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The Impact of User Participation on the Success of Enterprise Resource Planning (ERP) Adoption in Bangladesh

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Abstract. The successful adoption of Enterprise Resource Planning (ERP) systems is crucial for organizations to enhance operational efficiency and gain a competitive edge. User participation has been recognized as a key factor in determining the success of ERP implementation. This study aims to investigate the impact of user participation on ERP adoption success in the context of Bangladesh. The specific objectives include assessing the relationship between user participation and work performance, understanding/proficiency, user-friendliness, and training/support. Additionally, the influence of organizational factors, such as organizational value, guidelines/procedures, and resource/support availability, on user participation is examined. The study also explores the impact of user participation on compatibility with existing organizational processes and alignment with strategic goals. The findings reveal that user participation significantly influences work performance, understanding/proficiency, user-friendliness, and training/support. Organizational factors and strategic alignment play important roles in facilitating user participation. The results emphasize the need to foster user participation, provide adequate training and support, promote organizational values, and align strategic goals for successful ERP adoption in Bangladesh. These insights contribute to a better understanding of the factors that drive ERP implementation success and provide guidance for organizations in Bangladesh and similar contexts.

Keywords: Enterprise Resource Planning (ERP), User Participation, ERP Adoption, TOE Framework, Bangladesh.

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1. Introduction

Enterprise Resource Planning (ERP) systems are integrated software applications that provide organizations with the ability to manage and automate various business processes and operations, procurement, human resources, manufacturing, including finance, and supply chain management. ERP systems are designed to streamline and optimize business processes, facilitate data sharing and communication across different departments, and provide real-time visibility into organizational operations, ultimately leading to improved decision-making and increased operational efficiency [1]. The successful implementation of an ERP system is crucial for organizations to reap the benefits associated with these sophisticated software applications. However, research suggests that the success rate of ERP implementation projects is often lower than expected, with challenges and issues arising at different stages of the implementation process [2].

One significant factor that has been identified as a critical determinant of ERP success is user participation, which refers to the active involvement and engagement of employees who use the ERP system in the implementation process. User participation is essential for ERP success as it enables employees to have a sense of ownership and commitment towards the new system, promotes effective knowledge sharing and collaboration, and enhances user acceptance and adoption of the system [3]. User participation can take various forms, including involvement in system selection, planning, design, testing, training, and ongoing system usage. However, the role of user participation in the context of ERP implementation in the context of Bangladesh remains largely unexplored. Bangladesh, a developing country in South Asia, has been experiencing rapid economic growth and industrialization in recent years, with a significant focus on adopting modern technologies to enhance organizational efficiency and competitiveness. Many organizations in Bangladesh are increasingly recognizing the potential benefits of ERP systems in streamlining their business processes and improving operational effectiveness [4-6]. However, the adoption of ERP systems in Bangladesh is still in its early stages, and there is a need to investigate the factors that can influence the success of ERP implementation in this context. Against this backdrop, this qualitative research study aims to explore the impact of user participation on the success of ERP systems in Bangladesh. The study will focus on understanding the perceptions, attitudes, and behaviors of employees who use ERP systems in their organizations and how their level of participation in the ERP implementation process affects the success of the implementation. The study will provide valuable insights into the factors that can facilitate or hinder user participation in the context of ERP implementation in Bangladesh and their impact on the overall success of the ERP system [8].

The study's findings will add to the current body of knowledge on ERP implementation success factors and provide practical implications for organizations in Bangladesh and other similar contexts. The research findings can help organizations understand the importance of user participation in ERP implementation projects and develop strategies to encourage and enhance user participation, ultimately leading to successful ERP implementations and improved organizational performance. The study will provide valuable insights into the role of user participation in ERP implementation projects and contribute to the body of knowledge on ERP success factors. The research findings will have practical implications for organizations in Bangladesh and other similar contexts and can potentially help organizations achieve successful ERP implementations and enhance their operational efficiency and effectiveness.

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Research Question:

What is the connection between user participation and work performance, understanding/proficiency, user-friendliness, and training/support in the context of ERP systems in Bangladesh?

How do organizational factors, such as organizational value, guidelines/procedures, and resource/support availability, impact user participation in ERP implementation in Bangladesh?

What is the influence of user participation on the compatibility between ERP systems and existing organizational processes, as well as the alignment with strategic goals in Bangladesh?

