

# Enhancing Organizational Performance in Bangladeshi Industries: The Role of Enterprise Resource Planning (ERP) Systems

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**Abstract** - In today's dynamic business environment, organizations strive to enhance their operational efficiency and customer satisfaction to maintain their competitive edge. Therefore, the proper implementation of supply chain management, effective inventory management, and efficient financial risk management are key factors in improving a company's efficiency and customer satisfaction. To achieve these goals, companies must effectively utilize Enterprise Resource Planning (ERP) systems, which enable seamless integration across supply chain, production, and administrative processes. The aim of this research is to investigate the effect of ERP systems on organizational performance in Bangladeshi industries. A comprehensive literature review sets the foundation by analyzing existing research on ERP systems and organizational performance metrics. A survey questionnaire was sent to different types of industries in Bangladesh, and data were collected. Descriptive analysis and hypothesis testing were conducted to analyze the survey data. The hypothesis was tested using the z-test, revealing significant findings regarding the impact of ERP systems on various organizational aspects, such as inventory management, production planning, operational efficiency, order management, financial risk management, and customer satisfaction. This research makes a significant contribution to the academic literature on technology adoption, especially as it relates to the use of ERP in Bangladeshi enterprises. It will support further research on the topic.

**Keywords:** Enterprise Resource Planning, Bangladesh, Organizational Performance

## I. INTRODUCTION

The success of any management in the modern era is greatly dependent on information. Organizations must display an ability to adjust to the frequently changing and developing circumstances if they intend to survive and expand within the current competitive market. An organization should have a clear understanding of its own system dynamics throughout the enterprise to make effective decisions [1].

Enterprise Resource Planning (ERP) is that system which helps integrating people, processes, and systems across the enterprises to digitize or automate the transactions and create transparent, resilient, and sustainable supply chains. ERP systems serve as a framework for managing and integrating various business processes and transactions. ERP systems can integrate planning, inventory acquisition, sales, marketing, finance, and other functions. ERP software

programs are essential to businesses because they assist in the implementation of resource planning by combining all business operations into a single system. Additionally, ERP solutions can boost effectiveness, collaboration, and productivity [2].

ERP system enables seamless integration across the supply chain, production, and administrative processes. It establishes a standardized database structure, fostering consistency. By incorporating improved and reengineered processes, it strives for operational optimization. The platform promotes increased communication and collaboration among diverse business units and sites. Most importantly, the system holds the potential to offer a strategic advantage over competitors [3].

Bangladesh is a developing country that has made an increasing amount of industrial progress. Organizations nowadays are increasingly recognizing customer satisfaction as essential for their survival and longevity in a competitive market. Improving the way that products and services are provided to clients is necessary to achieve this. Therefore, the main elements to raising both the company's efficiency and customer happiness are effective supply chain implementation, appropriate inventory management, and financial risk management. In Bangladesh, even though a large number of businesses have implemented or are currently implementing enterprise systems, there is no trustworthy source to confirm their exact numbers. But from the web site it is figured out that lots of big organizations are already utilizing ERP systems provided by top ERP vendors Such as SAP, Oracle and AX which are being preserved by their regional partners. Several organizations are using ERP that is developed, executed, and maintained by local software companies. Many sectors all over the Bangladesh, Manufacturing, Technology, Garments, Pharmaceuticals, Food and beverage, Automobile, Retail and E-commerce, Consultancy, Electronics and home appliance, Trading House and Service are using ERP [4]. The top ERP software used in Bangladesh includes SAP, Oracle, PrismERP, Infor, Microsoft dynamics 360, Tally ERP, JD Edwards, PeopleSoft, XERP, and so on. Therefore, the current research was initiated because there is strong academic evidence on the benefits of using the ERP system in the above key factors.

As per Bangladesh’s perspective, does the ERP system play the same positive role in the industries? The objective of this research is to identify the impact of ERP system on the performance of an industry and the overall perception regarding ERP in Bangladesh.

