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Integrated Critical Success Factors for Effective ERP Implementation: A Comprehensive Review (2019-2024)

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Abstract

Enterprise Resource Planning (ERP) systems are crucial for enhancing organizational efficiency by integrating vital business functions. However, their implementation often encounters significant challenges, with failure rates as high as 75%. This literature review synthesizes insights from 20 peer-reviewed articles published between 2019 and 2024, identifying Critical Success Factors (CSFs) essential for successful ERP implementation across various sectors. Key findings underscore the paramount importance of Top Management Support and leadership, which ensure ERP initiatives align with organizational goals through strategic resource allocation and the cultivation of accountability. User Involvement and Training are also critical, as early engagement minimizes resistance and maximizes system utilization. Additionally, Effective Project Management—encompassing clear timelines, resource allocation, and risk management—helps to avoid delays and cost overruns. The review highlights the significance of Change Management in facilitating smooth transitions and addressing organizational resistance. Moreover, Communication and Stakeholder Collaboration foster an alignment of interests and timely issue resolution. Sector-specific factors, including organizational culture and the impact of emerging technologies like cloud computing and AI, further shape these CSFs, indicating a need for tailored approaches in ERP implementations. These findings reveal the complex, multi-dimensional nature of ERP projects, emphasizing that strategic, sector-specific planning is essential to achieve operational efficiency and leverage the full capabilities of ERP systems. Further research should focus on longitudinal studies to enhance implementation strategies across diverse industries.

Keywords

Enterprise Resource Planning (ERP) Implementation, Critical Success Factors (CSFs), ERP Enablers, Top Management Support in ERP, User Involvement in ERP, Effective Project Management in ERP, Stakeholder Collaboration in ERP

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1. Introduction

It has been proved that implementing ERP is profitable for an organization. It paves the way not only for the stakeholders, but also for suppliers and customers. As measured in the previous studies the success rate of ERP Implementation is below 30%. The aim of this article is to check the different sectors to see what the Critical Success Factors (CSFs) are, to be able to implement a successful ERP and benefit form that.

Enterprise Resource Planning (ERP) systems have become integral tools in modern organizational management, offering the promise of streamlined operations and enhanced data integration across various functions. Despite the considerable investments and potential benefits associated with ERP implementations, many organizations face significant challenges that hinder the successful deployment and full utilization of these systems. The success or failure of ERP projects is often linked to the management of Critical Success Factors (CSFs), which are essential to navigating the complexities and maximizing the outcomes of ERP endeavors.

2. Literature Review

The implementation of Enterprise Resource Planning (ERP) systems has been widely studied across various industries, with particular attention paid to identifying the Critical Success Factors (CSFs) that influence the outcome of such projects. These factors are essential in ensuring that ERP systems meet the objectives for efficiency, effectiveness, and organizational alignment. Based on a review of 20 articles published between 2019 and 2024, this literature review synthesizes key findings regarding the CSFs associated with ERP success. Table 1 summarizes the key findings from these selected articles.

2.1 Key Areas of CSFs in ERP Implementations

1. Leadership and Project Management

Leadership, particularly top management support, is universally acknowledged as one of the most critical success factors in ERP implementations. Studies across various sectors—government (Alkraiji et al., 2022), telecommunications (Juniawan et al., 2022), and manufacturing (Abdolvand et al., 2020)—consistently point to the importance of strong, committed leadership to drive the project and align it with organizational goals. Top management support not only provides the necessary resources and strategic direction but also helps to manage change effectively, ensuring that employees buy into the transformation process. This is particularly significant in high-complexity sectors, such as banking and telecommunications, where clear direction is essential for navigating the challenges inherent in ERP deployments (Ahmadzadeh et al., 2021).

Furthermore, project management plays a pivotal role in the day-to-day success of ERP initiatives. Alkraiji et al. (2022) and Salih et al. (2022) emphasize that effective project management ensures proper planning, resource allocation, and risk management, which ultimately determines whether the implementation adheres to timeline, scope, and budget constraints.