Objectives of the Study:

Broad/General Objective: To investigate the impact of user participation on the success of ERP systems in Bangladesh.

Specific Objectives:

Assess the relationship between user participation and work performance, understanding/proficiency, user-friendliness, and training/support in the context of ERP systems in Bangladesh.

Examine the influence of organizational factors, including organizational value, guidelines/procedures, and resource/support availability, on user participation in ERP implementation in Bangladesh.

Explore the impact of user participation on the compatibility between ERP systems and existing organizational processes, as well as the alignment with strategic goals in the context of Bangladesh.

2. Literature Review

Enterprise Resource Planning (ERP) systems have become widely adopted by organizations to manage their business processes effectively and efficiently. User participation has been recognized as a critical factor that influences the success of ERP systems. This literature review provides an overview of relevant studies on ERP systems, user participation, and their impact on system success. It also discusses the significance of user participation in ERP systems and the factors that influence it. Additionally, it highlights the existing research gap in the context of Bangladesh.

2.1 ERP Systems and Their Importance

The significance of Enterprise Resource Planning (ERP) systems lies in their capacity to rationalise and enhance business procedures, augment precision and availability of data, boost decision-making aptitudes, and facilitate organisational expansion and competitiveness. To begin with, ERP systems facilitate the integration and automation of various business functions within organisations, thereby obviating the necessity for distinct software applications and manual data entry. The integration facilitates smooth interdepartmental communication and collaboration, resulting in heightened efficacy and output. The integration of accounts payable, accounts receivable, and general ledger functions in an ERP system can lead to the automation of financial processes [1]. This can result in a reduction of the time and effort required for financial management tasks. ERP systems enhance the precision and availability of data. ERP systems mitigate the possibility of errors and inconsistencies that may result from utilising various disparate systems by means of centralising data storage and standardising data formats. According to [2], the availability of dependable and current information guarantees that individuals in positions of authority possess the necessary

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resources to make knowledgeable decisions and promptly react to shifts in the market. In addition, ERP systems offer instantaneous reporting and analytical functionalities, enabling enterprises to oversee significant performance metrics and monitor advancements towards strategic goals. ERP systems augment the capacity for decision-making through the provision of a holistic perspective of the organization's activities [3]. By utilising integrated data from multiple business functions, managers can conduct trend analysis, pinpoint bottlenecks, and arrive at decisions based on empirical evidence. As exemplified by [4], an ERP system has the capability to produce demand predictions by utilising sales information, inventory quantities, and market tendencies. This functionality can aid companies in enhancing their supply chain and production scheduling. Finally, it can be argued that ERP systems facilitate the expansion and competitive advantage of organisations. Through the implementation of streamlined processes and increased efficiency, organisations have the ability to decrease expenses, optimise resource allocation, and improve overall customer satisfaction. ERP systems offer the advantage of scalability, allowing organisations to adjust and broaden their activities in line with their growth. Furthermore, ERP systems enhance communication and cooperation with clients, vendors, and associates, thereby promoting efficient management of supply chains and customer relationships [3].

2.2 User Participation in ERP Systems

The active involvement of users is crucial for the effective deployment and adoption of Enterprise Resource Planning (ERP) systems. The active involvement of end-users in various phases of the ERP system's life cycle can yield several advantages. Initially, the involvement of users facilitates enhanced congruence between the ERP system and the operational procedures of the organisation. The incorporation of end-users during the system design and implementation stages can provide organisations with valuable insights into the distinct requirements, preferences, and workflows of diverse departments and individuals. [5] argue that active participation in the customization and configuration of the ERP system is crucial for organisations to meet their unique requirements. This involvement can lead to enhanced user acceptance and system effectiveness. Additionally, the involvement of users leads to increased levels of user contentment.

The involvement of employees in decision-making processes and system design has been found to enhance their engagement and investment in the ERP system. According to [6], active participation in the system can cultivate a feeling of possession and authority, which has the potential to generate favourable user attitudes and perceptions. According to [7], the participation of end-users during the implementation phase of an ERP system is positively correlated with the provision of sufficient training and support, leading to an improvement in their proficiency and self-assurance in utilising the system. Subsequently, the involvement of users results in enhanced system performance and the resolution of problems. End-users refer to the individuals who engage with the Enterprise Resource Planning (ERP) system on a regular basis and possess a comprehensive understanding of its capabilities, limitations, and user-friendliness concerns. Organisations can identify system flaws, usability challenges, and areas for improvement by incentivizing user feedback and participation.

