Pakistan Journal of Commerce and Social Sciences
2023, Vol. 17 (3), 424-445
Pak J Commer Soc Sci

Effort Expectancy, Task Technology Fit, and ERP Adoption Behavior; Moderating Effect of Trust in Technology: Evidence from SMEs of Pakistan

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Article History

Received: 06 July 2023 Revised: 15 Sept 2023 Accepted: 19 Sept 2023 Published: 30 Sept 2023

Abstract

Usually, adopting technology in the business boosts its performance, but SMEs are still reluctant to adopt modern technology such as ERP. This research has examined link among effort expectancy, task technology fit, and ERP adoption behavior in SMEs in Pakistan. Furthermore, this study examines the moderating effect of trust in technology on the said relationships. This study used a quantitative research technique. Google survey form method used to collect the data from employees of SMEs in Pakistan those having ERP systems. To measure and confirm the hypothesis, the study employed SmartPLS software. The findings show a significant linkage among effort expectancy, ERP adoption behavior, and task technology fit ERP adoption behavior. Besides the significance of direct relationships, the moderating effect of trust in technology is also significant in relation between effort expectancy, ERP adoption behavior, task technology fit and ERP adoption behavior, further strengthening the main hypothesis. This study's findings provide implications for organizations considering implementing an ERP system. By identifying the factors that influence ERP adoption behavior, organizations can develop strategies to increase the likelihood of successful implementation of ERP.

Keywords: Effort expectancy, task technology fit, ERP adoption behaviour, trust in technology, SMEs, Pakistan.

1. Introduction

Businesses must use accounting data to oversee their operations in various areas, such as cash flow, costs, and expenditures. Long-term strategies for better business planning are also facilitated by accounting information, particularly for companies operating in highly competitive markets (Lutfi, 2021). Prior studies examined that utilising IT-based solutions to enhance accounting information collecting and communication must be a top priority to increase a business's competitive edge and productivity (Hameed & Counsell, 2014). In this era of globalisation, companies adopted enterprise resource planning (ERP) for better integration between internal & external systems, effective decision-making for managers, supply chain management, financial information, human resource management, and inventory management; ERP automates essential organisational processes and improves client management (Subhani et al., 2023). Although SMEs of Pakistan contribute a lot to the economy and create opportunities for employment at the same time, they face some serious problems, such as; power shortages, inadequate government systems, weak corporate governance systems, energy crises, and a lack of technology adoption, harming a country's overall growth, decreasing worldwide rankings, and curtailing business operations (Butt, 2020).

In Pakistan, individuals believe that adopting the ERP system will decrease their power & decision-making ability in SMEs of Pakistan; in fact, the reduction in authority leads to a decrease in workload and the ability to spend time learning other functional skills of the ERP system (Taufiq & Siddiqui, 2021). Several factors affected the ERP system's adoption, and limited research conduct for adopting ERP among small and medium enterprises, especially in developing economies like Pakistan Butt (2020) argued that SMEs of Pakistan rely mainly on the old school of thought, conventional methodology, and spreadsheets have been widely seen, resulting in most of Pakistan's office staff being dissatisfied with the technology. Organisations in Pakistan follow pre-defined international standards that are misfits for the conditions in Pakistan, and it becomes the reason for low adoption and massive failure of the ERP system (Malik & Khan, 2021).

The majority of the studies focus on ERP adoption in developed countries, where rich data is available; therefore, there is a need for further research into ERP adoption in developing countries like Pakistan (Shafi et al., 2019). Prior research focuses on ERP adoption in developed countries, where flexibility, cost, performance, quality, and competitive advantage are there, whereas contextual factors spotlight the low adoption of ERP, such as in Pakistan, the pre-defined international standard, employees' fear, reluctance, and a lack of knowledge; therefore, there is a need for further research to highlight the importance of ERP adoption in developing countries like Pakistan (Shafi et al., 2019; Masood & Sonntag, 2020; Malik & Khan, 2021; Nazir & Khan, 2022).

Many researchers (Chao, 2019; Khalilzadeh et al., 2017) proposed enhancement of the variable could improve the strength of the model for forecasting of IT's reception. Accordingly, the research formulate a conceptual research framework underpinning abovementioned theories and report the most relevant factors mentioned in ERP adoption behaviour. Assimilating linkage among effort expectancy, task technology fit, ERP adoption behaviour of SMEs that Pakistan offers new insights and contributes to addressing Pakistan's low rate of ERP adoption among SMEs more efficiently. Additionally, the moderating effect of trust in technology may have implications on ERP adoption behaviour, further strengthening the main relationship, especially in Pakistan.

