

**FACTORS INFLUENCING EMPLOYEES EXPERIENCE WITH AN ERP
IMPLEMENTATION –CONSULTANTS PERSPECTIVE**

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Abstract

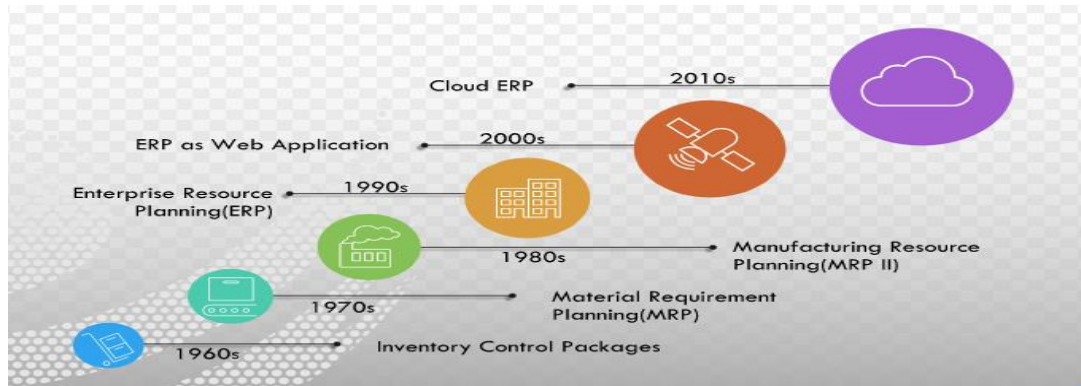
Expansion of the business combined with technology application occurs within the initial growing environment. Every business and IT strategic plan must exist in perfect alignment. ERP represents a unified software platform which provides assistance for all organization functionalities. Companies can utilize the program to oversee various aspects such as raw material management, inventory management, production oversight, marketing strategies, human resources, financial management, customer relations, and additional functions. Corporations at the highest success levels struggle to implement ERP software within their business operations. The main goal of this research project involves studying factors that shape employee perception about ERP deployment according to consultant viewpoints. Primary data collection from a structured questionnaire serves as the primary foundation for this study which has an analytical research approach. The researchers chose respondents through convenience sampling. The research team employed different mathematical and statistical approaches including percentage analysis for data examination and analysis of data collected from 34 participants.

Keywords: ERP Deployment, Key Success Factors (KSF), Project, Internet of Things (IoT), Components, and ERP Deployment

Introduction

Enterprise Resource Planning is the acronym for ERP. Several business processes and activities are integrated into a single, centralized application that is the software system. ERP Platform exist to streamline business operations across departments that extend from manufacturing through sales and supply chain to finance and human resources modules. Most business departments share one database that multiple business units may access for their goals. The presence of a shared database across different business departments enables consistent accurate

data access throughout the company. An ERP system produces an overview of organizational data and business procedures which seeks to enhance operational efficiency while supporting improved organizational choices through immediate operational monitoring. An ERP system functions as an ERP suite despite its name since its business components or modules communicate with each other through integrated functionality. Various modules unite to serve



the organization through information exchange although each traditionally addressed distinct business areas. Finance, accounting along with human resources, sales, procurement and SCM, consistently experience the most initial changes. The business sector has the freedom to pick suitable modules that suit their needs and can boost existing components as needed. The system's specification or applications within the system suite present two mechanisms through which the industry can specify the usage of ERP. ERP systems are available through two acquisition methods which include licensing followed by system installation or using cloud-based SaaS services.