The data obtained can subsequently be utilised to enhance the system, tackle user apprehensions, and maximise system efficiency [8]. Moreover, the involvement of users facilitates the customization of the ERP system in response to evolving business needs. As the organisation undergoes changes, there may arise a requirement for novel processes, functionalities, or integrations. Incorporating end-users during the phase of continuous

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improvement enables organisations to acquire significant insights and recommendations for system enhancements or modifications. The adoption of a user-driven approach guarantees the alignment of the ERP system with the dynamic requirements of the organisation, thereby facilitating continuous expansion and advancement.

2.3 Factors Influencing User Participation

Several factors influence user participation in ERP systems. One of the key factors is top management support, which refers to the active involvement and support of top-level management in the ERP implementation process [9]. Top management support is critical in creating a positive organizational culture that encourages user participation and fosters a sense of ownership among end-users [10]. Communication and training are also crucial factors that influence user participation. Effective communication and training programs can help end-users understand the benefits of the ERP system and their roles and responsibilities, which can lead to increased user involvement and participation [11].

Organizational culture and structure also play a significant role in influencing user participation in ERP systems. Organizations with a collaborative and participative culture that encourages employee involvement and empowerment are more likely to have higher levels of user participation in ERP systems [12], [13]. Similarly, organizations with a decentralized structure that allows for local decision-making and flexibility are more likely to have higher levels of user participation [14]. User characteristics, such as their level of expertise, attitude, and motivation, also impact user participation. Users with a higher level of expertise and positive attitude towards the ERP system are more likely to participate actively [15], [16].

2.4 Significance of User Participation in ERP Systems

The involvement of users in ERP systems is of considerable importance, as research has demonstrated its favourable influence on the achievement of system objectives. Research has indicated that the involvement of users in system development results in enhanced alignment of the system with organisational processes, heightened user contentment, and improved system performance [17]. The involvement of users is known to aid in the detection and resolution of system-related problems, adaptation of the system to align with organisational requirements, and effective implementation of the system [18]. The involvement of users can potentially foster a sense of ownership among employees towards the system, thereby leading to elevated levels of system utilisation and adoption [19]. According to [20], the active involvement of end-users in the design, implementation, and continuous improvement processes of an ERP system can result in a heightened sense of ownership and responsibility towards the system.

This, in turn, can lead to improved system performance and overall organisational success. In addition, the involvement of users can aid in the detection of probable obstacles and hazards linked with the implementation of an ERP system, thereby expediting their prompt resolution, as suggested by [21]. According to [22], individuals who actively contribute in the different phases of the ERP system are more inclined to recognise problems and offer input on the system's effectiveness and user-friendliness. This feedback can assist organisations in taking a proactive approach to address these difficulties [23]. The involvement of users can potentially enhance the process of organisational learning and knowledge generation by enabling the sharing of insights, practical knowledge, and optimal approaches among the end-users. This, in turn, can result in the constant enhancement and innovation of the system [24].

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2.5 Research Gap in the Context of Bangladesh

Despite the growing importance of ERP systems and user participation in system success, there is a significant research gap in the context of Bangladesh. Most of the existing research on ERP systems and user participation has been conducted in developed countries, and there is limited research specifically focused on developing countries like Bangladesh. Bangladesh is a developing country in South Asia that has witnessed significant economic growth in recent years and has become an attractive destination for foreign investment. Many organizations in Bangladesh has implemented ERP systems to improve operational efficiency and competitiveness. However, the level of user participation in ERP systems and its impact on system success in the context of Bangladesh is not well understood. There is limited research that explores the factors influencing user participation in ERP systems in Bangladesh, including top management support, communication and training, organizational culture and structure, and user characteristics. Moreover, the significance of user participation in ERP systems and its impact on system success in the context of Bangladesh needs further investigation. Understanding the role of user participation in ERP systems in the specific context of Bangladesh can provide valuable insights for organizations in the country to effectively implement and manage ERP systems.