## II. LITERATURE REVIEW

### A. Enterprise Resource Planning (ERP) System

An instrument for compiling and combining all management and data is called Enterprise Resource Planning (ERP) System. Therefore, it is a software that compiles and integrates all management expertise and data that reflect the company’s activities into a single database, spanning from finance to human resources and including supply chain components that firmly connect production to purchasing and sales [5].

ERP system integrates Customer Relation Management, Supply Chain Management, Material Requirement Planning, Financial Management and so on. Fig. 1 illustrates the ERP integrations.



Fig. 1 Integration through ERP System [4]

### B. Evolution of ERP

ERP was developed for the manufacturing and material requirement planning; it has since been widely used in the public sector, financial services, healthcare, and higher education. [6]. The transformation of ERP happened in the following four stages:

*Stage One: Inventory Control Packages:* Businesses were able to carry relatively significant amounts of inventory in the 1960s, but they still employed conventional methods, such as economic order quantity (EOQ), to keep costs down. [7].

*Stage Two: Material Requirements Planning (MRP):* Companies in the 1970s couldn’t afford an excessive amount of inventory. This brings the company to computer simulation systems called materials requirement planning (MRP) systems, which provide answers to other questions such what, how much, and when inventory supplies are needed. With the use of a master schedule, bill of materials, and inventory record, MRP systems sought to replace this reactive approach to production planning by accurately projecting future requirements and production capacity [8].

*Stage Three: Manufacturing Resource Planning (MRP II):* MRP improved throughout the 1980s because of the rising strength and accessibility of information technology (IT). Manufacturing Resource Planning is that (MRP-II). This fully integrated system uses the traditional MRP method to organize manufacturing operations, as well as staff and machine hours in addition to inventory. MRP II enabled firms to handle important functional areas such as shop floor and distribution management, project management, finance, human resource management, and business process engineering [9].

*Stage Four: Enterprise Resource Planning (ERP):* In the fourth stage, continuous advancements in the field of information technology made it possible to extend MRP II to include resource planning for the whole company. This is the origin of the use of the enterprise resource planning (ERP) concept. Product design, materials planning, capacity planning, communication systems, human resources, finance, and project management were among the numerous functional divisions that ERP merged [10].

*Stage Five: Extended ERP System (ERP II):* Recently, ERP II, a second-generation system with additional functionality including supply chain management and customer relationship management, was introduced to the market. Front-end and back-end office tasks are seamlessly combined by the upgraded ERP system (ERP II) [11].

### C. Survey Related to Literature

An enterprise resource planning (ERP) system integrates and optimizes every aspect of the business parameter. It offers services to almost every department within the company. It enables the company to use an integrated strategy for resource planning and management [12]. But it is also true that implementation of ERP is costly and time consuming. ERP system implementations typically cost 15 million dollar and take 21 months to complete, based on vendors like SAP AG and Oracle Corporation [13].

However, the implementation of ERP significantly has increased profitability and productivity at the prestigious steel manufacturing company BSRM, Bangladesh. The author considered ten years’ data from 2010 to 2019, where the first five years represent the period before ERP implementation and the next five years represent the period after ERP implementation. The study evaluated five

productivity variables. The findings revealed that both productivity and profitability notably improved after ERP implementation in BSRM [14]. Similarly, it is empirically proven by contrasting ten financial performance metrics between 2002 and 2012 between organizations who used an ERP system and those that did not in the context of Pakistan. This study provides empirical evidence in Pakistan that ERP adoption does increase a firm's competitiveness through increased effectiveness and cost reductions [15].

ERP improves operational efficiency in a manufacturing system. A case study had been conducted in a South African company that produces linens and uniforms for the hospitality sector. The purpose of the enterprise resource planning (ERP) structure was to decrease inventory and work-in-progress on the factory floor. As data and information could be collected and updated at a single location without duplication of effort that could waste resources, the ERP system increased employee efficiency. Moreover, it significantly enhanced departmental cooperation and communication led to increased operational efficiency [16].

A case study was conducted where it has been showed according to the receipt of customer orders, the ERP system would allow the process of fulfillment and delivery to initiate automatically. A well-organized supply chain will result in lower inventories of printed materials, lower shipping costs, and quicker cycle times for receiving goods. Implementing ERP might save the corporation an estimated \$30 million a year by cutting down on unnecessary inventory [17].

