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Navigating the ERP Landscape: Unveiling the Key Drivers in Enterprise Resource Planning Success - A Comprehensive Literature Exploration

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Article Information	Abstract

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Keywords

Critical Success Factors; Enterprise Resource Planning; ERP Implementation; Systematic Literature Review Organizations require information systems as a means of aiding decisionmaking processes. Enterprise Resource Planning (ERP) systems serve as information system tools that enhance work efficiency. They are considered the optimal solution for organizations seeking a competitive edge. The successful implementation of ERP systems offers numerous benefits to organizations. It is essential to note that while some organizations have encountered difficulties using ERP systems, others have succeeded. Implementing ERP systems poses a challenge for organizations, and this study aims to identify the critical success factors with ERP systems and get to know what category is most important to implementing ERP in an organization. This research identifies and categorizes the top five CSFs for successful ERP implementation: training and job redesign, adequate ERP software selection, clear goals and objectives, business process reengineering, and implementation strategy and timeframe. These CSFs are vital for organizations of all scales, offering a holistic framework for effective ERP integration. Through systematic analysis, the study maps these CSFs into four dimensions: Project Strategy, Project Structure, Information Systems, and People Management, highlighting the interplay between technology and human factors. This research underscores the enduring significance of ERP systems in the globalized business landscape and calls for continued exploration of evolving CSF trends to ensure ongoing organizational competitiveness and success. By following the outlined procedures, this study can be applied by organizations of different scales, including small and large businesses, to achieve effective ERP implementation. Integrating ERP systems will demonstrate advantages for organizations over the short and long run within the market context.

A. Introduction

The increasingly rapid growth of technology makes competitiveness between business environments increase [1]. The current study analyses the primary antecedent variables for achieving the ERP system adoption stage in their business operations. An ERP (Enterprise Resource Planning) system is an information technology (IT) solution that enables, manages business processes, enhances management decision-making effectiveness, and supports innovative business operations within an organization [2].

On the other hand, ERP implementation is generally intriguing. The implementation process typically requires substantial time, money, and resources from corporations. However, there are several dangers and unknowns associated with ERP implementation. Given this basis, it is critical to outline and appreciate the critical success factors (CSF) for the implementation of an ERP. A thorough consideration of these criteria makes selecting the appropriate execution approaches [1].

The implementation of Knowledge Lifecyle Management (Siemieuniuch & Sinclair, 2004), Customer Relationship Management (Croteau & Li, 2003; Rahimi & Berman, 2009), and Information Technology Infrastructure Library (ITIL) (Tan, Cater-Steel and Toleman, 2009) are just a few examples of the varied uses for which CSFs have been demonstrated. However, ERP systems have been the main topic of research in CSF IS. Given the CSF methodology's adaptability, flexibility, and applicability, CSFs would offer a helpful foundation to direct the deployment of PLM IS in multi-cultural situations [6].

The goal of this research was to accomplish three objectives. The first step was pinpointing a few crucial ERP system success indicators. Finding the definition of all essential components came second. Thirdly, the study will provide details regarding the challenges faced by ERP systems.

The following is a list of the research questions (RQ) that we attempted to answer in this article:

RQ1: What are the Critical Success Factors for implementing Enterprise Resource Planning (ERP) for the organization?

RQ2: What are the main factors that influence the success of implementing Enterprise Resource Planning (ERP) based on its categorization?

We are convinced that addressing these questions will offer a significantly more profound understanding of the essential success indicators for ERP systems. Consequently, this will make a valuable contribution to the success of future "ERP adventures".

After the introduction, the paper is structured as follows: Section 2 delves into the theoretical study; Section 3 provides a comprehensive overview of the research methodology employed; Section 4 presents the research findings in detail and an in-depth discussion of the research outcomes. Lastly, Section 5 concludes the research by summarizing the key findings, discussing their implications, and suggesting potential areas for further studies.

B. Theoretical Study

I. Enterprise Resource Planning (ERP)

Organizations aim to improve their operational efficiency by adopting an ERP system. However, this endeavor can be challenging due to the high costs associated with ERP implementation, staff training, and system maintenance to meet the organization's specific needs [3]. Despite these challenges, ERP implementation offers various benefits, such as increased profitability and performance growth, heightened competitiveness, improved information quality and data exchange, software standardization, and decision-making support [4], [5].

