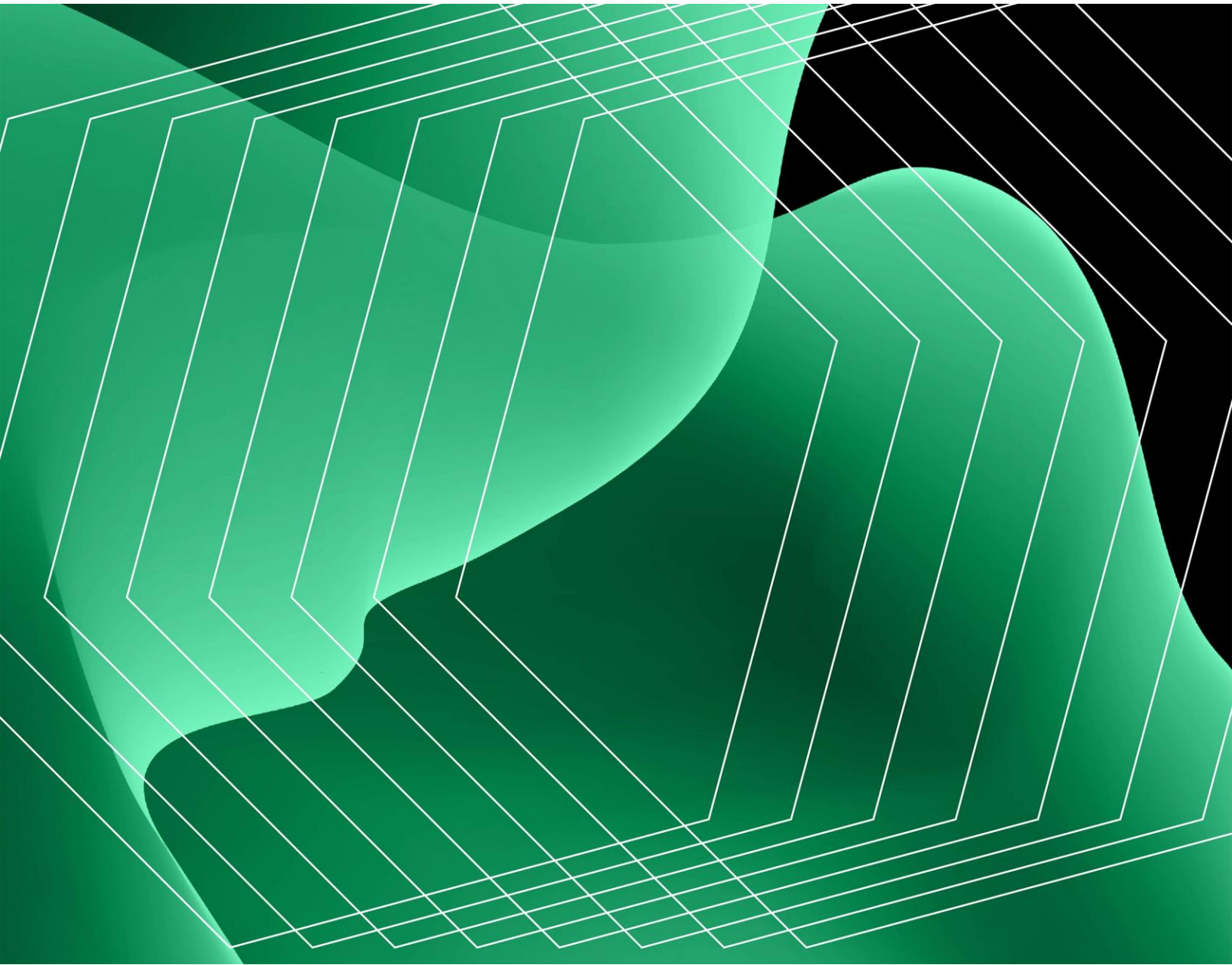
FORRESTER®

The Total Economic Impact™ Of SAP Cloud ERP Private

Cost Savings And Business Benefits Enabled By SAP Cloud ERP Private

A FORRESTER TOTAL ECONOMIC IMPACT STUDY COMMISSIONED BY SAP, OCTOBER 2025



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ABOUT FORRESTER CONSULTING

Forrester provides independent and objective research-based consulting to help leaders deliver key transformation outcomes. Fueled by our customer-obsessed research, Forrester's seasoned consultants partner with leaders to execute on their priorities using a unique engagement model that tailors to diverse needs and ensures lasting impact. For more information, visit forrester.com/consulting.

Executive Summary

As technology executives seek to address modern business demands for agility and innovation, they are transitioning from on-premises enterprise resource planning (ERP) solutions to cloud-based systems designed with business process transformation capabilities and AI at their core. RISE with SAP provides a guided journey for SAP ERP customers to modernize their ERP systems in the cloud and create business value by harnessing the full potential of the SAP Business Suite.

RISE with SAP is a comprehensive transformation journey that helps SAP ERP customers transition to the SAP Business Suite, an integrated suite of enterprise applications that brings AI capabilities, data, and core business applications together. SAP customers access the SAP Business Suite by transitioning on-premises ERPs to the cloud. For example, customers can select SAP Cloud ERP Private (SAP S/4HANA Cloud Private Edition), a cloud-based ERP that centralizes business processes and leverages AI for real-time insights and automation.[1]

SAP commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by using RISE with SAP to transition to SAP Cloud ERP Private.[2] The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of SAP Cloud ERP Private on their organizations.

Return on investment (ROI)
75%

Net present value
$5.5M

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four representatives with experience moving to SAP Cloud ERP Private using RISE with SAP. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single composite organization that is a global manufacturing organization with $15 billion annual revenue and 20,000 employees.

Interviewees said that prior to transitioning to SAP Cloud ERP Private, their organizations functioned in an on-premises environment, which entailed running in-house data centers and using on-premises SAP S/4HANA integrated with other solutions across business teams. As

their organizations scaled, costs associated with these on-premises environments increased and seemed unsustainable. Their organizations experienced frequent outages that undermined their resilience and overall business continuity. The environment also lacked workflow automation capabilities, which hindered efficiency creation, innovation, and business growth.

By embarking on the RISE with SAP journey, the interviewees' organizations could accelerate cloud adoption and support business growth in today's digitally connected ecosystem. By moving to SAP Cloud ERP Private, their organizations improved employee productivity, streamlined IT operations, offloaded costly legacy infrastructure, and enhanced system reliability — all in a secure, modern environment.