Figure 1 Development of ERP

1.1 Development of ERP

ERP began its development journey starting from the 1960's up to the 1970's. Material Requirements Planning (MRP) served as the founding concept that introduced an approach to help production organization enhance their manufacturing efficiency. MRP systems received their initial design during the 1970s for handling production planning together with stock control activities. Its main objective consisted of finding ways to maximize material utilization across production activities. During the 1980s the system was expanded to cover new areas which eventually included project management and human resources and operations finance. The evolution has given birth to ERP systems as its core outcome. ERP embraced its official acronym form in the early 1990s to define its precise meaning when 'Enterprise Resource Planning' became a pervasive phrase. The vendor introduced complete package solutions which managed various business functions under one system. SAP and Oracle together with Baan constructed the initial structures of this market sector. The computer technology and ERP system capabilities expanded considerably throughout the 2000s. Enterprise Resource Planning systems in the cloud began becoming popular because users appreciated both their accessibility features along with their flexibility capabilities. In the 2010s Mobile ERP enabled users to reach the ERP system through any desired geographical spot while providing vital information to

make decisions. Modern business operations demand every organization in every sector to adopt ERP system implementation. Management redesigned the system with new features for automation alongside predicting data analysis to optimize company efficiency through implementation of AI, machine learning and IoT technologies. The current ERP system achieves four core goals through employee cooperation improvement and process optimization and unified data sharing between departments combined with immediate data availability for decisions. ERP systems incorporate various technological components which increase the complete system requirements. Two essential elements of total system requirements include OOP development techniques and client/server distributed system architecture implementations. These two important components enable successful system expansion. The systems develop scalability features alongside supply chain and customer relationship management processing which enables companies to expand into customer and supplier networks. The development of ERP II followed this outcome. ERP II examines the method through which organizations link operations that are mutually shared with their trading partners. ERP II provides the essential framework for collaborative commerce and e-business facilitated by the internet. Technology implementation methods of businesses are predicted to undergo fundamental changes due to the rise of cloud computing. Cloud computing encompasses three essential types of services which include "platform-as-a-service" for software development prepared machines as well as "SAAS" for providing and hosting services for user applications that require leasing raw computing power. Cloud computing will reach levels equal to or better than traditional on-premise computing when it comes to reliability and reliability together with cost-effectiveness and security standards.

1.2. ERP Module

Industries anticipate that with such increase in demands, ERP will now be expanding further to accommodate other modules. However, for a particular requirement in an organization, we have assembled a list of ten modules that possess essential functionalities.

- Automation of Marketing
- Finance
- Management of Human Resources
- Management of Inventory
- Management of Orders
- Online shopping
- Production
- Purchasing
- Relationship Management with Customers
- Supply Chain Management

Other modules are allowed to be included in a module.

1.3. ERP Implementation

- Nowadays, ERP implementation is a dynamic and complex process because it is a combination of the organizational and technology interactions.

- In every ERP implementation, these are followed in the three stages. It depends on the actions done at each of these stages which things are able to be successful or unsuccessful.
- This includes the selection, including a package, a provider and the final requirements.
- Implementation phase involves carrying out tasks such as conference room pilot, setup and configuration, business analysis. This includes customization, production setup, data migration, security profile configuration, evaluation of the preparedness and a go live.
- Includes the post-implementation phase which is the task such as report creating, annual and monthly close, and refinement.
- Below given are the different types of the implementation:
 - • In an existing company, New implementation is referred to as implementation.
 - • The implementation for a startup company is referred to as a green field implementation.
- Implementation of the Roll out implementation is to implement the next sites for a company.

2. Review of literature

This study uses the Kitchenham technique for SLR in a very meticulous literature body review on post-implementation phase of the ERP. In order to complement this research, they then carried out frequency and content analysis. Some of the chosen papers have 13 CSFs in accordance under the umbrella of Technology Organisation Environment (TOE) paradigm; hence, building a strong understanding of this topic. Salih et al. (2022) as well state that change management is one of the CSFs so as to ensure that implementing a modern system is done smoothly without impacting the existing outdated system. It includes the study of appropriate group strategies to estimate the effects of these group strategies to extrade during the ERP device deployment. The ERP Systems are the system made up of a central database and the software interconnected modules which could help the organisation to manage the resources properly and effectively, (Vargas & Comuzzi (2020); Malik & Khan (2021)). Tan et al. (2020), who investigated Shanghai Tobacco Corporation's (STC) ERP installed in several time periods, find that opinions on impact change overtime. They end by saying that not only senior management were the important drivers of ERP deployment, business units or individuals were also significant drivers, previously thinking that it was only the seniors that could instruct on ERP implementation. By Koch & Barth (2019) the utilization of data migration and code cleaning (DMC) is recommended as the best method to upgrade an ERP system. It ensures that out of date and erroneous data do not transfer to the new system during this procedure. Xu (2019) argues that ERP systems are intricate and having data of the quality at deployment is what makes for successful deployment. Further, Xu asserts that if the data quality of ERP systems is acceptable its information will be viewed as worthy of using. According to Jordan (2018), 75% of ERP implementations do not achieve success. Jordan attributes this high failure rate to prevalent misunderstandings surrounding ERPs; however, these issues can be mitigated by applying insights gained from previous errors.