The advantages of implementing ERP are numerous. Firstly, it helps eliminate departmental silos and reduces data duplication. Secondly, real-time information sharing enhances transparency within the organization. Additionally, a centralized repository location ensures easy access to data. Moreover, ERP enhances organizational flexibility and worker efficiency. Finally, it improves planning, decision making, and empowers the workforce [6], [7].

ERP adoption has many positive aspects, but it also comes with a high failure risk and can majorly affect the core company [8]. Some of the most common complaints about ERP come from users, who often struggle with the software's interface, find it hard to get the help they need when they run into trouble, and complain that there isn't enough information or that it's too hard to find what they need because of the sheer volume of data and the complexity of the menus [9].

Therefore, extensive supporting aspects are essential to ensure a successful deployment. Top-down sponsorship, workflow harmony, stakeholder participation, socialization and training, vendor backing, and organizational agility are just a few of the critical success aspects cited in [10].

II. Critical Success Factors (CSF) of ERP systems

Modern firms now commonly use ERP technologies to integrate and streamline numerous business operations. However, ERP implementations are difficult, complex tasks that frequently face enormous risks. Organizations looking to get the most out of their ERP investments must comprehend the key success factors (CSFs) that support the successful adoption of ERP systems [6].

"The few areas where high performance would guarantee the organization's competitive success" [11] is how the Critical Success Factors (CSFs) are described. Top-down buy-in, a competent implementation team, company-wide buy-in, and a productive realignment of needs and ERP package capability are all critical success factors for implementing an ERP system [12]. These CSFs may be broken down into three distinct classes based on their respective technologies, distribution models, and performance benchmarks [13]. High-level management buy-in, an adequate project management group, executive user training, coordinated and communicative efforts, correct data, and process re-engineering are all mentioned in [13], which lists the CSFs for ERP adoption. Individual contributions, ERP system acceptability, key user participation, good project management, and information quality were found to have an impact on CSFs in ERP system adoption [14].

According to Vargas [15], the Critical Success Factors (CSFs) for ERP implementation are buy-in from upper management, a focus on user training, a lack of customization, the use of business analysts and consultants with both business and technological expertise, ERP system integration with other businesses, and the ability to build in-house IT capability [16].

The results of these CSFs are examined in relation to how they affect the outcomes of ERP installation, such as enhanced business processes, greater performance, increased user adoption, and organizational change. The analysis also identifies research gaps and offers possible areas for further study, such as the importance of cutting-edge technology for successful ERP deployment (such as cloud computing and artificial intelligence).

This SLR offers a thorough overview of the crucial variables that businesses should consider ensuring the success of ERP projects by synthesizing and analysing the body of knowledge on CSFs for implementation. The knowledge gathered from this analysis can help professionals, project managers, and decision-makers plan and carry out ERP installations successfully, increasing the likelihood of desired results and maximizing the value of ERP systems in the digital era.

III. Challenge for ERP systems

ERP systems can assist users and academics in comprehending the problems associated with implementing cloud-based ERP [17]. Numerous studies have investigated the difficulties that cloud ERP systems face when they are used in a variety of manufacturing and educational settings. The use of cloud ERP solutions in SMEs has also been researched [18].

Research on these issues is ongoing, and significant advancements are being made to assist trustworthy software and administration [18]. With the aid of an information system, an ERP system aims to compile all the company's data in one location and provide a comprehensive view [18]. Poor ERP selection increases the risk of implementing an ERP system [19].

IV. Grouping the CSFs

Extensive research has been conducted previously to classify CSFs into different groups. These investigations have encompassed areas such as ERP, e-business, and supply chain information systems. Table 1 presents a selection of frameworks that have been organized according to specific categories.

No	Categorization	References							
1.	People	Denolf, M.J. et al., 2015							
	Management Processes								
	Project Strategy								
	Structure								
	Information Systems								
2.	57 critical factors classified in eight categories:	Li, J., et al., 2004							
	Leadership								
	Organization and competency								
	Management Technology								
	Overall features and function								

	Table	L. CSFs	Categor	ization
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No	Categorization	References
	Function for suppliers	
	Function for customers	
	Customers	
	Suppliers	
3.	Organizational	Arora, R. et al., 2017
	Inter-organizational	
	Human	
	Technology	
	Program Management	
	CPG Sector Specific	

To classify the CSFs identified in the existing literature, we have employed the five categories established by Denolf, M.J., et al. in 2015. These five categories encompass the 20 CSFs that have been identified through multiple reviews.

