usage of ERP systems in SMEs in Pakistan, this quantitative cross-sectional research aims to examine the factors that influence the user acceptance of ERP in small enterprises (Babic & Golob, 2018). Using the TAM approach, the research model has been constructed to depict the interactions between the research variables. The primary theoretical purpose of this research is to elucidate the relationship between ERP user approval and its indications. The general objectives are to identify the effect of 'computer self-efficacy', 'job relevance', 'managerial support' & 'ERP training', 'system complexity', and 'compatibility' on intention towards using ERP System.

Conceptual Framework

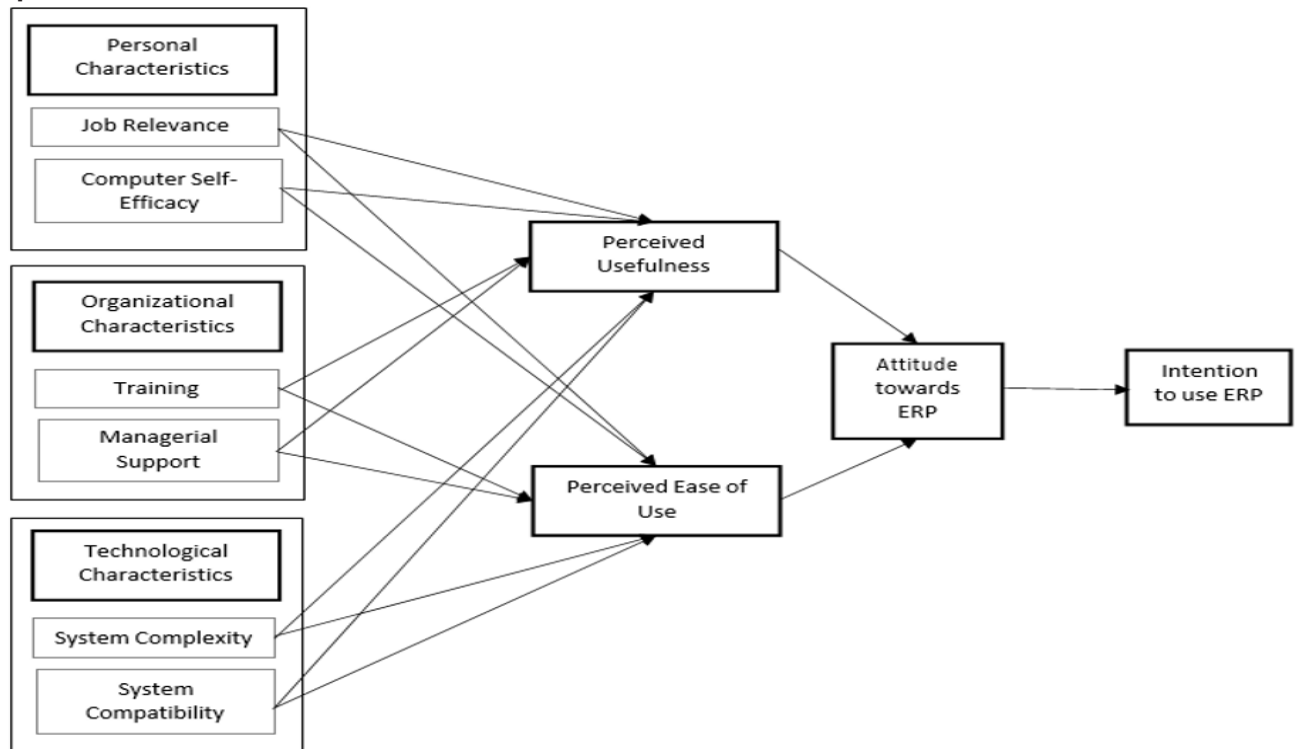


Figure 1 Conceptual Framework

LITERATURE REVIEW

Personal Characteristics and TAM

The higher a user's sense of efficacy, the greater his or her intrinsic motivation is towards using the system. Because ease of use increases self-efficacy, it can also be associated with the behavioural intention to use (Lepper, 1985). Numerous succeeding studies have provided empirical evidence supporting the robustness of these relationships (Venkatesh et al., 2003). Moreover, factors such as general computer self-efficacy level of education, job roles, and similar experiences such as game-based training, shared belief, and project communication were suggested to influence PU or PEOU (Marler et al., 2006). The second hypothesis is that these two beliefs mediate between the intention to use information systems and external variables (Kwak et al., 2012). When individuals evaluate the acceptability of a technology, their decision is typically based on the technology's relevance to their job or set of tasks (Venkatesh & Davis, 2000). Job relevance refers to “an individual’s perception regarding the degree to which the target system applies to his or her jobs.” Using this concept, they empirically examined and validated the effect of Perceived Usefulness meditation on the relationship between each perception and behavioural intention to use (Davis, 1989). As a result of the previous discussion, it can be hypothesised that the mediator function will positively impact the behavioural intention to use an ERP system, such that the function positively affects PU, which is a significant determinant of behavioural intention to use.

- H1: Job relevance positively impacts the perceived ease of use of ERP systems.
- H2: Job relevance positively impacts the perceived usefulness of ERP systems.
- H1a: There is a mediating effect between job relevance and attitude towards using the ERP systems.
- H2a: There is a mediating effect between job relevance and intention to use ERP systems.

Organisational Characteristics and TAM