According to Chaudhry (2018), one of the most difficult things when one is putting any ERP system in place is employee's mentality towards using the system. The reason is that information system upgrade can significantly alter the way in which employees carry out their job, respond to each other, and work. To clarify the function of Organizational Development (OD) interventions in promoting staff preparedness, transparency, and dedication to ERP system deployment, a conceptual framework is provided. Vayyavur (2015) insists that goals and objectives of an ERP adoption must be specified clearly for the adoption to be fully successful.

Statement of the problem

The goal of this study is to identify the critical success elements that are necessary for an ERP implementation to be successful. The project is therefore titled "Factors Influencing Employee Experiences During ERP Implementation: A Perspective from ERP Consultants". Additionally, it's critical to comprehend the difficulties that arise throughout the ERP adoption process. ERP system implementation is a challenging undertaken by a corporation. These systems differ in terms of functionality, procedures, and product life cycles among several business units, even though they belong to the same group. Although there is usually a dedicated ERP deployment team in the service industry, the procedures that these teams adhere to can vary greatly amongst companies in the same group. Assessing if the installation actually benefits the company is one of the many everyday issues the ERP department encounters. Additionally, this emphasizes how crucial development is when using ERP systems because it entails assessing the possibility of functional or process changes. If left unattended, the current business procedures will have an impact on any modifications to the ERP's version or design.

3. Goal of the research.

To identify the Critical Success Factors in ERP Implementation.

4. Research Methodology

The information was collected from participants living in the Coimbatore District of Tamilnadu. This research is an analytical study, more or less based on primary data, namely, structured questionnaire. Convenience sampling method was used in selecting the respondents. The mathematical and statistical tools used in the analysis of data collected from 34 respondents include such tools as Proportional assessment.

5.1. Findings and Analysis

1. Demographic profile

Dataset 1

		No. off. responders.	percentage of those surveyed.
Educational Qualification	Under Graduate (UG)	15	44.1
	Post Graduate (PG)	19	55.9
Marital Status	Unmarried	11	32.4
	Married	23	67.6

Decision Making	ERP Expert	3	8.8
	ERP Team member	6	17.6
	ERP Consultant	15	44.2
	Executive sponsor of the ERP project	1	2.9
	ERP Manager	7	20.6
	HR	2	5.9
Total Experience	Below 5 Years	9	26.5
	5 - 10 Years	21	61.8
	Above 10 Years	4	11.8
Present Experience Institution	Below 5 Years	28	82.4
	5 - 7 Years	5	14.7
	Above 7 Years	1	2.9

Table 1 reveals that 23 respondents (67.6%) among the total group are married while the remaining ones are single. Consultants represent the largest group among the study subjects comprising 15 respondents (44.2%). The research findings indicate that degree is the primary qualification for 19 of the total respondents (55.9 percent). Decision-making occupies the position of majority when it comes to ERP consultants as reported by 15 respondents (44.2%). A substantial number of 21 respondents (14.7%) have professional experience between 5 to 10 years. Achieved objectives

Dataset 2

Achieved objectives

Familiar	Frequency	%
No	3	8.8
Yes	31	91.2

Table 2 demonstrates that the majority of 31 (91.2%) respondents achieved objectives from the ERP implementation process but three respondents (8.8%) did not reach those objectives.