2. Change Management and Organizational Culture

Change management is often cited as a crucial factor influencing ERP success (Stone & Zhang, 2021; Qureshi, 2022). The process of moving from legacy systems to ERP involves substantial organizational transformation, which requires both technical adaptation and cultural adjustment. Stakeholder resistance to change, lack of clear communication, and inadequate training are common barriers to successful ERP adoption. This was particularly evident in studies such as

Dissanayake & Thelijjagoda (2022), where the success of post-implementation phases was found to depend heavily on training and effective business process management.

Moreover, the alignment of ERP systems with the organizational culture significantly impacts the long-term success of the project. Johansson & Byström (2024) highlighted that a supportive organizational culture, characterized by openness to change, clear communication, and shared values, plays a critical role in ERP success. In sectors such as education (Abu Madi et al., 2024), the need for an adaptable organizational culture is even more pronounced, as institutions must navigate both the technical and human aspects of the ERP transition.

3. User Training and Engagement

The role of user training in ensuring ERP success is another recurrent theme in the literature. Both pre-implementation and post-implementation training are necessary to ensure users understand the system's functionality and can operate it effectively. Agha et al. (2019) and Raeesi Vanani & Sohrabi (2020) underscored that training programs tailored to users' roles and capabilities are integral to overcoming challenges in system adoption. Poor user engagement or inadequate training often leads to operational inefficiencies, resistance to change, and underutilization of the system's potential.

The importance of involving users in the implementation process is also critical. Engaging employees early in the process, including them in decision-making, and obtaining their feedback helps ensure that the ERP system meets real-world needs. Salih et al. (2022) identified that user training and engagement were central to the successful adoption of ERP systems in Saudi Arabia's food industry, highlighting that employees' perspectives on system usability and design greatly affect the system's success in the long run.

4. Data Management and System Quality

The quality of data and system functionality is another vital factor that influences ERP implementation success. Kouriati et al. (2022) stressed the importance of data integrity and system quality management as critical to maintaining the accuracy and consistency of the ERP system's output. Poor data quality can lead to decision-making errors and undermine the efficiency of the system, which makes data validation a critical component of the pre-implementation phase (Stone & Zhang, 2021).

Furthermore, ensuring that the ERP system is robust, scalable, and adaptable to future needs is essential. Huang et al. (2019) examined the role of system quality in sustainable corporations, where ensuring that the ERP system can integrate with other business systems and adapt to future technological advancements is a significant CSF. This is particularly true for industries with fast-paced innovation, such as banking and telecommunications, where the system must evolve to support future business needs (Ahmadzadeh et al., 2021).

5. Vendor Support and System Customization

Vendor support, both in terms of system maintenance and customization, is also highlighted as a CSF. Vendor expertise ensures that the system is appropriately configured to meet the specific needs of the organization (Barth & Koch, 2019). Kusumawardhana et al. (2023) pointed out that vendor quality is particularly crucial for industries with complex regulatory requirements, such as the insurance sector in Indonesia. Furthermore, the level of support provided by the vendor post-implementation ensures that the system continues to function optimally, with issues quickly resolved.

In sectors where customization of the ERP system is required—such as in manufacturing and agriculture (Abdolvand et al., 2020; Kouriati et al., 2022)—the flexibility and responsiveness of

the ERP vendor are critical. Vendors must offer services that allow for system adjustments to match the evolving needs of the business.

2.2 Sector-Specific CSFs

While there are numerous commonalities across different sectors, there are also sector-specific CSFs that must be considered during the implementation of ERP systems.

1. Public Sector and Higher Education (Abu Madi et al., 2024)

The CSFs in public sector ERP implementations often include factors like political stability, regulatory compliance, and inter-departmental communication. These factors are influenced by the complex bureaucratic structures and slow decision-making processes typical of governmental organizations.

2. Telecommunications (Juniawan et al., 2022)

In the telecommunications industry, the CSFs often focus on ensuring high system reliability and seamless integration with existing infrastructure. Leadership effectiveness and top management support are crucial in such a competitive and rapidly evolving sector.