The supply chain management of a pharmaceutical production company in Amman, Jordan, was affected by the ERP system. Primary and secondary data were collected, and analysis was performed. In the result he found the positive impact of ERP on the supply chain management [18].

Bangladesh's usage of ERP systems affects accounting data. The author discovered that the feedback value and prediction value of relevance are positively impacted by ERP implementation. However, ERP does not improve the timeliness of accounting data. In this paper he only focused on accounting information other than impacts on the business and associated challenges [19].

Adopting ERP affects an organization's performance over time. They discovered that ERP adopters had substantially higher profitability over a three-year period than non-adopters. Using the ERP system, organizations could achieve superior financial performance by developing business strategies. Primary data was collected from 247 firms and analyzed the data before and after implementing ERP. [20] The results demonstrated that companies' financial performance increased following the implementation of ERP systems like research was done in Bangladesh as we mentioned earlier.

ERP systems are used to improve corporate budget management, optimize budget management in financial management, and more successfully achieve the long-term strategic goals of the firm [21].

Financial risk management pertains to the identification, analysis, and mitigation of potential financial risks faced by an organization, such as market fluctuations, credit risks, and interest rate changes. Employing sound financial risk management strategies is crucial for ensuring the financial stability and longevity of a business [22].

A study was conducted by reviewing literature and recent research on ERP implementation in Bangladesh. The result of the study is implementing ERP in local enterprises in Bangladesh led to increased productivity and profits, but also identified several challenges that need to be addressed [4].

Using an "inside the black box" analysis of the ERP systems' financial advantages, what business process (BP) improvements happen in firms with different ERP system adoption goals is analyzed. Additionally, the author demonstrated how BP enhances organizational performance and emphasized the connection between the rationale for ERP system implementation and its proportional benefits [23].

As we can see from the above reflection on ERP installation, most research has been done in Western and European nations. Nonetheless, the ERP system affects the company greatly in a variety of ways. However, there aren't many studies in Bangladesh that demonstrate how ERP affects an organization's overall performance, which is what motivated us to study this subject.

### III. METHODOLOGY

This research aims to investigate how the use of (ERP) systems affects the overall performance at different industries in Bangladesh. To create the study model, a review of the literature was first conducted. After that, a survey was executed and information was gathered from employees working in operations and quality departments, financial departments, production departments, supply chain departments in different industries. The acquired data was then analyzed using Excel.

#### A. Research Setting

The research was conducted in a range of organizations across Bangladesh that had implemented ERP systems. A variety of industries and sectors were selected to ensure diversity in the sample, including manufacturing, consultancy, RMG, Electronics and others. The research's setting provided valuable insights into the impacts of ERP in different organizational contexts. The findings underscore the significance of ERP in inventory management, financial management, customer relationship management, production management in the context of Bangladesh.

*B. Hypothesis Development*

The following research hypotheses can be formulated like below:

*H<sub>01</sub>*: ERP System does not calculate the Re-Order point based on inventory level.

*H<sub>02</sub>*: ERP System does not use the JIT methodology to fulfill organizational needs on schedule.

*H<sub>03</sub>*: ERP System does not monitor inventories to prevent material loss and damage.

*H<sub>04</sub>*: The ERP System does not facilitate the planning of new funding sources.

*H<sub>05</sub>*: ERP System does not assist in financial risk management.

*H<sub>06</sub>*: ERP System does not schedule the manufacturing process based on demand forecasts.

*H<sub>07</sub>*: ERP system does not improve the efficiency of operations.

*H<sub>08</sub>*: ERP system does not enhance order cycle.

*H<sub>09</sub>*: ERP system does not support zero defect production.

*H<sub>010</sub>*: ERP System does not track customer feedback regarding goods and services provided.

*H<sub>011</sub>*: ERP System does not facilitate the quick order system of customers.

*H<sub>012</sub>*: ERP System does not raise customer satisfaction.

