Investigating the Relationship between ERP-Related Technostress and Employee Performance

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Abstract

This study investigates the factors affecting the adoption of ERP systems in enhancing employee performance. Interestingly, it integrates the mediating role of Techno-Stressors to understand the negative effect of technology on the employee well-being which ultimately affects the performance of employees. The theoretical framework of this study is majorly based on the Technology Acceptance Model (TAM). TAM is most extensively applied model for the adoption of IT by end users. The data for this was collected from 123 participants in order to test the hypothesis while the hypothesis was checked with the SPSS Amos 23. This study firstly reconfirmed the TAM, stating that the intention to use ERP is driven by Perceived Usefulness (PU) and Perceived Ease of Use (PEoU). Furthermore, findings show a positive link between Intentions to use (IU) ERP systems with Usage of ERP. Additionally, the interesting part is that the study finds Usage of ERP positively impacts Employee performance but when the techno-stressor introduce as a mediator it will not enhance employee performance but instead causes stress to individuals in different forms. These insights underscore the importance of managing techno-stress to optimize ERP outcomes. It is concluded that ERP systems pave the way for substantial performance benefits, so organizations must consider and address the effects techno-stress to fully leverage these systems for sustainable productivity gains.

Keywords: Enterprise resource planning (ERP) system; techno-stressor; technology acceptance model (TAM); employee performance.

JEL Classification: M15, O33, J24

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1.   Introduction

As information technology (IT) is swiftly integrating with organizational operations the adoption of the ERP-Enterprise Resource Planning systems is extensively increasing (Li, 2024). ERP system is designed to streamline business processes and improve operational efficiency(Di Camillo, 2023). Even the implementation and acceptance of ERP systems bring potential benefits, they often cause severe challenges for both end users and stakeholders (Weerasekara & Gooneratne, 2023). Globally, ERP market is still rapidly growing, it is expected to reach $78.4 bn by 2026. On the contrary, it is also found that 51% of companies face disruptions when they implement ERP in their operations (NetSuite.com, 2024).

One of the most influential frameworks in understanding technology adoption, the Technology Acceptance Model (TAM), offers insights into these challenges by emphasizing the role of Perceived Usefulness (in further discussion denoted by PU) and Perceived Ease of Use (in further discussion denoted by PEoU) in determining users' intention to adopt and use technology (Leso & Cortimiglia, 2022; Liu et al., 2018).

TAM has been widely used to understand the implementation of information technology (IT) systems across various contexts, including the ERP systems. It demonstrated that employees and users commonly relyon technology if they find it useful and user-friendly (Sandar, 2023). TAM has been significant in addressing severe issues faced during the early stage of the adoption and implementation of ERP. It highlights how PU and PEOU are raising the intention to use ERP systems (Zheng & Khalid, 2022). It is found in recent studies that higher PU and PEoU cause enhancement in intention to use ERP systems which ultimately enhanced job performance and employee productivity. Although users' attitudes towards utilising and acquiring the new system might be either positive or negative, the impact of these attitudes on system performance is substantial since user acceptance is a major factor in the adoption of new technologies. Many theories have been established to address these issues; the TAM is one of the most popular approaches for assessing an individual's intention to use an information system (IS) (Hancerliogullari Koksalmis & Damar, 2022; Sternad et al., 2011).

Notably, the entire benefits of ERP system are barely achieved due to the phenomenon of the Techno-stressors. Techno-stress brings a negative impact on productivity and job satisfaction, which ultimately poses a barrier to the adoption of technology (Kim & Lee, 2021). It can be said that techno invasion affects the work life balance, while techno overload requires employees to work longer and be connected which ultimately brings job dissatisfaction (Akwa Nde, 2022).

This technology acceptance and techno-stress are interconnected in a critical way to understand the overall impact of ERP-Systems on employee performance (Ebrahimi et al., 2019). Whereas, efficient use of ERP system not only improves decision making capabilities

but also operational efficiencies. Techno-stress causing psychological pressure and declining job performance can undermine the benefits of ERP. Therefore, an inclusive approach that addresses technology acceptance and potential stressors also is essential for better employee performance (Fraboni et al., 2023).

This study is an attempt to explore the relationship amongst the PU and PEOU of ERP while considering the intention to use the system including their actual usage, moreover, considering the mediating role of techno-stressor over the employee performance. With the integration of TAM with techno-stress, this study establishes a unique framework to understand the actual, or better say dual, impact of ERP systems over organizational performance.

Implementing ERP solutions has become crucial for organizations looking to improve efficiency and streamline operations in today's quickly changing technology landscape. But ERP systems come with a lot of advantages as well as drawbacks, especially when it comes to the psychological effects on workers. Techno-stress, a contemporary type of stress linked to technology use, has become a significant problem that can have a severe impact on worker performance (Fraboni et al., 2023). ERP systems are prone to cause technostress since they are complicated and frequently necessitate large adjustments to work processes. This can reduce the overall effectiveness of these systems by lowering employee performance (Penn, 2016).

Companies across various sectors investing significant amount of resources for the implementation of ERP system, still fail to achieve desired level of success in the enhancement of employee performance. The implementation of these systems is hindered by challenges such as low adoption rates, user resistance, and the growing problem of techno-stressors, ultimately affecting organizational efficiency and competitiveness (Orheruata, 2023). Identifying the key factors driving ERP adoption, usage, and their effect on employee performance, especially in environments where techno-stressors are present, is essential for organizations seeking to achieve the highest possible return on investment in ERP systems. The study contributes to the existing literature by offering a structured framework that identifies and addresses how the adoption of technology impacts employee performance via mediator of techno-stressors. By establishing a clearer understanding of the causal relationships among TAM model and employee performance by estimating the effect of stress, this study provides actionable insights for eradicating the risks associated with adoption of technology.
This research aims to address the following questions in order to meet its objectives;

- What is the influence of PU of ERP and PEoU of ERP systems on the intention to use ERP?
- What is the impact of intention to use ERP systems over the actual usage of ERP systems?
- What are the effects of using the ERP system on employee performance, and the role of techno-stressors in mediating this relation?

The rest of the paper is organized as follows. In Section 2, the literature on TAM, employee performance and techno-stressors are reviewed, along with the hypothesis development which also includes theoretical backing. Section 3 outlines the methodology, utilizing a verified questionnaire from earlier research as its survey instrument for testing the hypothesis. A representative sample of 123 people who utilize ERP systems at work are given the survey. Several statistical approaches are used for data analysis, such as reliability tests and discriminant validity (which includes both construct validity and convergent validity) and structural equation modelling (SEM) to evaluate the correlations between variables. Regression analysis is also carried out to investigate the effects of ERP-related technostress on worker performance. To ensure a thorough and reliable analysis of the data, SPSS 23 and Amos 23 software are used for the studies. The findings and results of the study are discussed in Section 4. Section 5 covers the discussion of the study along with the limitation of this study, moreover, the implications for both managers and academicians are addressed in that section. In Section 6 conclusion of the study is discussed with the conclusive remarks of the study.

