

Unlocking Long-Term Value: A Multi-Stakeholder Perspective on Post-Implementation Success in SAP ERP Systems

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Abstract

The implementation of SAP ERP systems represents a significant milestone for organizations seeking to streamline operations, improve decision-making, and enhance competitiveness. However, the true measure of success lies not merely in the initial deployment but in realizing sustained, long-term value post-implementation. This paper adopts a multi-stakeholder perspective, examining how different groups—including employees, management, partners, and end-users—contribute to and benefit from the enduring success of SAP ERP systems. By analyzing case studies and industry practices, the research identifies critical factors such as user training, continuous system optimization, integration with emerging technologies, and alignment with strategic goals. It highlights the importance of fostering collaboration among stakeholders to address challenges like resistance to change, underutilization of features, and evolving business needs. The findings underscore that a holistic approach to post-implementation efforts not only maximizes ROI but also ensures that SAP ERP systems remain agile and relevant in an ever-changing business landscape.

Keywords: SAP ERP, post-implementation success, long-term value, multi-stakeholder perspective, continuous optimization, user training, ROI, resistance to change, emerging technologies, strategic alignment.

INTRODUCTION

Overview of SAP ERP Systems: Enterprise Resource Planning (ERP) systems have become indispensable for organizations aiming to streamline their operations and achieve business efficiency. Among the various ERP solutions, SAP ERP stands out as a global leader, providing comprehensive tools to integrate core business functions such as finance, supply chain, human resources, and sales. By centralizing data and automating processes, SAP ERP enhances operational transparency, decision-making, and scalability, making it a cornerstone for digital transformation.

Post-Implementation Challenges and Opportunities: While the implementation of SAP ERP systems is often seen as a major milestone, the journey does not end there. Organizations frequently encounter challenges such as resistance to change, underutilization of system features, and adapting the system to evolving business needs. However, these challenges also present opportunities for growth. When managed effectively, post-implementation efforts can unlock substantial long-term value, enabling businesses to remain agile, competitive, and innovative.

Purpose of the Study: The purpose of this study is to explore the factors that contribute to the sustained success of SAP ERP systems beyond their initial implementation. By adopting a multi-stakeholder perspective, the research highlights how collaboration between employees, management, partners, and end-users plays a pivotal role in ensuring the system's relevance and maximizing its return on investment (ROI). This approach aims to bridge the gap between implementation and continuous improvement.

Research Objectives: This paper aims to achieve the following objectives:

1. Identify the critical success factors for post-implementation success in SAP ERP systems.
2. Examine the roles and contributions of various stakeholders in achieving long-term value.
3. Highlight challenges and best practices in leveraging SAP ERP systems for sustained competitive advantage.
4. Provide actionable recommendations for organizations to future-proof their ERP investments.

By addressing these objectives, the study seeks to provide a comprehensive framework for organizations looking to optimize their SAP ERP systems and maintain their relevance in an ever-changing business environment.

UNDERSTANDING THE LANDSCAPE

Historical Context of ERP Implementations: ERP systems have evolved significantly over the past few decades, transitioning from basic resource management tools to sophisticated platforms that integrate business functions across global enterprises. Early ERP systems were often rigid and required extensive customization, leading to high implementation costs and long deployment timelines. With advancements in technology, especially the rise of cloud computing, modern ERP solutions like SAP ERP offer greater flexibility, scalability, and integration capabilities, making them indispensable for organizations navigating digital transformation.

Defining Post-Implementation Success: The success of an ERP system is no longer confined to its deployment phase. Post-implementation success is defined by the system's ability to deliver long-term value to the organization. Key metrics for evaluating this success include:

- **Operational Efficiency:** Improved processes and reduced redundancies.
- **User Satisfaction:** Acceptance and effective utilization of the system by employees and stakeholders.
- **Strategic Alignment:** Support for organizational goals and adaptability to changing needs.
- **Return on Investment (ROI):** Financial benefits realized over time relative to the total cost of ownership.