KEY FINDINGS

Quantified benefits. Three-year, risk-adjusted present value (PV) quantified benefits for the composite organization include:

- **Reduced costs by $7.5 million from phasing out an on-premises data center.** The composite organization gradually decommissions its on-premises data center, which reduces costs from data center hardware, infrastructure software, security, and resources that managed the data center.
- **Gained efficiencies of 20% in monthly financial closings activities**. By using SAP Cloud ERP Private, the composite streamlines financial closing activities, saving one day each month and improving its finance team's productivity. The composite saves $2.7 million over three years due to incremental output per finance worker.
- **Increased productivity worth $1.9 million from improved system availability.** The composite increases its system uptime from 98% to 99.7% by transitioning to SAP Cloud ERP Private. As such, end users increase their productive time per year, and FTEs devoted to support on-premises infrastructure experience 95% faster disaster recovery processes.
- **Attained 90% faster deployment of a new environment in the cloud.** After migrating to SAP Cloud ERP Private, the composite reduces the time needed to deploy a single new environment to scale resources based on business needs and growth. The composite saves roughly 27 weeks compared to the on-premises environment and avoids upfront hardware costs, saving $607,000 over three years.

"The RISE with SAP we see today is not the one we landed two years ago. They keep improving it, automation increases, and you can bundle more complex elements. This is very valuable."

Associate director for business application platforms, travel and hospitality

Unquantified benefits. Benefits that provide value for the composite organization but are not quantified for this study include:

- **IT time devoted to more productive tasks.** The composite streamlines IT operations and reduces FTEs devoted to routine tasks (e.g., patching) with the cloud operations and support services included with SAP Cloud ERP Private. This allows team members to focus on more strategic activities and proactive maintenance.
- **Enhanced security posture.** Built-in security controls and access to additional security measures provided by SAP cloud operations, such as data encryption, allow the composite organization to remain secure as it transitions to a cloud environment and employs a more mobile workforce.
- **Improved data consolidation and decision-making.** By leveraging real-time insights with transaction and analytical data in one system, the composite consolidates data across different geographies, providing unified reports and dashboards to decision-makers who can make better-informed decisions based on live data.
- **Simplified contracting and license optimization.** SAP Cloud ERP Private enables the composite organization to gain a better understanding of its SAP license utilization. By leveraging user classification based on modules and needs (e.g., full user equivalent), the organization optimizes its licenses and expands SAP solution reach without incurring additional costs.

> "RISE [with SAP] was the perfect enabler for our transformation journey."
>
> SAP PLATFORM ARCHITECT, PROFECTIONAL SERVICES

Costs. Three-year, risk-adjusted PV costs for the composite organization include:

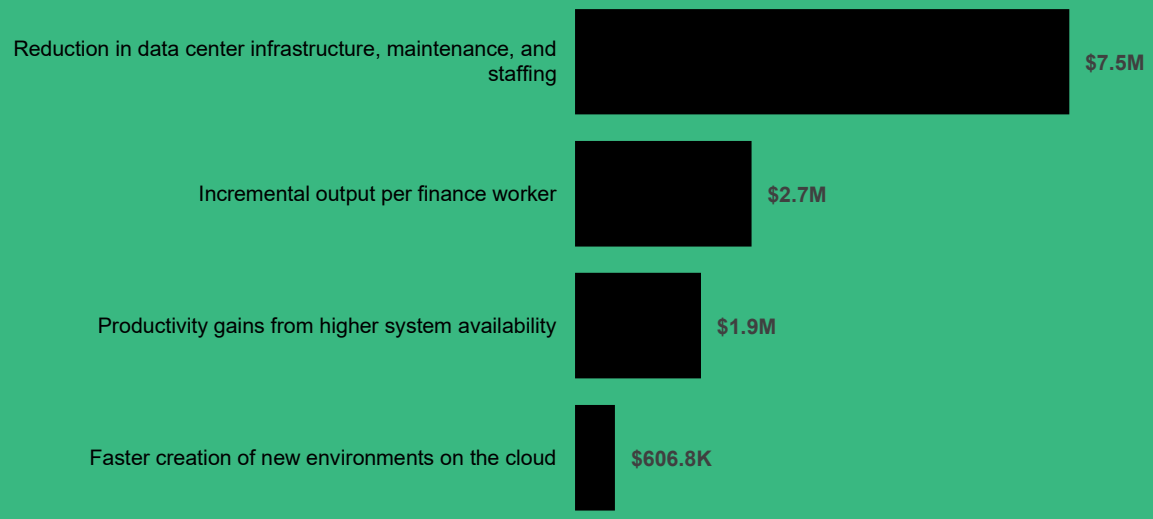
- **Annual SAP Cloud ERP Private subscription fees of $2.3 million.** The composite pays fees to SAP that cover SAP Cloud ERP Private software, all version upgrades, operational tools, technical cloud services, and migration tools and services.[3]
- **Cloud migration support costs of $3.5 million.** The organization allocates 10 internal FTEs to support the cloud migration process over eighteen months. Additionally, the IT department will rely on support from SAP experts through SAP services and support offerings to help overcome any challenges. The cost of these offerings is $65,000 per month for the duration of the migration journey.
- **Internal SAP support costs of $1.5 million.** The composite organization allocates eight FTEs who spend 50% of their time supporting SAP applications.

The financial analysis that is based on the interviews found that a composite organization experience benefits of $12.7 million over three years versus costs of $7.3 million, adding up to a net present value (NPV) of $5.5 million and an ROI of 75%.

> Savings achieved by having SAP manage the cloud infrastructure
>
> **$7.5 million**

ROI	BENEFITS PV	NPV	PAYBACK
75%	**$12.7M**	**$5.5M**	**16 months**

Benefits (Three-Year)



TEI FRAMEWORK AND METHODOLOGY

From the information provided in the interviews, Forrester constructed a Total Economic Impact™ framework for those organizations considering an investment in RISE with SAP.

The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact that RISE can have on an organization.