Support from the top management has been considered the most essential factor for attaining superior project performance. (Sharma & Yetton, 2011) exhibits that the effect of top-management support on user satisfaction is moderated by the degree of task interdependence, such that top-management support can be more effective when task interdependence is greater. (Sharma & Yetton, 2003). As mentioned,

implementing an ERP system increases task dependence by coordinating all the business's resources, information, and functions from shared data repositories (Sharma & Yetton, 2011). Additionally, individuals receiving higher internal support while adopting an ERP system would have a more favourable impression of the system's relevance, which is closely tied to Perceived Usefulness (Bendoly et al., 2006). Consequently, it is reasonable to anticipate that management support would positively impact perceived usefulness. It was additionally recommended that training is another organisational intervention that can facilitate user acceptance of technology. Training is required for both supervisors and subordinates so that the ERP system can be effectively utilised. Implementing an ERP system involves significantly modifying the organisation's technology and business processes. The existing literature adequately explains the mediating relationship between training and intent to use (Venkatesh & Davis, 1996). For most users, training is their first exposure to an ERP system. Thus, training designed to enhance users' self-efficacy may influence their intention to use by altering their perception of the system's ease of use. Intention to use via Perceived Usefulness may also be conveyed through training as it provides knowledge regarding the new system (Marler et al., 2006). It would be the initial exposure and chance for users to compare the new system with the existing one and to determine the value of the new system (Marler et al., 2006). Thus, it is anticipated that training will allow users to determine the perceived usefulness of the new system. Thus, it is conceivable that training has a positive relationship with Perceived Usefulness.

- H5: Training positively impacts the perceived ease of use of ERP systems.
- H4: Training positively impacts the perceived usefulness of ERP systems.
- H5: Managerial support positively impacts ERP systems' perceived ease of use.
- H6: Managerial support positively impacts the perceived usefulness of ERP systems.
- H3a: There is a mediating effect between job training and attitude towards using the ERP systems.
- H4a: There is a mediating effect between job training and the Intention of using the ERP systems
- H5a: There is a mediating effect between managerial support and attitude towards using the ERP systems.
- H6a: There is a mediating effect between managerial support and the intention to use ERP systems.