2.   Literature Review

The Technology Acceptance Model-TAM is one of the most widespread models used to gauge the acceptance of technology by users (Liu et al., 2018). It is important to mention the two key or vital characteristics of TAM i.e Perceived Usefulness-PU and Perceived Ease of Use-PEoU, in influencing attitudes of the users towards technology and their subsequent desire to use it. TAM is an extensively applied model to explain the adoption of information technology by end users (Leso & Cortimiglia, 2022). The concept and model TAM has been extensively applied in various market settings, including mobile applications (Talantis et al., 2020), e-learning platforms (Rektenwald, 2022), and healthcare technologies (Alsyouf et al., 2023), demonstrating its versatility and relevance across diverse contexts. Previously, complex issues faced by end users and stakeholders during the adoption and implementation of Enterprise Resource Planning (ERP) were also tried to elaborate by TAM model (Mukred et al., 2023). Several other studies, have considered TAM across various contexts, indicating that both Perceived Usefulness (PU) and Perceived Ease Of Use (PEoU) can significantly affect the intention to use and actual usage of information technology systems (Gupta et al., 2021).

With the increment in usage of technology another concept that emerged is Techno-stress, refers to the negative psychological effects associated with technology usage (La Torre et al., 2019). (Kim & Lee, 2021) states techno-stress as the pressure experienced by users of technology due to the extensive use of technology and it manifests in various forms: Techno Overload, Techno Invasion, Techno Complexity, Techno Insecurity, and Techno Uncertainty. Techno-overload occurs when users feel overwhelmed by the amount of information and tasks technology demands (Hameed et al., 2022), while constant connectivity has led to the

erosion of distinctions between professional and personal spheres of life, resulting in a phenomenon known as techno-invasion. (Kim, 2021). Techno-complexity refers to circumstances in which personnel must invest more time and effort to comprehend how to use a technology because it is so complex, while techno-insecurity is the term used to characterize the state in which workers feel threatened with losing their jobs and being replaced by others who are technologically savvy. The concept of techno-uncertainty is commonly referred to as how technologies are always changing due to their short life cycles, which causes staff expertise to become outdated (Tarafdar et al., 2007; Rehman, 2022). (Tarafdar et al., 2007) elaborate the dimensions of techno-stress and emphasized their negative impact over not only productivity but also job satisfaction, while (Nisafani et al., 2020) identified how techno-stress affects end-user job satisfaction and role stress, highlighting the unique outcomes of stress due to techno stressors.

Systems for enterprise resource planning, or ERPs, have grown to be extremely useful tools for businesses looking to improve operational effectiveness and simplify corporate procedures. The implementation of ERP systems can lead to significant benefits, including operational efficiency improvement, data accuracy enhancement, and better decision-making capabilities (Putra et al., 2021). Different ERP models exist, such as on-premise and cloud-based solutions, each with distinct advantages and challenges. Cloud-based ERP systems offer flexibility and scalability, allowing organizations to adapt quickly to changing business environments. However, the transition to cloud-based ERP can raise concerns regarding data security and compliance (Arora et al., 2021).

ERP systems can influence employee performance in multiple contexts, including how actively employees use and accept the technology, and how severely the employees experience the stress due to the technology (Nyo, 2022). Interestingly, higher PU and PEOU are associated with higher intentions to use and actual usage of ERP systems, which resultantly enhance job performance (Le, 2021). Employees who use the ERP system efficiently and easily are more likely to integrate it effectively into their daily tasks, which ultimately improves their productivity and performance. On the contrary, techno stressors such as techno-overload and techno-complexity can undo the positive impact of employee performance (Kim & Lee, 2021). Even if employees see an ERP system as useful and easy to use, high levels of techno-overload and techno-complexity can negate these benefits by causing stress and reducing overall job performance. Likewise, continuous connectivity and fear of job loss due to technology fall under the terms of techno-invasion and techno-insecurity, and can result in vanishing job satisfaction and performance despite the high level of PU and PEoU (Krauss, 2020).

A concise and clear framework for understanding user acceptance of technology is provided by Technology Acceptance Model (TAM), this is particularly focused on individual perceptions of technology and does not keep an effective account for organizational and

social factors. However, the widespread use of ERP systems in businesses has sparked worries about the possibility of employee techno-stress. Techno-stress, which is characterized by adverse psychological and physiological responses brought on by the use of technology, is a major problem in modern workplaces (Tarafdar et al., 2007; Elizalde, 2021). A comprehensive approach is the need of the hour, that considers both acceptance of technology and the potential stressors associated with technology, to improve employee performance.

2.1   *Perceived Usefulness of ERP*

The idea of perceived usefulness has undergone significant development. PU is "the level to which an individual perceives that employing a system would enhance their job productivity" (Yamin & Sweiss, 2020). For instance, in the telecommunications sector, ERP systems have been linked to significant improvements in operational performance and customer service. Later, some scholars worked on its importance, highlighting that PU is a vital predictor of intention to use technology (Chen & Aklikokou, 2020). Associating the concept of PU in the context of ERP, PU is an important factor in users' acceptance and continued use of ERP systems (Hancerliogullari Koksalmis & Damar, 2022). Scholars further emphasized that PU impact on users' attitudes towards ERP, affecting overall satisfaction and system success. Furthermore, it is also pointed out that PU is affected by the effectiveness of information provided by ERP systems, which affects user acceptance and efficiency (Zaman, 2020).

2.2   *Perceived Ease of Use of ERP*

The concept of Perceived Ease of Use of ERP also received major development. Davis introduced and explained the term PEoU as "the extent to which an individual perceives that utilizing a specific system would be effortless" (Davis, 1989; Muazu et al., 2024). The term PEoU is directly connected with PU, as easier systems can supposed as more useful (Chen & Aklikokou, 2020). While discussing the concept of PEoU in the context of ERP system, ease of use is a critical element as the system is complex, impacting the level of user satisfaction and adoption of ERP. Moreover, training for the ERP is an effective means to PEoU, thereby enhancing system acceptance and usage (Mullins & Cronan, 2021). Research indicates that when users perceive ERP systems as easy to use, they are more likely to adopt and utilize these systems effectively

2.3   *Intention to Use ERP*

The concept of intention is applied to technology, with the intention to use technology being shaped by how useful and easy to use it is perceived to be (Prastiawan et al., 2021). Moreover, if the concept applied in the context of ERP, it showed that intention to use is a vital predictor of actual system usage. PU has a more substantial impact on ERP usage than

PEoU, suggesting that users are more motivated by the benefits they expect to gain from the system. It is also necessary to mention that intention to use ERP systems is affected by social influence and facilitating conditions (Uddin et al., 2020). Furthermore, organizational support, system quality and user training also influence the intention to use ERP.

2.4   Usage of ERP

Usage of ERP systems has been linked Technology-to-Performance Chain model, which states that actual system usage affects performance outcomes (Butt et al., 2023). Effective ERP implementation can streamline and simplify business operations, lower operational expenses, and enhance the ability to make informed decisions, ultimately leading to increased productivity. (Bhattacharya et al., 2023) found that user involvement and training satisfaction positively influence job satisfaction, which in turn enhances ERP effectiveness within emergency service organizations. It is also noted that frequent usage of ERP systems is essential for realizing the system's complete benefits. Effective usage of ERP systems is crucial for achieving operational efficiency and strategic benefits (Chopra et al., 2022).