The government institutions were not concerned about adopting information technology & integrated systems like ERP in SMEs of Pakistan due to a lack of funds and effective planning. During FY2019-20, SMEs with a budget of US 1,000 to US 3,000 per business were allowed to spend on accounting software, human resource management, financial management, inventory management, regulatory compliance, production planning, procurement planning, and general management. Surprisingly, only 80 (Eighty) SMEs were granted up to February 2020 out of 5.2 million in Pakistan (SMEDA, 2020). The Public Sector Development Program (PSDP) reduced from Rs 7.341 billion for FY2019-20 to Rs 6.672 billion for FY2020-21 (Commission, 2021).

This research emphasises the understanding and further investigates the fundamental causes of the low adoption of ERP systems in a developing country, i.e., Pakistan. This study decided to build its theoretical framework around an inquiry into the facts of ERP adoption behaviour. In this research, four theories were used to examine the ERP adoption behaviour: the Task Technology Fit model (TTF) proposed by (Goodhue & Thompson, 1995), the theory of planned behaviour (TPB) (Ajzen, 1991), and the unified theory of acceptance and use of technology. (UTAUT) (Venkatesh et al., 2003).

The rest of the study is organized in the following manners. Section 2 will discuss the theoretical background and hypothesis development. Section 3 will discuss research methodology. Section 4 will present the data analysis. Finally, Section 5 will provide the discussion.

2. Theoretical Background and Hypothesis Development

2.1. Unified Theory of Acceptance and Use of Technology (UTAUT)

The information technology or information system scientists faced the optimal between varieties of models and assured to specify model, therefore overlooking the feedback of substitute models (Venkatesh et al., 2003). Recent studies have shown that the parameters for UTAUT and the most extrapolative model in the literature on technology adoption (Andwika & Witjaksono, 2020; Yakubu & Dasuki, 2019; Jeon, Ali, & Lee, 2019; Handoko, Soepriyanto, & Lindawati, 2019; Chen & Hwang, 2019). EE is core phenomenon; therefore, this study used effort EE as an explanatory variable of proposed model.

2.2. Effort expectancy (EE)

Effort expectancy (EE) is the sum of the commitment of each person to use a system to maintain their job (Venkatesh et al., 2003). Moreover, the studies demonstrated that EE had a positive and significant impact on consumer attitude toward using technology adoption (Patil et al., 2020). Similarly, Andwika & Witjaksono (2020) revealed that effort expectancy influences behavioral intention to embrace ERP systems in a good and significant way. Christiansen et al. (2022) mentioned that SMEs are mainly focused by the researchers due to lower budget and lower costs associated with small businesses.

The positive linkage between EE and ERP adoption found by multiple researchers (Rahi et al., 2019). Few researchers, like Uddin et al. (2020), could not found significant linkage between EE and ERP adoption. Hossain et al. (2019) reported insignificant effects of EE on ERP adoption. Another study by Kwateng et al. (2018) found that EE has an insignificant effect on behavioral intention to adopt mobile banking. Considering the mixed results between effort expectancy and ERP, there is a need for further investigation to verify this relationship, particularly in developing economies like Pakistan. Based on the above discussion, we, therefore, hypothesize that:

- H_1: Effort expectancy positively relates to ERP adoption behavior in SMEs in Pakistan

2.3. Task Technology Fit (TTF)

Task technology fit (TTF) is link of job descriptions, a person's skills, the application's features; more precisely, TTF explains how technology enables a person to execute their assignment profile (Goodhue & Thompson, 1995). The expectation that users have that technology adoption will improve as it becomes more specialized to their specific needs, takes less time, is always accessible, and is user-friendly (Saxena & Kumar, 2020). Oni et al. (2022) noted that TTF determines the influence of innovation on the performance of the business. Wang et al. (2020) developed a model by combining the UTAUT and TTF to explain how consumers consider wearable healthcare devices and observed the interactive meaning of clienteles for behavior, task, knowledge characteristics were affected significantly & positively. Saxena & Kumar (2020) integrated the UTAUT with the TTF to investigate the impact on users' adoption of the use of mobile during tourism and found that the model accounts for 70 per cent of the modification in behavior intention. The findings show that the TTF significantly affects technology adoption; the correlation between TTF constructs and the UTAUT model is also confirmed by (Zhou et al., 2010). TTF has positively influenced user behavior and has a more substantial impact than other variables (Isaac et al., 2019).