3. Agricultural and Food Industries (Kouriati et al., 2022; Salih et al., 2022)

In industries such as agriculture and food processing, the integration of ERP systems with existing operational workflows is a significant challenge. Data quality, system quality, and user training are essential for ensuring that ERP systems can handle the specific needs of production and inventory management in these industries

Table 1

#	Article Title	Purpose of Study	Methodology	Findings
1	Alkraiji, A. I., Jayawickrama, U., Olan, F., Asaduzzaman, M., Subasinghage, M., & Gallage, S. (2022). The perspective of national ERP vendors in achieving ERP project success in government organisations: A case of Saudi Arabia. *Enterprise Information Systems*, 16(1), 71–104. https://doi.org/10.1080/17517575.2020.1845811	To explore Key Influencing Factors (KIFs) from national ERP vendors in Saudi Arabia regarding ERP project success in government organizations	Mixed-method study involving in-depth interviews with 10 national ERP vendors and prioritization using multi-criteria decision analysis (AHP).	Identified KIFs grouped into four categories: Sponsors and leadership, IT capabilities, Change management, Project management. ERP capabilities and stakeholder management were found to be crucial, highlighting the importance of leadership and project team expertise.
2	Stone, A. R., & Zhang, X. (2021). Understanding success factors for ERP implementation: An integration of literature and experience. *Issues in Information Systems, 22*(2), 150-161. https://doi.org/10.48009/2_iis_2021_150-161	To identify critical success factors (CSFs) for ERP implementations based on literature review and the authors' experiences managing ERP projects.	A comprehensive review of literature combined with the authors' practical experiences managing ERP implementations across various settings.	Identified five key CSFs: Project buy-in, Change management, Employee training, Employee participation, and Data validation. Emphasized the need for commitment, effective training, and involvement of employees throughout the ERP implementation process.
3	Juniawan, M. A., Ashari, N., Tri Prastiti, R., Inayah, S., Gunawan, F., & Putra, P. H. (2022). Exploring critical success factors for enterprise resource planning implementation: A telecommunication company viewpoint. In *Proceedings of the 1st International Conference on Information System & Information Technology (ICISIT)* (pp. 120-126). IEEE. https://doi.org/10.1109/ICISIT54091.2022.9873043	To identify and assess crucial success factors (CSFs) affecting ERP implementation at ABC Telco Company in the telecommunications industry.	Mixed methods: Qualitative (semi-structured interviews) with project leadership, and quantitative surveys (1-5 Likert scale) administered to the ERP implementation team. Pareto Analysis was used for data analysis.	Highlighted Project Leader effectiveness, Organizational Change Management, and Top Management Support as critical success factors. Identified a total of 14 CSFs, with clear project goals emphasized as vital for successful implementation.
4	Abdallah Abu Madi, Rami M. Ayoubi & Mohammad Alzbaidi (2024) Spotting the Critical Success Factors of Enterprise Resource Planning Implementation in the Context of Public Higher Education Sector, International Journal of Public Administration, 47:2, 73-89, https://doi.org/10.1080/01900692.2022.2085300	To identify and categorize CSFs for ERP implementation in public higher education institutions in Jordan, addressing the gap in literature for this specific context.	Qualitative case study with semi-structured interviews of 33 participants from three Jordanian HEIs, combined with a systematic literature review across various databases to identify pre-established CSFs.	Identified three new sector-specific CSFs: Organizational factors (change management and training), Technical factors (IT infrastructure and system quality), and Social factors (management support). Reinforced previously cited CSFs such as project management and budget importance.
5	Raeesi Vanani, I., & Sohrabi, B. (2020). A multiple adaptive neuro-fuzzy inference system for predicting ERP implementation success. Iranian Journal of Management Studies, 13(4), 587-621. https://doi.org/10.22059/ijms.2020.289483.673801.	To develop an ANFIS predictive model for assessing ERP implementation success before initiation.	Data collection from 414 SMEs; hierarchy construction and ANFIS modeling to assess factors affecting ERP success.	Identified major influential factors: Change Orchestration (CO), Implementation Guide (IG), and Requirements Coverage (RC). Predictive model aids organizations in recognizing weaknesses before implementation.