Stakeholder Roles in ERP Systems: A critical factor in achieving post-implementation success is understanding the diverse roles of stakeholders involved. Each group contributes uniquely to the system's performance and value creation:

1. Employees

- Primary users of the system, responsible for daily operations.
- Require effective training and support to adapt to new processes.
- Their feedback is crucial for continuous system improvement.

2. Management

- Drives the strategic direction and ensures alignment of the ERP system with business goals.
- Monitors ROI and oversees system optimization efforts.

3. Implementation Partners

- External consultants or technology partners who provide expertise during deployment and post-implementation phases.
- Assist with upgrades, troubleshooting, and integration with emerging technologies.

4. End-Users and Customers

- Direct beneficiaries of improved service quality and efficiency.
- Their experience reflects the system's overall success and usability.

By examining these roles and their interplay, organizations can foster collaboration and maximize the potential of their SAP ERP systems.

RESEARCH APPROACH

Study Design: This study adopts a qualitative research design to explore the critical factors contributing to long-term success in SAP ERP post-implementation. The multi-stakeholder perspective necessitates a detailed examination of diverse viewpoints, making qualitative methods ideal for capturing the depth and complexity of these interactions. Additionally, quantitative data from surveys and case studies are used to validate findings and provide measurable insights.

Data Collection Methods: The research gathers data through the following methods:

1. Case Studies

- Analysis of organizations that have implemented SAP ERP systems and achieved post-implementation success. These cases provide insights into best practices and common challenges.
- Examples include industries such as manufacturing, healthcare, and retail, offering a broad spectrum of contexts.

2. Interviews

- Conducted with key stakeholders, including employees, managers, and implementation partners, to understand their perspectives on success factors, challenges, and collaboration.
- Semi-structured interviews ensure a balance between guided questions and open-ended responses.

3. Surveys

- Distributed to a larger pool of users and stakeholders to identify trends and patterns.
- Questions focus on system usability, feature adoption, satisfaction levels, and perceived ROI.

Analysis Framework: The data collected is analyzed using the following frameworks:

1. Thematic Analysis

- Identifies recurring themes and patterns in qualitative data, such as stakeholder collaboration, training effectiveness, and system adaptability.

2. Comparative Analysis

- Compares successful and less successful post-implementation cases to highlight critical differences in approach.

3. Quantitative Metrics

- Surveys and organizational performance data are used to measure success indicators, such as user adoption rates, downtime reductions, and financial ROI.

Scope and Limitations: While this study provides comprehensive insights, it is limited by the availability of case-specific data and potential biases in self-reported information. The focus on SAP ERP systems may not generalize to all ERP platforms but offers a robust framework for similar systems.

By combining qualitative and quantitative methods, the research aims to offer actionable recommendations and a holistic understanding of post-implementation success.

MULTI-STAKEHOLDER PERSPECTIVES

Employees: Employees are the primary users of the ERP system, responsible for executing daily operations and adhering to new processes. Their perspective is critical for sustained success:

- **Engagement and Training:** Comprehensive training programs help employees understand the system's capabilities, reducing resistance and improving adoption rates. Interactive sessions, hands-on practice, and follow-up support can address gaps in understanding.
- **Feedback for Continuous Improvement:** Employees often identify inefficiencies or areas where the system can be optimized. Regular feedback mechanisms, such as surveys or focus groups, ensure that their input drives future updates.

Management: Management plays a pivotal role in driving the strategic direction of the ERP system:

- **Leadership and Vision:** Managers must align ERP functionalities with the organization's long-term goals. For instance, integrating advanced analytics tools can support data-driven decision-making.
- **Resource Allocation:** Management ensures the availability of funds, personnel, and other resources necessary for ongoing system optimization and user support.
- **Monitoring ROI:** They are responsible for tracking the financial and operational benefits of the system, such as cost savings, productivity gains, and improved compliance.

Implementation Partners

Implementation partners, such as SAP consultants or technology vendors, bring expertise and technical support:

- **System Customization:** They tailor the system to meet the organization's specific needs, ensuring compatibility with existing workflows and infrastructure.
- **Upgrades and Maintenance:** Partners help with periodic system upgrades, troubleshooting, and the adoption of new SAP modules or features, ensuring that the ERP remains up-to-date.
- **Knowledge Transfer:** Effective partners provide knowledge transfer sessions to internal IT teams, reducing dependency on external support over time.