1. **Due Diligence**
   Interviewed SAP stakeholders and Forrester analysts to gather data relative to RISE with SAP.
2. **Interviews**
   Interviewed four decision-makers at organizations using RISE with SAP to obtain data about costs, benefits, and risks.
3. **Composite Organization**
   Designed a composite organization based on characteristics of the interviewees' organizations.
4. **Financial Model Framework**
   Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewees.
5. **Case Study**
   Employed four fundamental elements of TEI in modeling the investment impact: benefits, costs, flexibility, and risks. Given the increasing sophistication of ROI analyses related to IT investments, Forrester's TEI methodology provides a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

The SAP Cloud ERP Private Customer Journey

Drivers leading to the SAP Cloud ERP Private investment

Interviews			
Role	**Industry**	**Region**	**Employees**
SAP platform architect	Professional services	United States	774,000
CIO	Manufacturing	Middle East	35,000
Associate director for business application platforms	Travel and hospitality	Spain	18,000
Managing director, cloud core banking data and integration	Financial services	United States	100,000

KEY CHALLENGES

Interviewees' organizations faced several issues and challenges with their previous data centers and SAP environments. These included high technical debt associated with legacy systems, complexity from extensive SAP customizations, and other operational inefficiencies. Prior to using RISE with SAP to transition to SAP Cloud ERP Private, the organizations functioned in on-premises environments and used SAP S/4HANA on-premises integrated with other applications, platforms, and tools across core business areas including finance, supply chain, and procurement.

Interviewees noted how their organizations struggled with common challenges, including:

- **High costs associated with maintaining an on-premises data center.** Interviewees noted that their organizations incurred high expenses related to licensing their on-premises systems and hosting solutions in data centers, including costs for rental, cooling, security, hardware, utilities, and maintenance. Additionally, these systems required extensive upkeep, such as applying fixes and patches, customizing software, and recovering from system outages. This not only strained IT budgets but also hindered the ability to shift resources from maintenance to innovation.

- **Limited scalability and room for modernization.** As organizations projected future growth, the demand for increased data storage and the creation of new on-premises environments was time-consuming and financially burdensome for IT teams. In many cases, the goal of scaling operations and enhancing employee productivity through improved data access, insights, and automation remained unachieved within these legacy environments.
- **Unreliable systems and frequent outages.** Interviewees' organizations experienced frequent outages, which impacted their organizations' resilience and mission-critical systems availability. Organizations reported long-lasting and painful disaster recovery processes that affected IT team and end-user productivity, business continuity, and customer experience.

SOLUTION REQUIREMENTS

The interviewees searched for a solution that could:

- Lower their total cost of ownership, including by retiring legacy infrastructure.
- Simplify IT operations and reduce the complexity of managing customized systems.
- Position the organization for business growth and transformation initiatives by leveraging cloud-based applications and services.
- Enable migration to the cloud for enhanced security, scalability, availability, and flexibility.
- Enhance data integration and management for better decision-making and operational efficiency

COMPOSITE ORGANIZATION

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an ROI analysis that illustrates the areas financially affected. The composite organization is representative of the interviewees' organizations, and it is used to present the aggregate financial analysis in the next section. The composite organization has the following characteristics:

Description of composite. The composite organization is a global consumer products manufacturing organization with a retail division that sells its products in North America. It distributes its products through its own retail stores and third-party online marketplaces. The organization has $15 billion in annual revenue, approximately 20,000 employees, and 5,000

total SAP users across finance, supply chain, human resources, and procurement. Management sought to modernize its IT infrastructure by taking advantage of cloud-based systems while saving on overall IT costs.

Deployment characteristics. The composite organization begins using the solution in Year 1 after an 18-month implementation period. SAP supported the implementation with its cloud migration support service that assisted 10 of the composite's employees in various roles. It completely phases out the existing data center in Year 3.

KEY ASSUMPTIONS

$15 billion revenue
20,000 employees
5,000 SAP users

Analysis Of Benefits

Quantified benefit data as applied to the composite

Total Benefits						
Ref.	**Benefit**	**Year 1**	**Year 2**	**Year 3**	**Total**	**Present Value**
Atr	Reduction in data center infrastructure, maintenance, and staffing	$1,708,500	$3,034,500	$4,615,500	$9,358,500	$7,528,727
Btr	Incremental output per finance worker	$1,081,200	$1,081,200	$1,081,200	$3,243,600	$2,688,784
Ctr	Productivity gains from higher system availability	$772,224	$772,224	$772,224	$2,316,672	$1,920,407
Dtr	Faster creation of new environments on the cloud	$243,994	$243,994	$243,994	$731,983	$606,777
	Total benefits (risk-adjusted)	$3,805,918	$5,131,918	$6,712,918	$15,650,755	$12,744,695

REDUCTION IN DATA CENTER INFRASTRUCTURE, MAINTENANCE, AND STAFFING

Evidence and data. A primary goal of migrating to SAP Cloud ERP Private among interviewees' organizations was to eliminate on-premises data centers and associated expenses by entrusting SAP to manage the infrastructure and cloud operations.

- The largest portion of savings came from eliminating the data center, which includes hardware, software, space, utilities, and other indirect costs. On average, interviewees' organizations saved about $3 million per year. The CIO of a manufacturing organization observed that the annual expenditure for maintaining a single on-premises data center was approximately $3 million. This financial commitment posed a considerable burden, especially given the challenges associated with operating in a high-risk environment such as the Middle East.
- The associate director for business application platforms at a travel and hospitably organization said that their organization previously operated a large on-premises data center, which required significant investment in hardware, maintenance, and operation

support as it aged. He highlighted that the organization explored two scenarios and discovered that SAP Cloud ERP Private was more cost-effective than building and managing their own cloud infrastructure with an infrastructure-as-a-service provider.

- Interviewees' organizations reassigned anywhere from three to 100 FTEs in IT who were responsible for on-premises systems infrastructure management and support. These reassignments typically occurred over the modeling period (i.e., within three years).
- Interviewees' organizations phased out on-premises centers and reassigned staff over one to three years.

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- Prior to the migration, the composite spends $3 million each year on its in-house data center, which includes space, utilities, hardware, and infrastructure software. It phases out this expenditure over three years.
- There are 15 FTEs assigned to support the on-premises data center by Year 3. The composite reassigns these staff as it phases out the data center across the same three-year period.
- The average fully burdened annual salary for a system admin is $132,000.
- Before the migration, the composite spends $450,000 each year on maintenance fees for its SAP S/4HANA on-premises system

Risks. Organizations will have varying degrees of cost savings related to the elimination of an in-house data center based on the following factors.

- Costs associated with the data center and whether it is managed in-house or by a third party.
- The capacity and performance of the hardware and how well it meets operational needs throughout the year.
- Average salary and growth rates for systems infrastructure staff.