On the other hand, Erskine, Khojah, & McDaniel (2019) revealed that self-efficacy had no significance regarding views of task-technology fit, and the same geographic reasoning skill had no significant influence. In light of the above vibrant discussion, we hypothesize that:

- H_2: Task technology fit positively relates to ERP adoption behavior in SMEs of Pakistan

2.4. Moderating Role of Trust in Technology (TT)

Scholars have shown great interest in trust in technology over the years; research findings on the impact of trust in technology adoption remain undecided. Some researchers found that the correlation between trust and technology adoption is insignificant, whereas some are believed to show a positive correlation (Kabra et al., 2017). Other research suggests that trust is an important determinant of impartial behavior through attitudes and behaviors (Patil et al., 2020). Additionally, trust in technology influences the willingness to resolve family disputes online (Casey & Wilson-Evered, 2012). Similarly, Koh et al. (2023) noted that in a wake of COVID-19 the businesses have resort to cost cutting through use of innovation and technology.

Cho et al. (2018) take trust as a moderator of the effect of freedom on market response. Khalid & Ahmed (2016) studied trust in supervisors moderates the relationship between general political behavior and relational silence. Ozyilmaz, Erdogan, & Karaeminogullari (2018) took employee trust in the organization as a moderator. Omwansa, Lule, & Waema (2015) discussed the influence of trust as a moderator in behavioral intention. Alsaad, Mohamad, & Ismail (2017) took the moderating role of trust in adoption behavior. Lee and Song (2013) suggest that trust in future research will improve understanding of the processes involved in consumer technology use.

Chao (2019) recommended that trust may moderate the relationship between behavior intention (BI) and technology adoption. Trust variables were used in different studies as a moderator, while there is no empirical evidence that employed trust as a moderator in the relationship of ERP adoption in SMEs of developing countries. Therefore, this gap leads to limited knowledge and understanding of the critical role of trust in ERP adoption behavior among SMEs, particularly in Pakistan. In light of the above recommendations, we, therefore, hypnotized that.

- H_3a: Trust in technology moderates the direct effect of EE over ERP adoption behavior in SMEs of Pakistan
- H_3b: Trust in technology moderates the direct effects of TTF on ERP adoption behavior in SMEs of Pakistan.

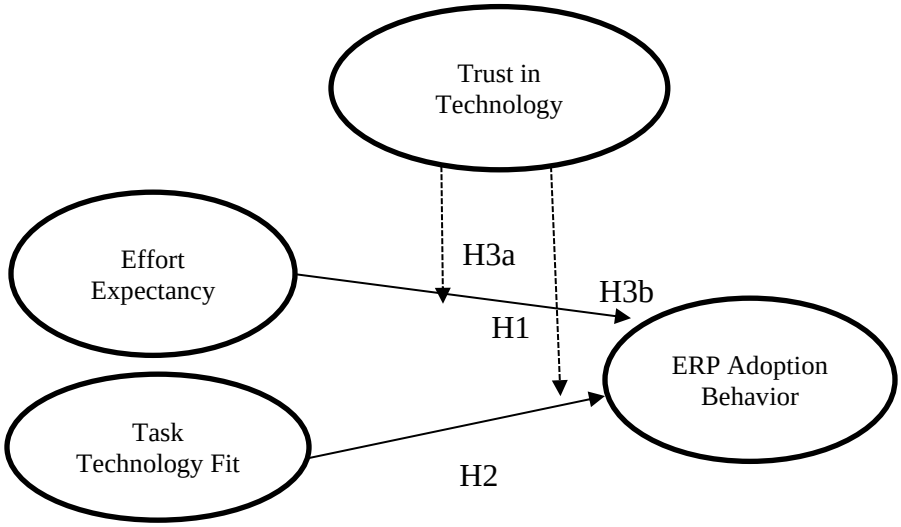

Figure 1: Hypothesized Model

3. Research Methodology

3.1. Questionnaire Design, Measures, and Data Collection

This is a quantitative study using an online survey (Google Docs) for data analysis through statistical analysis; therefore, a quantitative approach was suitable for research. The study used the descriptive research design to examine the ERP adoption behavior in SMEs in Pakistan.

The questionnaire consists of two main parts. The first segment contains the introduction and purpose of the research. The second section comprises of demographic information with respect to respondents. The next four parts contain the related items, which include EE, task technology fit, ERP adoption behavior, and trust in technology, respectively. As depicted in table 2, we develop the questionnaire in English.

We use a five-point Likert scale from 1 to 5 to measure each item. (1 for strongly disagree and 5 for strongly agree). We adapt the questionnaire for EE with four items from Venkatesh et al. (2003). Trust in technology questionnaire with five items was adapted from Kabra et al. (2017). The questionnaire for task technology fit was adapted from Lin and Wang (2012) with four items. ERP adoption items were adapted from Dwivedi et al. (2019), and there were four items for ERP adoption as well.

