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| RESEARCH ARTICLE

Implementing RISE with SAP: Strategic Guidance and Practical Insights

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| ABSTRACT

RISE with SAP represents a transformative approach to enterprise modernization, bundling cloud infrastructure, SAP S/4HANA, business process intelligence, and transformation services into a unified offering. Successful implementation demands more than technical migration, requiring strategic alignment, architectural coherence, and disciplined execution. This article provides practical guidance across five interconnected dimensions: strategic foundations emphasizing capability assessment and clean core principles; architectural considerations addressing integration and data migration; transformation toolchain leveraging process mining and architecture management; implementation methodologies synthesizing established frameworks; and execution excellence focusing on quality gates and change management. By integrating insights from diverse implementation experiences, the article offers a comprehensive roadmap for organizations seeking to maximize value from their RISE journey while avoiding common pitfalls. The guidance balances technical requirements with organizational considerations, emphasizing that sustainable transformation outcomes depend on harmonizing business objectives, system capabilities, and adoption strategies throughout the implementation lifecycle.

| KEYWORDS

Digital Transformation, Enterprise Architecture, Cloud Migration, Process Intelligence, Change Management

| ARTICLE INFORMATION

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I. Introduction

In today's digital-first economy, enterprises find themselves navigating an increasingly complex technology landscape while striving to maintain a competitive advantage. The introduction of RISE with SAP in early 2021 represents a pivotal moment in enterprise transformation, fundamentally altering how organizations approach modernization initiatives. This comprehensive "Business Transformation as a Service" offering consolidates previously fragmented elements into a cohesive framework, addressing the multifaceted challenges that organizations have historically encountered when undertaking digital transformation [1]. Research published in the International Journal of Information Management demonstrates that successful digital transformations hinge not merely on technology adoption but on a harmonious alignment between technology, strategy, and organizational capabilities—precisely the integration that RISE with SAP aims to facilitate through its bundled approach.

The transition from conventional ERP implementation models to the RISE paradigm signifies a fundamental shift in how enterprise systems are deployed and managed. Traditional SAP implementations typically involved numerous stakeholders, complex contractual arrangements, and significant on-premises infrastructure investments. The RISE model simplifies this landscape considerably by unifying cloud infrastructure, application management, and transformation services under a single contractual umbrella [1]. According to comprehensive analyses of enterprise technology adoption patterns, this consolidation addresses several persistent pain points that organizations have identified in transformation journeys, including contractual complexity, accountability diffusion, and unpredictable total cost of ownership. The Journal of Information Management research further indicates that such integration leads to more predictable outcomes and faster time-to-value, critical metrics for modern enterprises operating in volatile market conditions.

Despite the promise of integrated transformation offerings, organizations continue to face substantial challenges in digital transformation initiatives. Recent research published in Technological Forecasting and Social Change reveals that transformation success correlates strongly with several organizational factors beyond technology selection [2]. The research identified critical success determinants, including executive sponsorship quality, cross-functional collaboration effectiveness, data governance maturity, and change management sophistication. Organizations that scored in the top quartile across these dimensions were approximately three times more likely to achieve transformation objectives compared to those in the bottom quartile. Additionally, the research highlighted persistent challenges in skills availability, with specialized expertise in areas such as cloud-native development, process mining, and integration architecture frequently cited as significant constraints on transformation velocity.

This article synthesizes practical guidance for organizations embarking on RISE implementation journeys, drawing from empirical research and documented experiences across various industry sectors. Rather than presenting merely theoretical frameworks, the following sections offer actionable recommendations addressing the strategic, architectural, and operational dimensions of RISE implementations. By examining the interplay between business capability requirements, architectural decisions, and implementation methodologies, the article provides a holistic view of factors influencing transformation outcomes.