Results. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $7.5 million.

> "We replaced our single data center by having the cloud solution. We are talking about a drop in our IT budget by around 25% to 30%."
>
> CIO, MANUFACTURING

Reduction In Data Center Infrastructure, Maintenance, And Staffing					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
A1	Data center infrastructure cost (rental, utility, cooling, security, networking, maintenance)	Interviews	$3,000,000	$3,000,000	$3,000,000
A2	Percentage of data center transferred to the cloud	Interviews	30%	60%	100%
A3	**Subtotal: Cost savings from previous data center reduction**	**A1*A2**	**$900,000**	**$1,800,000**	**$3,000,000**
A4	Workers reassigned	Composite	5	10	15
A5	Fully burdened annual salary for a system admin	TEI standard	$132,000	$132,000	$132,000
A6	**Subtotal: Data center headcount reallocation cost savings**	**A4*A5**	**$660,000**	**$1,320,000**	**$1,980,000**
A7	Elimination of SAP on-prem maintenance fees	Composite	$450,000	$450,000	$450,000
At	Reduction in data center infrastructure, maintenance, and staffing	A3+A6+A7	$2,010,000	$3,570,000	$5,430,000
	Risk adjustment	↓ 15%			
Atr	Reduction in data center infrastructure, maintenance, and staffing (risk-adjusted)		$1,708,500	$3,034,500	$4,615,500
	Three-year total: $9,358,500			**Three-year present value: $7,528,727**	

INCREMENTAL OUTPUT PER FINANCE WORKER

Evidence and data. Interviewees said that their previous financial processes were inefficient due to on-premises infrastructure limitations and outdated, heavily customized financial processes. After migrating to SAP Cloud ERP Private, their organizations could complete financial processes much faster.

- The associate director for business application platforms at a travel and hospitality organization noted that before investing in SAP Cloud ERP Private, their company faced a series of complex and interrelated challenges within its finance operations, largely stemming from the scale and intricacy of its global business model. The company processed up to 200 million transactions per day, driven by a transaction-based revenue model that spanned airlines, travel agencies, hotels, and more. This created immense pressure on their on-premises SAP S/4HANA systems, particularly in billing, where invoices ranged from simple summaries for small agencies to massive, multimillion-line documents for large airline clients. Their on-premises infrastructure, including a 16-terabyte SAP S/4HANA system, struggled to retain data beyond three months, complicating compliance and archiving. Frequent hardware failures, such as memory module issues and system crashes every few months, further jeopardized critical financial processes like monthly closings. These challenges collectively underscored the need for a financial transformation combined with cloud migration.
- He highlighted that SAP Cloud ERP Private was not only able to support their wider transformation of financial processes, but also helped create a more scalable, stable, and efficient financial system. For instance, the interviewee noted that a consequences of their challenges before modernizing to cloud ERP included delayed financial closing and reporting. As noted in their interview, system stability is crucial for month-end or year-end closings, which are highly time-sensitive for public reporting. Any delay in publishing financial results due to system outages could negatively impact the organization’s stock price and investor confidence.
- The managing director of cloud core banking data and integration at financial services institution noted that their organization had more than 80 distinct finance workflows across multiple applications, which slowed end-of-month processing and reconciliation tasks. After going through process standardization as part of the migration, the interviewee reported a 15% to 20% efficiency improvement in daily general ledger processing and a 10% improvement in end-of-month activities. SAP tools helped to manage workload using compute elasticity provided by the hyperscaler.

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization has 500 total finance SAP users. The fully burdened hourly rate for a finance user is $53.

- After migrating to SAP Cloud ERP Private, the organization shortens its financial closing process from five days to four, saving eight hours per month (a 20% efficiency gain).
- Forrester applies a productivity recapture rate of 50% to this calculation, which assumes that employees can productively use one-half of the time previously lost due to outages.

Risks. The degree of savings related to finance processes may vary based on.

- The number of financial processes that an organization can consolidate into SAP Cloud ERP Private.
- The level of customization and complexity in an organization's previous financial processing systems.
- The average salary and growth rates for SAP finance users.

Results. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $2.7 million.

Efficiency gains in financial closing activities

15% to 20%

"Obviously, you need to publish your month-end or year-end closings at a certain point in time. If you don't publish that because your hardware system went down, you immediately have an effect on the stock price."

ASSOCIATE DIRECTOR FOR BUSINESS APPLICATION PLATFORMS, TRAVEL AND HOSPITALITY

> "The whole reporting aspect has become much faster on [the hyperscaler] because of the elasticity and the compute speed. ... Now I don't need to warn users about slowdowns. That is a very visible benefit. I can tell there is at least a 10% or greater benefit in financial closing activities."
>
> MANAGING DIRECTOR, CLOUD CORE BANKING DATA AND INTEGRATION, FINANCIAL SERVICES

Incremental Output Per Finance Worker					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
B1	Finance employees impacted by SAP Cloud ERP Private	Interviews	500	500	500
B2	Fully burdened hourly rate for a finance employee	TEI standard	$53	$53	$53
B3	Time saved in monthly payroll and accounting closings (hours)	Interviews	8	8	8
B4	Productivity recapture	TEI standard	50%	50%	50%
Bt	Incremental output per finance worker	B1*B2*B3*B4*12	$1,272,000	$1,272,000	$1,272,000
	Risk adjustment	↓ 15%			
Btr	Incremental output per finance worker (risk-adjusted)		$1,081,200	$1,081,200	$1,081,200
	Three-year total: $3,243,600			**Three-year present value: $2,688,784**	

PRODUCTIVITY GAINS FROM HIGHER SYSTEM AVAILABILITY

Evidence and data. Prior to the RISE with SAP journey, interviewees' organizations experienced frequent issues with planned and unplanned systems outages for application upgrades and other disruptions.

- The managing director of cloud core banking data and integration at a financial services institution noted that their organization experienced lengthy outages for patching and SAP upgrades. One hardware patching event led to four days of downtime. The

application upgrades required several weeks of planning and completion during change freeze periods. The interviewee explained: “Every time we had to install an SAP upgrade, we had to start the process of notifying everybody three months ahead of time and then [implement] a freeze period during that time. And it just got to the point where we said, ‘This is not the way we want to run our business.”