Most of the research used to generate the questions for each item came from previously published studies in this field, which were then changed to meet the Pakistani context. Table 2 lists the variables and research studies that are related to them. The questionnaire's content validity was ensured by soliciting and considering professional, academic, and research participant feedback. The questions were somewhat updated to understand the respondents better, clarify the questionnaire, and remove any ambiguity. Research data was collected through online surveys conducted via Google Forms between November 2022 and February 2023. We further contact each responder through phone calls at the beginning of the data collection procedure. We further sent an email with online link to each respondent.

3.2. Sample Characteristics

This study's population was SMEs in Pakistan having ERP systems. The unit of analysis is the primary identity to be examined in the investigation. Individuals are frequently used as the analytic unit in research. Therefore, employees working in SMEs in Pakistan and using the ERP systems served as the unit of analysis. A sampling frame is the physical representation of all characteristics that exist in the population. The sampling frame of this study is complete in all elements for a representative population sample. Whereas non-probability sampling is used because the sampling frame cannot be determined, and every element of the population does not have an equal chance of selection (Chen & Tsai, 2007). Therefore, this study used a non-probability purposive sampling technique.

Determining the sample size has always been one of the critical elements in the data collection process. The sample size should be moderate; too small could hinder the achievement of the research objectives. Similarly, a too-large sample size can also cause high cost and time-consuming; a sample should be sufficient to determine the relationships between the constructs (Fink et al., 2008). Some researchers have suggested a range of sample sizes, such as Roscoe (1975) recommended 30 to 500 respondents. Different researchers have recommended different methods to acquire a minimum sample size. Hair et al. (2018) suggested a 15:1 or 20:1 sample-to-variable ratio. So, this study used a 20:1 sample-to-variable ratio; there are three independent variables, and according to the 20:1 ratio, the minimum sample size was determined to be 60. Moreover, this study also used G-Power software for determination of study's sample size.

To collect the data, the researcher approached ERP solution providers and asked them to send the questionnaire to SMEs randomly using ERP systems throughout Pakistan. The researcher waited almost 4 months and got the data from 331 respondents. The study restricted the questionnaire to the closed-ended question, yes or no, whether they were using ERP solutions or not. 84 respondents answered No; the researcher learned that these SMEs were not fully operational using ERP. So, the study excluded 84 respondents who answered a No, and 247 respondents were used for further analysis. The questionnaire took almost 8 to 10 minutes. Table 1 shows the profile of the respondents. As depicted in table,

85% of respondents were male whereas 15% belongs to female gender. Similarly, the majority of respondents; 49% falls under the second category of 26 to 35 age group. From educational level perspective, 54% of the respondents have master level education. Moreover, 30% of the respondents were employees whereas 35% of the respondents hold job experience of 1 to 5 years.

Table 1: Respondents Profile

Profile	**Frequency**	**Percentage**
Gender		
Male	211	85%
Female	36	15%
Age		
Under 25	38	15%
26 to 35	121	49%
36 to 45	70	28%
46 to 55	16	7%
56 to onwards	2	1 %
Education Level		
Bachelor	68	28%
Master	134	54%
MS/MPhil	30	12%
Other	15	6%
Responsibility level in the company		
Top-level management	37	15%
Middle-level management	96	39%
Lower middle-levels management	39	16%
Employee	75	30%
Job experience		
1 to 5 years	86	35%
6 to 10 years	66	27%
11 to 15 years	42	17%
16 to 20 years	28	11%
21 to 25 years	15	6%
26 years to onwards	10	4%

4. Data Analysis

4.1. Validity and Reliability

Internal consistency reliability elaborates either a survey or questionnaire is fulfilling our expectations with the survey. In the past, Cronbach alpha was predominately used to measure internal consistency reliability. The Cronbach alpha assumes that all the measurement items have equal loadings and are equally reliable. In PLS-SEM, the Cronbach alpha might not be the proper measure to analyze the reliability, as in PLS-SEM, indicators are prioritized according to their reliability (Hair et al., 2016). So, to measure internal consistency reliability, composite reliability is the most recommended analysis (Hair Jr. et al., 2017; McNeish et al., 2018).

In contrast to Cronbach's alpha, composite reliability deals with the individual items' reliability, and in the reflective construct, each item indicates the relevant construct. Besides, the differences between Cronbach alpha and composite reliability are interpreted similarly, and the threshold value of composite reliability is between 0 and 1. The values of composite reliability between 0.60 to 0.70 are acceptable, values ranging between 0.70 to 0.90 are satisfactory, and the values above 0.95 indicate that all the items are measuring the same phenomenon and do not differ, so they are not acceptable (Hair et al., 2018). Table 2 shows that the internal consistency reliability of the constructs was satisfactory, as the values of Cronbach alpha and composite reliability are within the threshold value.