2.5   Employee Performance

Employee performance has been a focal point of organizational studies and interestingly it has greatly influenced technology usage (Rambulangi et al., 2024). Employee performance is defined as how well an employee performs job-related activities (Madogwhe & Omogero, 2023). Performance is a behavior under an individual's control that contributes to organizational goals. Performance is identified as both task performance and contextual performance, affecting overall organizational success (Bhardwaj & Kalia, 2021). It is important to highlight here that ERP system usage enhances employee performance by improving efficiency and decision-making capabilities. ERP system is linked with employee performance as well-implemented systems significantly enhance individual productivity (Tarigan et al., 2020).

2.6   Techno Stressor

When someone "has a negative evaluation of their experience when carrying out tasks using technology at work," they are said to be experiencing techno-stress. The multi-item phenomenon known as "techno-stress" is made up of stressors such as "role ambiguity," "role overload," and "a sense of not having control" (Tarafdar et al., 2007; Bondanini et al., 2020). Techno-overload, Techno-invasion, Techno-complexity, Techno-insecurity, and Techno-uncertainty are the elements that (Ragu-Nathan et al., 2008) have identified as the most common class of factors that contribute to Techno-stress (Kim & Lee, 2021).

When employees experience various demands related to their use of technology, they become techno-overloaded and are compelled to work longer and faster (Stankevičiūtė, 2022). Three concepts are merged into a single term: communication overload, system feature overload, and information overload (Jackson & Farzaneh, 2012; Shahrzadi et al., 2024). Another term that has recently gained traction is 'social overload,' which refers to the negative impacts of extended social media usage (Fu et al., 2020). Techno-invasion occurs when workers feel pressured to always be reachable and connected, which causes work-related technology to infiltrate their personal lives (Chen et al., 2022). People suffer from a certain loss of privacy as a result of the ongoing connectivity issue and the hazy distinction between work and home. Techno-complexity illustrates the circumstance where people have to put in more effort at work and learn new skills to use rapidly evolving technologies because of the complexity of the technology. Put another way, the employee feels inadequate technically because of how complications of technology (Hurbean et al., 2022). Techno-uncertainty causes ambiguity and hurdles when people are concerned about integrating technology into their professions, while techno-insecurity occurs when employees fear they might lose their positions to more IT- skilled individuals (Ragu-Nathan et al., 2008).

2.7   *Perceived Usefulness of ERP and Intention to Use ERP*

PU is an important predictor of users' intention to adopt ERP systems. Users are more likely to engage with ERP systems when they believe these systems will enhance their job performance. Intention to use ERP relates to an individual's willingness and preparedness to accept and utilize the ERP system based on their awareness of its usefulness. The TAM, first proposed by (Davis, 1989), suggests that how useful something is perceived to be is a crucial factor in determining an individual's intention to use that technology (Mullins & Cronan, 2021) demonstrated that PEoU positively influences perceived usefulness, which subsequently affects users' attitudes and intentions to use ERP systems. The relationship between the perceived usefulness of ERP and intention to use ERP is synchronous in nature, when employees perceive the ERP system as useful for their job tasks their intention to use it is strengthened, leading to increased utilization and adoption of the ERP system(Stankevičiūtė, 2022). Furthermore, users' perceptions of system quality and information quality have a substantial impact on their perceived usefulness, which in turn directly influences their intention to continue using ERP systems. (Zaman, 2020).

H1: There is a significant impact of the Perceived usefulness of ERP on the Intention to use ERP.

2.8   *Perceived Ease of Use of ERP and Intention to Use ERP*

Similarly, PEoU has been recognized as an important determinant of individuals' intentions to use ERP systems. According to TAM, PEoU influences users' attitudes toward

technology, which subsequently shapes their intentions to adopt it (Davis, 1989; Muazu et al., 2024). As people are more willing to use tools that have compact interfaces and are easy to navigate, employees are more likely to adopt an ERP system if they perceive it as easy to use and navigate. When employees perceive the ERP system as user-friendly, their intention to use it is strengthened, leading to increased adoption and utilization of the system within the organization.

H2: There is a significant impact of Perceived ease of use of ERP on Intention to use ERP.

2.9   *Intention to Use ERP and Usage of ERP*

Usage of ERP relates to the real utilization of the ERP system in performing tasks within an organization (Putra et al., 2021). The usage of ERP pertains to the actual utilization of the system in performing job tasks within an organizational context. The theory of Planned Behavior (TPB) suggests that individuals' intentions strongly predict their behaviors (Pothuganti, 2024). When employees have a strong intention to use ERP, they are more likely to engage with the system and utilize its features in their daily tasks, leading to increased usage within the organization. In the context of ERP systems, it can be anticipated that employees' intention to use ERP will positively influence their actual usage of the system.

H3: There is a significant impact of Intention to use ERP on Usage of ERP.

2.10   *Usage of ERP and Employee Performance*

Employee performance encompasses the effectiveness and efficiency with which employees accomplish their work responsibilities (Rambulangi et al., 2024). The Resource-Based View offers insights into how ERP systems contribute to organizational performance. This theory suggests that resources which are valuable, scarce, difficult to replicate, and cannot be easily replaced can result in a lasting competitive edge and enhanced outcomes (Ali, 2021). When employees leverage the capabilities of the ERP system, they can access real-time information, streamline workflows, and make data-driven decisions, ultimately enhancing their performance within the organization.

H4: There is a significant impact of the usage of ERP on employee performance.

2.11   *Techno Stressor as Mediator*

Techno stressors, including techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty, refer to the negative psychological and physiological responses experienced by individuals due to the use of technology in the workplace. Techno-stress Model highlights the negative impact of information technology

use on employee well-being and performance (Pothuganti, 2024). It suggests that techno stressors such as information overload, invasion of privacy, and complexity of systems can mediate the relationship between ERP usage and employee performance. When techno stressors are high, they can hinder employees' ability to effectively utilize the ERP system and negatively influence their performance. On the other hand, when techno stressors are mitigated, employees may experience improved performance outcomes.

H5: Techno stressor mediates the influence of usage of ERP on employee performance.
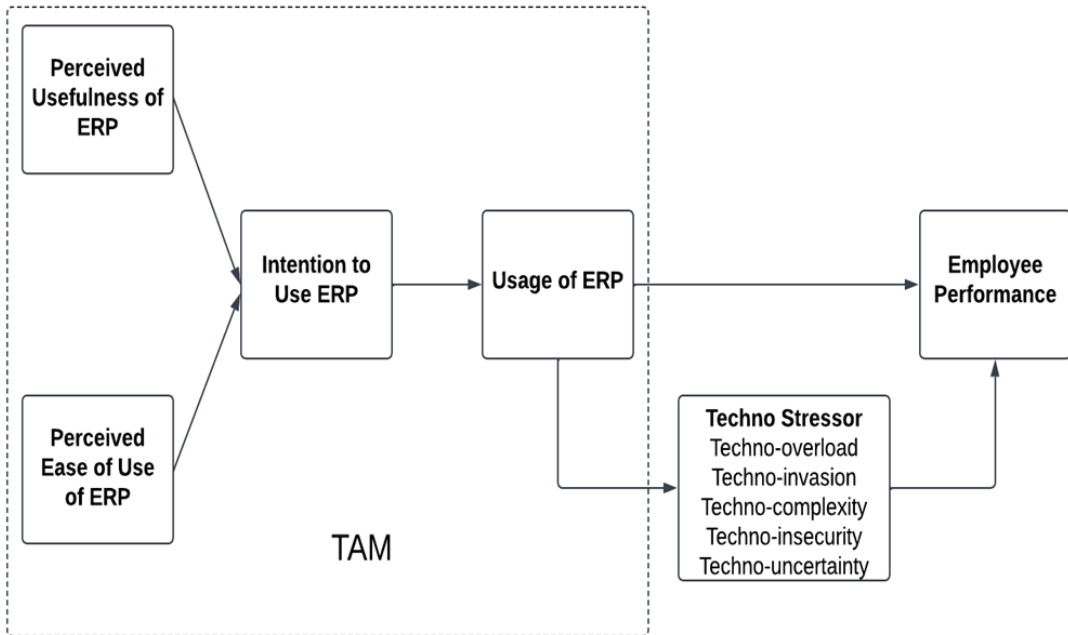