2.6 Theoretical Framework: Technology-Organization-Environment (TOE) Framework

The Technology-Organization-Environment (TOE) framework provides a comprehensive theoretical lens for examining the impact of user participation on the success of ERP systems. The TOE framework, proposed by Tornatzky and Fleischer (1990), considers three key dimensions that influence technology adoption and implementation: technological factors, organizational factors, and environmental factors [25]–[27].

2.6.1. Technological Factors

In the context of ERP systems, technological factors refer to the characteristics and attributes of the technology itself. User participation plays a crucial role in enhancing the understanding and proficiency of users in utilizing ERP systems. When users actively participate in the implementation process, they are more likely to grasp the functionalities and features of the ERP system, leading to improved work performance. Furthermore, user-friendly interfaces and intuitive navigation systems contribute to increased user participation and overall system success [28]–[30].

H1: Technological Factors has a significant influence on the ERP System Implementation Success

2.6.2. Organizational Factors

Organizational factors encompass the internal structures, processes, and culture within an organization. User participation is influenced by organizational factors such as support from management, clear guidelines and procedures, and the availability of resources and training. Organizations that value and encourage user participation in ERP-related decision-making tend to foster a positive environment for successful ERP implementation. Additionally, adequate support and resources provided by organizations enable users to effectively participate in the ERP system, addressing their concerns and facilitating system success [31]–[33].

H2: Organizational Factors has a significant influence on the ERP System Implementation Success

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2.6.3. Environmental Factors:

Environmental factors refer to the external context in which an organization operates [34]. Compatibility between the ERP system and existing organizational processes is a critical environmental factor influencing user participation. When the ERP system aligns with the organization's strategic goals, it enhances user engagement and participation. Furthermore, regulatory and competitive pressures in the external environment can drive organizations to adopt ERP systems and encourage user involvement [35]–[37].

H3: Environmental Factors has a significant influence on the ERP System Implementation Success

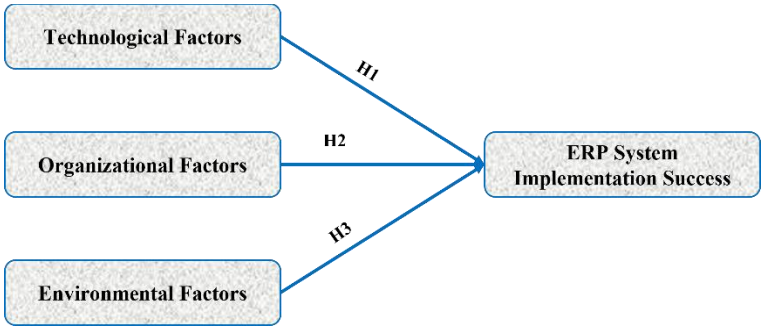

Figure 1: Proposed Research Model

3. Materials & Method

3.1 Research Design Process

3.1.1 Research Approach:

The quantitative research technique was used in this investigation. Quantitative research was concerned with gathering and analyzing numerical data in order to uncover patterns, trends, and correlations between variables. It enabled statistical analysis and the extension of findings to a broader population.

3.1.2 Research Method

The research method used in this study was a survey. A structured questionnaire was designed to collect data from participants. The survey method allowed for efficient data collection from a large number of respondents, providing a broad perspective on the impact of user participation on the success of ERP adoption in Bangladesh.

3.1.3 Type of Data

This study used primary data to acquire information. Primary data refers to data collected specifically for the purpose of the study at hand. It was gathered through the survey questionnaire designed to assess user participation and the success of ERP adoption in Bangladesh.

3.1.4 Study Setting

The study was conducted in various organizations across Bangladesh that had implemented ERP systems. The specific industries and sectors were selected to ensure diversity in the sample, including manufacturing, services, and retail sectors. The study setting provided insights into the impact of user participation in different organizational contexts.

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3.2 Sampling Method

3.2.1 Target Population

The target population for this study consisted of employees who were directly involved in or affected by the ERP system within organizations in Bangladesh. This included employees from different departments such as finance, human resources, supply chain, and operations.

3.2.3 Sampling Technique

In this study, convenience sampling was utilized as the sampling technique. Convenience sampling involved selecting participants based on their easy availability and accessibility to the researcher. This method was chosen for its convenience and practicality, as it allowed for quick and efficient data collection.