6	Salih, S., Abdelsalam, S., Hamdan, M., Ibrahim, A. O., Abulfaraj, A. W., Binzagr, F., Husain, O., & Abdallah, A. E. (2022). The CSFs from the perspective of users in achieving ERP system implementation and post-implementation success: A case of Saudi Arabian food industry. Sustainability, 14(23), Article 15942. https://doi.org/10.3390/su142315942.	To identify CSFs for ERP implementation and post-implementation success from users' perspectives in the Saudi Arabian food industry.	Descriptive-analytical survey approach with 144 ERP system users; correlation coefficient analysis for identifying CSFs.	Significant impacts of project management, top management support, and user training on ERP success were reported. Identified the critical nature of user interfaces and support for technological changes post-implementation.
7	Agha, W. A., Ragheb, M. A., & Shawky, A. Y. (2019). Transformational leadership as a critical success factor for enterprise resource planning system implementation. Open Access Library Journal, 6, e5243. https://doi.org/10.4236/oalib.1105243	To investigate whether transformational leadership style has a significant impact on the successful implementation of ERP systems.	Quantitative, non-experimental correlational empirical research strategy; Structural Equation Modeling (SEM) was used for analysis.	There is a significant relationship between transformational leadership style and successful implementation of ERP systems, with Inspirational Motivation and Individualized Consideration being particularly influential.
8	Ahmadzadeh, A., Sheikh Aboumasoudi, A., Shahin, A., & Teimouri, H. (2021). Studying the critical success factors of ERP in the banking sector: A DEMATEL approach. International Journal of Procurement Management, 14(1), 126–145. https://doi.org/10.1504/IJPM.2021.115151	To identify and separate the critical success factors (CSFs) of ERP into cause-and-effect variables in the banking sector.	Literature review and pairwise comparison questionnaire using the DEMATEL technique.	Identified critical success factors include: Cause Variables: Project management, User training, Commitment and support of senior managers. Effect Variables: Technology infrastructure, Business vision and plan, Communication, Change management, Participation of groups.
9	Huang, S. Y., Chiu, A. A., Chao, P. C., & Arniati, A. (2019). Critical success factors in implementing enterprise resource planning systems for sustainable corporations. Sustainability, 11(23), Article 6785. https://doi.org/10.3390/su11236785	To explore the critical success factors for implementing ERP systems in B Corporations in Taiwan, focusing on sustainable development.	The study uses a literature review and a modified Delphi method expert questionnaire survey. The questionnaire was distributed to ERP system experts and practitioners in Taiwan for empirical measurement and discussion of the CSFs.	It identifies 41 critical success factors categorized into five dimensions: 1) Business Organization Strategies, 2) System Users, 3) Counseling Team, 4) Software Vendor, and 5) Enterprise Performance. Top management support, training, interdepartmental communication, and vendor service quality are highlighted as crucial. ERP systems enhance internal control reliability, positively impacting corporate brand image and sustainable operations.
10	Qureshi, M. R. N. M. (2022). Evaluating enterprise resource planning (ERP) implementation for sustainable supply chain management. Sustainability, 14(24), Article 14779. https://doi.org/10.3390/su142214779	To identify and analyze Critical Success Factors (CSFs) for ERP implementations that enhance sustainability in supply chain management (SCM).	The study utilized a thorough literature review to identify CSFs, engaged an expert group for input, used Interpretive Structural Modeling (ISM) along with MICMAC analysis for classification, and applied the Interpretative Ranking Process (IRP) to prioritize these factors.	Highlighted top-ranked CSFs that included top management support, change management, and business process reengineering for achieving sustainability in ERP implementations.