End-Users and Customers

Although not direct users of the ERP system, end-users and customers benefit from its improved operational capabilities:

- **Service Quality:** By streamlining processes such as order management or customer support, ERP systems enhance the overall user experience.
- **Feedback and Expectations:** Customer feedback on service quality can indirectly shape ERP adjustments, ensuring alignment with market demands and expectations.

Collaboration Among Stakeholders

- The interplay between these stakeholder groups determines the ERP system's long-term value. Regular communication, shared accountability, and clear role definitions foster collaboration and mutual understanding. For instance, management must prioritize employee concerns, while implementation partners should align their support with organizational goals.
- By understanding and leveraging these diverse perspectives, organizations can create a unified approach to achieving post-implementation success.

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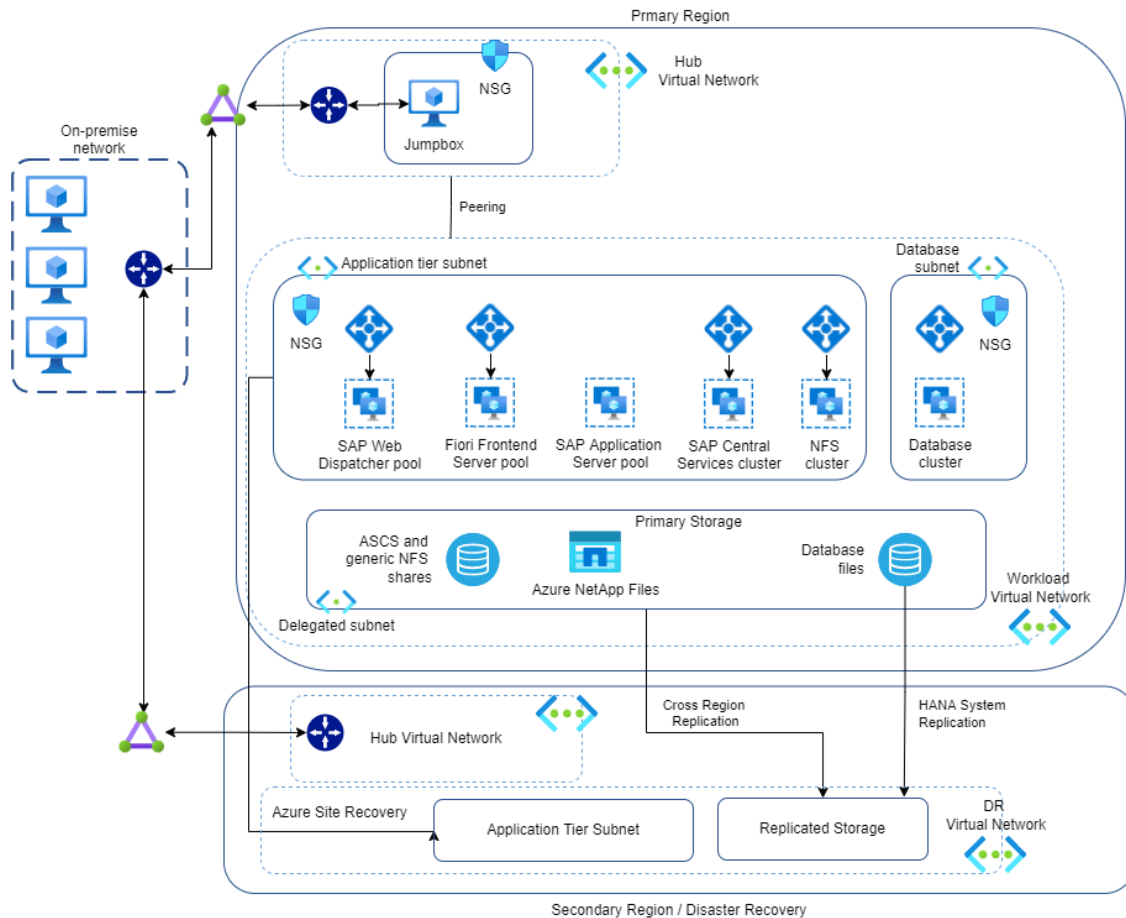