2. Modules Deployment

Dataset 3 Modules Deployment

Factors	No. off. responders.	percentage of those surveyed.
Marketing	6	17.6
Material Management	13	38.2

Manufacturing(Production)	6	17.6
Finance	12	35.3
Quality Management	8	23.5
Plant Maintenance	12	35.3
Sales and Distribution	5	14.7
Human Resource	8	23.5

Survey participants identified Material Management and Finance together with Plant Maintenance as their primary concerns in the study since these three divisions received 38.2% and 35.3% and 35.3% of survey responses respectively. The participants viewed Quality Management and Human Resource as moderately important operations with identical 23.5% rankings. Respondents identified Marketing and Manufacturing (Production) as well as Manufacturing (Production) at the same rate of 17.6%, indicating a lower importance level among participants. A minimal portion of 14.7% of respondents marked Sales and Distribution as a vital aspect for the organization. The survey revealed that Material Management established itself as the leading priority among the investigated factors but Sales and Distribution remained the least important segment.

3. Critical Success Factors (CFS) analysis

The research hypothesis states that educational qualification shows no direct relationship with critical factors needed for successful ERP implementation.

Educational qualification generates a strong relationship with the critical factors that lead to successful ERP Deployment.

A significant relationship between educational background and the important success variables is seen in Dataset 4. An analysis of these test results allow us to reject the null hypothesis for TMP (Top Management Support) and CM (Communication Management) and Team Motivation/Planning and User Training because their value for statistical significance (sig) is below 0.05. Educational attainment proves to create a strong link with the fundamental elements required for successful ERP implementation. The testing verifies that we can accept the null hypothesis for Effective Management and also for Effective Business Process Re-engineering, Effective Project Management, Technology Related, HR Related, and Quality Related to the Project Team.

Dataset 4

Independent Samples Test

	t-test for Equality of Means						
						95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Communication Management	1.227	32	.229	1.15088	.93767	-.75909	3.06085
	1.284	31.350	.208	1.15088	.89613	-.67596	2.97772
Top Management Support	1.440	32	.160	1.41404	.98203	-.58629	3.41436
	1.500	31.640	.143	1.41404	.94245	-.50654	3.33461
Effective Management	2.183	32	.036	1.80000	.82462	.12030	3.47970
	2.230	31.858	.033	1.80000	.80728	.15534	3.44466
Team Motivation/Planning	2.119	32	.042	1.93684	.91400	.07508	3.79861
	2.218	31.325	.034	1.93684	.87324	.15660	3.71708
EffectiveProject Management	2.057	32	.048	1.99649	.97045	.01975	3.97324
	2.102	31.868	.044	1.99649	.94979	.06152	3.93146
Effective Business Process Re-engineering	2.281	32	.029	2.31228	1.01357	.24770	4.37686
	2.371	31.770	.024	2.31228	.97510	.32550	4.29906
User Training	1.291	32	.206	1.12982	.87511	-.65271	2.91236
	1.327	31.993	.194	1.12982	.85154	-.60473	2.86438
Technology Related	.882	32	.385	.81404	.92333	-1.0667	2.69480
	.896	31.589	.377	.81404	.90897	-1.0384	2.66650
Quality related - Project Team	.995	32	.327	.87719	.88163	-.91863	2.67301
	1.024	32.000	.313	.87719	.85637	-.86718	2.62157
HR Related	1.317	32	.197	1.24561	.94584	-.68099	3.17222
	1.356	32.000	.185	1.24561	.91858	-.62547	3.11670

4. Conclusion

The study's discoveries add value to academic work while presenting usable results. Success in ERP deployment depends on outstanding management from the project team coupled with excellent business process re-engineering and effective project management alongside technology-oriented and human resources-focused along with quality-related initiatives. ERP implementation projects of these organisations must embrace CSFs as well as other leading practices that promote project success because survey participants indicated their ERP projects had failed.

Educational background did not establish any meaningful connection to the core elements which produce successful ERP deployment. The T-test findings show that ERP installation success rates differ across organizations both because of educational background and crucial ERP implementation success factors.

The success of ERP installation in Coimbatore city depends on effective project teams along with effective management methods and business process re-engineering as well as technological capabilities and human resource support and quality standards. The negative feedback from survey participants can be used to support the argument that ERP projects experience problems in Coimbatore.

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