II. Strategic Foundations for RISE with SAP Implementation

Successful RISE with SAP implementations fundamentally depend on establishing clear strategic alignment between transformation initiatives and broader organizational objectives. This alignment requires organizations to develop a comprehensive understanding of how RISE capabilities can address specific business challenges and growth opportunities. Research published in the Journal of Enterprise Information Management identifies strategic alignment as the primary determinant of transformation success, emphasizing the importance of explicit linkages between technology initiatives and measurable business outcomes [3]. Organizations implementing RISE with SAP must conduct thorough analyses of how cloud infrastructure, business process intelligence, and integrated services directly contribute to strategic priorities such as market responsiveness, operational efficiency, and customer experience enhancement. The research further indicates that organizations achieving high degrees of strategic alignment typically employ formal value mapping methodologies, documenting specific connections between RISE capabilities and strategic key performance indicators.

Business capability assessment provides a structured framework for evaluating current-state operations and prioritizing transformation initiatives within the RISE implementation context. According to research published in Business & Information Systems Engineering, capability-based planning approaches enable organizations to systematically identify high-value transformation opportunities while mitigating implementation risks [4]. Effective assessment frameworks evaluate capabilities across multiple dimensions, including process standardization, automation potential, data quality, and integration complexity. Organizations can then develop prioritization frameworks that balance implementation complexity against business impact, typically targeting high-impact, low-complexity capabilities for early implementation phases to establish momentum.

Clean core principles represent a fundamental shift in implementation philosophy that significantly influences RISE with SAP outcomes. This approach emphasizes minimizing customizations within the central S/4HANA environment while leveraging extension mechanisms such as the Business Technology Platform for organization-specific requirements. Research on enterprise system implementations has consistently demonstrated that excessive customization represents a primary driver of implementation complexity, upgrade challenges, and ongoing maintenance costs [3]. The clean core approach directly addresses these challenges by establishing a clear delineation between standard functionality and extensions. Organizations embracing clean core principles typically develop formal extension frameworks with defined decision criteria for evaluating customization requests against standard functionality.

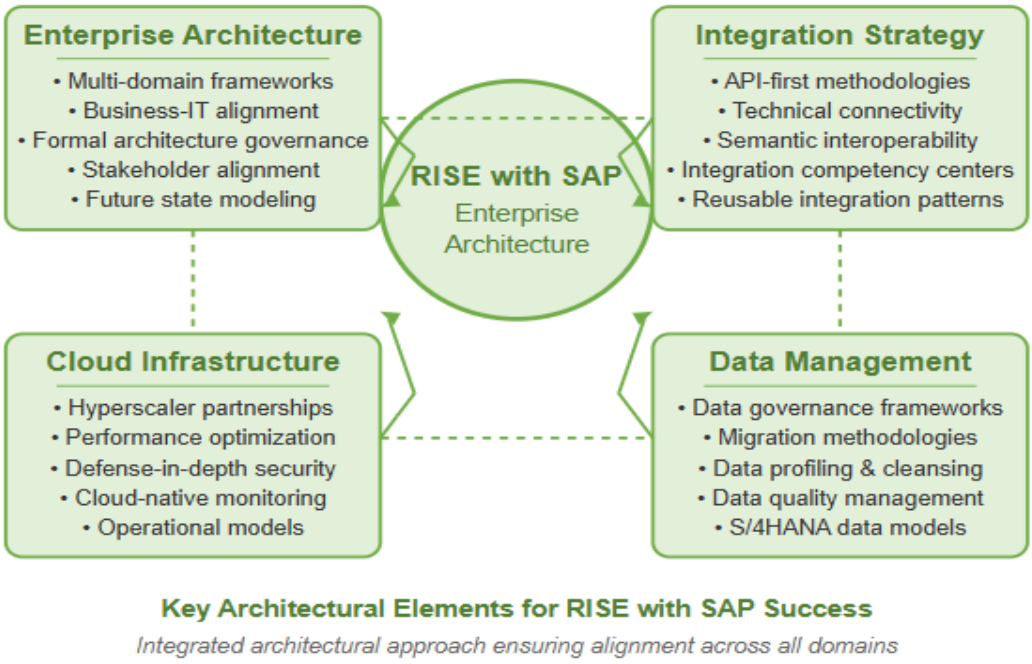

Fig 1: Architectural Considerations and Integration Approaches [3, 4]

Robust governance structures constitute the final strategic pillar supporting successful RISE implementations. Research on digital transformation initiatives emphasizes that governance effectiveness represents a critical differentiator between successful and unsuccessful implementations [4]. Comprehensive governance frameworks establish clear decision rights across business and technical domains, implementation quality gates, and risk management protocols. Effective governance models typically feature multi-tiered structures, including executive steering committees providing strategic direction, transformation program offices coordinating implementation activities, and working-level teams executing specific workstreams.

