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Draft Version

Optimizing B2B Relationships with Post-Covid Sales and Marketing Automation through ERP Implementation: A Value-Driven Approach in Bangladesh

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Abstract: Enterprise Resource Planning (ERP) is a powerful software program created to combine and streamline several company processes. Companies in developed countries frequently use it to increase their general effectiveness. ERP enables companies to meet the specific demands, interests, and behaviours of their customers, who are increasingly seeking individualized experiences. Even with the help of an implementation partner, deploying ERP properly necessitates a solid understanding of the involved process. During the implementation stage, effective communication and responsibility sharing can be challenging. The main goal of this paper is to create a thorough guidebook that offers insightful advice to businesses and their clients throughout the whole ERP deployment process. Six interviews were done to obtain information and address any implementation-related worries in order to accomplish this. These talks led to the creation of an implementation handbook that addressed important challenges and offered useful solutions. A methodology model diagram is also suggested to act as a visual roadmap for an organized and fruitful ERP installation. The objective is to equip businesses and their clients with the information and resources they need to successfully complete the deployment process and get the most out of their ERP system.

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1 INTRODUCTION

The Enterprise Resource Planning (ERP) has become an indispensable tool for managing critical aspects of organizational operations. With the support of comprehensive multi-module software, manufacturers and service providers can efficiently handle a wide range of tasks (Maguire, S., Ojiako, & Said, 2010). ERP systems have evolved over the years, replacing outdated Material Requirements Planning (MRP) systems and emerging as a fundamental component of IT infrastructure.

Large corporations with diverse business units often face challenges in managing their databases and generating timely reports on their operations. Previously, organizations relied on in-house databases and software solutions to handle data, with the accounting system being linked to the overall database (Barker, T., & Frolick, M. N., 2003). However, the process of gathering information from various factories and generating reports for higher authorities was time-consuming.

Implementing ERP requires a comprehensive understanding of the fundamental steps and technical intricacies involved, which can be challenging for marketers to grasp (Khan, M. R., & K., 2012). Although implementation partners are available to provide support, effective communication and responsibility sharing can sometimes be difficult, necessitating additional assistance.

To enhance understanding and discuss ERP practices worldwide, a framework is proposed that examines ERP installations in both industrialized and developing nations. This framework provides valuable insights for practitioners and researchers, highlighting the implications and considerations associated with ERP implementations (Achard, F., 2005; Maxwell, James Clerk).

It is important to note that the abundance of ERP solutions in the market does not necessarily correlate with the availability of up-to-date content. Technological advancements and evolving practices render literature older than ten years obsolete, and the most recent information is predominantly accessible through online articles. As a result, this study relied on freely accessible web articles to

2 FACTORS OF THE ERP

Based on the publication (Huang, Z., & Palvia, P., 2001)) the factors of the ERP given down below

2.1 Economy and economic growth

An economy's health is a reliable barometer of a nation's IT/IS development. Rapid economic expansion drives IT/IS development because companies are eager to gain a competitive edge. As a result, the development of IT/IS and the adoption of ERP require a solid economic foundation.

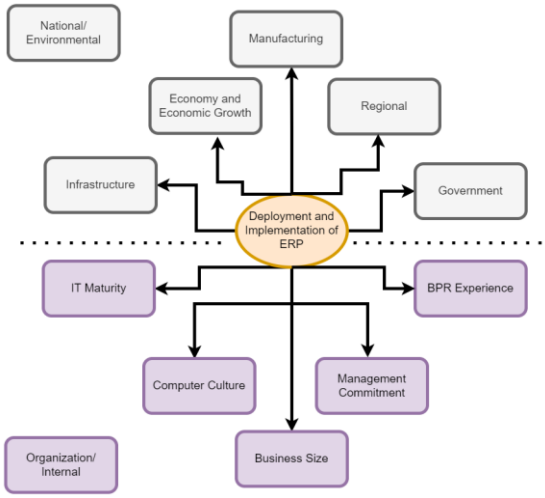

Figure 1: ERP Implementation Factors and Frameworks

2.2 Infrastructure

Infrastructure, which comprises both fundamental and IT infrastructure, is a crucial requirement for ERP deployment. The company's internal operations, as well as those of its suppliers, clients, and banks, are all impacted by ERP. The entire infrastructure must be reliable to implement complete value chain management made possible by ERP.