*C. The Study Tools*

A questionnaire was built up considering the hypothesis of this research. The questionnaire consists of five-point Likert and short questions. The questionnaire consists of five sections:

*Section 1: General Information:* The general data was collected with close-ended questions (Name, Organization’s name, type of the industry, designation in the organization)

*Section 2: Those who have not implemented ERP:* This section measured the reasons behind not implementing ERP in their organization and what were the implementation challenges.

*Section 3: Those who have implemented ERP:* In this section, the questions about ERP system had been discussed. The impacts of ERP on inventory, financial management,

customer relationship, order cycle, efficiency and so on. This section contains 12 questions about the overall impact of ERP in an organization. All of the questions were being asked in this section through Likert scale. The Likert scale of the study is shown below.

TABLE I LIKERT SCALE

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

*Section 4: Overall thoughts about ERP:* In this section the employees were being asked to share his overall thoughts about ERP.

*D. Method of Analysis*

*1. Reliability Test:* An important consideration while performing empirical research is reliability analysis. Measurement accuracy is determined through reliability analysis. In essence, it measures how likely it is that a given set of questions will yield repeatable outputs. To assess how consistently respondents have answered each question on the scale, Cronbach’s alpha coefficient is used [24].

If the value of Cronbach’s Alpha is  $\geq 0.70$ , the data reliability is good and 0.60 is accepted [25].

In our case, we have put the survey data in MS Excel where we have determined the value of Cronbach’s Alpha using the following formula:

$$\alpha = \frac{K}{K - 1} \left( 1 - \frac{\sum_{i=1}^k \sigma_i^2}{\sigma_x^2} \right)$$

Here,

K= Number of items

Sigma i = Variance of items i

Sigma x = Total score variance.

The values are shown below:

TABLE II CRONBACH’S ALPHA WITH STANDARDIZED VARIABLES

<b>Cronbach’s alpha</b>	0.85565
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From Table II we can see the Cronbach’s alpha value are 0.85565 which confirms us about the high reliability of the data.

*2. Normality Test:* Data can be considered normal if the skewness falls between -2 and +2, while the kurtosis falls between -7 and +7 [25].

The Skewness and Kurtosis value of the responses for every question in this paper was calculated in MS Excel.

TABLE III SKEWNESS AND KURTOSIS VALUE OF THE RESPONSES

Question Set	Skewness (-2 to +2)	Kurtosis (-7 to +7)
ERP System calculates the Re-Order point based on inventory level	-0.7554	0.5194
ERP System uses the JIT methodology to fulfill organizational needs on schedule.	-0.888	0.0076
ERP System monitors inventories to prevent material loss and damage.	-1.0334	1.0554
The ERP System does not facilitate the planning of new funding sources.	-0.2832	-0.8970
ERP System supports financial risk management	-0.5159	-0.2727
ERP System schedules the production process based on demand forecasts.	-0.8715	-0.4416
ERP system improves the efficiency of operations	-0.5074	-0.5480
ERP system enhances order cycle.	-1.2273	2.3939
ERP system supports zero defect production	0.5407	-0.5787
ERP System tracks customers' feedback regarding goods and service provided	-0.0943	-1.2365
ERP System facilitates the quick order system of customers	-0.5387	-0.6585
ERP System raises customer satisfaction	-0.69809822	-0.1886109

From the Table III, we can see that the skewness falls between -2 and +2, and the kurtosis falls between -7 and +7, therefore we can conclude that the data is normally distributed.

### 3. Descriptive Analysis

Measurements of dispersion, central tendency, and levels of measurement are described. The most frequently used types of descriptive statistics are those that measure dispersion/variability, such as standard deviation, variance, and range, and those that measure center, such as the mean, median, and mode. For each element in our study, we have calculated the mean, mode, and standard deviation to represent central tendency and variability [26].