III. Architectural Considerations and Integration Approaches

Enterprise architecture frameworks serve as foundational elements for successful RISE with SAP implementations, providing structured approaches to align business capabilities with technical solutions while managing transformation complexity. Research on Enterprise Architecture Management (EAM) success factors indicates that formal architecture governance significantly influences implementation outcomes through improved stakeholder alignment and decision consistency [5]. Effective architecture frameworks for RISE implementations must address multiple interconnected domains, including business architecture defining target operating models, application architecture mapping system landscapes, data architecture, addressing information flows, and technology architecture, specifying infrastructure components. The research demonstrates that organizations with mature architecture practices experience substantially improved transformation outcomes, particularly regarding architectural consistency and business-IT alignment.

Integration architecture represents a critical success factor in RISE implementations, particularly given the heterogeneous system landscapes characteristic of most enterprise environments. Information Systems Strategy research emphasizes that effective integration approaches must address both technical connectivity and semantic interoperability across diverse application portfolios [6]. RISE implementations typically involve complex integration scenarios connecting SAP S/4HANA with legacy systems, third-party applications, and external partner environments. Modern integration approaches increasingly emphasize API-first methodologies, moving away from traditional point-to-point interfaces toward more flexible, maintainable integration patterns. Organizations implementing RISE with SAP typically establish integration competency centers responsible for developing integration standards, defining reusable patterns, and governing implementation across the enterprise landscape.

Cloud infrastructure considerations significantly impact RISE implementation outcomes, influencing system performance, scalability, and operational stability throughout the transformation journey. Enterprise Architecture Management research demonstrates that cloud architecture requires fundamentally different approaches compared to traditional on-premises infrastructure planning [5]. RISE implementations typically leverage cloud infrastructure services provided through hyperscaler partnerships, requiring organizations to develop new skills and governance models adapted to cloud environments. Effective cloud architecture for RISE implementations must address multiple considerations, including performance optimization through

appropriate sizing and configuration, security architecture incorporating defense-in-depth strategies, and operational models leveraging cloud-native monitoring and management capabilities.

Data management and migration strategies fundamentally determine S/4HANA transformation outcomes, with data quality and conversion effectiveness directly impacting system performance, user adoption, and business process execution. Information Systems Strategy research emphasizes that effective data management requires comprehensive governance frameworks addressing both technical and organizational dimensions [6]. RISE implementations typically involve complex data migration scenarios, converting legacy data structures to S/4HANA data models while simultaneously addressing historical data quality issues. Successful approaches implement structured methodologies incorporating data profiling, cleansing, enrichment, and validation to verify migration outcomes.