Figure 1: Shows the conceptual model of the research

3.   Research Methodology

        This study is conducted using a post-positivist approach (Gefen et al., 2000) that rests on the premise that observation and experimentation are the means to achieve reality (Henn et al., 2009). Additionally, this research employs a quantitative research design (Creswell, 2013), deemed the most suitable design for exploring cause-effect relationships. Post Positivism also advocates for quantitative methods to evaluate the proposed hypotheses. This research work is deductive in nature as all the constructs are derived from valid literature. The time frame for this research is cross-sectional where data is collected from participants in a single frame of time. This research is based on probability sampling where data is collected from random individuals each having the same probability for selection.

3.1 Population and Sampling

A survey based on the valid questionnaire is used for data collection. To evaluate the theoretical framework, a questionnaire created in earlier research studies serves as the survey tool. A 5-point Likert scale, from 1 (strongly disagree) to 5 (strongly agree), is utilized. Table 1 provides a detailed account of the sources and item count for the construct. Appendix A also contains the complete questionnaire. Data is collected from respondents using Google Forms. Participants were asked a screening question before filling out the survey form, whether they were aware of the Enterprise Resource Planning (ERP) systems. Only after completing this phase participants were allowed to take part in the survey thus our sampling is classified as purposive sampling (Cash et al., 2022). The table below shows the summary of the questionnaire of the study:

Table 1
Summary of Questionnaire

Variables		References	Items
TAM	Perceived usefulness of ERP	(Rajan&Baral, 2015)	4
	Perceived ease of use of ERP		2
	Intention to use ERP		2
	Usage of ERP		2
Employee Performance		(Koopmans et al., 2012)	2
Techno Stressor		(Hang et al., 2022)	17

3.2 Demographic Statistics

Among 123 participants, there are 91 (74%) male and 32 (26%) female respondents whose age ranges from 20 years to 50 years. 96 (78%) of the respondents were up to Graduation, 26 (21.1%) had master's degree and 1 (0.8%) had PhD degree. 56% of respondents report to be working in mid-level job positions while 70% of respondents have 2 to 5 years of work experience. These details are also given in Table 2:

Table 2
Respondent's Demography

Variable		Frequency	Percentage
Gender	Male	91	74%
	Female	32	26%
Age	20-29	43	35%
	30-29	73	59.3%
	40-49	7	5.7%
Education	Bachelors	96	78%
	Masters	26	21.1%
	PhD	1	0.8%
Job Position	Entry Level	2	1.6%
	Junior Level	17	13.8%
	Mid-Level	69	56.1%
	Senior Level	27	22%
	Management	8	6.5%
Experience Years	0-1	11	8.9%
	2-5	86	69.9%
	5-10	23	18.7%
	More than 10	3	2.4%

4. Results

SEM is performed in AMOS23 in order to check the fitness of good model-fit for the structural model which is represented below:
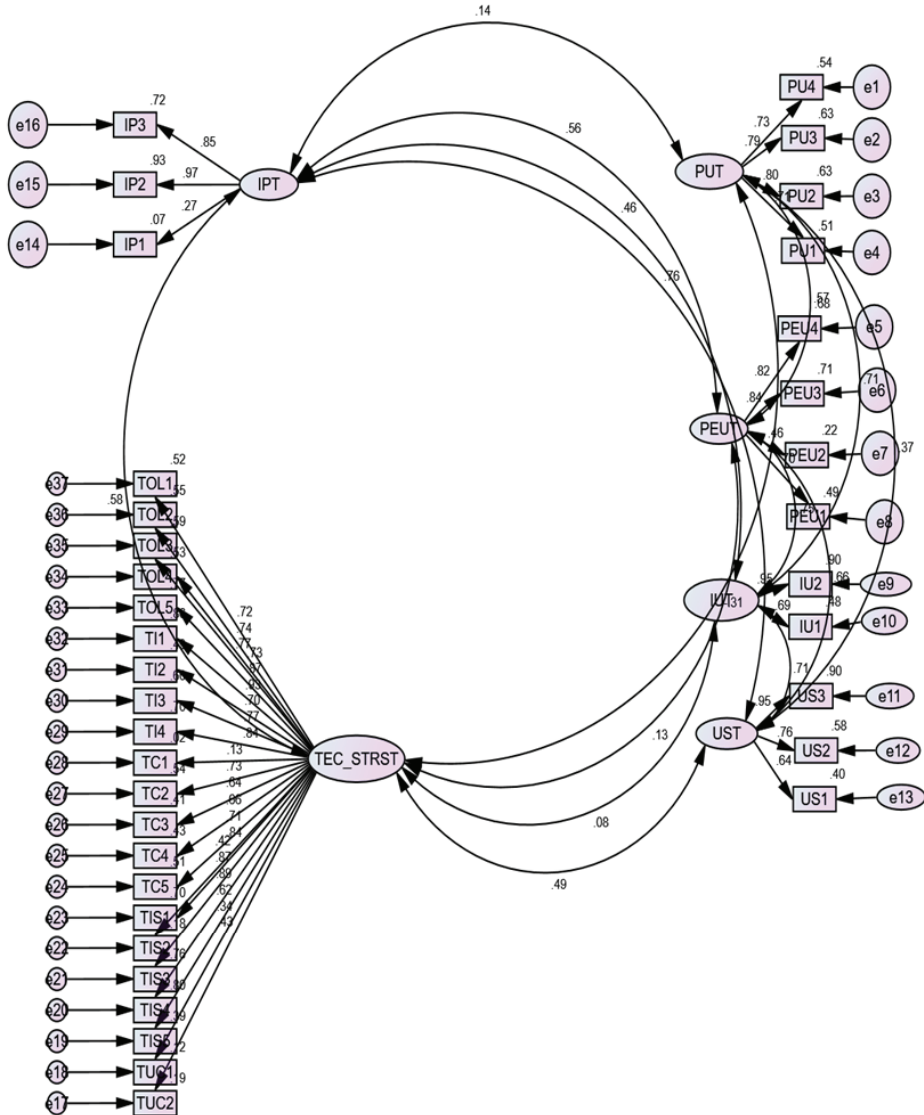
Figure 2: A model with Items and Factor Loadings

All variables including Independent variables, Dependent variables and Mediators undergo the process of regression to check the model fit of our framework. The results obtained are discussed in the table below:

4.1   *Reliability Analysis*

Reliability measures the consistency of data and ensures that the collected data is coherent. The tools utilized in the research have been extensively employed by scholars in various contexts with satisfactory Cronbach's Alpha.