Table 2: Measurement and Operationalization

Construct	Item	M	Loading	CR	AVE	Alpha
Effort Expectancy	EE1	Learning to operate ERP system is easy for me	0.860	0.898	0.699	0.892
	EE2	I would find that ERP is easy for me to use	0.877			
	EE3	It would be easy for me to become skillful at using	0.823			
	EE4	My interaction with ERP is clear and understandable	0.819			
	EE5	I believe that the ERP system is easy to use	0.789			
Trust in Technology	TT1	I believe it is safe to use ERP	0.873	0.908	0.704	0.895
	TT2	I think ERP systems will provide reliable information	0.853			
	TT3	I believe it is risk-free to use ERP	0.763			
	TT4	I believe that the utilization of ERP systems will meet my work expectations	0.892			

	TT5	I believe that ERP systems will keep my best interests	0.809			
Use Behavior	UB1	I frequently use the ERP	0.857	0.825	0.636	0.800
	UB2	I really want to use the ERP	0.856			
	UB3	Most of my customers' requests are	0.583			
	UB4	I use the ERP system on a	0.858			
Task Technology Fit	TTF1	This ERP system matches my interests	0.769	0.929	0.667	0.928
	TTF2	This ERP system is compatible with all aspects	0.820			
	TTF3	My organizational goals and needs	0.805			
	TTF4	I think the output from the ERP	0.820			
	TTF5	The information from this ERP	0.826			
	TTF6	This ERP system provides you with up-to-date	0.834			
	TTF7	I get the information, which I need in time from ERP	0.830			
	TTF8	This ERP system provides an output that seems to be	0.826			

Convergent validity indicates the extent of correlation of an indicator with another indicator of the same construct (Hair, Risher, & Ringle, 2019). It also explains the extent Of variance of items. Average variance Extracted (AVE) is the assessment criteria of convergent validity. We assess AVE values by squaring the loading of each indicator and computing the mean value. In other words, it explains the variance percentage of the indicators making up the construct. The threshold for accepting the value of AVE is $\geq$ 0.50 indicates that the indicators explain 50% of the variance. Table 2 shows that the AVE value of each construct is $\geq$ 0.50.

Discriminant validity was measured using the recommended three approaches. i. Cross-loadings, ii. Fornell-Larker Criterion, iii. Heterotrait-Monotrait Ratio (HTMT). Assessing the cross-loading of indicators is the first criterion to measure the discriminant validity (Hair Jr. et al., 2017). Higher outer loadings of an indicator on all loadings of other constructs indicate valid discriminant validity (Hair, Ringle, & Sarstedt, 2013). Fornell & Larcker (1981) proposed a second method to measure discriminant validity, a more rigorous approach than cross-loading. In this method, each construct's square root AVE

should be greater than its highest correlation with other constructs. Table 3 shows valid discriminant validity as AVE was higher than the squared inter-construct correlation.

Table 3: Fornell-Larker Criterion

Variables	**EE**	**TT**	**TTF**	**UB**
Effort Expectancy	0.836			
Trust in Technology	0.722	0.839		
Task Technology Fit	0.687	0.793	0.816	
ERP Adoption Behavior	0.677	0.747	0.787	0.797

Fornell-Larker is a better approach than cross-loading to measure discriminant validity. However, it explains just 20.28% discriminant validity. With the slight difference in construct indicators, Fornell-Larker performs well but not up to the mark. In contrast, the Heterotrait-Monotrait (HTMT) criterion explains 97 to 99% discriminant validity (Henseler, Ringle, & Sarstedt, 2014). The threshold value of HTMT for conceptually similar constructs is 0.90, and for other constructs which are distinct is 0.85. Table 4 shows the satisfactory level of discriminant validity using HTMT criteria, as all the values are under the threshold values of 0.85 and 0.90.

Table 4: Heterotrait-Monotrait Criterion

	EE	**TT**	**TTF**	**UB**
Effort Expectancy				
Trust in Technology	0.801			
Task Technology Fit	0.753	0.864		
ERP Adoption Behavior	0.783	0.869	0.915	-

4.2Hypothesis Testing

Hypotheses testing is shown in the following section; PLS-SEM results in Table 5. Hypothesis H1 Effort expectancy positively affects ERP adoption behavior in SMEs of Pakistan. Effort expectancy is the sum of each person's commitment to ease of use to maintain their job. The findings indicate a significant linkage among EE and ERP adoption behavior ($\beta = 0.175$, t-value = 2.558, p-value $0.011 < 0.05$). This shows support for H1. The above results align with the previous studies; many researchers have verified the relationship between EE and ERP adoption behavior and found it to be positive (Uddin et al., 2020; Handoko & Prianto, 2020; Yakubu & Dasuki, 2019; Shiferaw & Mehari, 2019; Andwika & Witjaksono, 2020; Isaac et al., 2019). Therefore, it is assumed that technology adoption makes the job effort easy. This study accepted the hypothesis that the performance of Pakistani SMEs will be increased with better IT infrastructure, less cultural resistance, and internal integration. Our results in this context are in line with the previous studies such

as Rahi et al. (2019) which shows the positive association between the variables in case of Pakistan.