#	Article Title	Purpose of Study	Methodology	Findings
11	Dissanayake, I., & Thelijjagoda, S. (2022). Impact of critical success factors in Oracle EBS enterprise resource planning post-go-live implementation: A case study on SriLankan Airlines. In 2022 International Conference on Computing, Communication and Power Technology (IC3P). IEEE. https://doi.org/10.1109/IC3P52835.2022.00064	The study aimed to evaluate the influence of Critical Success Factors (CSFs) on the success of post-go-live ERP implementation at SriLankan Airlines.	A case study method was employed, focusing on Oracle EBS ERP, utilizing a survey to collect data from users regarding three CSFs: Adequate End User Training, Business Process Management (BPM), and Top Management Support. Reliability of the data was tested using Cronbach's Alpha, and statistical analysis was performed using IBM SPSS software.	The research concluded that the CSFs significantly influenced ERP success post-go-live: Adequate Training (68%), BPM (63%), and Top Management Support (48%) collectively accounting for 76% of the implementation success. This indicates room for other unidentified factors contributing to the remaining 24% of success.
12	Kouriati, A., Moulogianni, C., Kountios, G., Bournaris, T., Dimitriadou, E., & Papadavid, G. (2022). Evaluation of critical success factors for enterprise resource planning implementation using quantitative methods in agricultural processing companies. Sustainability, 14(14), 6606. https://doi.org/10.3390/su14116606.	To assess and rank CSFs based on the perspectives of stakeholders involved in ERP implementation in the agricultural processing sector in Central Macedonia, Greece, and elucidate management for sustainability.	Researchers distributed a specially designed questionnaire among stakeholders in the agricultural processing industry. Analyzed data using descriptive statistics, Grey Relational Analysis (GRA), and the Friedman test to draw assessments regarding the importance of different CSFs.	The study identified 37 critical success factors, with 33 deemed "very important". There was a noted divergence between GRA and Friedman test rankings—indicating high importance for data integrity and system quality, emphasizing the necessity for strong data management practices within ERP implementations.
13	Ahmadzadeh, A., Sheikh Aboumasoudi, A., Shahin, A., & Teimouri, H. (2021). Developing a QFD model for prioritizing the CSFs of ERP based on the enablers of organizational agility. Benchmarking: An International Journal, 28(4), 1164-1185. https://doi.org/10.1108/BIJ-08-2020-0411.	To develop a model for prioritizing critical success factors (CSFs) of ERP implementation based on enablers of organizational agility (OA).	Utilized a three-phase QFD model paired with DEMATEL to classify CSFs and enablers from data collected in the banking sector.	Identified key factors like organizational structure and IT infrastructure as critical for ERP success. Recommendations included enhancing managerial support.
14	Abdolvand, N., Mastoory, Y., & Rajaee Harandi, S. (2020). A case study in identifying the relevance of ERP implementation critical success factors in a developing country. Research Gate Journal, 14.	To identify CSFs influencing successful ERP implementation in Iran, focusing on enhancing operational efficiency and interdepartmental integration.	Surveyed 180 ERP users at a large manufacturing company using a structured questionnaire and analyzed data through Partial Least Squares (PLS).	Found that perceived ease of use and perceived usefulness significantly influenced ERP adoption, stressing the importance of user training and clear communication in improving implementation outcomes.
15	Kusumawardhana, R. H., Eitiveni, I., Yaziji, W., & Adriani, Z. A. (2023). Identifying critical success factors (CSF) in ERP implementation using AHP: A case study of a social insurance company in Indonesia. *Journal of Cases on Information Technology, 26*(1). https://doi.org/10.4018/JCIT.337389.	To identify and prioritize CSFs for ERP implementation in social insurance companies in Indonesia.	Analytic Hierarchy Process (AHP); Data from surveys of ERP project team members at PT XYZ.	15 CSFs categorized into organizational, process, and technological factors. Key factors: Project team competence, Vendor quality, ERP fit, Top management support, Hardware/software selection.