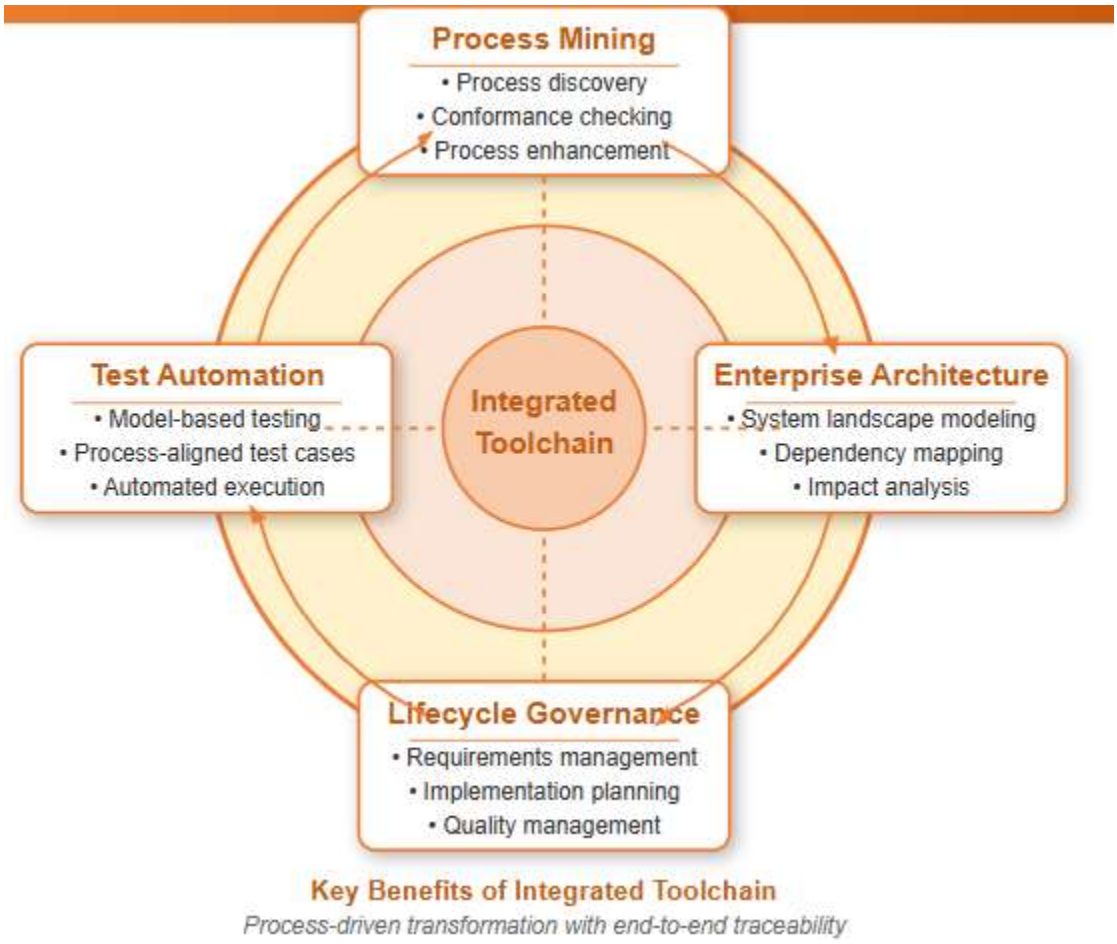

Fig 2: Leveraging SAP's Transformation Toolchain [5, 6]

IV. Leveraging SAP's Transformation Toolchain

Process mining and business process intelligence capabilities represent foundational elements of effective RISE with SAP implementations, enabling organizations to move beyond subjective process understanding toward data-driven transformation approaches. According to comprehensive research on process mining methodologies, these technologies facilitate objective analysis of as-is processes through event log extraction and algorithmic pattern identification, revealing actual execution paths rather than assumed workflows [7]. Process mining techniques support multiple analytical perspectives, including process discovery to visualize actual workflows, conformance checking to identify deviations from reference models, and enhancement to identify improvement opportunities. The research emphasizes that process mining delivers particular value in complex transformation scenarios where actual process execution frequently differs from documented procedures—a common challenge in enterprise system implementations.

Enterprise architecture management tools provide essential capabilities for modeling complex system landscapes and dependencies throughout RISE implementation journeys. Recent platform ecosystem research emphasizes that effective architecture tools must support multiple interconnected viewpoints, including business, application, data, and technology

perspectives, with explicit linkages enabling impact analysis across domains [8]. Within RISE implementations, architecture management tools enable organizations to document current landscapes, model future states, analyze transformation impacts, and track implementation progress against architectural roadmaps. The research highlights that architecture tools deliver particular value in heterogeneous environments where multiple systems, technologies, and integration points create substantial complexity, typical characteristics of enterprise landscapes undergoing RISE transformation.