- The CIO at a manufacturing organization faced serious challenges with system availability and stability, primarily due to the volatile geopolitical environment in the Middle East. Their IT infrastructure heavily relied on on-premises data centers and servers in unstable regions, which posed a constant risk of disruption. The interviewee explained that the group had more than 360 servers scattered across various companies, many of which were not housed in proper data centers, but in ordinary offices. This setup made the systems highly vulnerable to outages, physical damage, and even airstrikes. In fact, he noted that some of the group’s companies could not operate for more than two days if the system went down, and a full shutdown was a real risk.
- SAP Cloud ERP Private addressed these issues by enabling the interviewee’s group of companies to migrate its critical systems and data to the cloud. This shift eliminated local infrastructure dependency and significantly improved system resilience. The interviewee shared that after migrating to SAP Cloud ERP Private, some of their facilities were directly hit by airstrikes, but because their systems were already in the cloud, they could recover and continue operations. He emphasized that this level of resilience would have been impossible with their previous setup, as SAP Cloud ERP Private transformed system availability from a major operational risk into a strategic strength, ensuring business continuity even under extreme conditions.
- Interviewees reported that SAP cloud operations services significantly improved their organizations’ ability to restore operations after system crashes, reducing disaster recovery times by 70% to 90%. The SAP platform architect at a professional services firm mentioned that their organization used to spend months recovering from crashes, which required coordination across several teams, including hardware and IT staff. With SAP Cloud ERP Private, they can be back up and running within two days. The associate director for business application platforms said that their travel and hospitality organization experienced several system crashes before its RISE with SAP journey and once spent more than two months trying to understand what had happened to the system.

Additionally, the CIO at a manufacturing company highlighted the need for multiple disaster recovery plans and several redundant data centers in the Middle East, where cities can be unstable. However, this approach was prohibitively expensive and logistically unfeasible for their organization. He emphasized that the SAP cloud operations services provided with SAP Cloud ERP Private not only improved disaster recovery but also eliminated the need for multiple physical recovery sites, reducing their IT budget by up to 60%.

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- It experiences 98% uptime with their SAP ERP systems on premises.
- After migrating to SAP Cloud ERP Private, uptime is set at 99.7%, which is the contractual SAP SLA.
- The organization's North American operations span five time zones, which total 12 hours of operation per day and 3,120 hours per year.
- The fully burdened hourly rate for an SAP business user is $44.
- The organization recaptures 53,000 annual user hours from outages and other system downtime.
- Forrester applies a conservative productivity recapture rate of 25% to this calculation. This assumes that employees can productively use one-fourth of the time previously lost due to outages.
- The composite organization experiences 95% faster disaster recovery after modernizing its ERP to the cloud.
- The organization devotes 15 system admins to disaster recovery. The fully burdened weekly rate for a system admin is $2,538.

Risks. Organizations will have varying degrees of reduction related to the SAP application outages based on:

- The number and roles of SAP users, including how much time they typically spend on SAP applications.
- The time lost to outages in the previous data center environment.
- Average salary and growth rates for SAP business users.
- Time and resources allocated to disaster recovery.

- Average salary and growth rates for system admins devoted to disaster recovery.

Results. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $1.9 million.

Reduction in time for disaster recovery

95%

"The situation in the region didn't allow us to depend on anything on the ground due to wars. Some servers were not even located in data centers but in ordinary offices. Once having all our environment, data, and everything migrated to the cloud with RISE [with SAP], we saved the business and ensured resilience and continuity in the region."

CIO, MANUFACTORING

"Prior to RISE [with SAP], our organization experienced system crashes from time to time. In one case, we spent over two months understanding what had happened to the system. That's all gone now with RISE."

ASSOCIATE DIRECTOR FOR BUSINESS APPLICATION PLATFORMS, TRAVEL AND HOSPITALITY

> "RISE [with SAP] enabled a 70% faster disaster recovery. This means better brand reputation. It's critical to do the disaster recovery well or you can create a disaster yourself."
>
> SAP PLATFORM ARCHITECT, PROFESSIONAL SERVICES

Productivity Gains From Higher System Availability					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
C1	SAP application uptime for in-house data center	Interviews	98.0%	98.0%	98.0%
C2	SAP application uptime with RISE	Composite	99.7%	99.7%	99.7%
C3	Additional systems uptime with RISE with SAP per year (hours)	(C2-C1)*3,120	53	53	53
C4	Estimated users affected by downtime during work hours	Composite (20% total users)	1,000	1,000	1,000
C5	Increase in productive time per year (hours)	C3*C4	53,000	53,000	53,000
C6	Fully burdened hourly rate for an SAP business user	TEI standard	$44	$44	$44
C7	Percentage of time recaptured	TEI standard	25%	25%	25%
C8	**Subtotal: Productivity gains from higher uptime**	**C5*C6*C7**	**$583,000**	**$583,000**	**$583,000**
C9	Time spent on disaster recovery prior to RISE (weeks)	Interviews	9.0	9.0	9.0
C10	Percentage of time saved on disaster recovery with RISE with SAP	Interviews	95%	95%	95%
C11	System admins devoted to disaster recovery	Composite	15	15	15
C12	Fully burdened weekly salary for a system admin	TEI standard ($132,000/52)	$2,538	$2,538	$2,538
C13	**Subtotal: Time saved on disaster recovery with RISE with SAP**	**C9*C10*C11*C12**	**$325,499**	**$325,499**	**$325,499**
Ct	Productivity gains from higher system availability	C8+C13	$908,499	$908,499	$908,499
	Risk adjustment	↓ 15%			
Ctr	Productivity gains from higher system availability (risk-adjusted)		$772,224	$772,224	$772,224
	Three-year total: $2,316,672			**Three-year present value: $1,920,407**	

FASTER CREATION OF NEW ENVIRONMENTS ON THE CLOUD

Evidence and data. Before SAP Cloud ERP Private, interviewees' organizations faced significant delays and operational burdens when creating new on-premises environments.

- The associate director for business application platforms at a travel and hospitality firm noted that their on-premises approach required a lengthy procurement and setup cycle that typically took between six and nine months. It included ordering and installing hardware, configuring systems, and managing dependencies across infrastructure and network layers. The process demanded substantial internal resources, including dedicated project management and technical effort, making it costly and time-consuming.

  Migrating to the cloud transformed this process. The SAP cloud operations services enabled their organization to provision new environments in as little as three weeks, contingent only on commercial approval. This shift eliminated the need for hardware procurement and drastically reduced internal workload, as SAP took on infrastructure setup management. The interviewee noted that this also resulted in a more agile and responsive IT landscape, allowing their organization to accelerate innovation, more efficiently support development and testing initiatives, and respond faster to evolving business needs.