Table 3
Reliability Analysis

	Mean	Std. Deviation	Cronbach's Alpha
Perceived Usefulness	4.04	.534	.835
Perceived Ease of Use	3.43	.429	.785
Intention to Use	3.89	.559	.780
Usage of ERP	3.27	.623	.812
Individual Performance	4.36	.498	.718
Techno Stressor	3.53	.491	.951

`The alpha value of Techno stressor is the highest (N=17, M=3.53, SD=.49) with the value .951, followed by Perceived Usefulness (N=4, M=4.04, SD=.53) with alpha=.835. The lowest value for Cronbach's alpha is .718 for Individual Performance (N=2, M=4.36, SD=.498). The extreme highest and the lowest values of reliability fall within an acceptable range of alpha greater than 0.7.

4.2   *Convergent and Discriminant Validity*

The AVE for each variable must exceed 0.40, while the CR should be greater than 0.70 for convergent validity. The summarized results presented in the table below confirm that the data meets the criteria for convergent validity (Hair, 2010).

Table 4
AVE and Cronbach's Alpha

	CR	AVE
PUT	0.854	0.594
PEUT	0.754	0.611
IUT	0.808	0.681
UST	0.778	0.642
IPT	0.903	0.823
TEC_STRST	0.961	0.597

The distinctiveness and uniqueness of each variable is assessed via discriminant validity (Hair, 2010). Discriminant validity is established when the square root of AVE exceeds the square of each correlation pair (Fornell & Larcker, 1981). The information displayed in the table below demonstrates the achievement of discriminant validity criteria for all constructs with the exception of Perceived Usefulness (PUT). The square root of the AVE for PUT is smaller than its correlation with PEUT.

Table 5
Discriminant Validity

	PUT	PEUT	IUT	UST	IPT	TEC_STRST
PUT	0.771					
PEUT	0.810***	0.782				
IUT	0.694***	0.765***	0.826			
UST	0.423***	0.630***	0.796***	0.801		
IPT	0.137	0.452***	0.466***	0.764***	0.907	
TEC_STRST	-0.317**	-0.054	0.09	0.416***	0.600***	0.773

4.3 Hypothesis Testing

Regression Analysis was first performed to check the model fit. First, confirms the TAM model which is using is using as basic framework of the study for Usage of ERP. It is found that TAM model is providing results as expected. It is also reflected in the analysis that Perceived Usefulness of ERP provides the significant results with Intention to use which is already highlighted in the Discriminant validity.

The study found that dependent variable Individual performance has a significant relationship with the Independent variable Usage of ERP and Moderator Techno stressor. Also, significant relationship between the Independent variable and Mediator is verified.

The method proposed by (Judd & Kenny, 1981) has been employed to assess mediation models, wherein the direct effect of the independent variable (usage of ERP) is determined by directly regressing it on the dependent variable (individual performance). The mediator (Techno stressor) and the independent variable (Usage of ERP) are both regressed against the dependent variable (Individual Performance) to examine the indirect effect.

Table 6
Hypothesis Testing

Hypothesis No.	Path		Estimate	S.E.	C.R.	P	Result
H1	PUT→ IUT	Direct Effect	0.322	0.083	3.894	***	Supported
H2	PEUT →IUT	Direct Effect	0.595	0.206	2.892	0.004	Supported
H3	IUT →UST	Direct Effect	0.796	0.094	8.471	***	Supported
H4	UST→IPT	Direct Effect	0.513	0.071	7.244	***	Supported
H5	UST→T.S →IPT	Direct Effect	0.638	0.083	-	***	Supported
		Mediating Effect	0.322	0.146	-	0.023	Supported

The table above illustrates the overall impact of the independent variable "Usage of ERP" on the dependent variable "Individual Performance," showing a total effect of 63.8%, and this effect is statistically significant, confirming the validity of our H1 hypothesis.
Upon introducing the mediator "Techno Stressor," the relationship between "Usage of ERP" and "Individual Performance" reduced to 32.2%, yet the results remain statistically significant. This suggests a partial mediation, supporting the validity of our H2 hypothesis.

5.   Discussion

According to the discussion in the chapters above, our predictions are confirmed by the results. Firstly, hypotheses (H1) and (H2) show that the intention to use ERP systems is significantly positively impacted by both perceived usefulness (H1) and perceived ease of use (H2). This result validates the Technology Acceptance Model (TAM), which suggests that users' opinions about a system's usefulness and ease of use are important factors in determining whether or not they will choose to accept and utilize it. Furthermore, this study also supported (H3) which suggests that there is a significant relation between the intention to use ERP systems and actual usage of ERP. This result supports earlier studies' findings that behavioral intention is a reliable indicator of system utilization in practice.

Furthermore, the result of (H4) shows that usage of ERP systems greatly improves employee performance, confirming previous research that highlights the contribution of ERP systems to enhancing individual productivity, organizational performance, and operational efficiency. Moreover, the study also reveals the mediating role of techno-stressors (H5), which negatively impact the relation between employee performance and usage of ERP. This shows that although ERP systems are intended to enhance efficiency, on the contrary prolonged use of technology can cause technostress, which reduces the benefits that could otherwise accrue from increased worker productivity.

Technostress's existence as a mediating element is especially significant since it implies that controlling employee stress during ERP system use is necessary for the systems to be effective in improving employee performance. ERP usage can improve performance, but its benefits may be undermined in high-tech situations. This is consistent with other research that examined the negative impacts of technology-induced stress on worker productivity and well-being, especially in jobs requiring a lot of technology (Tarafdar et al., 2015). Therefore, while there is no doubt that ERP systems can lead to increased performance, Organizations face a major obstacle in order to fully reap the benefits of these systems: the presence of techno-stressors.

The findings of this study align with the existing literature, in accordance with previous research, the results confirm TAM's claim that PU and PEOU are key factors influencing the adoption of technology. This study builds upon TAM by introducing the mediating effect of techno-stress, thereby incorporating a psychological aspect that is frequently neglected in ERP adoption studies. The integration of technology stressors into ERP systems shows that although these systems can enhance productivity, their high complexity and stringent usage requirements can also generate stress, thus offsetting some of their advantages.

5.1   *Limitations and Future Research Directions*

There are various restrictions on this study. Initially, the study concentrates on a particular organizational context with extensive ERP utilization, which restricts the applicability of the results to other sectors. Firstly, while considering the factors like participant variety and sample size the scope this study might be limited. Secondly, there is a risk of bias since self-reported data may not accurately reflect the objective effects of ERP usage, since subjective assessments of stress and performance may be incomplete. Future research could be strengthened by using longitudinal data or objective performance criteria. Furthermore, although not thoroughly investigated, elements like staff skills and the complexity of the ERP system may have an impact on the degree of technological stress. Lastly, this study solely looked at techno-stress as a mediating component for the future research the potential mediators or moderators like organizational support or employee resilience may provide additional insights over the research topic.