### 4. Hypothesis Analysis Technique (Z Test)

A Z-test is a statistical test for which the distribution of the test statistic under the null hypothesis may be approximately estimated using a normal distribution. Z test is used for

evaluating significance of single population mean and difference of two population means of a normal distribution with a known variance. For a z test operation, a sample size requires to be large enough (Usually, sample size  $\geq 30$ ) [27]. In this paper, the sample data is 31. That's why a "z test" was performed. Z test determines whether the population mean is equal to a hypothesized value. In this research, we want to examine whether there is a significant impact of ERP on the organization or not. Thus, to figure out whether there is significant variation between the sample mean and the predefined value of 3 (neutral), which indicates that ERP influences an industry's performance, we will compare the mean of a single sample to that number.

## IV. DATA ANALYSIS

### A. Descriptive Analysis

The data of the respondents were put in Excel and evaluated the descriptive data with the help of "Data Analysis" tool of Excel. The descriptive analyses are shown below.

TABLE IV DESCRIPTIVE DATA ANALYSIS OF THE RESPONSES

Sl. No.	Statements	Mean	Standard Deviation	Median	Mode	Standard Error
1	ERP System calculates the Re-Order point based on inventory level	3.6875	1.119	4	4	0.1976
2	ERP System uses the JIT methodology to fulfill organizational needs on schedule	3.8437	1.110	4	4	0.1962
3	ERP System monitors inventories to prevent material loss and damage	4.0312	0.897	4	4	0.1586
4	The ERP System does not facilitate the planning of new funding sources.	3.2187	1.337	3	3	0.2364
5	ERP System supports financial risk management	3.5454	1.092	4	4	0.1901
6	ERP System schedules the manufacturing process based on demand forecasts.	3.8787	1.243	4	5	0.2165
7	ERP system improves operations efficiency	4.3939	0.609	4	4	0.1060
8	ERP system enhances order cycle	4.0909	0.913	4	4	0.1590
9	ERP system supports zero defect production	2.8484	1.175	3	2	0.2046
10	ERP System tracks customer feedback regarding goods and services provided.	3.3636	1.167	4	4	0.2032
11	ERP System facilitates the quick order system of customers	3.7575	1.031	4	4	0.1795
12	ERP System raises customer satisfaction	3.6667	1.0801	4	4	0.18802

From Table IV, we can see, except Serial No 4 and 9, the respondents are highly agreeing with the provided statements. The low standard error, and the high median and mode indicate the positive attitudes of the respondent to the statements.

**B. Hypothesis Test**

We have performed ‘z test’ to check whether there is a significant difference between the sample mean and the population mean.

Formula for Z Score is,

$$Z = \frac{\bar{x} - \mu}{\frac{\sigma}{\sqrt{n}}}$$

Here,  $\bar{x}$  = Mean for the sample  
 $\mu$  = Mean for the population  
 $\sigma$  = Standard Deviation  
 $n$  = Sample size

*Testing the Null hypotheses (Alpha=0.05):* The data was put into the excel sheet and calculated the z value using the above formula. By applying a building function of Excel called ‘Z.TEST’ which return the one tailed p value with a predetermined sigma. Using the function, the p value was calculated for each statement.

*Decision:* If the p value is less than the value of alpha=0.05, the Null hypothesis will be rejected. Otherwise, Null hypothesis won’t be rejected.

TABLE V HYPOTHESIS TEST OF THE RESPONSES

Sl. No.	Null Hypotheses	Z Score	P Value	Decision
1	ERP System does not calculate the Re-Order point based on inventory level	3.472908471	0.0002574	Reject the null hypothesis
2	ERP System does not use the JIT methodology to fulfill organizational needs on schedule	4.298643038	8.59235E-06	Reject the null hypothesis
3	ERP System does not monitor inventories to prevent material loss and damage	6.500120342	4.01279E-11	Reject the null hypothesis
4	The ERP System does not facilitate the planning of new funding sources.	0.925080887	0.177461917	Failed to reject the null hypothesis
5	ERP System does not assist in financial risk management.	2.824751454	0.002061799	Reject the null hypothesis
6	ERP System does not schedule the production process based on demand forecasts.	3.996363467	2.47128E-05	Reject the null hypothesis
7	ERP system does not improve operations efficiency	12.94219105	9.35146E-40	Reject the null hypothesis
8	ERP system does not enhance order cycle	6.752447505	3.51257E-12	Reject the null hypothesis
9	ERP system does not support zero defect production	-0.7289312	0.77042075	Failed to reject the null hypothesis
10	ERP System does not track customer feedback regarding goods and services provided.	1.761542024	0.036819135	Reject the null hypothesis
11	ERP System does not facilitate the quick order system of customers	4.153840931	1.235E-05	Reject the null hypothesis
12	ERP System does not raise customer satisfaction	3.491486244	0.00019584	Reject the null hypothesis