Project Strategy, a precise project strategy is essential for achieving project objectives, encompassing a thorough description of the project's scope, efficient project planning, meticulous risk management, and the establishment of a welldefined project strategy. Project Structure, the organizational framework and governance of a project fall under this category, involving elements such as project management, team structure, lines of communication, decision-making procedures, and resource allocation. A robust project structure is fundamental for effective execution. Information Systems, the significance of information systems in project success is underscored in this category. Considerations include the accessibility and dependability of project-related data, a suitable technological foundation, efficient data administration, and seamless integration of information systems into the project. People, emphasizing the critical role of human resources in enterprise success, this category considers elements such as the skills and abilities of project team members, efficient cooperation and collaboration, motivation and morale, and the cultivation of a positive project culture. Management Process, this category centers on the management process, specifically focusing on the steering committee's role in enabling implementation. It encompasses the strategic decision-making and guidance provided by the steering committee to ensure the smooth progression of the project.

These five groups offer a framework for classifying and comprehending the crucial elements that contribute to the CSF.

C. Research Methods

This paper conducts a systematic literature review (SLR) to comprehensively synthesize the existing research on CSFs pertaining to the implementation of ERP systems. Utilizing the SLR methodology, relevant articles from academic journals, conference proceedings, and scholarly sources are meticulously identified. Following the framework proposed by Kitchenham et al. (2004), a thorough analysis of selected articles is performed to extract essential CSFs and associated insights. The findings reveal several prominent CSFs with significant implications for the success of ERP implementations, encompassing diverse domains such as technological considerations, organizational factors, project management techniques, and change management approaches. The subsequent section will delineate the structure of this paper, organized into four steps, aimed at addressing the research questions posed in the investigation.

I. Search Strategy

This paper uses five different databases for answering the RQs, specifically IEEE, Emerald, ProQuest, Science Direct and Scopus. The query has been used are:

"Critical Success Factor" AND ("ERP" OR "Enterprise Resource Planning") AND ("Implementation" OR "Adoption").

II. Inclusion and Exclusion Criteria

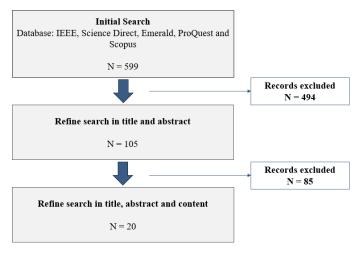
To evaluate each research question in systematic literature reviews, specific inclusion and exclusion criteria are needed [Kitchenham]. These standards are initially stated when the protocol is established, though they might be improved if quality standards are established. The inclusion and exclusion standards for this paper are described below in Table 2.

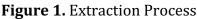
Table 2. Inclusion and Exclusion Criteria								
Inclusion Criteria	Exclusion Criteria							
Literatures release within 2017 – 2023	Literatures release outside 2017 – 2023							
Literatures release in journal and conference	Literatures written in non-English							
Literatures written in English	Literatures type							
	Literatures type are not book, magazine, blog							
Literatures in open access journal	Literatures not open access journal							
Literatures which answer the research	Literatures type is Systematic Literature Review							
questions								
ERP Implementation in open and private	Literatures which have duplicate in more than							
company	database							
	ERP Implementation for SME							

Table 2. Inclusion and Exclusion Criteria

III. Systematic Review Process

After establishing the inclusion and exclusion criteria for this study, the researchers proceeded with the steps to select high-quality sources. The literature selection process involved three stages: the initiation stage (based on search results), the title and abstract selection stages, and the complete literature selection stage. Figure 1 illustrates the flow of this review selection.