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization

- It requires one new environment each year.
- The composite organization experiences a 90% faster deployment process for a single new environment on the cloud.
- It conservatively allocates two FTEs to new on-premises environment deployment.
- The fully burdened weekly rate for a system admin is $2,538.

Risks. There are several factors that can affect the benefit amount and calculation, including:

- The number of new environments an organization requires per year.
- The time and resources the organization allocates to the deployment process.
- Average salary and growth rates for a system admin.
- The type and costs of the hardware required to deploy a new environment.

Results. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $607,000.

Faster deployment of a new environment on the cloud

90%

"Before RISE [with SAP], it used to take between six and nine months to create a new on-prem environment. With RISE [with SAP], as soon as you've sorted it out commercially, you get it in about three weeks."

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Faster Creation Of New Environments On The Cloud					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
D1	Time to deploy a single new on-prem environment (weeks)	Interviews	30	30	30
D2	Percentage of time saved on deploying a single new environment on the cloud	Interviews	90%	90%	90%
D3	FTEs assigned to the deployment of a new on-prem environment	Composite	2	2	2
D4	Fully burdened weekly salary for a system admin	TEI standard ($132,000/52)	$2,538	$2,538	$2,538
D5	Average upfront hardware cost for a single new on-prem environment	Interviews	$150,000	$150,000	$150,000
D6	Percentage of upfront hardware cost for a single new on-prem environment eliminated	Interviews	100%	100%	100%
Dt	Faster creation of new environments on the cloud	(D1*D2*D3*D4)+(D5*D6)	$287,052	$287,052	$287,052
	Risk adjustment	↓ 15%			
Dtr	Faster creation of new environments on the cloud (risk-adjusted)		$243,994	$243,994	$243,994
	Three-year total: $731,983			**Three-year present value: $606,777**	

UNQUANTIFIED BENEFITS

Interviewees mentioned the following additional benefits that their organizations experienced but were not able to quantify:

- **Upskilled IT resources.** Interviewees reported that the cloud operations and support services provided with SAP Cloud ERP Private enabled their organizations to reallocate IT FTEs from infrastructure-heavy tasks to more strategic, value-adding projects or areas of expertise (e.g., AI, innovation, application security, or IT thought leadership) by transitioning to a cloud-based operations model. Before moving to the cloud, the associate director for business application platforms at a travel and hospitality organization said they managed a complex on-premises ERP landscape that required significant internal resources for system upgrades, support packages, and infrastructure maintenance. This limited the IT team's ability to focus on innovation and business support. With ERP modernization, SAP cloud operations took over the technical operations and infrastructure management, allowing IT resources to concentrate on the application layer and business process optimization. For instance, their IT resources now support strategic initiatives such as finance transformation, automation, and AI technology development. They enhance reporting, improve billing accuracy, and support business units with tailored analytics and control tools — transforming them into proactive partners to the business rather than system maintainers. The CIO at a manufacturing organization retained legacy system developers who are now certified SAP Analytics Cloud users that build real-time dashboards and support decision-making across the organization.
- **Enhanced security posture.** Interviewees said their organizations experienced significant enhancements to their security posture after migrating to the cloud with SAP cloud operations. For instance, the associate director for business application platforms at a travel and hospitality company reported initial concerns about losing control over security policies after the migration, as they could no longer directly impose their internal standards on SAP's managed infrastructure. However, the reality proved more favorable, as their company observed a marked improvement in system security and compliance. They noted that vulnerability checks became more robust and consistent. They attributed the improvement to SAP's standardized, cloud-based operational model, which delivered more proactive and reliable security management than their previous on-premises setup.

- **Improved data consolidation and decision-making.** Some interviewees reported that SAP Cloud ERP Private played a role in improving their organization's data consolidation and decision-making through enhanced analytics capabilities and real-time insights. The CIO at a manufacturing group of companies noted that ERP modernization enabled SAP Analytics Cloud integration, which allowed them to consolidate data from multiple companies and systems into a unified reporting layer. This was particularly transformative in a region where companies operate in different currencies and under complex conditions. The CIO noted that SAP Analytics Cloud allowed them to develop roughly 50 dashboards tailored to various executive roles, enabling real-time monitoring of key metrics such as sales performance, production scrap rates, and financial consolidation across business units.
- **Simplified contracting and license optimization.** Two organizations highlighted that SAP Cloud ERP Private helped optimize SAP licensing for their firms by enabling a more flexible and usage-based licensing model that aligned better with actual user needs. The manufacturing organization was using professional licenses across the board, which were among the most expensive SAP license types. After migrating to the cloud, they conducted a detailed utilization analysis and discovered that many users did not require full professional access. As a result, they could reclassify approximately 50% of those users to the most cost-effective core licenses. This optimization and the flexibility of SAP Cloud ERP Private pricing, which supports differentiated user roles and scalable licensing, allowed the group to onboard around 250 new users without increasing their total licensing costs

> "If you examine the results of the vulnerability checks, the system has never been as safe as it is since we migrated to the cloud with RISE [with SAP]."
>
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> "Each and every chief officer is monitoring metrics such as the marketing reflection of each campaign or the scrap of each day in the companies. All from a centralized, cloud-based dashboard accessible even on mobile devices."
>
> CIO, MANUFACTURING

> "We have a true partnership in which we focus on the application layer and maintain ownership of the technology, while SAP does the technical work needed to keep the system stable."
>
> ASSOCIATE DIRECTOR FOR BUSINESS APPLICATION PLATFORMS, TRAVEL AND HOSPITALITY

FLEXIBILITY

The value of flexibility is unique to each customer. There are multiple scenarios in which a customer might implement SAP Cloud ERP Private and later realize additional uses and business opportunities, including:

- **Innovating through the SAP Business Technology Platform (BTP).** Interviewees' organizations are starting to explore ways to employ SAP's BTP, which they can use to develop new applications, extend existing SAP applications, integrate with third-party systems, and build automated AI-powered solutions to optimize processes and differentiate from competitors.
- **Creating new revenue streams.** By centralizing data using RISE with SAP to migrate to SAP Cloud ERP Private, organizations may uncover inefficiencies, customer trends, or

supply chain bottlenecks they hadn't seen before, leading to new product lines, services, or market strategies.