From Table V we can see, except Serial No 4 and 9, all the null hypotheses can be rejected as the P value is less than the value of alpha=0.05. It defines that the ERP system has impacts on those parameters.

As serial 4 and 9 contains the smaller P value than the value of alpha=0.05, therefore the null hypothesis cannot be rejected. It indicates ERP does not have any positive impact on them.

**V. RESULTS**

The research was conducted with 35 different companies. Among them, 31 companies have implemented an ERP system, while the remaining 4 companies have not. This high adoption rate indicates a growing recognition of the benefits that ERP systems. According to the sample of this research paper, the implementation percentage is shown in Fig. 2.

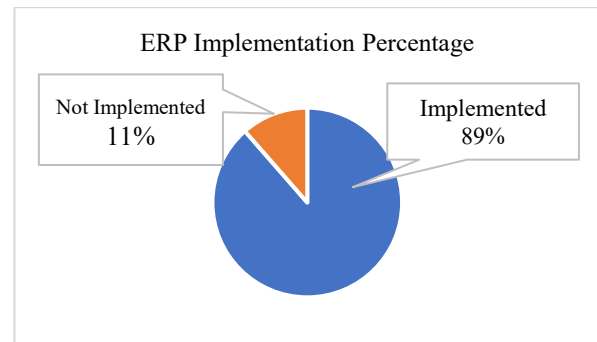


Fig. 2 ERP Implementation Percentage as per sample size of this research

The result of the data analysis is:

1. ERP system has a significant impact on determining re-order point based on inventory level. With the assistance of ERP systems, precise reorder points may be established in accordance with lead times, safety stock levels, as well as prior demand.

2. ERP system has a significant impact in adopting JIT technique to fulfill the needs of organization on time. Because ERP offers robust forecasting, automation tools, and the ability to set minimum inventory levels.
3. ERP system has a significant impact in monitoring inventory to avoid damage and loss of material. With real-time data on inventory conditions, businesses can ensure that materials are stored in appropriate environments. ERP systems provide various benefits for inventory management, including real-time visibility into inventory levels, end-to-end inventory analysis, quality checks which helps to avoid damage and loss of material.
4. ERP system has a significant impact in supporting financial risk management. ERP systems include robust financial modules that assist in risk assessment and management. These modules may incorporate tools for budgeting, forecasting, and financial analysis, allowing organizations to model different scenarios and assess the potential impact of financial decisions on risk exposure.
5. ERP system has a significant impact in planning production process based on demand forecasting. ERP systems facilitate accurate demand forecasting by consolidating data from various sources, including sales, inventory, and customer trends. This centralized data allows businesses to analyze historical patterns and make informed predictions about future demand. This forecasting capability is crucial for aligning production processes with actual market needs.
6. ERP system has a significant impact in improving operations efficiency. The research shows a positive impact in improving operations efficiency. ERP systems include tools for performance monitoring and analytics. This enables organizations to track key performance indicators (KPIs) and identify areas for improvement. The ability to generate reports and analyze data in real-time contributes to continuous process optimization.
7. ERP system has a significant impact in improving order management (order cycle). ERP systems centralize order-related information, providing a unified view of the entire order lifecycle. This includes order creation, processing, fulfillment, and delivery. ERP systems facilitate better communication and collaboration between different departments involved in the order management process.
8. ERP system has a significant impact in following-up customers' feedback about product/service provided. Real-time reporting and analytics capabilities within ERP systems enable businesses to quickly identify trends, allowing for prompt response and continuous improvement.
9. ERP system has a significant impact in supporting the quick order system of customers. With an ERP system, businesses can automate order entry, tracking, and fulfillment processes. This automation leads to faster order processing times, reducing the turnaround time for customers.
10. ERP system has a significant impact in raising customer satisfaction. ERP facilitate better communication within

the organization, ensuring that customer inquiries and issues are addressed promptly. This real-time information sharing leads to improved customer service and builds trust between the company and its customers. Overall, the impact of an ERP system on customer satisfaction is significant, as it enhances operational efficiency, reduces errors, and enables businesses to provide a more seamless and enjoyable experience for their customers.