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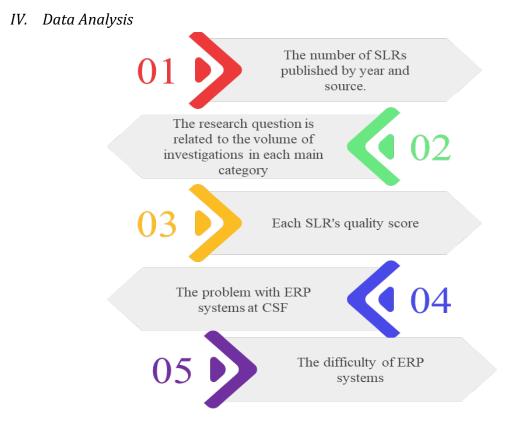


Figure 2. Data Analysis Flow

In the data analysis phase, we scrutinized the number of Systematic Literature Reviews (SLRs) published annually, providing insights into the temporal trends and sources contributing to the discourse on ERP system implementation.

The investigation delved into the research questions associated with the volume of inquiries within each primary category, shedding light on the distribution and focus of scholarly investigations in the field.

Rigorous examination was conducted on the quality score of each SLR, employing established metrics to assess and compare the methodological robustness and reliability of the selected literature.

An in-depth analysis was carried out to identify and understand the prevailing issues with ERP systems as outlined in the CSFs. This involved a detailed examination of challenges and shortcomings reported in the literature.

The complexity and challenges associated with ERP systems were systematically assessed, providing valuable insights into the difficulties encountered during ERP implementation. This analysis contributes to a comprehensive understanding of the hurdles faced by organizations in adopting and optimizing ERP solutions.

V. Literature Quality Test

Literature testing uses eight mandatory indicators filled with literature that will be used as a theoretical basis. There are 8 indicators used for selecting literature, which will be explained in Table 3.

Indicator Code	Description
C1	Does the article clearly state the goal of the study?
C2	Does the article give a background, a research context, and a literature review?
С3	Does the essay include relevant work from earlier studies to demonstrate the key contribution of the investigation?
C4	Does the article describe the methods employed or the recommended architecture?
C5	Are there research findings in the article?
C6	Does the article's conclusion address the problem or goal of the research?
C7	Does the article suggest any changes or further effort for the future?
C8	(Q1/Q2/Q3/Q4/unindexed) Scopus index

Table 3. Quality Test Indicators

VI. Data Extraction and Synthesis

After determining the quality test indicators, the literature that has been collected will be extracted with information that will answer research questions. The data extraction will be described more fully in Table 4.

After that, this research will be carried out data synthesis by processing the extracted data that has been obtained into several diagrams based on selected journals. E4 will carry out the mapping, which will be carried out based on grouping the CSFs based on the framework described in Table 1. From E4, the percentage of each grouping CSF category that has been carried out will be obtained, which will become E5.

Tuble II Extraction Data Description						
Extraction Data	Description					
Title (E1)	Journal paper or conference article					
Author (E2)	Name of journal author or conference article					
Publication Year (E3)	iblication Year (E3) Year of journal author or conference article been released					
Mapping CSFs (E4)	Mapping the CSFs into framework's categorization					
CSF Grouping (E5)	Modelling CSF into categorization					

Table 4. Extraction Data Description

D. Result and Discussion

The summary and findings of this paper are presented in this section. The answers to the study questions are discussed by the researchers.

I. Research result

Based on the research results, there are 20 articles. Appendix 1 displays the findings of the search process of the list papers in the process of systematic review with regards to source, authors, year, title, and number of CSFs on those articles. The Critical Success Factors

Table 5 presents the outcomes of the systematic review, which lists 40 factors indicating the success of ERP implementation mentioned in each of the papers.

Code	CSFs	Code	CSFs
CS1	Top Management support	CS4	Team morale and motivation
CS2	ERP teamwork and composition	CS5	Adequate ERP software selection
CS3	Training and job redesign	CS6	User involvement and participation

Table 5. The CSFs

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Code	CSFs
CS7	Change Management
CS8	Clear goals and objectives
CS9	Business process reengineering
CS10	Consultant selection and relationship
CS11	Implementation strategy and timeframe
CS12	Project team organization and competence
CS13	Communication plan
CS14	Troubleshooting/crisis management
CS15	Effectiveness of Project Leader/Champion
CS16	Vendor Support
CS17	Choice of ERP Modules
CS18	Testing and Start-up the System
CS19	Individual Impact
CS20	Information Quality
CS21	Vendor and Consultant Quality
CS22	System Quality
CS23	Legacy System Consideration