Implementation lifecycle governance platforms provide the structural foundation for disciplined execution throughout RISE transformation programs. Platform ecosystem research demonstrates that effective governance tools must balance control requirements with implementation flexibility, establishing sufficient structure to ensure quality while avoiding bureaucratic barriers to progress [8]. Within RISE implementations, lifecycle governance platforms enable organizations to manage requirements, coordinate implementation activities, track progress against plans, and ensure quality across transformation workstreams. The research indicates that governance tools deliver particular value in complex programs involving multiple stakeholders, interconnected workstreams, and extended timelines—characteristics typical of enterprise-scale RISE implementations.

Test automation and quality assurance tools represent critical components of successful RISE implementations, ensuring that business processes execute correctly across complex system landscapes. Process mining research emphasizes that testing approaches must evolve from traditional script-based methodologies toward model-based techniques that maintain alignment with business processes throughout the transformation journey [7]. Within RISE implementations, test automation platforms enable organizations to define test cases aligned with business processes, automate execution across system boundaries, and track quality metrics throughout the implementation lifecycle.

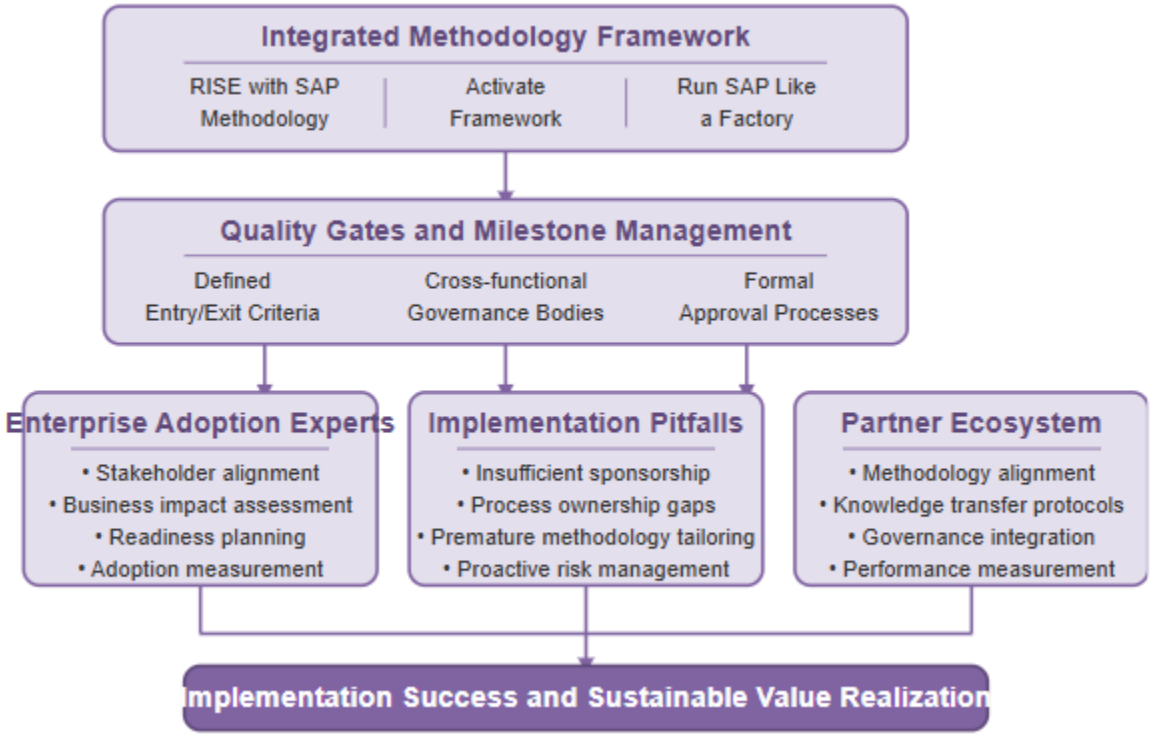

Fig 3: Implementation Methodology and Execution Excellence [5, 6]

V. Implementation Methodology and Execution Excellence

Effective implementation methodologies for RISE with SAP require a comprehensive approach that addresses both technological and organizational dimensions of transformation. Research on digital transformation drivers and success factors identifies that methodological approaches must balance standardization with adaptation, providing sufficient structure to ensure implementation consistency while accommodating organization-specific requirements [9]. Successful RISE implementations typically synthesize elements from multiple methodological frameworks, including RISE with SAP Methodology for transformation guidance, Activate for technical implementation structure, and Run SAP Like a Factory for operational transition planning. The research emphasizes that effective methodologies must address multiple transformation dimensions, including strategy formulation, organizational change, process optimization, and technology implementation, rather than focusing narrowly on technical migration aspects.