Table 5: Hypothesis Testing Results

Paths	β	Std. Error	t-Value	P-value	Decision
Effort Expectancy→ ERP adoption behavior (H1)	0.175	0.068	2.588	0.011**	Supported
Task Technology Fit→ ERP adoption behavior	0.470	0.076	6.220	0.000***	Supported
Trust in Technology *Effort Expectancy→ ERP adoption behavior	-0.156	0.067	2.337	0.019**	Supported
Trust in Technology* Task Technology Fit→ ERP adoption behavior	0.124	0.072	1.729	0.084*	Supported

Note: ***, **, * Significant p-value at 1%, 5%, and 10%.

Similarly, H2 Task technology fit positively affects ERP adoption behavior in SMEs in Pakistan. The degree to which a device satisfies its users' needs, meets their desires and fulfils the TTF tasks. The study identified the task technology fit's influence on the ERP adoption behavior among SMEs in Pakistan with (β =0.47, t-value = 6.22, p-value 0 < 0.05). Results confirm the acceptance of the second hypothesis. The results are aligned with past studies such as (Isaac et al., 2019; Wang et al., 2020), which show the data's compatibility, accuracy, and timely updating. It also shows that task technology fit improves ERP adoption in SMEs in Pakistan by ensuring that the system is aligned with the SMEs' specific needs and requirements, which improves usability, increased productivity, better alignment with business processes, and enhanced data quality. Our results in this case borne similarity to the results of Oni et al. (2022) which shows the positive association between the variables in case of Nigeria.

The moderating role of trust in technology on the linkage between EE and ERP was tested in H3a. The study revealed a significant result, which shows the moderating effect of trust in technology on relationship between EE and ERP adoption behavior. The results show the values of (β= -0.156, t-value = 2.337, p-value = 0.019 < 0.05), revealing support for H3a. The H3a aligned the results of the previous studies (Alsaad, Mohamad, & Ismail 2017; Rastogi, Verma, & Sushil 2018; Cho et al. 2018; Patil et al. 2020).

$$Effect\ Size = \frac{R^2included - R^2excluded}{1 - R^2included}$$

$$= \frac{0.678 - 0.673}{1 - 0.678} = 0.015$$

To calculate the effect size, we use R^2 values before and after the interaction. The change in R^2 shows the effect size of 0.015, which is a small effect size. For the two-way interaction plot, we used Beta values of independent, moderator, and interaction terms. Figure 2 shows the relationship between ERP adoption behavior and effort expectancy, and this relationship becomes stronger when the level of trust in technology is lower. Again, our results were consistent with Oni et al. (2022) in this context.

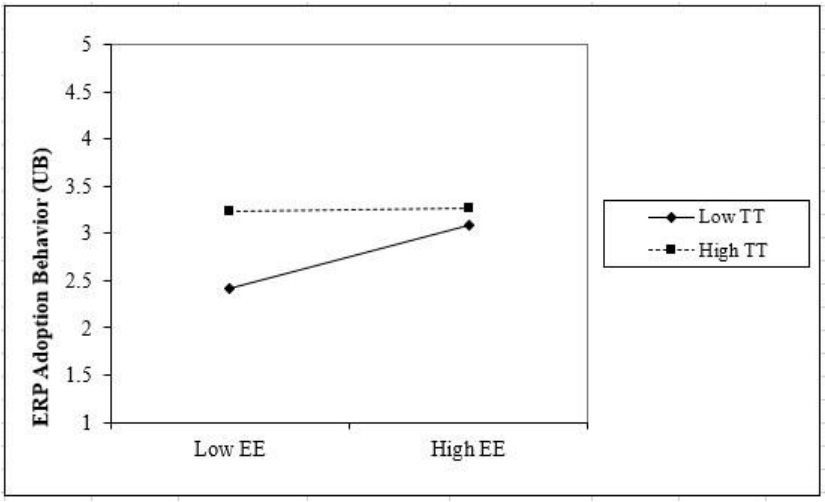

Figure 2: Two-Way Interaction Plot (Moderator = Trust in technology, = Effort Expectancy)

H3b examined trust in technology's moderating influence on the link among Task technology fit and ERP adoption behavior in SMEs of Pakistan. The study identified significant result with value of (β = 0.124, t-value = 1.729, p-value 0.084 < 0.05).

$$Effect\ Size = \frac{R^2included - R^2excluded}{1 - R^2included}$$

$$= \frac{0.678 - 0.675}{1 - 0.678} = 0.009$$

The effect size for the moderating effect of trust in technology on the relationship between task and technology fit and ERP adoption behavior is lower. Figure 3 shows that the relationship between task technology fit and ERP adoption behavior becomes stronger

when the trust in technology is higher. Our results were according to research of Cheng et al. (2019) who found similar results in case of Taiwan.