Code	CSFs			
CS24	Data Accuracy			
CS25	System Reliability and Flexibility			
CS26	Perceived Ease of Use			
CS27	Technological Complexity			
CS28	User Satisfaction			
CS29	Net Benefits			
CS30 Performance measurement and evaluation				
CS31	Business plan and vision			
CS32	Business case building			
CS33	33 Project management and evaluation			
CS34	Experience (Lessons Learned)			
CS35	IT infrastructure and architecture			
CS36	IT investment			
CS37	Cultural Alignment			
CS38	Steering Committee			
CS39	Organizational financial health			
CS40	Governance structure for sustainability			

The list of CSFs for ERP system implementation encompasses a comprehensive array of considerations crucial for project success. Key factors include securing Top Management support, fostering effective ERP teamwork, ensuring adequate training and job redesign, and maintaining high team morale and motivation. Critical aspects involve selecting suitable ERP software, engaging users actively in the process, and implementing robust change management strategies. Clear goals and objectives, meticulous business process reengineering, and a well-structured communication plan are paramount. Technical aspects, such as system quality, legacy system considerations, and data accuracy, are integral. Additionally, factors such as vendor support, user satisfaction, and the alignment of IT infrastructure with organizational goals contribute significantly. Noteworthy considerations extend to governance structures, organizational financial health, and a culture aligned with ERP implementation goals, all underpinning the success of ERP projects. The comprehensive nature of these CSFs highlights the multifaceted approach necessary for achieving successful ERP system implementation.

II. Mapping The CSFs

Table 6 presents the outcomes of the systematic review, which lists 40 factors indicating the success of ERP implementation mentioned in each of the papers.

		-								Tapp											
	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19	L20	
CS1	v	v	v	v	v		v	v	v	v	v	v	v	v		v	v	v	v	v	18
CS2	v	v					v	v	v	v	v						v	v	v		10
CS3	v	v	v	v			v	v	v	v		v	v			v		v	v	v	14
CS4																			v		1
CS5	v	v	v		v		v						v	v			v		v		9
CS6	v		v						v	v			v			v	v	v	v		9
CS7	v	v	v				v	v		v			v	v		v		v	v	v	12
CS8	v				v					v	v	v					v		v		7
CS9		v	v				v	v	v	v								v	v	v	9
CS10	v								v								v		v	v	5
CS11					v			v	v	v		v			v				v		7
CS12	v		v	v			v							v		v			v		8
CS13			v	v			v	v	v				v	v					v		8
CS14							v			v					v	v		v	v		6
CS15	v				v		v	v			v						v				6
CS16	v						v		v						v					v	5
CS17	v	v													v					v	4
CS18	v									v											2
CS19		v																			1
CS20		v																v			3
CS21		v	v						v	v						v					6
CS22		v															v				3
CS23			v				v		v												3
CS24			v							v					v		v	v		v	6
CS25			v	v					v	v				v	v		v			v	8
CS26				v											v						3
CS27			v	v																	2
CS28																					1
CS29										v		v									3
CS30							v		v				v								3
CS31							v		v					v							3
CS32							v			v											2
CS33									v	v			v	v			v			v	6
CS34										v											1
CS35											-		v								1
CS36																		v			1
CS37												v						v			2
CS38					v																1
CS39												v									1
CS40												v									1
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Table 6. Csfs Mapping To Literatures

Based on the provided table, the analysis indicates that the following five CSFs play a significant role in supporting the successful implementation of ERP in organizations: Top Management Support, ERP Teamwork and Composition, Training and Job Redesign, User Involvement and Participation, and Change Management.

After identifying the CSFs that contribute to the success of ERP implementation in organizations through the systematic literature review (SLR) method, these CSFs will be categorized based on Denolf's (2015) framework, as shown in Table 7.

Project Strategy	Project Structure	Information Systems	People	Management Processes
CS3	CS2	CS14	CS4	CS1
CS5	CS10	CS17	CS6	CS7
CS8	CS15	CS18	CS12	CS33
CS9	CS29	CS22	CS16	CS36

Table 7. Mapping CSFs to Its Gategorization

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Project Strategy	Project Structure	Information Systems	People	Management Processes
CS11	CS35	CS25	CS19	CS39
CS13	CS38	CS26	CS21	
CS20	CS40	CS27	CS28	
CS23			CS30	
CS24			CS37	
CS31				
CS32				
CS34				

III. Modelling CSF based on Literature

A diagram of the study findings from the mapping literature review of CSF towards CSF categorization is obtained from the mapping results in Table 7. The graph is shown in figure 3.