The participants were selected from organizations in Bangladesh that had implemented ERP systems. The selection was based on the convenience and willingness of the organizations to participate in the study. The researcher approached organizations that met the criteria and were readily accessible for data collection.

3.2.4 Sample Size

This research has a sample size of 270 people. This sample size was chosen after considering statistical power, practicality, and data collecting and analytic resources. It was anticipated that it would give enough data for useful analysis and appropriate conclusions.

3.3 Data Analysis Process

SPSS was used to analyze the data gathered for this investigation. Descriptive statistics were produced to summarize the features of the variables and provide an overview of the data. Correlation analysis was used to analyze the correlations between user involvement and the success of ERP deployment in Bangladesh. This study assessed the degree and direction of the linear association between these variables. Furthermore, regression analysis was used to investigate the influence of user engagement on ERP adoption success while adjusting for any confounding factors. Multiple regression analysis was utilized, with user engagement as the independent variable and ERP adoption success as the dependent variable. Control factors may have been added, such as organizational size, industry sector, or implementation time. The data analysis results revealed how much user interaction predicted ERP adoption success and whether there were any meaningful relationships.

3.4 Reliability of the Measurements

Cronbach's alpha was used to examine the reliability of the measurements in this investigation. The calculated Cronbach's alpha coefficient was.948, suggesting that the measurement items had good internal consistency and reliability. Furthermore, the Cronbach's alpha coefficient based on standardized items was calculated and provided a value of.949, indicating that the measures are reliable. The study included a total of 11 items, and the high Cronbach's alpha values indicate that the items were reliable and consistent in measuring the constructs under investigation. The high reliability of the measurements suggests that the survey questionnaire used in this study provided consistent and dependable data for the analysis.

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Table 1. Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.948	.949	11

4. Results & Findings

4.1 Descriptive Statistics

The table presents descriptive statistics for various variables related to user participation and the success of Enterprise Resource Planning (ERP) adoption in Bangladesh. The variables are assessed using a five-point Likert scale, and their mean values and standard deviations are provided. To determine the impact of each variable, we can refer to the criteria set in the study. A variable has a large effect if its mean value is greater than 3.5 and its standard deviation is less than one, according to the criterion. A variable has a little impact if its mean value is less than 3.5 and its standard deviation is less than one.

Table 2. Descriptive Statistics

	N	Mean	Std. Deviation
User participation positively impacts my work performance in utilizing the ERP system.	270	4.27	.838
User participation enhances my understanding and proficiency in using the ERP system.	270	4.01	.970
The ERP system is user-friendly and easy to navigate.	270	3.93	.906
Adequate training and support are provided to encourage user participation in the ERP system.	270	4.23	.893
My organization values and encourages user participation in ERP system-related decision-making.	270	4.33	.830
Clear guidelines and procedures are in place for users to participate effectively in the ERP system.	270	4.17	.938
My organization provides sufficient resources and support to address user concerns related to the ERP system	270	4.07	1.060
The ERP system is compatible with the existing organizational processes.	270	4.14	.903
The strategic goals of my organization are well-aligned with the implementation and use of the ERP system.	270	4.15	.976
Overall, I consider the implementation of the ERP system in my organization to be successful.	270	4.00	1.104
In my opinion, the ERP system has positively impacted the efficiency and effectiveness of our organizational processes.	270	3.82	1.160
Valid N (listwise)	270		

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Based on these criteria, we can identify the variables that have a massive influence on the success of ERP adoption in Bangladesh:

- User participation positively impacts my work performance in utilizing the ERP system. Mean: 4.27, Standard Deviation: 0.838
- User participation enhances my understanding and proficiency in using the ERP system. Mean: 4.01, Standard Deviation: 0.970
- Adequate training and support are provided to encourage user participation in the ERP system. Mean: 4.23, Standard Deviation: 0.893
- My organization values and encourages user participation in ERP system-related decision-making. Mean: 4.33, Standard Deviation: 0.830
- Clear guidelines and procedures are in place for users to participate effectively in the ERP system. Mean: 4.17, Standard Deviation: 0.938
- The strategic goals of my organization are well-aligned with the implementation and use of the ERP system. Mean: 4.15, Standard Deviation: 0.976

These variables demonstrate a massive influence as their mean values are all above 3.5, and their standard deviations are all less than 1. They indicate that user participation, training, support, organizational values, and strategic alignment significantly contribute to the success of ERP adoption in Bangladesh. It's important to note that there are additional variables in the table with mean values greater than 3.5, but their standard deviations are greater than 1. These variables may still have an influence, but their impact may be more varied or inconsistent. Overall, these findings suggest that fostering user participation, providing adequate training and support, promoting organizational values, and aligning strategic goals are critical factors for successful ERP adoption in Bangladesh.