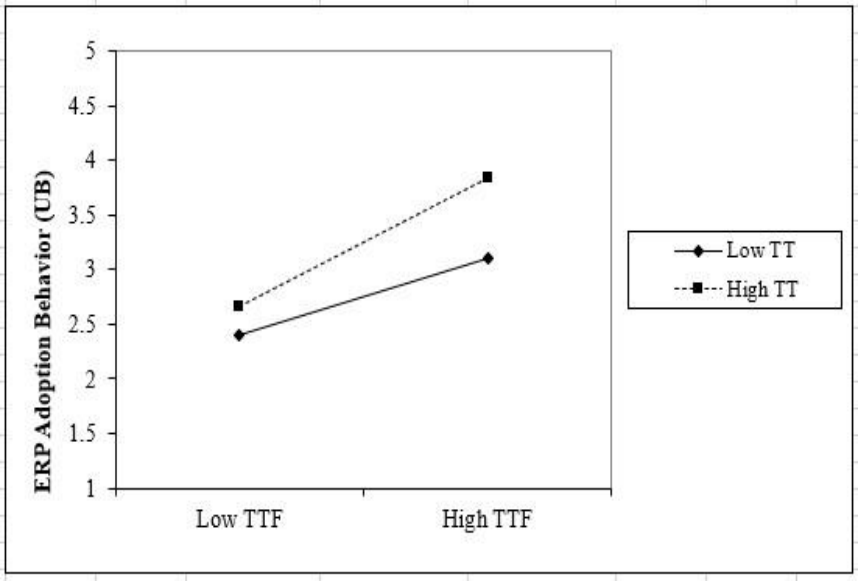

Figure 3: Two-Way Interaction Plot (Moderator = Trust in technology, = Task technology Fit)

5. Discussion

Effort expectancy is the sum of each person's commitment to ease of use to maintain their job. The study results align with the previous studies. Many researchers have verified the positive linkage between EE and ERP adoption behavior (Uddin et al., 2020; Handoko & Prianto, 2020; Yakubu & Dasuki, 2019; Shiferaw & Mehari, 2019; Andwika & Witjaksono, 2020; Isaac et al., 2019). Therefore, it is assumed that technology adoption makes the job effort easy. This study accepted the hypothesis, which shows that the performance of Pakistani SMEs will be increased with better IT infrastructure, less cultural resistance, and internal integration.

Consumer confidence in technology makes it easier for consumers to trust information technology and encourages conditions for end users to learn and value IT adoption. The findings are consistent to past studies like (Awa & Ukoha 2020; Malik, 2020; Chao, 2019; Patil et al., 2020). The result shows the data's compatibility, accuracy, and timely updating. It also shows that task technology fit improves ERP adoption in SMEs in Pakistan by ensuring that the system is aligned with the specific needs and requirements of the SMEs.

The results also improve usability, increase productivity, better alignment with business processes, and enhance data.

The degree to which a device satisfies its users' needs, meets the user's desires and fulfils the task technology fit tasks. The findings are consistent to past studies like (Isaac et al., 2019; Wang et al., 2020), which show the data's compatibility, accuracy, and timely updating. It also shows that task technology fit improves ERP adoption in SMEs in Pakistan by ensuring that the system is aligned with the specific needs and requirements of the SMEs. The above also leads to improved usability, increased productivity, better alignment with business processes, and enhanced data quality.

The moderating role of trust in technology showed diversified results. Some researchers argue moderating impact of trust between EE and ERP use behavior (Alsaad, Mohamad, & Ismail 2017; Rastogi, Verma, & Sushil 2018; Cho et al. 2018; Patil et al. 2020). Other researchers negated the above agreement and identified insignificant results where trust in technology is not moderating the linkage between TTF and ERP adoption behavior (Dwivedi et al., 2019), which stated that all the moderators don't need to be significant. However, ERP adoption requires high trust in the technology being implemented. If employees or stakeholders do not trust the technology, they may be resistant to using it or use it incorrectly, resulting in decreased efficiency and productivity. Therefore, this study examines that the moderation of trust in technology is an important factor that can affect the success of ERP adoption in SMEs in Pakistan. Study hypotheses H3a and H3b were supported as we found positive coefficient of trust in technology on the main hypothesis. In both cases, the results were significant and consistent.