16	Barth, C., & Koch, S. (2019). Critical success factors in ERP upgrade projects. Industrial Management & Data Systems, 119(3), 656-675. https://doi.org/10.1108/IMDS-01-2018-0016	Identify CSFs for ERP upgrades in the context of enterprise resource planning (ERP)	Literature review and qualitative interviews with experts such as CEOs, CIOs, consultants	The study identifies 14 CSFs for ERP upgrades, focusing on project management, external support, and team composition. Emphasizes the differences between ERP implementation and upgrade CSFs.
17	Aini, S., Lubis, M., Witjaksono, R. W., & Azizah, A. H. (2020). Analysis of critical success factors on ERP implementation in PT. Toyota Astra Motor using extended information system success model. *2020 3rd International Conference on Mechanical, Electronics, Computer, and Industrial Technology (MECnIT)*. IEEE. https://doi.org/10.1109/MECNIT49184.2020.9245442	The study aims to evaluate the effectiveness of ERP system implementation in PT. Toyota Astra Motor. It focuses on identifying Critical Success Factors (CSFs) that influence the success of ERP implementation and developing an extended model to guide companies in assessing the success of their ERP processes.	A quantitative research approach was used, involving a survey where questionnaires were distributed to ERP users within PT. Toyota Astra Motor. Data from 85 respondents were analyzed using SPSS and Smart PLS to test measurement and structural models based on purposive sampling.	The study highlights multiple factors affecting ERP success: individual impact, project management, and information quality were significant. Other variables like top management support and workgroup impact were not significantly influencing success. The model explained 53.4% of the variance in ERP success.
18	Menon, S. (2019). Benefits and process improvements for ERP implementation: Results from an exploratory case study. *International Business Research, 12*(8), 124-143. https://doi.org/10.5539/ibr.v12n8p124	To explore the benefits and process improvements associated with ERP projects in the oil and gas industry in Canada and identify key benefits organizations can leverage during ERP implementations.	The study uses a qualitative exploratory single-case study design, with data collected through face-to-face interviews and document reviews. Participants included twenty individuals from four project role groups. Data were analyzed using NVivo 11 for qualitative data analysis.	The study identified 22 key benefits, including standardization of business processes, a single integrated system, and improved KPIs, along with 4 process improvements such as improved process planning and AR cash operations.
19	Johansson, B., & Byström, M. (2024). The role of organizational culture in ERP implementation: The case of replacing an old ERP in a retail organization. *Procedia Computer Science, 239*, 1911–1918. https://doi.org/10.1016/j.procs.2024.06.374)	To explore how organizational culture influences the implementation of ERP systems and how it affects the execution process in a retail organization transitioning to a new ERP.	A qualitative case study approach with semi-structured interviews conducted with six individuals from strategic and operational levels within a retail organization undergoing ERP implementation.	Organizational culture significantly impacts implementation success; resistance to change exists. Management support and clear communication about the ERP project's importance foster positive reception. Contextual alignment between organizational culture and strategic goals is crucial for effective collaboration and implementation.
20	Subbarao, A., & Hareyana, A. (2023). Push and pull factors for successful implementation of ERP in SMEs within Klang Valley: A roadmap. In R. Buyya et al. (Eds.), *Computational Intelligence and Data Analytics* (Lecture Notes on Data Engineering and Communications Technologies, Vol. 142, pp. 289–299). Springer Nature Singapore. https://doi.org/10.1007/978-981-19-3391-2_46609.	To identify factors influencing ERP implementation in SMEs and develop a success model.	Qualitative methods; semi-structured interviews.	Pull Factors: Effective change management, strong top management support, efficient project management, effective communication, comprehensive training and education, effective project team. Push Factors: Lack of management commitment, ineffective change management, poor ERP package selection, employee resistance.