In the complex ecosystem of Enterprise Resource Planning (ERP) implementations, our study underscores four critical dimensions: Project Strategy, Project Structure, Information Systems, and People Management. Each of these dimensions holds specific facets that are integral to the success of an ERP project.

From the perspective of Project Strategy, the emphasis is on a holistic approach, highlighting the importance of clear goals, robust software selection processes, business process reengineering, and learning from past experiences. This approach ensures that the strategy aligns with the organization's broader vision and objectives.

The Project Structure dimension focuses on the human and leadership elements of an ERP project. The composition and teamwork of the ERP team, the effectiveness of project leadership, and governance structures all play pivotal roles in guiding the project towards its desired outcomes.

On the front of Information Systems, the selection of appropriate ERP modules, system quality, reliability, and flexibility is key. This dimension also highlights the challenges and solutions related to technological complexities and the need for effective troubleshooting mechanisms.

Lastly, People Management and Management Processes play an undeniable role in determining ERP success. User involvement, team morale, vendor relationships, change management, and top-tier support, among others, are instrumental in ensuring that the ERP system is not just technically sound but also organizationally embraced.

Moreover, an overarching theme emerges from the data: the intertwining of technological and human factors. For an ERP implementation to truly succeed, the technical components of the system must be matched by an organization's readiness, competence, and alignment with its strategic imperatives.

In sum, the success of an ERP system is not solely determined by its technical architecture but is deeply anchored in strategic vision, structural efficiency, and a nuanced balance between people and processes. Organizations striving for a seamless ERP journey would significantly benefit from a comprehensive approach,

considering each of these facets and their intricate interplay. This holistic outlook is evident in the organization's emphasis on a broad range of factors, from strategic planning and information systems to people-oriented concerns and management processes. A more in-depth exploration or specific inquiries can shed light on the finer intricacies of this approach.

E. Conclusion

In the dynamic landscape of globalised business, sustaining competitiveness is contingent upon organisations embracing effective ERP systems to augment their management and organisational strategies. Recognising the pivotal role of ERP systems in achieving organisational success, the implementation of IT-enabled management, a foundational aspect of ERP, has faced challenges, resulting in outcomes below expectations. To address these complexities, a scientific exploration is underway, emphasising the identification and categorization of CSFs pivotal for the successful implementation of ERP systems. This initiative recognises the imperative for a nuanced understanding of the challenges inherent in ERP implementations, ultimately contributing to the evolution of strategies that fortify organizations in the ever-evolving global business environment.

Technology serves as a linchpin in the implementation of ERP systems, playing a pivotal role as the robust foundation for IT-enabled management—a focal point for organizations striving to optimize their operations. Despite the significance of this technological backbone, the implementation of IT-enabled management has confronted obstacles, resulting in outcomes that often fall short of expectations. This discrepancy has spurred a heightened emphasis on comprehending the CSFs are intricately categorized, considering diverse facets such as the alignment of ERP with project goals, the structural nuances of the ERP system, the transformative impact on business processes induced by IT, and the pivotal role of people and management processes throughout implementation. As elucidated, the paramount CSFs for successful ERP implementation revolve around Project Strategy with 1) training and job redesign, 2) adequate ERP software selection, 3) clear goals and objectives, 4) business process reengineering, 5) implementation strategy and timeframe, 6) communication plan, 7) information quality, 8) legacy system consideration, 9) data accuracy, 10) business plan and vision, 11) business case building, and 12) experience (lessons learned) factors. As a result, the researchers have determined that future research should address the challenge of ERP systems and their performance enhancement by conducting surveys and industry-specific studies. Furthermore, it is important to consider the evolving trends in key success factors, as they can provide valuable insights for improving ERP system implementation.