11. ERP system does not support planning for new sources of funds. This result necessitates a deeper exploration of the intricate relationship between ERP systems and financial planning strategies.
12. ERP system does not support zero defect production. ERP systems primarily focus on integrating and managing business processes, such as supply chain management, production planning, and inventory control. While the overall zero-defect production involves specialized tools and methodologies.

## VI. DISCUSSION

The research aimed to explore the impact of Enterprise Resource Planning (ERP) systems on various aspects of organizational performance across different industries in Bangladesh. Through hypotheses testing and examination of associated challenges, the research provides valuable insights into the role of ERP systems in organizational contexts. The hypotheses testing, conducted using the z-test, revealed significant findings regarding the impact of ERP systems on different organizational aspects. Notably, ERP systems demonstrated a significant impact on determining reorder points based on inventory levels, adopting Just-In-Time (JIT) techniques, monitoring inventory to prevent damage and loss, supporting financial risk management, planning production processes based on demand forecasting, improving operational efficiency, order management, and customer satisfaction. However, the analysis did not find sufficient evidence to support ERP systems' significant role in planning for new sources of funds or achieving zero-defect production. The overall sentiments regarding Enterprise Resource Planning (ERP) are largely positive. Respondents view ERP as an effective and essential tool for organizations. Implementation of ERP is considered helpful in determining and developing production planning. Everyone agrees that ERP systems play a vital role in integrating and accessing diverse data within an organization. Many corporate activities, such as sourcing, procurement, loading, and human resource management, rely heavily on technology where ERP system plays a crucial role. It is necessary for effective corporate operations, digital transformation, and well-informed decision-making.

## VII. LIMITATION AND RECOMMENDATION

1. This research has been carried out considering 12 performance parameters. It is recommended to conduct such research that considers all possible performance parameter.

2. This research was conducted to the industries of Bangladesh. Therefore, it is recommended to carry out research globally.
3. This research was done for a short period; hence, it is recommended to conduct this research after a suitable time to identify sector development based on data of longer period of time.
4. This research had not covered profitability of ERP as it is a confidential information for a sort of company. To check whether ERP impacts the profitability of company or not, it is recommended to carry out research concerning profit and revenue.
5. The sample size of this paper was less. The questionnaire was sent to more than 75 companies but among them 35 companies had replied. Therefore, it is recommended to take large sample to get a better result.

### VIII. CONCLUSION

In conclusion, this research has provided valuable insights into the utilization of Enterprise Resource Planning (ERP) systems in Bangladesh, assessing the impact of ERP on industry performance. The findings offer a comprehensive understanding of ERP's role in diverse industries. ERP is an effective and essential tool for organizations, and Bangladeshi industries are adopting this system at a rapid pace. The findings revealed a positive impact of ERP on reorder points based on inventory levels, the adoption of Just-In-Time (JIT) techniques, effective monitoring of inventory to prevent damage and loss, support for financial risk management, planning of production processes based on demand forecasting, enhancement of operational efficiency, improved order management, and heightened levels of customer satisfaction. However, it was observed that there was insufficient evidence to support the significant role of ERP systems in planning for new sources of funds or achieving zero-defect production. This research not only achieves its stated objectives but also provides valuable insights into the current state of ERP utilization in Bangladesh. ERP is being adopted at a quick pace by a variety of industries, including government, semi-government, and non-government sectors. Most companies are showing interest in implementing ERP systems. The research's findings offer a foundation for further research and practical guidance for organizations in Bangladesh and beyond as they navigate the dynamic landscape of ERP systems.

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