4.2 Correlation Analysis

The correlation matrix in Table 3 reveals significant positive correlations among Technological Factors, Organizational Factors, Environmental Factors, and ERP System Implementation Success in Bangladesh. Technological Factors are strongly correlated with Organizational Factors ($r = 0.817^{**}$), indicating that advancements in technology align with organizational practices related to ERP system implementation. Additionally, Technological Factors show a significant positive correlation with Environmental Factors ($r = 0.699^{**}$), highlighting the interplay between technology and the environmental context. Furthermore, both Technological Factors ($r = 0.776^{**}$) and Organizational Factors ($r = 0.754^{**}$) exhibit strong positive correlations with ERP System Implementation Success, emphasizing their importance in achieving successful outcomes. The correlation between Organizational Factors and Environmental Factors is also strong ($r = 0.861^{**}$), implying that organizational practices are closely linked to the environmental context. Overall, these findings underscore the significance of managing technological advancements, organizational practices, and environmental factors collectively to drive successful ERP system implementation in Bangladesh.

4.3. Regression Analysis:

The regression model, which includes Environmental Factors, Technological Factors, and Organizational Factors as predictors, shows a strong positive relationship ($R = 0.818$) with ERP System Implementation Success. These predictors collectively explain around 66.9% of the variance (R Square) in the outcome variable. The adjusted R Square of 0.665 indicates a good fit of the model, considering the number of predictors. The standard error of the estimate

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(0.61469) reflects a reasonable level of prediction accuracy. Overall, the model suggests that Environmental Factors, Technological Factors, and Organizational Factors play significant roles in determining ERP System Implementation Success in Bangladesh.

Table 5 presents the ANOVA results for the regression model predicting ERP System Implementation Success. The regression model, including the predictors (Constant, Environmental Factors, Technological Factors, and Organizational Factors), accounts for a significant amount of variance in the outcome variable, as indicated by the high F-statistic ($F = 179.102$, $p < 0.001$). The regression sum of squares is 203.019, with 3 degrees of freedom, resulting in a mean square of 67.673. The residual sum of squares is 100.507, with 266 degrees of freedom and a mean square of 0.378. These findings demonstrate that the regression model has a strong overall fit and that the predictors make a significant contribution to explaining ERP System Implementation Success.

Table 3. Correlations

		Technological Factors	Organizational Factors	Environmental Factors	ERP System Implementation Success
Technological Factors	Pearson Correlation	1	.817**	.699**	.776**
	Sig. (2-tailed)		.000	.000	.000
	N	270	270	270	270
Organizational Factors	Pearson Correlation	.817**	1	.861**	.754**
	Sig. (2-tailed)	.000		.000	.000
	N	270	270	270	270
Environmental Factors	Pearson Correlation	.699**	.861**	1	.725**
	Sig. (2-tailed)	.000	.000		.000
	N	270	270	270	270
ERP System Implementation Success	Pearson Correlation	.776**	.754**	.725**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	270	270	270	270
**. Correlation is significant at the 0.01 level (2-tailed).					

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.818a	.669	.665	.61469
a. Predictors: (Constant), Environmental Factors, Technological Factors, Organizational Factors				

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Table 5. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	203.019	3	67.673	179.102	.000b
	Residual	100.507	266	.378		
	Total	303.527	269			
a. Dependent Variable: ERP System Implementation Success						
b. Predictors: (Constant), Environmental Factors, Technological Factors, Organizational Factors						

Table 6. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.892	.212		-4.211	.000
	Technological Factors	.679	.086	.484	7.912	.000
	Organizational Factors	.126	.110	.099	1.147	.252
	Environmental Factors	.357	.082	.301	4.351	.000
a. Dependent Variable: ERP System Implementation Success						