Technological Characteristics and TAM

The degree to which a computer system is perceived to be difficult to master or use is called its system complexity (Thompson et al., 1991). It emphasises perceptions of using a system as opposed to perceptions of the system itself. Most models of IS acceptance have identified SC as a significant barrier to individuals' acceptance and use of a computer system in recognition of the crucial role SC plays in influencing users' attitudes towards a system. SC was discovered to have a negative effect on using personal computers (Bradford & Florin, 2003), user satisfaction with ERP implementation, and behavioural intent to use a technology (Van Slyke et al., 2002). As the complexity of a task increases, the outcomes associated with the task become further away and less likely. Individuals who perceive a system as challenging to use or learn are consequently more likely to question their abilities and skills to use it effectively. This is anticipated to have a negative impact on evaluations of the system's usefulness and usage (Moore & Benbasat, 1991). Accordingly, it is hypothesised that SC negatively affects perceived usefulness and ease of use. Compatibility was defined as the extent to which potential adopters perceive an innovation to be consistent with their extant values, needs, and past experiences. System compatibility is regarded as a technological characteristic that influences ERP usage (Moreno-Camacho et al., 2019). It refers to the compatibility of ERP with the organisation's current system. ERP usage is positively influenced by computer self-efficacy, organisational support, training, and compatibility, which has a substantial impact on panoptic empowerment and individual performance. Greater compatibility of the technological innovation with the adopting unit's existing technical systems, operational procedures, and value and belief systems has been cited as supporting its adoption and spread. It is therefore hypothesised that Compatibility positively affects perceived usefulness and ease of use.

- H7: System Compatibility positively impacts ERP systems' perceived ease of use.
- H8: System Compatibility positively impacts the perceived usefulness of ERP systems.

- H9: System Complexity negatively impacts ERP systems' perceived ease of use.
- H10: System Complexity negatively impacts the perceived usefulness of ERP systems.
- H7a: There is a mediating effect between system compatibility and attitude towards using the ERP systems.
- H8a: There is a mediating effect between system compatibility and the intention to use ERP systems.
- H9a: There is a mediating effect between system complexity and attitude towards using the ERP systems.
- H10a: There is a mediating effect between system complexity and the intention to use ERP systems.

Technology Acceptance Model and ERP

Research defines perceived ease of use as the cognitive effort required to learn and use new technology (Compeau & Higgins, 1995). The ease with which users can operationalise information systems affects their capacity to assess their usefulness. Operationalising the information system gives people trust in its benefits (Amandasari, 2019). A study revealed that behavioural intentions and actions are strongly correlated. Employees must believe in a good use-performance link to use enterprise apps with increased perceived usefulness. Some researchers believe that perceived usefulness directly affects intention, while perceived ease of use indirectly affects intention. The study found that consumers' perceived usefulness, ease of use, and intrinsic participation are the most critical elements affecting their propensity to utilise technology (Soto-Acosta et al., 2013). Based on the preceding description, the following research hypotheses have been developed:

- H11: Perceived ease of use positively impacts attitude towards using the ERP systems.
- H12: Perceived usefulness positively impacts attitude towards using the ERP systems.
- H13: Attitude towards using the ERP systems positively impacts intention to use the ERP systems.
- H11a: Attitude towards using ERP systems mediates the relationship between perceived ease of use and intention to use them.
- H12a: Attitude towards using the ERP systems mediates the relationship between perceived usefulness and intention to use the ERP systems.

METHODOLOGY

The research methodology comprises the research approach, designs, sampling method and techniques, and instruments used for data collection of this study. The research philosophy is Positivism, and the research approach used in this study is deductive. The research population comprises the end users of ERP systems in SMEs in Pakistan. Although the number of ERP users in the country is unknown with certainty, research indicates that approximately 514 companies use ERP systems (SAP and Oracle) in the country (Lodhi, 2016). The non-probability Purposive sampling method is used as the research is only confined to those with prior experience using ERP (Skowronek & Duerr, 2009). The sample size consists of 251 participants.

The Questionnaire was divided into three Sections. The first section has an item examining any prior experience of using ERP. The second section was designed to continue with all the demographic questions if any experience was found in using ERP. In the third section, there were a total of 10 Constructs with 50 items. There are six independent variables as Computer Self Efficacy (CSE), Job Relevance (JR), Managerial Support (MS), Training (TR), System Complexity (SC) and Compatibility (COMP). One dependent variable is the Intention to use ERP (INT). The three mediating variables are perceived ease of use (PEU), perceived use (PU), and attitudes towards using ERP (ATT). Each item in these constructs was measured by using a 5-point Likert Scale, ranging from 1 (Strongly Agree) to 5 (Strongly Disagree) (Karsten et al., 2014).