Subsequent investigations may broaden the conclusions by examining distinct sectors, hence improving the applicability of findings. A deeper knowledge of how ERP systems affect performance might result from extending the scope to include factors like employee engagement, organizational culture, and digital literacy. Assessing the long-term impacts of ERP use and stress management techniques may be aided by longitudinal research. Furthermore, studying how new technologies like artificial intelligence (AI) and machine learning are integrated into ERP systems and how this affects performance and stress might yield important information for improving system designs in the future.

5.2   Theoretical Implications

This research contributed significantly in existing literature by developing a unique and conclusive relation between the usage of ERP and employee performance. Furthermore, the discussion is not only limited to the above-mentioned relation but it further penetrates towards emphasizing the vital role played by techno-stressors as mediators in this dynamic, which basically filling a space in the research that has frequently unnoticed the complex effects of ERP systems on employee outcomes. This study offers a greater knowledge of the pathways via which ERP usage affects individual performance by highlighting this mediating element. This realization not only adds to the existing theoretical frameworks on ERP systems, but it also creates new opportunities for studying the relationship between workplace stressors and technology adoption, providing a more comprehensive understanding of ERP's impact on organizational behavior.

5.3   Managerial Implications

In addition, this research provides a unique standpoint for managerial perspective, the result and conclusion of this research provide useful information for businesses that depend significantly on ERP systems. Stakeholders and policy makers, after a deep and clear understanding of how techno-stress affects the performance of employees, can create better solutions which reduce these stresses and enhance the level of productivity within their teams. The negative consequences of ERP-related techno-stress can be eliminated by applying stress-reduction techniques, offering sufficient training, and creating a supportive work environment. This can enable the managers not only to boost productivity and effectiveness within the company but also to enhance the individual performance of employees. These findings also offer executives the ability to make data-driven decisions on employee assistance programs and technology integration, which in turn helps them to develop a workforce that is more flexible and resilient and optimizes the potential advantages of ERP systems.

6.   Conclusion

This study offers an in depth understanding into the complex connection between techno-stress linked to ERP and employee productivity, based over the TAM theoretical framework. The study's results highlight the significant impact of PU, PEoU, intention to use ERP systems, and actual ERP usage on employee outcomes, especially in situations where there are technological stressors. The research has significant policy implications for companies seeking to achieve the greatest advantages from their ERP systems. Improving the usability and design of ERP systems to make them more intuitive and user-friendly can substantially reduce complexity-related stress and promote better adoption. Implementing structured employee training programs and providing ongoing technical support can boost the perceived value of ERP systems, thereby reducing stress and improving performance.

Stress management programs, including workload modifications, guidance services, and educational campaigns, should be organize by organizations to alleviate the negative consequences of technological stressors. Resultantly, successful ERP implementation hinges on prioritizing individual and organizational preparedness, coupled with effective change management techniques, to facilitate smooth transitions and enhanced results.

This study significantly contributes to existing knowledge by expanding the TAM framework to include techno-stress as a mediator, offering deeper insights into ERP implementation challenges. It highlights the need for a holistic approach addressing both technological and human factors for successful ERP integration. Future research could explore long-term impacts of ERP-related techno-stress on productivity or conduct cross-cultural studies on industry-specific or demographic variations. Ultimately, the study underscores the importance of balancing employee well-being and technology integration to enhance ERP outcomes and drive organizational success.

References

Akwa Nde, A. (2022). The influence of technostress and work life balance on Burnout among employees in the Banking sector in the Free State. https://scholar.ufs.ac.za/items/688fb3aa-157e-413e-a474-88b939ed74ad.

Ali, E. (2021). The Impacts of Triple-A Supply Chain on Organizational Performance with the Mediating Roles of Supply Chain Performance in Bahir Dar and Kombolcha Textile Share Company [PhD Thesis]. http://ir.bdu.edu.et/handle/123456789/12012.

Alsyouf, A., Lutfi, A., Alsubahi, N., Alhazmi, F. N., Al-Mugheed, K., Anshasi, R. J., Alharbi, N. I., & Albugami, M. (2023). The use of a technology acceptance model (TAM) to predict patients' usage of a personal health record system: The role of security, privacy, and usability. *International Journal of Environmental Research and Public Health, 20*(2), 1347. https://doi.org/10.3390/ijerph20021347

Arora, R., Gera, S., & Saxena, M. (2021). Mitigating security risks on privacy of sensitive data used in cloud-based ERP applications. 2021 8th International Conference on Computing for Sustainable Global Development (INDIACom), 458–463. https://ieeexplore.ieee.org/abstract/document/9441297/.

Bhardwaj, B., & Kalia, N. (2021). Contextual and task performance: Role of employee engagement and organizational culture in hospitality industry. Vilakshan-XIMB *Journal of Management, 18*(2), 187–201. https://doi.org/10.1108/XJM-08-2020-0089

Bhattacharya, M., Ramakrishnan, T., & Fosso Wamba, S. (2023). Leveraging ERP systems for improving ERP effectiveness in emergency service organizations: An empirical study. *Business Process Management Journal, 29*(3), 710–736. https://doi.org/10.1108/BPMJ-06-2022-0303

Bondanini, G., Giorgi, G., Ariza-Montes, A., Vega-Muñoz, A., & Andreucci-Annunziata, P. (2020). Technostress dark side of technology in the workplace: A scientometric analysis. *International Journal of Environmental Research and Public Health, 17*(21), 8013. https://doi.org/10.3390/ijerph17218013

Butt, S., Mahmood, A., Saleem, S., Murtaza, S. A., Hassan, S., & Molnár, E. (2023). The contribution of learner characteristics and perceived learning to students' satisfaction and academic performance during COVID-19. *Sustainability, 15*(2), 1348. https://doi.org/10.3390/su15021348

Cash, P., Isaksson, O., Maier, A., & Summers, J. (2022). Sampling in design research: Eight key considerations. *Design Studies, 78*, 101077. https://doi.org/10.1016/j.destud.2021.101077

Chen, L., & Aklikokou, A. K. (2020). Determinants of E-government Adoption: Testing the Mediating Effects of Perceived Usefulness and Perceived Ease of Use. *International Journal of Public Administration, 43*(10), 850–865. https://doi.org/10.1080/01900692.2019.1660989

Chen, Y., Wang, X., Benitez, J., Luo, X. (Robert), & Li, D. (2022). Does Techno-invasion Lead to Employees' Deviant Behaviors? *Journal of Management Information Systems, 39*(2), 454–482. https://doi.org/10.1080/07421222.2022.2063557

Chopra, R., Sawant, L., Kodi, D., & Terkar, R. (2022). Utilization of ERP systems in manufacturing industry for productivity improvement. Materials Today: *Proceedings, 62*, 1238–1245. https://doi.org/10.1016/j.matpr.2022.04.529

Creswell, J. W. (2013). Qualitative inquiry and research design: Choosing among five approaches (third edition). SAGE. 1412995310, 9781412995313.

Davis, F. D. (1989). Technology acceptance model: TAM. Al-Suqri, MN, Al-Aufi, AS: Information Seeking Behavior and Technology Adoption, 205, 219. https://doi.org/10.4018/978-1-4666-8156-9.ch013

Di Camillo, T. (2023). Optimizing operational efficiency: A comprehensive study of ERP Systems and Accenture's SAP utilization in work process enhancement. [PhD Thesis, Politecnico di Torino]. https://webthesis.biblio.polito.it/28332/.