Table 6 provides the coefficients for the predictors in the regression model predicting ERP System Implementation Success. The unstandardized coefficients (B) represent the estimated effect of each predictor on the outcome variable, while the standardized coefficients (Beta) show the relative importance of each predictor, considering their different scales. The results indicate that Technological Factors have a significant positive impact on ERP System Implementation Success ($B = 0.679$, $p < 0.001$). For every one-unit increase in Technological Factors, there is an estimated increase of 0.679 units in the ERP System Implementation Success, holding other variables constant. This predictor has the highest standardized coefficient (Beta = 0.484), suggesting it has the strongest influence among the predictors. On the other hand, Organizational Factors have a small positive effect that is not statistically significant ($B = 0.126$, $p = 0.252$). The standardized coefficient (Beta = 0.099) indicates a weak association with ERP System Implementation Success. Environmental Factors also have a significant positive impact ($B = 0.357$, $p < 0.001$), with a moderate standardized coefficient (Beta = 0.301). An increase of one unit in Environmental Factors is associated with a predicted increase of 0.357 units in ERP System Implementation Success. The constant term in the model is -0.892 (B), indicating the estimated value of the outcome variable when all predictor variables are zero. It is statistically significant ($p < 0.001$), suggesting that there are other factors influencing ERP System Implementation Success beyond the included predictors. In summary, the results highlight the importance of Technological Factors and Environmental Factors in driving ERP System Implementation Success, while the impact of Organizational Factors appears to be less pronounced. These findings provide insights into the relative contributions of each predictor in the regression model.

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5. Discussion

The study aimed to investigate the impact of user participation on the success of Enterprise Resource Planning (ERP) adoption in Bangladesh. The specific objectives were to assess the relationship between user participation and various factors related to ERP systems, examine the influence of organizational factors on user participation, and explore the impact of user participation on compatibility with existing organizational processes and alignment with strategic goals. The descriptive statistics revealed that variables such as user participation positively impacting work performance, enhancing understanding and proficiency, providing adequate training and support, organizational values and encouragement, clear guidelines and procedures, and strategic goal alignment all exhibited significant influence. These findings suggest that user participation, training, support, organizational values, and strategic alignment are critical for successful ERP adoption in Bangladesh.

The correlation analysis revealed significant positive correlations among Technological Factors, Organizational Factors, Environmental Factors, and ERP System Implementation Success in Bangladesh. These correlations indicate the interplay between technology, organizational practices, and the environmental context in driving successful ERP implementation. The regression analysis demonstrated that the regression model, including Environmental Factors, Technological Factors, and Organizational Factors as predictors, had a strong positive relationship with ERP System Implementation Success. These predictors collectively explained a significant amount of variance in the outcome variable, indicating their significant roles in determining ERP success in Bangladesh.

The coefficients provided more detailed insights into the impact of the predictors. Technological Factors exhibited a significant positive influence on ERP System Implementation Success, indicating the strongest influence among the predictors. Organizational Factors showed a weak association, while Environmental Factors had a moderate impact. These findings emphasized the importance of technological advancements and environmental factors in driving ERP success, while the impact of organizational factors appeared to be less pronounced. Overall, the study's findings suggest that fostering user participation, providing training and support, promoting organizational values, and aligning strategic goals are crucial factors for successful ERP adoption in Bangladesh. The results provide valuable insights for organizations in Bangladesh and contribute to the understanding of the impact of user participation on ERP implementation success.

6. Conclusion

In conclusion, this study investigated the impact of user participation on the success of Enterprise Resource Planning (ERP) adoption in Bangladesh. The findings highlight the significance of user participation, training, support, organizational values, and strategic alignment in achieving successful ERP implementation. The descriptive statistics revealed that variables related to user participation, such as work performance, understanding/proficiency, training/support, organizational values, guidelines/procedures, and strategic goal alignment, had a significant influence on ERP success. The correlation analysis further emphasized the positive relationships among technological factors, organizational factors, environmental factors, and ERP system implementation success. The regression analysis demonstrated that technological factors and environmental factors played significant roles in determining ERP system implementation success, while the impact of organizational factors was comparatively weaker. These results underscore the importance of managing technological advancements,

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providing adequate support, aligning organizational values, and considering the environmental context for successful ERP adoption. The findings provide valuable insights for organizations in Bangladesh and contribute to the understanding of the factors influencing ERP implementation success.

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