Data Analysis Method

The data analysis was performed in two steps. First, normality, reliability, validity (Discriminant and Convergent), and Correlation were conducted through SPSS software. In the next step, to investigate the directions and strength of the construct, Confirmatory Factor Analysis and Structural Equation Model were done using AMOS software.

The data of 251 respondents was used for the research testing purpose. The response was only collected from individuals with any prior experience using ERP software. Of 251 respondents, 41% were females, 49% were males, and 10% preferred not to say. Most respondents were employed full-time (60%), followed by employed part-time (16%), self-employed, etc. Most respondents belonged to the age group of 25 – 35 years (57%).

Table 1
Demographics

Demographics		Frequency	Percent (%)
Employment	Employed Full-Time	154	60.6
	Employed Part-Time	40	15.7
	Self-Employed	27	10.6
	Student	17	6.7
	Unemployed	14	5.5
	No response	2	0.8
Department	Customer Services	22	8.7
	Finance	48	18.9
	Human Resource	19	7.5
	Marketing & Sales	40	15.7
	Supply Chain	120	47.2
	No response	5	2.0
ERP Using Experience	Less than 1 year	39	15.4
	1 - 2 years	90	35.4
	2 - 5 years	86	33.9
	5 - 10 years	34	13.4
	More Than 10 Years	3	1.2
	No response	2	0.8

Descriptive Statistics

Descriptive Statistics is used to measure the univariate normality of the collected data. It comprises measures of central tendency and variability. Mean, median, and mode are used to measure the central tendency. Standard Deviation, Variances, Skewness, and Kurtosis measure the Variability of the data.

Table 2
Descriptive Statistics

	Mean	Std. Deviation	Skewness	Kurtosis
PEU	1.65	0.55	0.59	-0.15
PU	1.66	0.53	0.42	-0.16
ATT	1.62	0.51	0.46	-0.08
INT	1.68	0.57	0.98	2.14
CSE	2.26	0.69	-0.31	-1.25
JR	1.66	0.55	0.51	-0.16
TR	1.74	0.64	0.75	0.23
MS	1.71	0.58	0.63	0.44
SC	1.96	0.80	1.03	1.20
COM	1.69	0.58	0.58	-0.08

The above table shows the highest Skewness value (SK = 1.03) for the construct System complexity (SC) (Mean = 1.96, SD = 0.80) and the lowest Skewness value (SK = -0.31) for the construct Computer Self-Efficacy (CSE) (Mean = 2.26, SD = 0.69). Similarly, it shows the highest Kurtosis value (KR = 2.14) for the construct Intention to use ERP (INT) (Mean = 1.68, SD = 0.57) and the lowest kurtosis value (KR = -1.25) for the construct Computer Self- Efficacy (CSE) (Mean = 2.26, SD = 0.69). All the construct satisfies the acceptable range of ± 2.5 for univariate normality (Park, 2015).

Reliability Analysis

Reliability analysis determines the internal consistency of a measure by using Cronbach Alpha as shown in table 3, below.

Table 3
Reliability Analysis

Constructs	Mean	Variance	Std. Deviation	N of Items	Cronbach Alpha
PEU	9.891	10.921	3.305	6	0.910
PU	9.933	9.945	3.154	6	0.914
ATT	8.092	6.504	2.550	5	0.900
INT	6.703	5.168	2.273	4	0.888
CSE	18.033	30.301	5.505	8	0.946
JR	6.657	4.890	2.211	4	0.878
TR	8.682	10.109	3.179	5	0.922
MS	6.841	5.420	2.328	4	0.882
SC	7.845	10.123	3.182	4	0.917
COM	6.757	5.428	2.330	4	0.898

Table 3 shows the highest reliability ($\alpha = 0.946$) for construct CSE (Mean = 18.033, SD = 5.55) while the reliability ($\alpha = 0.878$) for construct JR (Mean = 6.65, SD = 2.21). All the Cronbach Alpha’s values are greater than 0.7, indicating satisfactory reliability for the data (Iqbal & Usmani, 2009).