Ebrahimi, N., Jani, R., & Abu Bakar, R. (2019). How personality moderates the effect of techno-stress on actual use of technology. *Advances in Business Research International Journal (ABRIJ), 5*(1), 42–53. https://doi.org/10.24191/abrij.v5i1.9975

Elizalde, R. R. (2021). Techno-Stress: Damage caused by new emerging risks. *Laws, 10*(3), 67.

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research, 18*(1), 39–50. https://doi.org/10.1177/002224378101800104

Fraboni, F., Brendel, H., & Pietrantoni, L. (2023). Evaluating organizational guidelines for enhancing psychological well-being, safety, and performance in technology integration. *Sustainability, 15*(10), 8113. https://doi.org/10.3390/su15108113

Fu, S., Li, H., Liu, Y., Pirkkalainen, H., & Salo, M. (2020). Social media overload, exhaustion, and use discontinuance: Examining the effects of information overload, system feature overload, and social overload. *Information Processing & Management, 57*(6), 102307. https://doi.org/10.1016/j.ipm.2020.102307

Gefen, D., Straub, D., & Boudreau, M.-C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the Association for Information Systems, 4*(1), 7. https://doi.org/10.17705/1CAIS.00407

Gupta, P., Prashar, S., Vijay, T. S., & Parsad, C. (2021). Examining the influence of antecedents of continuous intention to use an informational app: The role of perceived usefulness and perceived ease of use. *International Journal of Business Information Systems, 36*(2), 270. https://doi.org/10.1504/IJBIS.2021.112829

Hair, J. F. (Ed.). (2010). Multivariate data analysis: A global perspective (7. ed., global ed). Pearson. https://doi.org/10.4018/IJSSMET.2021090107

Hameed, I., Khan, A. K., Quratulain, S., Munawar, N., & Muhammad, K. (2022). Impact of Techno Overload on Students' Performance in Technology-Enhanced Learning: The Mitigating Role of Peer Support and ICT Personnel Support. https://osf.io/preprints/edarxiv/2rt5f/.

Hancerliogullari Koksalmis, G., & Damar, S. (2022). An Empirical Evaluation of a Modified Technology Acceptance Model for SAP ERP System. *Engineering Management Journal, 34*(2), 201–216. https://doi.org/10.1080/10429247.2020.1860415

Hang, Y., Hussain, G., Amin, A., & Abdullah, M. I. (2022). The Moderating Effects of Technostress Inhibitors on Techno-Stressors and Employee's Well-Being. *Frontiers in Psychology, 12*, 821446. https://doi.org/10.3389/fpsyg.2021.821446

Henn, M., Weinstein, M., & Foard, N. (2009). A critical introduction to social research (2. ed). SAGE. 9781848601796.

Hurbean, L., Dospinescu, O., Munteanu, V., & Danaiata, D. (2022). Effects of Instant Messaging Related Technostress on Work Performance and Well-Being. Electronics 2022, 11, 2535. s Note: MDPI stays neutral with regard to jurisdictional claims in published https://www.academia.edu/download/105512817/pdf.pdf.

Jackson, T. W., & Farzaneh, P. (2012). Theory-based model of factors affecting information overload. *International Journal of Information Management, 32*(6), 523–532. https://doi.org/10.1016/j.ijinfomgt.2012.04.006

Judd, C. M., & Kenny, D. A. (1981). Process Analysis: Estimating Mediation in Treatment Evaluations. *Evaluation Review, 5*(5), 602–619. https://doi.org/10.1177/0193841X8100500502

Kim, D. G., & Lee, C. W. (2021). Exploring the roles of self-efficacy and technical support in the relationship between techno-stress and counter-productivity. *Sustainability, 13*(8), 4349. https://doi.org/10.3390/su13084349

Kim, Y.-Y. (2021). How smart workers cope with techno-invasion stress in work domain. *Journal of the Korea Convergence Society, 12*(3), 261–272. https://doi.org/10.15207/JKCS.2021.12.3.261

Koopmans, L., Bernaards, C., Hildebrandt, V., Van Buuren, S., Van Der Beek, A. J., & De Vet, H. C. W. (2012). Development of an individual work performance questionnaire. *International Journal of Productivity and Performance Management, 62*(1), 6–28. https://doi.org/10.1108/17410401311285273

Krauss, M. (2020). Digitalization of the workplace: How openness of employees moderates the effects of technostress on job satisfaction [Master's Thesis, Universidade NOVA de Lisboa (Portugal)]. https://search.proquest.com/openview/b6d68945d73377e6a59d5974c5fdeeaf/1?pq-origsite=gscholar&cbl=2026366&diss=y.

La Torre, G., Esposito, A., Sciarra, I., & Chiappetta, M. (2019). Definition, symptoms and risk of techno-stress: A systematic review. *International Archives of Occupational and Environmental Health, 92*, 13–35. https://doi.org/10.1007/s00420-018-1352-1

Le, M. D. (2021). User acceptance of enterprise resource planning systems: A study in small and medium enterprises in Vietnam. *International Journal of Entrepreneurship and Innovation Management, 25*(1), 72. https://doi.org/10.1504/IJEIM.2021.113799

Leso, B. H., & Cortimiglia, M. N. (2022). The influence of user involvement in information system adoption: An extension of TAM. *Cognition, Technology & Work, 24*(2), 215–231.

Li, J. (2024). The Past, Present and Future of Enterprise Resource Planning. *Journal of Enterprise and Business Intelligence, 4*(1), 32–41. https://doi.org/10.53759/5181/JEBI202404004

Liu, D., Lu, W., & Niu, Y. (2018). Extended Technology-Acceptance Model to Make Smart Construction Systems Successful. *Journal of Construction Engineering and Management, 144*(6), 04018035. https://doi.org/10.1061/(ASCE)CO.1943-7862.0001487.

Madogwhe, S., & Omogero, E. F. (2023). Work-life balance and employee performance in higher institution in Warri delta state. *International Journal of Management & Entrepreneurship Research, 5*(1), 57–67. https://doi.org/10.51594/ijmer.v5i1.437

Muazu, S., Inuwa, U., & Ibrahim, A. (2024). Relationship between perceived usefulness, perceived ease and e-marketing intention among SMES in Gombe state, Nigeria. *KWASU Journal of the Business of Education, 4*(1), 127–138. 2408-5367.

Mukred, M., Alotaibi, F. M., Yusof, Z. M., Mokhtar, U. A., Hawash, B., & Ahmed, W. A. (2023). Enterprise resource planning adoption model for well-informed decision in higher learning institutions. *Journal of Information Science, 49*(3), 792–813. https://doi.org/10.1177/01655515211019703

Mullins, J. K., & Cronan, T. P. (2021). Enterprise systems knowledge, beliefs, and attitude: A model of informed technology acceptance. *International Journal of Information Management, 59*, 102348. https://doi.org/10.1016/j.ijinfomgt.2021.102348

NetSuite.com. (2024, September 27). 60 Critical ERP Statistics: Market Trends, Data and Analysis. Oracle NetSuite. https://www.netsuite.com/portal/resource/articles/erp/erp-statistics.shtml.