Fig 1: SAP S/4HANA Cloud Deployment Options

CRITICAL FACTORS FOR LONG-TERM SUCCESS

Continuous Optimization: SAP S/4HANA Cloud is a next-generation, cloud-based ERP solution designed to meet the needs of modern enterprises. Built on the SAP HANA in-memory platform, SAP S/4HANA Cloud provides real-time data processing and advanced analytics, enabling businesses to make faster, more informed decisions. It offers a simplified user experience with SAP Fiori and provides pre-configured business processes based on industry best practices, reducing the time required for implementation. SAP S/4HANA Cloud is available in different editions, including public and private cloud, allowing organizations to choose the deployment model that best suits their requirements.

Integration with Emerging Technologies: has partnered with major cloud service providers, including Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP), to offer flexible deployment options for SAP ERP. These partnerships allow enterprises to take advantage of the scalability, reliability, and security of leading cloud infrastructure providers. SAP ERP can be deployed in a multi-cloud environment, providing flexibility for businesses that want to avoid vendor lock-in or need to comply with regional regulations. The integration with these cloud platforms also enables enterprises to access additional services, such as AI, machine learning, and data analytics, which can be used to extend the capabilities of their ERP systems.

Collaboration and Communication

A collaborative environment ensures that all stakeholders work towards shared goals:

- **Cross-Functional Teams:** Encouraging collaboration across departments fosters a deeper understanding of ERP functionalities and their impact on different areas of the business.
- **Regular Check-Ins:** Scheduling periodic meetings or reviews allows stakeholders to share progress, address challenges, and identify improvement opportunities.
- **Knowledge Sharing:** Creating a centralized knowledge repository helps stakeholders access training materials, best practices, and troubleshooting guides.

Change Management

ERP systems must adapt to the changing needs of the business and its environment:

- **Anticipating Market Shifts:** Organizations should monitor industry trends and customer expectations, ensuring that the ERP system evolves to meet these demands.
- **Employee Transition Support:** Providing consistent training and clear communication during updates minimizes disruption and builds user confidence.
- **Scalability and Flexibility:** The ERP system should be designed to handle expansions, acquisitions, or new product launches without significant overhauls.

Measuring and Monitoring Success

Tracking key performance indicators (KPIs) ensures that the ERP system continues to deliver value:

- **Operational KPIs:** Metrics such as system uptime, user adoption rates, and transaction processing times highlight the system’s efficiency.
- **Financial KPIs:** Analyzing cost savings, revenue growth, and ROI ensures that the ERP investment aligns with financial goals.
- **Customer Satisfaction Metrics:** Enhanced service quality and reduced response times reflect the system’s impact on end-users.

By focusing on these critical factors, organizations can unlock the full potential of their SAP ERP systems, transforming them into dynamic assets that drive long-term success and competitiveness.