Conclusion:

This literature review has underscored the critical importance of Critical Success Factors (CSFs) in the successful implementation of Enterprise Resource Planning (ERP) systems. As ERP systems become increasingly integral to organizational efficiency and competitiveness, understanding and addressing CSFs is vital for mitigating implementation risks and maximizing system benefits. The synthesis of insights from 20 empirical studies highlights diverse factors crucial for ERP success, emphasizing the complex, multi-dimensional nature of these projects, including technological, organizational, and human elements.

Contribution to Future Research

The findings from this review not only clarify the significance of CSFs but also provide a foundation for future research in ERP implementation. By further investigating these factors and their interrelationships, scholars can explore several promising research avenues:

1. Exploring the Interdependencies of CSFs

Individual CSFs have been studied extensively, but their interplay requires deeper exploration. Understanding how leadership impacts change management or how technical factors influence user engagement could lead to more comprehensive ERP implementation frameworks.

2. Sector-Specific Critical Success Factors

As ERP systems are implemented across diverse sectors, research should focus on identifying and analyzing sector-specific CSFs. Each industry, such as banking, education, and manufacturing, faces unique challenges—research could explore these nuances and how they evolve with technology and organizational needs.

3. Longitudinal Studies on CSFs

Given that ERP systems evolve post-implementation, longitudinal studies could provide insights into the shifting importance of CSFs over time. Such research could track how organizations address initial challenges and sustain ERP success as they mature with the technology.

4. The Role of Emerging Technologies in CSF Evolution

Emerging technologies like artificial intelligence and cloud computing are transforming ERP landscapes. Future research could investigate how these technologies impact traditional CSFs and identify any new factors that emerge, aiding organizations in adapting to technological advancements.

5. Cultural Dimensions and Global Perspectives

With ERP adoption in global organizations, cultural factors become increasingly significant. Research should explore cross-cultural differences in CSF perception and enactment, providing insights for multinational organizations to adapt ERP strategies to local contexts effectively.

6. Sustainability in ERP Systems

As organizations focus more on sustainability, ERP systems can support these initiatives. Research could explore how ERP implementations contribute to achieving sustainability goals, particularly in industries with significant corporate social responsibility (CSR) commitments.

Final Thoughts

In conclusion, CSFs are crucial determinants of ERP implementation success. As organizations embrace ERP systems to drive efficiency, growth, and innovation, recognizing and effectively managing CSFs is essential. This review highlights key CSFs such as leadership commitment, change management, and user engagement, and proposes future research avenues to enhance understanding and adaptation to evolving business demands.

By building on these insights, organizations and researchers can better navigate ERP complexities, ensuring these systems deliver maximum value both short- and long-term. Further exploration of CSF interdependencies, sector-specific challenges, and the impact of emerging technologies will be integral to adapting ERP strategies for the dynamic global business environment.