Nisafani, A. S., Kiely, G., & Mahony, C. (2020). Workers' technostress: A review of its causes, strains, inhibitors, and impacts. *Journal of Decision Systems, 29*(sup1), 243–258. https://doi.org/10.1080/12460125.2020.1796286

Nyo, M. S. (2022). Factors Influencing User Perception of ERP Software in Brothers Group of Copanies [PhD Thesis, MERAL Portal]. https://meral.edu.mm/record/8626/file_preview/Myat%20Sandi%20Nyo%2C%20EMBA-59%2C%2017th%20Batch.pdf?allow_aggs=True.

Orheruata, E. J. (2023). Influence of Techno-Stress and Work Schedule on Job Performance and Security of Secretaries in Tertiary Institutons in North-East, Nigeria [PhD Thesis, Kwara State University (Nigeria)]. https://search.proquest.com/openview/0ad25d9cd4ac2d46b33007a9a817cbff/1?pq-origsite=gscholar&cbl=2026366&diss=y.

Penn, R. L. (2016). Mitigation strategies of technostress on supply chain management. Walden University. https://search.proquest.com/openview/e60fb7954aaf683ea32f4273b6b1739b/1?pq-origsite=gscholar&cbl=18750.

Pothuganti, S. (2024). Technostress: A Comprehensive Literature review on Dimensions, Impacts, and Management Strategies. *Computers in Human Behavior Reports*, 100475.

Prastiawan, D. I., Aisjah, S., & Rofiaty, R. (2021). The effect of perceived usefulness, perceived ease of use, and social influence on the use of mobile banking through the mediation of attitude toward use. APMBA (*Asia Pacific Management and Business Application), 9*(3), 243–260. https://doi.org/10.21776/ub.apmba.2021.009.03.4

Putra, D. G., Rahayu, R., & Putri, A. (2021). The influence of Enterprise Resource Planning (ERP) implementation system on company performance mediated by organizational capabilities. *Journal of Accounting and Investment, 22*(2), 221–241. https://doi.org/10.18196/jai.v22i2.10196

Ragu-Nathan, T. S., Tarafdar, M., Ragu-Nathan, B. S., & Tu, Q. (2008). The Consequences of Technostress for End Users in Organizations: Conceptual Development and Empirical Validation. *Information Systems Research, 19*(4), 417–433. https://doi.org/10.1287/isre.1070.0165

Rajan, C. A., & Baral, R. (2015). Adoption of ERP system: An empirical study of factors influencing the usage of ERP and its impact on end user. *IIMB Management Review, 27*(2), 105–117. https://doi.org/10.1016/j.iimb.2015.04.008

Rambulangi, V., Tampi, J. R., & Tulusan, F. M. (2024). Analysis of Employee Performance at the Bahu Subdistrict Office: Study on Aspects of Quality, Quantity, Timeliness, Effectiveness and Work Independence. *Journal La Bisecoman, 5*(1), 32–41. https://doi.org/10.37899/journallabisecoman.v5i1.1029

Rehman, L. U. (2022). Managing Change Through Resistance: A Network Dynamics Model for Adaptation to Techno-Change [PhD Thesis, Université de Pau et des Pays de l'Adour]. https://theses.hal.science/tel-04324895/.

Rektenwald, S. M. (2022). The Acceptance of Learning Management Systems by Higher Education Faculty in an Educational Landscape Influenced by a Global Pandemic. https://digitalcommons.acu.edu/etd/531/.

Sandar, M. (2023). Understanding technology acceptance and critical success factors of ERP Consultancies in Thailand [PhD Thesis, Thammasat University]. http://ethesisarchive.library.tu.ac.th/thesis/2023/TU_2023_6502043018_18222_27961.pdf.

Shahrzadi, L., Mansouri, A., Alavi, M., & Shabani, A. (2024). Causes, consequences, and strategies to deal with information overload: A scoping review. *International Journal of Information Management Data Insights, 4*(2), 100261. https://doi.org/10.1016/j.jjimei.2024.100261

Stankevičiūtė, Ž. (2022). The Dark Side of Technology Use: The Relationship Between Technostress Creators, Employee Work-Life Balance, and Job Burnout While Working Remotely During the COVID-19 Lockdown. In L. Ivascu, L.-I. Cioca, & F. G. Filip (Eds.), *Intelligent Techniques for Efficient Use of Valuable Resources* (Vol. 227, pp. 119–138). Springer International Publishing. https://doi.org/10.1007/978-3-031-09928-1_8

Sternad, S., Gradisar, M., & Bobek, S. (2011). The influence of external factors on routine ERP usage. *Industrial Management & Data Systems, 111*(9), 1511–1530. https://doi.org/10.1108/02635571111182818

Talantis, S., Shin, Y. H., & Severt, K. (2020). Conference mobile application: Participant acceptance and the correlation with overall event satisfaction utilizing the technology acceptance model (TAM). *Journal of Convention & Event Tourism, 21*(2), 100–122. https://doi.org/10.1080/15470148.2020.1719949

Tarafdar, M., Pullins, E. Bolman., & Ragu-Nathan, T. S. (2015). Technostress: Negative effect on performance and possible mitigations. *Information Systems Journal, 25*(2), 103–132. https://doi.org/10.1111/isj.12042

Tarafdar, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. S. (2007). The Impact of Technostress on Role Stress and Productivity. *Journal of Management Information Systems, 24*(1), 301–328. https://doi.org/10.2753/MIS0742-1222240109

Tarigan, Z. J. H., Siagian, H., & Sebayang, P. (2020). The impact of implementing enterprise resources planning (ERP) project on firm performance and organizational citizenship behavior as a moderating [PhD Thesis, Petra Christian University]. https://repository. petra.ac.id/19173/.

Uddin, M. A., Alam, M. S., Al Mamun, A., & Akter, A. (2020). A study of the adoption and implementation of enterprise resource planning (ERP): Identification of moderators and mediator. *Journal of Open Innovation: Technology, Market, and Complexity, 6*(1), 2. https://doi.org/ 10.3390/joitmc6010002

Weerasekara, U., & Gooneratne, T. (2023). Enterprise resource planning (ERP) system implementation in a manufacturing firm: Rationales, benefits, challenges and management accounting ramifications. *Accounting and Management Information Systems, 22*(1), 86–110. https://doi.org/10.24818/jamis.2023.01005

Yamin, M. A. Y., & Sweiss, M. I. K. (2020). Investigating employee creative performance with integration of DeLone and McLean information system success model and technology acceptance model: The moderating role of creative self-efficacy. International *Journal of Business Excellence, 22*(3), 396. https://doi.org/10.1504/ IJBEX.2020.110969

Zaman, M. S. (2020). Impact of Perceived Ease of Use and Perceived Usefulness of Enterprise Resource Planning System Adoption on End User Acceptance. Capital University: Islamabad, Pakistan. https://thesis.cust.edu.pk/UploadedFiles/MPM181001.pdf.

Zheng, J., & Khalid, H. (2022). The Adoption of Enterprise Resource Planning and Business Intelligence Systems in Small and Medium Enterprises: A Conceptual Framework. Mathematical Problems in Engineering, 2022, 1–15. https://doi. org/10.1155/2022/1829347