FORRESTER

The Total Economic Impact™ of SAP S/4HANA Cloud Public Edition

Cost Savings and Business Benefits Enabled by SAP S/4HANA Cloud Public Edition

A FORRESTER TOTAL ECONOMIC IMPACT STUDY
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ABOUT FORRESTER CONSULTING

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

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Executive Summary

Legacy enterprise resource planning (ERP) systems impede efficient business processes and timely insights. A modern cloud ERP solution that incorporates industry best practices and cloud-based principles allows for: improved business processes, faster workflows, seamless data flows, increased data accuracy, and ultimately provides critical insights that drive faster business decisions. Organisations realise that a consistent, predictable and secure cloud ERP solution they can implement and maintain with confidence is more integral to their business outcomes and success than a legacy solution.

SAP S/4HANA Cloud Public is a ready-to-run software-as-a-service (SaaS) ERP **solution**. It is a core solution of the GROW with SAP suite offering. SAP S/4HANA Cloud Public Edition (i.e., SAP's SaaS ERP solution) has multiple package options each with a variety of core ERP features and functions, additional add-on solutions, adoption acceleration services, connected user community, and learning components. GROW with SAP is intended to serve enterprises that are midsized and up to the lower end of the large enterprise market.

SAP commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) that midsized companies may achieve by deploying SAP S/4HANA Cloud Public Edition.[1] The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of the SAP S/4HANA Cloud Public Edition on their organisations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed five representatives across different organisations with experience using SAP S/4HANA Cloud Public Edition. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single composite organisation. The composite is a midsized company headquartered in the US looking to expand globally. The composite organisation thus adopts SAP S/4HANA Cloud Public Edition to support its business strategy.

Return on investment (ROI)
155%

Net present value
$2.9M

Interviewees said that prior to using SAP S/4HANA Cloud Public Edition, they were either using other basic on-premises ERP tools or various business tools to support finance and business management processes. The interviewees noted how their companies struggled with challenges in business scalability and visibility.

To understand the specific benefits associated with the time to value (TTV) enterprises may achieve by deploying SAP S/4HANA Cloud Public Edition, please refer to Forrester Consulting's TTV study.

KEY FINDINGS

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

- **Cost savings of more than $630,000 from replacing local on-premises ERP solutions.** Adopting SAP S/4HANA Cloud Public Edition enables the composite organisation to decommission prior solutions, including local on-premises ERP solutions and other ancillary business tools along with the infrastructure, maintenance and labour costs were also associated with these prior solutions. For example, the system network VPN cost would have reached $150,000 for the composite organisation. Over three years, the cost savings from replacing local on-premises ERP solutions is worth more than $630,000.
- **Improved heavy ERP user efficiency by up to 30% and general ERP user efficiency by up to 15%.** Heavy ERP users usually spend the majority of their working time interacting with the system, while general ERP users interact with the system occasionally daily. SAP S/4HANA Cloud Public Edition significantly enhances user efficiency by integrating various business functions — such as finance, accounting, procurement and sales — into a unified platform with a central repository. Over three years, the improved ERP user efficiency is worth more than $3.1 million.
- **Increased profit by nearly $371,000 from reduced risks in delayed branch openings and accelerated international expansions.** Transitioning to SAP

S/4HANA Cloud Public Edition eliminates the cumbersome setup processes associated with on-premises solutions (e.g., infrastructure and VPN installations) which caused delays. SAP's SaaS ERP solution offers better business and financial visibility which enables employees to make more confident and informed decisions about opening new branches, accelerating international market expansion. Over three years, the revenue impact of SAP in international market and branch expansions are worth nearly $371,000 in profit.