- **Accelerating global expansion.** SAP provides multitenant and single tenant ERP cloud environments, enabling companies to deploy in multiple countries while maintaining central governance and local autonomy. SAP ensures compliance with local data residency laws and industry-specific regulations, such as GDPR. Additionally, SAP provides preconfigured localization content for more than 40 countries, including local tax regulations like GST and VAT. This approach reduces the need for custom development, accelerates time to market for entering new markets, and allows organizations to scale operations globally with minimal friction.

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Total Economic Impact Approach).

Analysis Of Costs

Quantified cost data as applied to the composite

Total Costs							
Ref.	**Cost**	**Initial**	**Year 1**	**Year 2**	**Year 3**	**Total**	**Present Value**
Etr	Annual SAP Cloud ERP Private subscription fee	$0	$934,665	$934,665	$934,665	$2,803,994	$2,324,372
Ftr	Internal and external costs for cloud migration support	$3,465,000	$0	$0	$0	$3,465,000	$3,465,000
Gtr	Internal SAP support tasks	$0	$594,000	$594,000	$594,000	$1,782,000	$1,477,190
	Total costs (risk-adjusted)	$3,465,000	$1,528,665	$1,528,665	$1,528,665	$8,050,994	$7,266,562

ANNUAL RISE WITH SAP SUBSCRIPTION FEE

Evidence and data. The SAP Cloud ERP Private subscription fee is all inclusive for SAP Cloud ERP Private, version upgrades, operational tools, technical cloud services, and migration tools and services. SAP scales fees for organizations' peak capacity and processing needs and customizes pricing for specific environment and contractual needs. Interviewees' organizations also paid for a training and adoption package to support the SAP solution over the years.

- SAP Cloud ERP Private encompasses business capabilities for finance and procurement, supply chain, sales, service, production, and product lifecycle.
- The pricing unit is the full user equivalent (FUE). These equate to users at the following ratios:
    - Advanced users: 1 user = 1 FUE
    - Core users: 5 users = 1 FUE
    - Self-service users: 30 users = 1 FUE
    - Developers: 1 user = 2 FUEs

- SAP offers a training and adoption package designed to help individuals and organizations learn, implement, and maximize the value of SAP solutions. This package provides digital learning solutions, instructor-led training (live or online), certifications, online communities, and customer training programs.

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- It has 5,000 users spread across finance, supply chain, and procurement functions.
- Users are allocated across types roughly equally, with 1% being developers.
- The price of one FUE equals $350 per year. (Actual pricing may vary. For the most accurate and up-to-date pricing information, please contact SAP directly).
- The price of the training and adoption package is 10% of ongoing RISE with SAP subscription fees.

Risks. There are several factors that can affect the pricing amount and calculation, including:

- The total number of SAP users.
- Classification of SAP users across type.
- The price of a single FUE.
- The price of the training and adoption package.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $2.3 million.

Annual SAP Cloud ERP Private Subscription Fee						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
E1	Advanced users	Composite		1,750	1,750	1,750
E2	Core users	Composite		1,500	1,500	1,500
E3	Self-service users	Composite		1,700	1,700	1,700
E4	Developers	Composite		50	50	50
E5	FUEs	E1+E2/5+E3/ 30+E4*2		2,207	2,207	2,207
E6	Average SAP Cloud ERP Private subscription fee per FUE	Composite		$350	$350	$350
E7	**Subtotal: Total SAP Cloud ERP Private subscription fee (FUE)**	**Composite**		**$772,450**	**$772,450**	**$772,450**
E8	SAP training and adoption package	1%*E7		$77,450	$77,450	$77,450
Et	Annual SAP Cloud ERP Private subscription fee	E7+E8	$0	$849,695	$849,695	$849,695
	Risk adjustment	↑10%				
Etr	Annual SAP Cloud ERP Private subscription fee (risk-adjusted)		$0	$934,665	$934,665	$934,665
	Three-year total: $2,803,994			**Three-year present value: $2,324,372**		

INTERNAL AND EXTERNAL COSTS FOR CLOUD MIGRATION SUPPORT

Evidence and data. Even with systems integrators leading the migration efforts and SAP experts assisting through the SAP services and support offerings, interviewees' organizations still needed significant internal resources to work alongside them. This was particularly important with business process reengineering efforts.

- The interviewees' organizations allocated internal resources to the migration efforts; some were full time but most were on a part-time basis. Those roles included SAP business analysts, system architects, functional experts, application developers, and testers.
- The costs, number of internal resources, and timelines for migration varied widely among interviewees' organizations. The primary drivers were the previous ERP environments, the number of solutions integrated with the ERP solution, and the extent of business transformation organizations undertook. Organizations coming from an ERP

system other than SAP incurred higher costs than those coming from on-premises SAP S4/HANA (a brownfield migration).

- The version of on-premises SAP S4/HANA the interviewees' organizations used before using RISE with SAP to migrate to SAP Cloud ERP Private also influenced the duration of the migration process. Two organizations reported needing to update to the latest version before starting the cloud migration process.
- One interviewee's organization redesigned their corporate processes, supported by a transition to SAP Cloud ERP Private. Their RISE with SAP journey began with upgrading from SAP S4/HANA version 1610 to the latest compliant version, followed by migrating the SAP Governance Risk and Compliance solution. Next, the organization migrated its finance and central billing ecosystem, followed by its local billing ecosystem. The final phase of the migration process involved transitioning its SAP Solution Manager. Overall, the migration took about two years to complete. The associate director for business application platforms at a travel and hospitality organization highlighted that the complexity of the environment and the specific context in which the migration occurs significantly influences the process duration. Notably, their finance and billing system migration took approximately one year.

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite is migrating from an on-premises SAP S4/HANA, which includes capabilities for finance, supply chain, and human resources.
- The composite creates project teams to work alongside SAP experts and assigns 10 full-time resources for the entire migration. Roles include SAP business analysts, project managers, and testers.
- The composite does not hire external system integrators to lead the migration process but instead leverages the SAP service and support offerings. The SAP team brings comprehensive RISE with SAP experience and expertise and best practices from thousands of customers that have transitioned from on premises to cloud ERP. The service encompasses multiple phases, from design and planning to implementation and ongoing support.

Risks. There are several factors that can affect the cost of cloud migration support

- The number of ERP add-on applications to migrate.