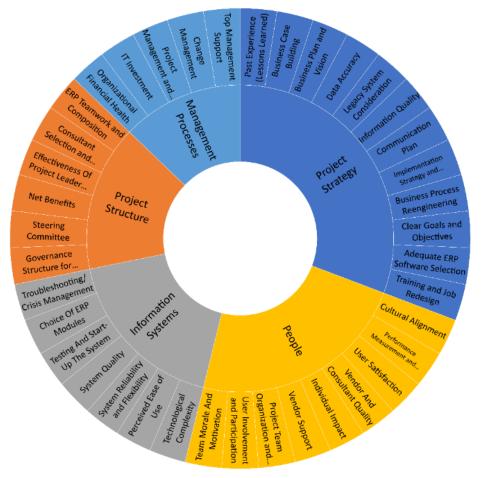


Figure 3. CSF Sunburst based on Categorization

In conclusion, this scientific exploration underscores the significance of ERP systems for organizations seeking to thrive in the globalized environment. By delineating and categorizing Critical Success Factors, organizations can better navigate the complexities of ERP implementation. Future research endeavors should not only address current challenges but also anticipate and adapt to evolving trends, ensuring the continuous improvement of ERP systems and their contribution to organizational competitiveness and success.

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	Appendix A: Systematic Review Studies Authors Year Title CSFs Code						
					Code		
IEEE	Juniawan M. A, et al.	2022	ExploringCriticalSuccessFactorsforEnterpriseResourcePlanningImplementation:ATelecommunicationCompany Viewpoint	14	L1		
	Aini S., et al.	2020	Analysis of Critical Success Factors on ERP Implementation in PT. Toyota Astra Motor Using Extended Information System Success Model	11	L2		
	Wicaksono G. P., et al.	2022	Critical Success Factor Analysis ERP Project Implementation Using Analytical Hierarchy Process in Consumer Goods Company	13	L3		
	Putri A. D., et al.	2020	Analysis of Critical Success Factors (CSF) inEnterpriseResourcePlanning(ERP)ImplementationusingExtendedTechnologyAcceptanceModel(TAM) atTrading and DistributionCompany	9	L4		
	Syafiraliany L., et al.	2019	Analysis of Critical Success Factors fromERPSystemImplementationinPharmaceuticalFieldsSystemSuccess Model	6	L5		
	Phaphoom, et al.	2018	An Investigation of ERP implementation: A Comparative Case Study of SME and Large Enterprises in Thailand	8	L6		
Emerald	Barth C., et al.	2019	Critical success factors in ERP upgrade projects	16	L7		
ProQuest	Epizitone. A, et al.	2019	Critical Success Factors for ERP System Implementation to Support Financial Functions	8	L8		
	Huang S. Y, et al.	2019	Critical Success Factors in Implementing Enterprise Resource Planning Systems for Sustainable Corporations	16	L9		
	James Kimpel	2019	Measuring the Impact of Culture on Critical Success Factors for Global Information System Implementations	19	L10		
	Prasad, et al.	2018	ERP Critical Success Factors-Roles and Impact on Promoting Cross Functional Integration	8	L11		
Science Direct	AboAbdo S, et al.	2019	ImplementingEnterpriseResourcePlanningERPSysteminaLargeConstructionCompany in KSA	5	L12		

Appendix A: Systematic Review Studies

	Authors	Year	Title	CSFs	Code
Scopus	Ranjan S., et al.	2019	Critical success factors in ERP implementation in Indian manufacturing enterprises: an exploratory analysis	9	L13
	Saha I, et al.	2020	Development of Sustainable Business Model: A Conceptual Framework for the Financial Sector to Obtain Successful ERP	11	L14
	Shafi K, et al.	2019	Measuring Performance Through Enterprise Resource Planning System Implementation	8	L15
	Sar A, et al.	2022	Developing ERP success model in Indian manufacturing sector	7	L16
	Halim S, et al.	2020	Rank Critical Success Factors (CSFs) of Data Warehouse and Business Intelligence (DW/BI) Implementation in Banking Sector Using Analytical Hierarchy Process (AHP)	13	L17
	Wijaya S.F, et al.	2019	Identification and Analysis of Critical Success Factors Influencing Technology Implementation of Supply Chain	12	L18
	Qureshi M.R.	2022	Evaluating Enterprise Resource Planning (ERP) Implementation for Sustainable Supply Chain Management	15	L19
	Wamba, et al.	2018	ERP Adoption and Use in Production Research: An Archival Analysis and Future Research Directions	10	L20