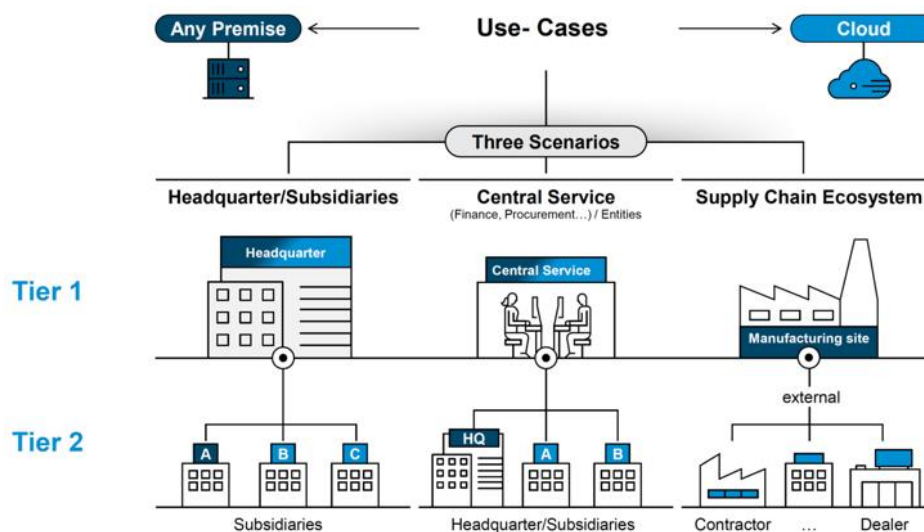


FIG 2: Two-Tier ERP Deployment Model

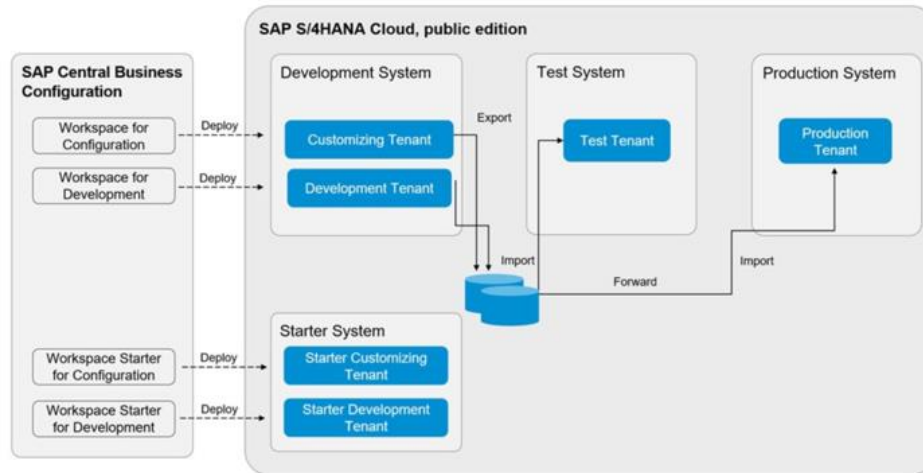


FIG 3: SAP S/4HANA Cloud Three-System Landscape

CHALLENGES IN POST-IMPLEMENTATION

Even after a successful implementation, organizations face various challenges in maintaining and enhancing the value of SAP ERP systems. Addressing these obstacles is essential to sustain long-term success and ensure that the system continues to align with business objectives.

Resistance to Change

Adapting to new systems and processes can be difficult for employees and stakeholders:

Cultural Barriers: Long-standing habits and workflows can create resistance to adopting new ways of working.

Lack of Training: Insufficient training can lead to frustration among users, reducing system adoption and effectiveness.

Mitigation Strategies: Organizations must foster a culture of adaptability through continuous education, clear communication about system benefits, and involvement of employees in decision-making processes.

Underutilization of Features

ERP systems like SAP often have a vast array of features that remain unused due to:

- **Knowledge Gaps:** Users may not fully understand the capabilities of the system, limiting its potential.
- **Focus on Immediate Needs:** Organizations may only utilize features that address their initial requirements, overlooking functionalities that could drive additional value.
- **Mitigation Strategies:** Regular audits, workshops, and tailored training programs can help uncover and maximize underutilized features.

Evolving Business Needs

As businesses grow and industries evolve, ERP systems must keep pace:

- **Dynamic Market Conditions:** Shifting customer expectations, regulatory requirements, and competitive landscapes can necessitate updates to the system.
- **Scaling Challenges:** Growing businesses may outpace the capacity or configuration of their existing ERP systems.
- **Mitigation Strategies:** Proactive system reviews, modular upgrades, and scalable cloud solutions can help organizations adapt seamlessly.

Integration with Third-Party Systems

ERP systems often need to integrate with other platforms, such as CRM tools or e-commerce systems:

- **Technical Compatibility Issues:** Legacy systems or diverse software architectures can hinder smooth integration.
- **Data Inconsistencies:** Mismatched data formats and synchronization delays can lead to inefficiencies.
- **Mitigation Strategies:** Leveraging middleware solutions, such as SAP Cloud Integration, ensures seamless connectivity and real-time data synchronization.