Validity Analysis

Construct validity is the extent to which a test accurately measures what it is intended to measure. It can be determined by using tests of ‘Convergent Validity’ and ‘Discriminant Validity’. The constructs adopted in this study were previously utilized in another research. Therefore, to maintain the uniformity of the study, Convergent Validity has been measured by values of Average Variance explained.

Table 4
Convergent Validity

Constructs	Cronbach Alpha	KMO	BToS	AVE
PEU	0.910	0.907	873	0.69
PU	0.914	0.889	910	0.69
ATT	0.900	0.876	694	0.71
INT	0.888	0.825	538	0.75
CSE	0.946	0.942	1,576	0.72
JR	0.878	0.802	493	0.73
TR	0.922	0.867	877	0.76
MS	0.882	0.814	519	0.74
SC	0.917	0.826	686	0.80
COM	0.898	0.808	592	0.76

To check the variability between variables, principal component analysis, together with Varimax rotation, is applied. Table 4 shows the values of Kaiser- Meyer-Olkin (KMO) > 0.7, Average Variance Explained (AVE) > 0.5, and Bartlett Test of Sphericity (BToS) at a confidence level of 95% (Hair, et al., 2014). These results fulfil the requirement of Convergent Validity. Discriminant Validity ensures that the construct used in the study is distinct and unique. This test includes the fact that the Average Variance Explained square root should be greater than the Correlation Coefficient (Fornell & Larcker, 1981).

Table 5
Discriminant Validity

	PEU	PU	ATT	INT	CSE	JR	TR	MS	SC	COM
PEU	0.831									
PU	0.461	0.831								
ATT	0.518	0.456	0.843							
INT	0.398	0.433	0.444	0.866						
CSE	0.023	0.031	0.059	0.054	0.849					
JR	0.448	0.394	0.460	0.458	0.030	0.854				
TR	0.383	0.272	0.308	0.248	0.027	0.471	0.872			
MS	0.350	0.428	0.333	0.353	0.037	0.382	0.423	0.860		
SC	0.161	0.215	0.099	0.161	0.000	0.171	0.143	0.230	0.894	
COM	0.446	0.310	0.316	0.317	0.036	0.348	0.339	0.415	0.158	0.872

The diagonal values in Table 5 are the square root of the AVE of constructs, whereas the off-diagonal values represent the values of Coefficient Correlation. The results show that diagonal values are all greater than Coefficient correlation, hence satisfying the Discriminant Validity Condition.

Correlation Analysis

Correlation analysis is used to determine the multicollinearity among the variables and is the prerequisite for regression Analysis. The researches indicate that the correlation should lie between 0.2 and 0.9 (Bell et al., 2022).

Table 6
Correlation Analysis

	PEU	PU	ATT	INT	CSE	JR	TR	MS	SC	COM
PEU	1									
PU	.679**	1								
ATT	.720**	.675**	1							
INT	.631**	.658**	.666**	1						
CSE	.150*	.176**	.243**	.233**	1					
JR	.669**	.628**	.678**	.677**	.173**	1				
TR	.619**	.522**	.555**	.498**	.163*	.686**	1			
MS	.592**	.654**	.577**	.594**	.193**	.618**	.650**	1		
SC	.401**	.464**	.315**	.401**	-.022	.413**	.378**	.480**	1	
COM	.668**	.557**	.562**	.563**	.189**	.590**	.582**	.644**	.397**	1

** . Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 6 shows that all the values are significant at a confidence level of 95% or 100% except the between SC and CSE (-0.022). The Lowest value ($r = 0.022$) is between CSE and SC, whereas the strongest value ($r = 0.720$) exists between PEU and ATT. The relationship of CSE with the other constructs is relatively weak or has no relation to other constructs. Therefore, the construct may be dropped in the later tests.