2.3 IT maturity

How a firm chooses to purchase and implement IT/IS can be significantly influenced by the level of IT maturity. Because they have a better understanding of IS implementation, can successfully communicate with ERP vendors, and have a better understanding of IS implementation, IT mature organizations are more likely to succeed in ERP adoption. (I. S. Jacobs, 1963). (Jacobs, I. S, 1963)

2.4 Computer culture

This relates to the organization's computing history, employee attitudes toward computers, and organizational computer dependency even though it is related to IT maturity. A company with a solid culture will have more understanding of ERP system acceptance, data management, and application functionality.

2.5 Business size

The size of a company has a big impact on how much money it spends on IT and how often it uses it. Many major systems began in huge corporations, and ERP systems were pioneered by large corporations. Smaller businesses are starting to embrace ERP as a result of two considerations. First, ERP companies are focusing more on small and medium businesses, and second, small businesses are feeling the push to use ERP to gain a competitive advantage.

2.6 BPR experience

How much a company spends on IT and how frequently it uses it are significantly influenced by its size. Large enterprises were the forerunners of many important systems, including ERP systems. Due to two factors, smaller companies are beginning to use ERP. First, small and medium-sized firms are receiving increasing attention from ERP providers, and second, small businesses are sensing pressure to embrace ERP to gain a competitive edge.

2.7 Manufacturing strengths

Although this is changing, historically, ERP solutions have been more functional in the manufacturing areas. Despite the fact that service providers have started to enter this sector, manufacturers are more likely to use ERP.

2.8 Government regulations

Regulations can either help or impede the use of IT, and governments can encourage it. For instance, in order to be audited, several government departments in China are compelled to replace manual accounting processes with accounting software. Software for accounting and finance has therefore been widely used.

2.9 Management commitment

Given the complexity and resource demands, this management commitment is essential to the implementation of ERP in both developed and developing countries. Given the fundamental status of ERP in undeveloped countries, it might even be more crucial in these nations.

2.10 Regional environment

The use of IT and ERP in a country may be influenced by its geographical surroundings and culture. Bangladesh is a great case in point. Bangladesh should have a sizable future ERP market because it is a developing nation, but its presence is still quite young. The bulk of big Bangladeshi firms have moved their manufacturing activities to other Asian countries, which is one of the factors. In these Asian countries, ERP usage is not very common. Because collaborating nations do not use ERP, which is not a stand-alone system. The geographical setting and cultural traditions of a nation may affect how it uses IT and ERP. Bangladesh is a great case in point. Bangladesh should have a sizable future ERP market because it is a developing nation, but its presence is still quite young. One aspect is that.

3 LITERATURE REVIEW

ERP is difficult to install due of its complexity. In recent years, there have been a number of studies on ERP deployment, among those there were numerous count of failed implementation of the ERP. (Barker, T., & Frolick, M. N,2003) ERP implementation should be considered as a new company venture and a team effort, not simply a software installation. (Chen, C. C., Law, C. C., & Yang, S. C., 2009) For ERP to be a success, companies must involve all employees and sell the notion of ERP to them absolutely and completely.(King, W. R. ,2005)Involving, supervising, recognizing, and retaining those who have worked or will work closely with the system is critical to a successful implementation. (Chakravorty, S. S., Dulaney, R. E., & Franza, R. M. 2016)The findings suggest a roadmap for firms adopting ERP to follow in order to avoid making significant, yet often overlooked, project management blunders. Despite the widespread use of ERP systems, there remains substantial worry about ERP installation failure. (Grabski, S. V., & Leech, S. A. ,2007) Escalation of commitment could be one reason for many ERP implementation failures. The tendency of decision-makers to continue investing in a poor course of action is referred to as escalation of commitment. Two main kinds of factors influence ERP implementation: national/environmental and organizational/internal, each of which has five variables. (Dezdar, S., & Ainin, S. ,2011) This study

compares the AISs and ERPs that are currently most widely utilized in the United Arab Emirates while also examining the market and the size of local firms. The study emphasized the benefits and drawbacks of the present information systems as well as the traits of the businesses that influenced how widely the programs were used.