Cost and Resource Management

Post-implementation efforts require ongoing investment in time, money, and resources:

- **High Maintenance Costs:** Regular upgrades, troubleshooting, and support can strain budgets.
- **Resource Allocation Challenges:** Balancing ERP needs with other business priorities can lead to resource constraints.
- **Mitigation Strategies:** Implementing a clear budget plan, prioritizing critical upgrades, and automating routine processes can optimize resource utilization.

Security and Compliance Risks

As systems grow and integrate with external platforms, vulnerabilities may emerge:

- **Cybersecurity Threats:** Increasing reliance on digital systems exposes organizations to hacking and data breaches.
- **Regulatory Compliance:** Meeting evolving compliance standards, such as GDPR or HIPAA, requires continuous monitoring and adjustments.
- **Mitigation Strategies:** Regular security audits, advanced encryption technologies, and compliance management tools can safeguard data integrity.

ADDRESSING THE CHALLENGES

Overcoming these challenges requires a proactive, multi-faceted approach:

- Regular stakeholder engagement ensures alignment and adaptability.
- Continuous investment in technology and training fosters user confidence and satisfaction.
- Monitoring and addressing issues promptly prevents them from escalating into larger problems.
- By anticipating and mitigating these challenges, organizations can secure the long-term success of their SAP ERP systems.

CASE STUDIES AND PRACTICAL EXAMPLES

To understand the practical application of post-implementation strategies and their outcomes, this section highlights case studies from various industries. These examples provide insights into how organizations have successfully navigated challenges and unlocked long-term value from SAP ERP systems.

Manufacturing Industry: Enhancing Supply Chain Efficiency

Company: A global electronics manufacturer

Challenge:

- Fragmented supply chain operations across multiple geographies.
- Limited visibility into inventory and procurement processes.

Solution:

- Implemented SAP ERP modules for supply chain management.



- Leveraged real-time analytics to monitor inventory and streamline procurement.

Results:

- Achieved a 20% reduction in inventory costs.
- Improved order fulfillment rates by 15%.
- Gained end-to-end supply chain visibility, enabling faster decision-making.

Key Takeaway:

Continuous optimization and the use of real-time analytics ensure that ERP systems deliver tangible benefits in dynamic environments.

Healthcare Industry: Improving Patient Care

Organization: A Large Hospital Network.

Challenge:

- Disparate systems for patient records, billing, and resource management.
- Compliance with stringent healthcare regulations (e.g., HIPAA).

Solution:

- Integrated SAP ERP with electronic health record (EHR) systems.
- Implemented SAP modules for financial management and resource allocation.

Results:

- Reduced billing errors by 30%.
- Streamlined resource management, leading to a 10% increase in operational efficiency.
- Enhanced patient care by providing physicians with unified access to records.

Key Takaway:

Integration with industry-specific systems, like EHRs, maximizes the relevance and utility of ERP systems.

Retail Industry: Adapting to E-Commerce Growth

Organization: A national retail chain

Challenge:

- Rapid growth in online sales overwhelmed legacy systems.
- Difficulty in managing omnichannel inventory and customer data.

Solution:

- Migrated SAP ERP to a cloud-based platform for scalability.
- Integrated SAP with e-commerce platforms and CRM tools.

Results:

- Increased scalability to handle a 50% spike in online orders during peak seasons.
- Improved customer retention through personalized marketing campaigns powered by integrated data.
- Reduced IT infrastructure costs by 25%.

Key Takeaway:

Cloud-based ERP systems provide scalability and flexibility to meet the demands of evolving retail markets.

Financial Services: Achieving Regulatory Compliance

Organization: A multinational bank

Challenge:

- Complex compliance requirements across multiple jurisdictions.
- Inefficient manual processes for financial reporting.

Solution:

- Deployed SAP ERP's financial management and reporting modules.
- Automated compliance checks and regulatory reporting.

Results:

- Reduced reporting errors by 40%.
- Accelerated regulatory filing processes, cutting timelines by 30%.
- Enhanced transparency and audit readiness.

Key Takeaway:

Automation and compliance tools embedded within ERP systems enable financial institutions to meet stringent regulatory demands effectively.