Structural Equation Model and Mediation Analysis

The overall model was tested through Covariance-based CB-SEM Analysis using Amos V24 software. This helps in conducting CFA Confirmatory Factor Analysis and hypothesis testing simultaneously. CFA assess the model and confirms its fitness using the Measurement and Structural model. The study reports dit-indices such as Chi-Square, Standardized Regression weights, Correlations, Root mean square residual (RMR), Root mean Square Error of Approximation (RMSEA), Comparative fit index (CFI), Tucker-Lewis Index (TLI), Incremental Fit Index (IFI), Parsimonious Normed Fit Index (PNFI), and Parsimonious Comparative Fit Index (PCFI). To achieve the goodness of fit for the model construct, CSE was dropped due to non-significant correlation and more items. Similarly, 15 items were deleted due to increased error correlations or no significance.

Standardised Regression weights for all the items are greater than 0.7. The chi-square value is 1115.936 when $P < 0.05$. Similarly, CMIN Relative Chi-Square (χ^2/df) is 2.130, satisfying the condition of goodness of fit ($\chi^2/df < 5$) (Kline, 2023). Another determinant, RMR, determines the badness of fit with the acceptable value of < 0.05 (Iacobucci, 2010). The result highlights the RMR value to be 0.021, satisfying the acceptable criteria. RMSEA should be less than 0.08, CFI to be > 0.9 , TFI to be > 0.9 (Hair, 2014). The result shows that RMSEA is 0.067, CFI is 0.920, TLI is 0.909, and IFI is 0.921, indicating the goodness of fit for the model. For the Parsimony fit index, PNFI and PCFI should be > 0.7 (Schumacker & Lomax, 2004). The analysis shows that PNFI is 0.758 and PCFI is 0.810