(Faccia, A., Mosteanu, N. R., Fahed, M., & Capitanio, F. ,2019) It demonstrates that basic physical, economic, cultural, and cultural difficulties present extra challenges for ERP systems in emerging nations. By contrasting developed and developing nations, this essay identifies a variety of problems with ERP deployment.(Huang, Z., & Palvia, P,2001) Daniela Corsaro, Isabella Maggioni, Mirko Olivieri examine how S&MA generates value for companies in the post-Covid-19 scenario. They propose a conceptual model that considers various value drivers, including customer-centric, operational, and integration-based factors. (Corsaro et al., 2021)

4 RESEARCH DESIGN

This paper proposes a framework for driving value creation through ERP implementation in B2B relationships, focusing on the perspective of Bangladesh. The research addresses two main questions: (RQ1) What is the proper methodology for ERP implementation? and (RQ2) How does data-driven value creation occur through SMA in B2B relationships? Interviews were conducted to gather relevant insights, and the following interview questions were considered:

- Does the vendor possess the necessary skills to set up the modules?
- Are all business heads aware of the implementation and providing timely support?
- Do team members responsible for ERP have adequate knowledge and experience?
- Are decisions made by the team leader timely and effective?
- Can the company afford the cost of ERP implementation?
- Is the vendor providing proper training and support to the end user?
- Is the funding for implementation being utilized effectively?
- Are the data being migrated from legacy systems to ERP transparent and accurately reported?
- Do end users exhibit a tendency to use ERP in the same way as their legacy systems?
- Is the UAT session conducted appropriately before going live with ERP?

4.1 Data Collection Method

Google Forms was used to gather the data for this article during the qualitative phase. The authors chose to directly interview people involved in the relevant subject, nonetheless, as the initial responses looked unrelated. Four project managers from various firms, one managing director, and an Oracle representative involved in the rollout of the Oracle Fusion ERP system were all interviewed via Skype by the team. The aforementioned questions were asked to the interviewees, and the answers were used to develop the solutions.

4.2 Limitations

For a business to avoid ERP deployment failure, which could be financially draining, it is essential to analyze the process. Typically, when establishing an ERP system, businesses must follow a particular framework and process. Companies can guarantee more efficient execution by adhering to this structure and organizing the implementation process. Accessing larger businesses or enough resources, however, can be difficult because there may not be enough communication and teamwork among employees.

4.3 Problem and Solution

Some problems and solutions are discussed in this paper

4.3.1 Poor software fit /inaccurate requirements:

The key to a successful ERP deployment understands the requirements. Meet with stakeholders across disciplines, address current pain points, and anticipate future challenges. Create a comprehensive list of necessary criteria and useful features. Prioritize functionality over unnecessary extras. If a prospective ERP system doesn't meet all requirements, keep searching until you find one that does.

4.3.2 Business leadership is not committed to the implementation:

Commitment from organizational leadership is crucial for a successful ERP project. If they are not fully dedicated, suggest delaying the project to ensure proper resource allocation. Money and personnel are valuable resources that need to be considered. Important individuals involved in the deployment should complete their prior duties, and arrangements should be made for temporary replacements if needed. The ERP deployment requires the involvement of the entire organization.

4.3.3 Insufficient team resources

Building an ERP team with the right people is crucial for a successful implementation. Allocating sufficient resources and time is essential. Consider using contractors or external employees, or utilizing existing personnel with time allocated for the project. Prioritize the ERP implementation over other tasks if using internal resources. Seek outside assistance for specific goals, such as data conversion programming. A dedicated team manager will oversee the project and report to top management and a steering team.

4.3.4 Lack of accountability to make timely, high-quality decisions

Establish clear decision-making roles early in the ERP implementation process. Slow, incorrect, or poor decisions can result in failure. Encourage collective decision-making, involving team members familiar with processes and improvements, rather than relying solely on executive management.