RECOMMENDATIONS

To maximize the long-term value of SAP ERP systems and ensure post-implementation success, organizations must adopt a structured approach focusing on continuous improvement, collaboration, and strategic alignment. Below are actionable recommendations based on insights from research and case studies.

1. Foster a Culture of Continuous Learning

- **Employee Training and Development:** Provide ongoing training to employees to enhance their understanding of system features and functionalities. This includes workshops, online courses, and certifications.
- **Knowledge Sharing:** Encourage cross-departmental collaboration to share best practices and insights on using ERP systems effectively.

2. Prioritize System Optimization

- **Regular System Audits:** Conduct periodic reviews to identify underutilized features and areas for improvement.
- **Adopt Modular Upgrades:** Use SAP's modular capabilities to implement updates incrementally, minimizing disruption while ensuring the system evolves with business needs.
- **Leverage SAP Support:** Utilize SAP's support tools and communities to stay informed about updates, best practices, and troubleshooting techniques.

3. Integrate Emerging Technologies

- **AI and Automation:** Incorporate AI tools to automate routine tasks and provide predictive insights for decision-making.
- **Cloud Migration:** Transition to cloud-based SAP ERP platforms to improve scalability, reduce costs, and support remote access.
- **IoT Integration:** Utilize IoT devices for real-time data collection and improved operational visibility, particularly in industries like manufacturing and logistics.

4. Strengthen Stakeholder Collaboration

- **Clear Communication Channels:** Establish regular forums for employees, management, and partners to discuss system performance, challenges, and improvements.
- **User Feedback Mechanisms:** Implement structured feedback systems to capture user experiences and integrate their suggestions into system enhancements.
- **Role Definition:** Clearly define the responsibilities of each stakeholder group to ensure accountability and alignment.

5. Focus on Change Management

- **Proactive Planning:** Develop a robust change management strategy to address resistance, minimize disruption, and guide employees through updates and new implementations.
- **Leadership Involvement:** Ensure that top management actively champions ERP initiatives, fostering trust and engagement across the organization.
- **Adaptability:** Design processes that can flexibly respond to market dynamics and regulatory changes.

6. Measure and Monitor Success

- **Define KPIs:** Establish clear metrics to evaluate the performance and ROI of the ERP system, such as productivity improvements, cost savings, and user adoption rates.
- **Dashboard Analytics:** Utilize real-time dashboards to track system performance and identify trends that inform decision-making.
- **Benchmarking:** Compare organizational performance against industry standards to identify strengths and opportunities for improvement.

7. Future-Proof the ERP System

- **Invest in Scalability:** Ensure the ERP system can accommodate organizational growth, new business models, and emerging technologies.
- **Adopt Agile Practices:** Implement agile methodologies for system updates, enabling faster adaptation to business changes.
- **Stay Ahead of Industry Trends:** Monitor advancements in ERP technologies and emerging business needs to maintain a competitive edge.

CONCLUSION

The post-implementation phase of SAP ERP systems represents a critical period where organizations can realize sustained value far beyond the initial deployment. This paper has emphasized the importance of adopting a multi-stakeholder perspective, recognizing that employees, management, partners, and end-users all play essential roles in ensuring the system's long-term success.

Key factors such as continuous optimization, integration with emerging technologies, and effective change management are crucial in addressing the challenges that arise after implementation. By fostering collaboration, investing in training, and aligning ERP capabilities with strategic business goals, organizations can transform their SAP ERP systems into dynamic assets that drive operational efficiency, innovation, and competitiveness.

Through case studies and practical examples, this research has demonstrated how different industries have successfully navigated post-implementation challenges to unlock significant ROI, improve decision-making, and enhance customer satisfaction. The findings underscore that success requires a proactive,

adaptive approach where stakeholders work together to address evolving needs and leverage the full potential of the ERP system.

As organizations continue to operate in an era of rapid technological advancement and market disruption, the ability to unlock long-term value from ERP systems is not just a competitive advantage—it is a strategic imperative. By implementing the recommendations outlined in this paper, businesses can future-proof their SAP ERP investments, ensuring they remain agile, efficient, and aligned with the demands of the digital age.

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