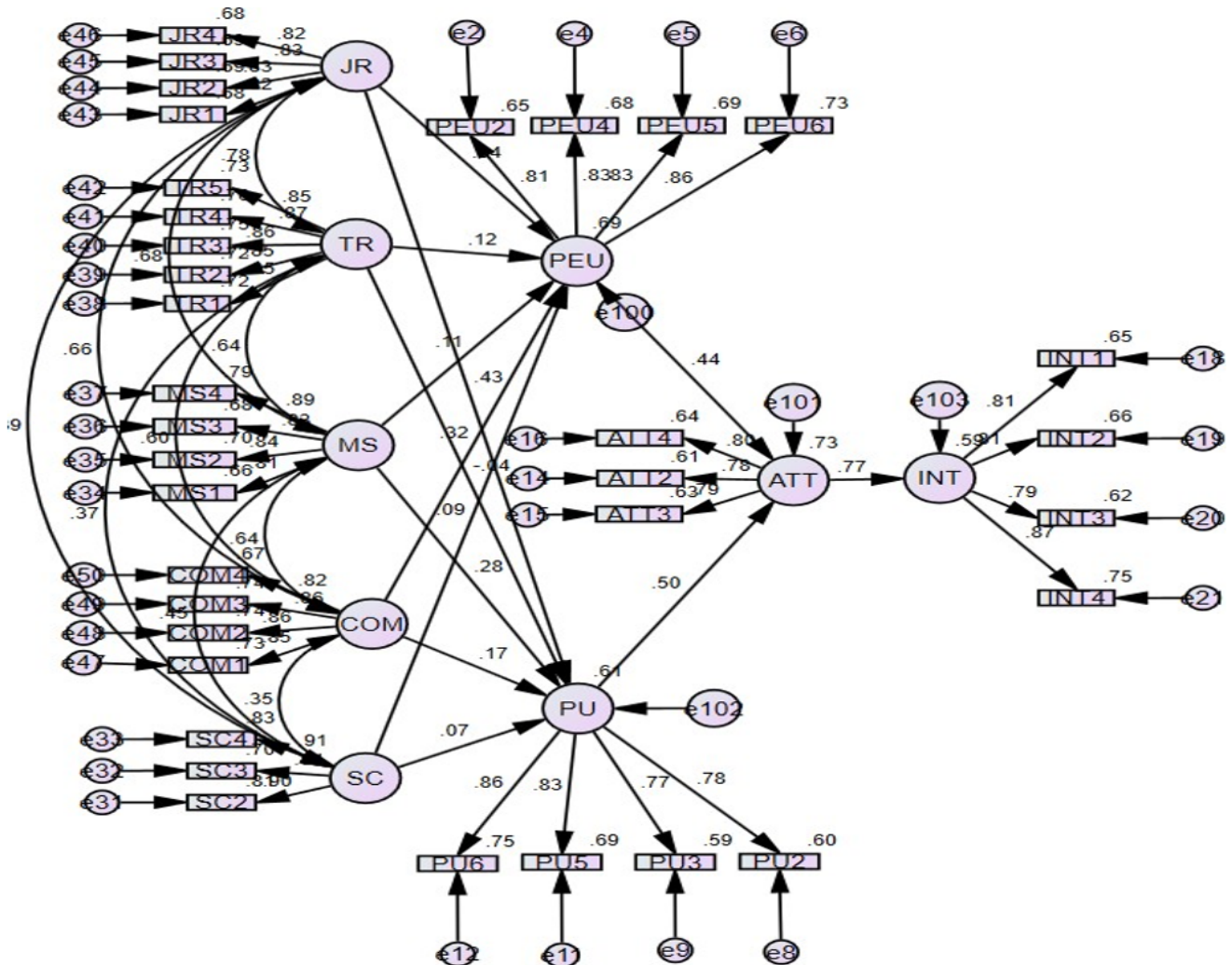


Figure 2 Structural Model

Results of Hypothesis Testing

The results in Table 8 indicate the model path analysis for the conceptual model tested using the CB Covariance-based SEM approach. It uses standardized path coefficients to test the hypothesis. JR significantly influences PEU ($\beta = 0.339, p < 0.05$) and PU ($\beta = 0.428, p < 0.05$). The study also concludes that PEU and PU mediate on JR and ATT, as well as JR and INT. The construct TR is highlighted to have no significant impact on PEU ($\beta = 0.119, p > 0.05$) and PU ($\beta = -0.043, p > 0.05$). Similarly, the mediation effect is also not relevant to the case. In the case of MS, it insignificantly impacts PEU ($\beta = 0.115, p > 0.05$), but significantly impacts PU ($\beta = 0.282, p < 0.05$). There is also a mediating impact between MS and ATT, and MS and INT. Construct COM has a significant impact on PEU ($\beta = 0.324, p < 0.05$) and PU ($\beta = 0.169, p < 0.05$). Similarly, PEU and PU mediate between ATT and COM and INT and COM. There is also no significant impact of SC on PEU ($\beta = 0.089, p > 0.05$) and PU ($\beta = 0.068, p > 0.05$). Conversely, the mediating factor is also not applicable to this. PEU ($\beta = 0.443, p < 0.05$) and PU ($\beta = 0.502, p < 0.05$) both have a significant impact on ATT. There is also a mediating impact of ATT between PEU and INT, and PEU and INT. ATT also has a direct significant impact on INT ($\beta = 0.771, p < 0.05$).

Table 7
Model Path Analysis

Hypotheses	Paths	Estimate	P	Conclusion
H1	JR ---> PEU	0.339	***	Hypothesis Supported
H2	JR ---> PU	0.428	***	Hypothesis Supported
H3	TR ---> PEU	0.119	0.134	Hypothesis Not supported
H4	TR ---> PU	-0.043	0.62	Hypothesis Not supported
H5	MS ---> PEU	0.115	0.114	Hypothesis Not supported
H6	MS ---> PU	0.282	***	Hypothesis Supported
H7	COM ---> PEU	0.324	***	Hypothesis Supported
H8	COM ---> PU	0.169	0.022	Hypothesis Supported
H9	SC ---> PEU	0.089	0.079	Hypothesis Not supported
H10	SC ---> PU	0.068	0.221	Hypothesis Not supported
H11	PEU ---> ATT	0.443	***	Hypothesis Supported
H12	PU ---> ATT	0.502	***	Hypothesis Supported
H13	ATT ---> INT	0.771	***	Hypothesis Supported

Table 8 determines the mediating impact through Standardized indirect Effects and Percentile method Two-tailed Significance ($p < 0.05$).