- The extent of business process reengineering, which can be related to level of customization of prior ERP applications.
- Salaries and growth rates for various business and IT support roles involved.
- The cost of SAP services and support offerings or the cost of a system integrator.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $3.5 million.

> "We successfully completed our cloud migration journey with SAP, utilizing its services and support offerings. We did not involve any other system integrator in this process. We appreciated SAP's support for several reasons, including cost-effectiveness and the timely completion of tasks as per the agreed timeline."
>
> **ASSOCIATE DIRECTOR FOR BUSINESS APPLICATION PLATFORMS, TRAVEL AND HOSPITALITY**

Internal And External Costs For Cloud Migration Support						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
F1	FTEs devoted to the cloud migration process	Interviews	10			
F2	Length of the cloud migration process (months)	Composite	18			
F3	Fully burdened monthly salary for an FTE devoted to the cloud migration process	TEI standard	$11,000			
F4	Monthly cost of SAP service and support (cloud migration assistance)	Composite	$65,000			
Ft	Internal and external costs for cloud migration support	(F1*F2*F3) + (F4*F2)	$3,150,000	$0	$0	$0
	Risk adjustment	↑10%				
Ftr	Internal and external costs for cloud migration support (risk-adjusted)		$3,465,000	$0	$0	$0
	Three-year total: $3,465,000			**Three-year present value: $3,465,000**		

INTERNAL SAP SUPPORT TASKS

Evidence and data. SAP manages all infrastructure support for SAP Cloud ERP Private. Still, interviewees' organizations retained application support resources for SAP users.

- Interviewees' organizations had anywhere from eight to 18 resources assigned to SAP application support.
- These resources were responsible for SAP application configurations and working with SAP to ensure they applied patches and updates correctly. They also supported users with training, processes, and reporting.
- These roles may also work on Advanced Business Application Programming (ABAP) to customize SAP applications and work with SAP BTP to develop APIs and interfaces.

Modeling and assumptions. Based on the interviews, Forrester assumes that the composite organization assigns eight FTEs at 50% of their time to support SAP applications and users.

Risks. Resource costs for organizations using SAP Cloud ERP Private may vary based on the following factors:

- The extent to which organizations customize SAP applications and use SAP ABAP and BTP.
- The overall number and type of SAP users.
- Salaries and growth rates for SAP application support roles.

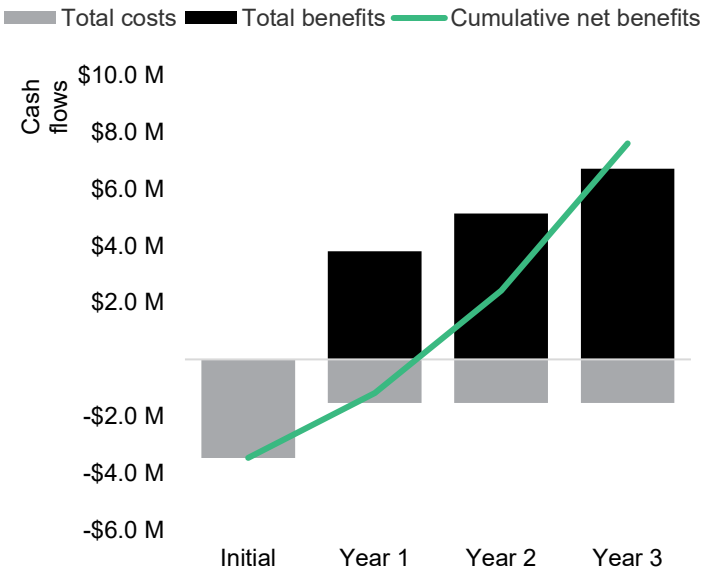
Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $1.5 million.

Internal SAP Support Tasks						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
G1	Internal SAP support FTEs (SAP application, not infrastructure)	Composite		8	8	8
G2	Fully burdened annual salary for an SAP support FTE	TEI standard		$135,000	$135,000	$135,000
G3	Percentage of time allocated to support tasks	Composite		50%	50%	50%
Gt	Internal SAP support tasks	G1*G2*G3		$540,000	$540,000	$540,000
	Risk adjustment	↑10%				
Gtr	Internal SAP support tasks (risk-adjusted)		$0	$594,000	$594,000	$594,000
	Three-year total: $1,782,000			**Three-year present value: $1,477,190**		

Financial Summary

Consolidated Three-Year Risk-Adjusted Metrics

Cash Flow Chart (Risk-Adjusted)



The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

These risk-adjusted ROI, NPV, and payback period values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

Cash Flow Analysis (Risk-Adjusted)

	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	($3,465,000)	($1,528,665)	($1,528,665)	($1,528,665)	($8,050,994)	($7,266,562)
Total benefits	$0	$3,805,918	$5,131,918	$6,712,918	$15,650,755	$12,744,695
Net benefits	($3,465,000)	$2,277,523	$3,603,523	$5,184,523	$7,600,570	$5,478,803
ROI						75%
Payback						16 months

APPENDIX A: TOTAL ECONOMIC IMPACT

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

Total Economic Impact Approach

Benefits represent the value the solution delivers to the business. The TEI methodology places equal weight on the measure of benefits and costs, allowing for a full examination of the solution's effect on the entire organization.

Costs comprise all expenses necessary to deliver the proposed value, or benefits, of the solution. The methodology captures implementation and ongoing costs associated with the solution.

Flexibility represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. The ability to capture that benefit has a PV that can be estimated.

Risks measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on "triangular distribution."

Present Value (PV)

The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.

Net Present Value (NPV)

The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made unless other projects have higher NPVs.

Return on investment (ROI)

A project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits less costs) by costs.

Discount rate

The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.

Payback period

The breakeven point for an investment. This is the point in time at which net benefits (benefits minus costs) equal initial investment or cost.

The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1 that are not discounted. All other cash flows are discounted using the discount rate at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value calculations of the Total Benefits, Total Costs, and Cash Flow tables may not exactly add up, as some rounding may occur.

APPENDIX B: ENDNOTES

[1] Note that SAP replaced the RISE with SAP package with the SAP Cloud ERP Private package. RISE with SAP now refers to the transformation journey for on-prem ERP customers to modernize their ERPs.

[2] Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists solution providers in communicating their value proposition to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of business and technology initiatives to both senior management and other key stakeholders.

[3] Note that SAP has replaced the RISE with SAP Package with the SAP Cloud ERP Private package.

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