References

1. Alkraiji, A. I., Jayawickrama, U., Olan, F., Asaduzzaman, M., Subasinghage, M., & Gallage, S. (2022). The perspective of national ERP vendors in achieving ERP project success in government organisations: A case of Saudi Arabia. *Enterprise Information Systems*, 16(1), 71–104. https://doi.org/10.1080/17517575.2020.1845811
2. Stone, A. R., & Zhang, X. (2021). Understanding success factors for ERP implementation: An integration of literature and experience. *Issues in Information Systems, 22*(2), 150-161. https://doi.org/10.48009/2_iis_2021_150-161
3. Juniawan, M. A., Ashari, N., Tri Prastiti, R., Inayah, S., Gunawan, F., & Putra, P. H. (2022). Exploring critical success factors for enterprise resource planning implementation: A telecommunication company viewpoint. In *Proceedings of the 1st International Conference on Information System & Information Technology (ICISIT)* (pp. 120-126). IEEE. https://doi.org/10.1109/ICISIT54091.2022.9873043
4. Abdallah Abu Madi, Rami M. Ayoubi & Mohammad Alzbaidi (2024) Spotting the Critical Success Factors of Enterprise Resource Planning Implementation in the Context of Public Higher Education Sector, International Journal of Public Administration, 47:2, 73-89, https://doi.org/10.1080/01900692.2022.2085300
5. Raeesi Vanani, I., & Sohrabi, B. (2020). A multiple adaptive neuro-fuzzy inference system for predicting ERP implementation success. Iranian Journal of Management Studies, 13(4), 587-621. https://doi.org/10.22059/ijms.2020.289483.673801.
6. Salih, S., Abdelsalam, S., Hamdan, M., Ibrahim, A. O., Abulfaraj, A. W., Binzagr, F., Husain, O., & Abdallah, A. E. (2022). The CSFs from the perspective of users in achieving ERP system implementation and post-implementation success: A case of Saudi Arabian food industry. Sustainability, 14(23), Article 15942. https://doi.org/10.3390/su142315942.
7. Agha, W. A., Ragheb, M. A., & Shawky, A. Y. (2019). Transformational leadership as a critical success factor for enterprise resource planning system implementation. Open Access Library Journal, 6, e5243. https://doi.org/10.4236/oalib.1105243
8. Ahmadzadeh, A., Sheikh Aboumasoudi, A., Shahin, A., & Teimouri, H. (2021). Studying the critical success factors of ERP in the banking sector: A DEMATEL approach. International Journal of Procurement Management, 14(1), 126–145. https://doi.org/10.1504/IJPM.2021.115151
9. Huang, S. Y., Chiu, A. A., Chao, P. C., & Arniati, A. (2019). Critical success factors in implementing enterprise resource planning systems for sustainable corporations. Sustainability, 11(23), Article 6785. https://doi.org/10.3390/su11236785
10. Qureshi, M. R. N. M. (2022). Evaluating enterprise resource planning (ERP) implementation for sustainable supply chain management. Sustainability, 14(24), Article 14779. https://doi.org/10.3390/su142214779
11. Dissanayake, I., & Thelijjagoda, S. (2022). Impact of critical success factors in Oracle EBS enterprise resource planning post-go-live implementation: A case study on SriLankan Airlines. In 2022 International Conference on Computing, Communication and Power Technology (IC3P). IEEE. https://doi.org/10.1109/IC3P52835.2022.00064.
12. Kouriati, A., Moulogianni, C., Kountios, G., Bournaris, T., Dimitriadou, E., & Papadavid, G. (2022). Evaluation of critical success factors for enterprise resource planning implementation using quantitative methods in agricultural processing companies. Sustainability, 14(14), 6606. https://doi.org/10.3390/su14116606.
13. Ahmadzadeh, A., Sheikh Aboumasoudi, A., Shahin, A., & Teimouri, H. (2021). Developing a QFD model for prioritizing the CSFs of ERP based on the enablers of organizational agility. Benchmarking: An International Journal, 28(4), 1164-1185. https://doi.org/10.1108/BIJ-08-2020-0411.

14. Abdolvand, N., Mastoory, Y., & Rajaee Harandi, S. (2020). A case study in identifying the relevance of ERP implementation critical success factors in a developing country. Research Gate Journal, 14.
15. Kusumawardhana, R. H., Eitiveni, I., Yaziji, W., & Adriani, Z. A. (2023). Identifying critical success factors (CSF) in ERP implementation using AHP: A case study of a social insurance company in Indonesia. *Journal of Cases on* Information Technology, 26(1). https://doi.org/10.4018/JCIT.337389.
16. Barth, C., & Koch, S. (2019). Critical success factors in ERP upgrade projects. Industrial Management & Data Systems, 119(3), 656-675. https://doi.org/10.1108/IMDS-01-2018-0016.
17. Aini, S., Lubis, M., Witjaksono, R. W., & Azizah, A. H. (2020). Analysis of critical success factors on ERP implementation in PT. Toyota Astra Motor using extended information system success model. *2020 3rd International Conference on Mechanical, Electronics, Computer, and Industrial Technology (MECnIT)*. IEEE. https://doi.org/10.1109/MECNIT49184.2020.9245442.
18. Menon, S. (2019). Benefits and process improvements for ERP implementation: Results from an exploratory case study. *International Business Research, 12*(8), 124-143. https://doi.org/10.5539/ibr.v12n8p124
19. Johansson, B., & Byström, M. (2024). The role of organizational culture in ERP implementation: The case of replacing an old ERP in a retail organization. *Procedia Computer Science, 239*, 1911–1918. https://doi.org/10.1016/j.procs.2024.06.374.
20. Subbarao, A., & Hareyana, A. (2023). Push and pull factors for successful implementation of ERP in SMEs within Klang Valley: A roadmap. In R. Buyya et al. (Eds.), *Computational Intelligence and Data Analytics* (Lecture Notes on Data Engineering and Communications Technologies, Vol. 142, pp. 289–299). Springer Nature Singapore. https://doi.org/10.1007/978-981-19-3391-2_46609.