Table 8
Mediation Impact

Hypotheses	Path	β	P	T-Value	Conclusion
H1a	JR ---> ATT	0.365	0.01	3.67	Mediating
H3a	TR ---> ATT	0.031	0.878	4.17	Not mediating
H5a	MS ---> ATT	0.192	0.045	1.49	Mediating
H7a	COM ---> ATT	0.229	0.014	-	0.50
H9a	SC ---> ATT	0.073	0.232	1.57	Not mediating
H2a	JR ---> INT	0.281	0.01	3.46	Mediating
H4a	TR ---> INT	0.024	0.878	4.69	Not mediating
H6a	MS ---> INT	0.148	0.045	2.30	Mediating
H8a	COM ---> INT	0.176	0.014	1.77	Mediating
H10a	SC ---> INT	0.057	0.232	1.24	Not mediating
H11a	PEU ---> INT	0.342	0.01	6.38	Mediating
H12a	PU ---> INT	0.387	0.01	6.92	Mediating

DISCUSSION & CONCLUSION

These analyses revealed that Personal Characteristics influence the Intention to use ERP systems. Job relevancy influences Perceived Ease of use and Perceived Use, as also suggested by (Alambeigi & Ahangari, 2016). Perceived Ease of Use and Perceived Use also mediate in Job Relevancy, Attitude, and Job Relevancy and Intention. This highlights that Organizations have redefined the use of technology for every employee. As a result, employees find the relevance of tasks and ERP technology. This helps the Employees continue using the ERP system to improve their job performance. The findings show that Organizational Characteristics partially impact the Intention to Use ERP. Because Training and Managerial Support have no impact on Perceived ease of use. Meanwhile, perceived usefulness seems to be influenced only by managerial support. Similarly, perceived usefulness also acts as a mediator for managerial support, the intention to use ERP, managerial support, and attitude towards ERP. These results were significant (Leonard-Barton & Deschamps, 1988; Rajan & Baral, 2015). Managers are typically assumed to have influenced the acceptance of technology by their subordinates. However, this research reveals that employees may not consistently perceive this approach. They might not require managerial support while dealing with the difficulty and complexity of using ERP technology. On the other hand, perceived usefulness can be influenced by managerial support, as managers could promote the potential benefits (Thompson et al., 1991). Similarly, training may not impact perceived ease of use and perceived

usefulness by depending on certain factors such as lack of user resistance to change, any prior experience, differences in attitudes or beliefs, and poorly designed training programs (Kassab et al., 2022; Daoud & Ibrahim, 2018; Venkatesh et al., 2003)

The analyses reveal that Technological characteristics partially impact User's intention to use. System compatibility significantly impacts perceived ease of use and perceived usefulness, with PEU and PU acting as mediators for compatibility, attitude, compatibility, and intention. These results are compatible with (Ismail, 2016). System compatibility by ERP users may result in reduced complexity, improved integration and increased adoption. However, system complexity does not impact PEU and PU (Pappas et al., 2014). This can be attributed to sufficient training, a well-designed system, and user expertise.

The study's limitation is that while it examined various enterprises implementing multiple modules of an ERP system, caution must be taken when generalising the findings. Other factors within the ERP environment, such as communication, learnability, past adoption behaviour, interface usability characteristics, and the nature of the technology itself, are also crucial to understanding.

The study's limitation is that it only examined the mediating role of some user characteristics and not moderating characteristics, while other user characteristics were not included in the research framework.

Competing Interest

The authors had no competing interests.

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