4.3.5 Lack of investment in change management

Prioritizing excellent communication and careful planning is crucial for a successful ERP installation. To keep everyone informed and involved, over communicate the arguments and anticipated benefits of the ERP rollout. You shouldn't take it for granted that people will accept the change right away because opposition can result in failure. Specialists in change management can be useful additions to the implementation team since they can help people accept and embrace the future by recognizing their unique personalities and resolving their worries.

4.3.6 Insufficient Training/Support

The implementation of an ERP requires user education. The resources of the implementation support team are being drained by users who haven't been given any training beforehand. The implementation fails when there aren't enough support resources to address go-live problems.

4.3.7 Insufficient funding

Budgeting for an ERP system must take into account both the upfront cost and ongoing expenses. To accommodate for unanticipated costs, increase your projected budget by 25%. Be ready to pay for payroll costs, consultant fees, infrastructure upgrades, ongoing support, and maintenance on top of the price of the ERP system itself. Long-term savings might be possible, but it's crucial to set aside money to ensure the implementation goes well.

4.3.8 Insufficient data cleansing

The crucial yet difficult parts of implementing ERP are data preparation and cleansing. To prevent implementation errors, system development and data purification should take place simultaneously. Sort data into static (transactional) and dynamic (once-entered) categories. Tables containing static data columns will be included in the new ERP system. Data from old sources is mapped and replicated to the new ERP, taking into account required and optional fields. Avoid unneeded clutter by only sending recent and necessary info. Maintain legacy systems in read-only mode to allow access to historical data. Before entering data into the new ERP, double-check the information and fix any mistakes. A successful implementation depends on careful attention to detail during the data preparation phase.

4.3.9 Insistence on making ERP look like legacy

Excessive ERP system customization can have detrimental effects, such as reducing functionality, making updates and testing more difficult, and raising costs and risks. Although users may be familiar with legacy systems, they will rapidly adjust to the new ERP because it integrates best practices. Meeting specific business requirements should take priority above pleasing the eye. Due to its considerable cost, customization should only be done when absolutely necessary. Most ERP systems provide minimally customized configuration choices.

4.3.10 Lack of testing

For an ERP implementation to be effective, extensive testing must be performed repeatedly. Test each crucial business process first, then go on to volume tests and simulated go-live situations. Testing aids in locating and resolving difficulties, such as challenges with data migration. A test can fail with just one data element in the incorrect format. Testing includes data migration as a crucial component. To ensure a seamless transition, make the necessary corrections based on testing findings and carry out several iterations.

Document the migration procedure and locate techniques that permit speedy loading of all required data to ensure effective data migration during go-live. Automated robotics testing can find and fix a variety of potential problems, lowering the possibility of implementation failures. While there may be other dangers, avoiding these ten major ones greatly raises the likelihood that an ERP crisis won't occur and enables your company to quickly restart operations.

5 RESULT/FINDINGS

The research was consists of few interviews from different organizations in Bangladesh.

Table 1 provides a detailed overview of the sample profile of the employees who participated in the study, which can be useful for understanding the demographics of the participants and analyzing the results of the study.

Table 1: Details of Sample Profile

Category	Characte -ristic	Sample amount	Perce-ntag e (%)	Valid Perce nt
Gender	Male Female	6 0	100 0	92 0
Age (Years)	31-35 36-40 41-45	1 4 1	16.67 66.67 16.67	10 60 16.67
Designati on	Project-Manger Managing-direction Brand-Ambassador	4 1 1	66.67 16.67 16.67	66.67 30.10 50.55
Year of Designati on	3-5 6-10 >10	1 4 1	16.67 66.67 16.67	31.51 70.21 30.66

In this paper, there is a proposed model diagram framework for ERP system. To help to visualize the system there is a sample scenario given down below:

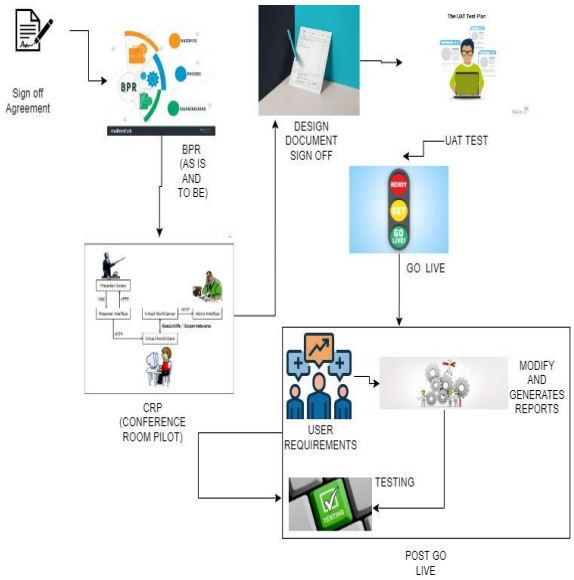

Figure 2: Proposed Model Framework to Implement ERP System

Here is detailed discussion of the proposed model Framework:

5.1 Sign off Agreement

Sign off agreements are formal declarations between the client and the implementation team, certifying the successful implementation of the ERP system and meeting all client requirements.

• Vendors present system solution and discuss rules and support.

5.2 BPR

BPR involves redesigning processes to improve key performance indicators and align with the new ERP system.

• Map current processes, identify gaps, and design future state blueprint.

• Implement changes and consider dependencies.

5.3 CRP

A select group tests system functionality in a simulated environment before full implementation.

• Scope, design, and build.

5.4 Design Documents Sign Off

When Formal acceptance and approval of design documents by stakeholders to ensure their needs are addressed.

• Approve CRP build.

5.5 Sign off UAT

Obtain official clearance from users or stakeholders after thorough testing.

• Provide test server and module testing.

5.6 Go Live

Stage when the ERP system is fully operational and used for regular business operations.

• Go live after successful UAT.

5.7 Post Go Live

Continuously optimize and address user requirements for ongoing improvements.

• Address user requirements, fix issues, and test.

Previously, organizations relied on in-house software Legacy, which was easy to use but lacked proper record-keeping. Shifting to Oracle Fusion ERP provided a convenient solution, as it stores and tracks all user input, ensuring data integrity. The COVID-19 pandemic accelerated the adoption of cloud ERP, offering significant benefits for remote work. As more companies in Bangladesh transition from legacy systems to ERP, the demand has increased. However, limited experienced professionals and computer literacy among employees pose challenges in implementation.

6 FUTURE WORK

Additional Study on ERP Adoption in SMEs: doing more thorough investigations to investigate the difficulties SMEs in Bangladesh have implementing ERP systems. This might entail examining elements like price, technical proficiency, and change management tactics to offer insightful information to practitioners and policymakers. Impact Assessment of ERP Implementation: Examining the ERP implementation's long-term effects on Bangladeshi SMEs. To evaluate the concrete benefits and outcomes of ERP deployment, this may entail measuring variables such as productivity, efficiency, cost savings, customer satisfaction, and overall business performance.

7 CONCLUSIONS

Bangladesh's economic growth has been remarkable, but there is a significant earnings gap between small and medium-sized enterprises (SMEs) and larger corporations. To further boost GDP growth and support SMEs, it is essential to facilitate the growth of these smaller businesses. In the digital age, the success of businesses is closely linked to their ability to manage big data and leverage advanced technologies. Therefore, providing SMEs with access to ERP systems, which offer benefits beyond basic accounting information systems (AIS), becomes a crucial challenge for the country. A study aimed to identify the best ERP system for SMEs and found that cloud-based Oracle Fusion Applications are the most suitable choice. This is because SMEs are better equipped to manage lower-tier ERP systems compared to higher-tier ones. Regardless of the industry or organizational structure, ERP systems are designed to handle key functions of a company and are already widely adopted by large corporations, gaining popularity among small and medium-sized businesses. However, the study reveals that SMEs in Bangladesh have not received sufficient attention regarding ERP adoption. Policymakers should consider signing agreements to expedite the ERP deployment process for SMEs, as this could contribute to the success, growth, job stability, and overall excellence of SMEs in the region. (Eason, G., Noble, B., & Sneddon, I. N., 1955; Faccia, A., Mosteanu, N. R., Fahed, M., & Capitanio, F., 2019).

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