5.1. Theoretical Implications

In broad-spectrum, we add to the literature by developing a theoretical model by examining the ERP adoption behavior in Pakistan. The researcher examines the ERP adoption behavior by integrating various theoretical models and validating them in this context. The UTAUT's connection between its components may change depending on situations and behaviors. In this research, UTAUT model is extended for more variation of adoption behavior with the integration of three novel factors: innovativeness in information technology, TTF, with trust in technology. These constructs improve the model's validity. The finding confirms that effort expectancy and TTF leads towards ERP adoption behavior which also be significantly moderated by the trust on this nexus supports people in professional training tasks in the portfolio to adoption behavior and attitude towards using the technology of ERP in SMEs of Pakistan.

5.2. Practical Implications

Thoughtful, the factors inducing SMEs to choose ERP systems adoption propose valuable knowledge not only for ERP vendors and practitioners but also for SME owners at large. The traditional technology adoption models mostly explain a few dimensions of the ERP

adoption behavior. This research suggests that top management/owners of the SMEs should provide technical assistance, knowledge, resources, and necessary organizational infrastructure to the employees so that ERP adoption in SMEs of Pakistan will be improved. The ERP provider/vendors should also persuade the SMEs' top management/owners how efficiently technological devices and facilities make the system more convenient. Eventually, all the arrangements will support and encourage the employees to better ERP adoption behavior in SMEs of Pakistan. A significant association between EE and attitude toward ERP adoption discloses that ERP systems may minimize the energy and time required to complete a task. The finding recommended that with the help of employee attitude towards ERP adoption, SMEs should provide ease of systems that will lead to employee satisfaction. Eventually, it can lead to improved employee engagement, and as a result, there will be less turnover, more productivity, higher profitability, and financial stability.

5.3. Limitation and Future Direction

Besides developing and validating a model with managerial and theoretical contributions, this research followed some limitations. The employees of SMEs adopting ERP systems were considered as sample. The sampling frame and the unavailability of the data related to SMEs adopting ERP systems, this study had to approach ERP providers and use online resources to collect the data. Next, the limitation is related to a specific industry. The study was unaware of the SMEs adopting ERP systems, and no data was available. So, the researcher observed overall SMEs regardless of a specific industry. Finally, this research used background of Pakistan, so this study used the constructs relevant to its objectives accordingly. Further research may be extended with the other relevant constructs, such as perceived usefulness, compatibility, and value of openness to change. Moreover, other constructs, such as relative advantage and observability, can be used as moderators.

5.4 Conclusions

This study delved into the crucial factors influencing ERP adoption behavior in Pakistan's small and medium-sized enterprises (SMEs). The results highlighted several noteworthy findings regarding the relationships among effort expectancy, task technology fit, trust in technology, and ERP adoption behavior.

The findings confirmed a significant relationship between EE and ERP adoption behavior. The above implies that when employees perceive the ease of use of ERP systems, they are more inclined to adopt them. This finding emphasizes the importance of considering the user's perception and experience when implementing ERP solutions in SMEs.

The study uncovered an important linkage between task technology fit and ERP adoption behavior. The study also shows that task technology fit improves ERP adoption in SMEs in Pakistan by ensuring that the system is aligned with the specific needs and requirements

of the SMEs. The above also leads to improved usability, increased productivity, better alignment with business processes, and enhanced data quality.

Likewise, research explored moderation effect of trust in technology on the association among EE and ERP adoption behavior. Results indicated that trust in technology amplifies the impact of EE on ERP adoption. The above results mean that when employees have higher levels of trust in technology, their perception of ease of use has a stronger influence on their decision to adopt ERP systems. Recognizing this moderating effect can help organizations focus on building trust to enhance the impact of perceived effort expectancy on ERP adoption. However, it is noteworthy that moderating effect of trust in technology on the relationship between task technology fit and ERP adoption behavior in SMEs of Pakistan was not significant. The results suggest that while trust is essential, its role in shaping the relationship between task technology fit and ERP adoption may be less pronounced in specific contexts but cannot be generalized. Further research is necessary to explore other factors influencing this relationship in Pakistani SMEs.

In summary, this study provides valuable insights into the reasons affecting ERP adoption behavior in Pakistan. Findings emphasize significance of perceived effort expectancy, trust in technology, and their integration in driving ERP adoption. The results can assist organizations and legislators in their efforts to encourage successful ERP implementation and utilization in the dynamic and evolving landscape of SMEs.

Research Funding

The authors received no research grant or funds for this research study.

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