Quality gates and milestone management provide essential governance mechanisms throughout RISE implementations, establishing clear decision points and evaluation criteria across the transformation journey. Research on digital business strategy implementation identifies structured governance approaches as critical success factors, particularly in complex transformation programs involving multiple stakeholders and interconnected workstreams [10]. Effective quality gate frameworks for RISE implementations typically define major milestones across the transformation lifecycle, each with clearly defined entry and exit criteria, deliverable expectations, and approval requirements. The research highlights that quality gates serve multiple governance functions, including scope management, quality control, and risk management, identifying implementation challenges before they impact downstream activities.

Enterprise Adoption Experts (EAEs) fulfill critical change management functions throughout RISE implementations, bridging the gap between technical delivery and business adoption. Research on digital transformation success factors identifies organizational change management as a primary determinant of transformation outcomes, emphasizing the importance of structured approaches to stakeholder engagement, impact management, and adoption support [9]. EAEs perform multiple essential functions throughout the transformation journey, including stakeholder alignment, business impact assessment, organizational readiness planning, adoption measurement, tracking user acceptance, and process compliance.

Common implementation pitfalls frequently undermine RISE transformation outcomes, with research on digital business strategy implementation identifying several recurring challenges across transformation programs [10]. Among the most prevalent pitfalls are insufficient executive sponsorship, inadequate business process ownership, and premature methodology tailoring. The research emphasizes that transformation challenges frequently manifest at organizational rather than technical levels, with governance structures, decision processes, and stakeholder alignment representing particular areas of vulnerability.

Partner ecosystem alignment represents a critical success factor in RISE implementations, with research on digital transformation drivers highlighting the increasing importance of ecosystem management in complex transformation programs [9]. Effective partner management for RISE implementations typically encompasses multiple dimensions, including delivery methodology alignment, knowledge transfer protocols, and governance integration, incorporating partner activities within overall transformation governance.

Element	Focus Area	Key Insight
Methodological Approach	Framework Integration	Blends RISE, Activate, and Run SAP Like a Factory for end-to-end transformation
Transformation Dimensions	Strategic & Operational Scope	Covers strategy, change, processes, and technology—not just migration
Quality Gates & Milestones	Governance & Control	Provides structure, risk mitigation, and delivery oversight
Enterprise Adoption Experts	Change Management	Ensure stakeholder engagement and adoption tracking
Common Pitfalls	Organizational Weaknesses	Failures often stem from leadership, ownership, or rushed customization
Partner Alignment	Ecosystem Coordination	Aligns delivery, governance, and knowledge across vendors

Table 1: Key Elements of RISE with SAP Implementation Methodology [9, 10]

Conclusion

Successful RISE with SAP implementations represent a delicate balance between methodological discipline and organizational adaptation, technical excellence and business alignment, standardization and innovation. The journey toward intelligent enterprise capabilities requires a holistic approach addressing strategic foundations, architectural considerations, toolchain utilization, implementation methodology, and execution excellence as interconnected dimensions rather than isolated workstreams. Organizations embarking on RISE transformations must establish robust governance frameworks while fostering cross-functional collaboration, adhere to clean core principles while accommodating legitimate customization requirements, and leverage process intelligence capabilities while developing internal expertise. As the RISE offering continues evolving to incorporate emerging technologies and enhanced capabilities, the core implementation principles outlined in this article will remain relevant guides for

transformation journeys. By approaching RISE implementation as a business transformation opportunity rather than a technical migration exercise, organizations position themselves to realize sustainable value while establishing the foundation for continuous innovation in an increasingly dynamic business environment.

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