- **Revenue growth of 6% for consulting business.** SAP S/4HANA Cloud Public Edition consolidates all project and financial information in one place, providing project managers with immediate insights into resourcing, revenue and contracts. This centralised approach allows consultants to focus more on delivering projects rather than administrative tasks. Enhanced visibility into customer contracts and revenue supports business expansion and increases the organisation's capacity to handle more projects. Over three years, this revenue impact on consulting business growth is worth more than $273,000 in profit.
- **Avoided costs of over $443,000 related to lack of a disaster recovery platform.** Many small businesses cannot afford a dedicated disaster recovery platform, which can lead to significant issues during system outages. SAP S/4HANA Cloud Public Edition ensures data is continuously backed up and can be quickly restored in the event of an outage. This capability minimises downtime and reduces the financial impact of disruptions, addressing the costs and risks associated with inadequate disaster recovery solutions. Over three years, the adoption of SAP's SaaS ERP solution avoids over $443,000 in losses from the lack of a disaster recovery platform.

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

- **Improved security.** Moving the ERP solution to the cloud enhances data security by eliminating the risks associated with database backups and manual workflows. Unlike on-premises systems that may face delays in backup and recovery, cloud solutions provide continuous protection and quick restoration in case of cyber-attacks and system outages. This minimises operational disruptions and reduces the risk of significant downtime.

- **Improved compliance.** SAP S/4HANA Cloud Public Edition solution comes with built-in compliance features that meet stringent regulatory requirements across multiple regions. These systems include specialised access controls and support programs that help ensure adherence to regulatory standards, addressing compliance needs more effectively than some custom-built solutions that may lack the necessary expertise.
- **Improved customer experience (CX).** Implementing SAP S/4HANA Cloud Public Edition improves CX by minimising delays in generating and accessing complex reports. In a retail context where timely transactions are crucial, cloud-based systems streamline data processing, enabling faster access to information and more efficient service delivery.
- **Fostering a transparent and innovative culture.** SAP S/4HANA Cloud Public Edition cultivates a more transparent and collaborative work environment and enables greater access to information. Teams can quickly access and review data in meetings, facilitating more effective problem-solving and informed discussions. This approach encourages a culture of innovation and efficiency, where data is readily available to support decision-making and strategic planning.

> "Project management is now easier due to quick, collaborative access to information and enhanced transparency. During management meetings, we can swiftly access and review data together, allowing us to address issues more effectively and have well-informed discussions."
>
> CEO, IT PRODUCTS AND SERVICES

> "[With greater visibility], we can now efficiently track the performance and gross profit of our product groups or SKUs. This insight allows us to identify high-performing items, quickly stock these fast movers and reduce focus on underperforming products."
>
> CEO, RETAIL MANUFACTURING

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

- **SAP S/4HANA Cloud Public Edition subscription fees of $280,000 in Year 1, $342,000 in Year 2 and $425,000 in Year 3, totalling more than $942,000.** The composite organisation incurs annual recurring subscription fees for SAP S/4HANA Cloud Public Edition that are calculated based on the organisation's accelerated growth and its subsequent expansion of use cases and additional adoption of features and functions. The key modules the composite deploys are core ERP modules, product-centric industry modules, services-centric industry modules, the business technology platform (BTP) and the integrations between other systems.
- **Core implementation cost of $434,000.** The core implementation phase includes steps such as discovery, preparation, exploration, testing and deployment to develop the essential functions. This cost includes labour and expenses for the core implementation phase, which lasts seven months. Another major part of this cost category is the implementation partner cost, which accounts for 66% of the initial core implementation cost.
- **Training, post-go-live support and continuous innovation costs of $501,000.** This category includes two main segments: an initial post-deployment stabilisation phase that is 46% of the total risk-adjusted cost and ongoing costs for training and maintenance that make up the remaining 54%. The post-

deployment stabilisation phase lasts four months, where users engage in ongoing training and system monitoring to ensure optimal performance during this period. Internal teams address multiple issues, conduct testing and refine operations to ensure everything functions smoothly.

The representative interviews and financial analysis found that a composite organisation experiences benefits of $4.8 million over three years versus costs of $1.9 million, adding up to a net present value (NPV) of $2.9 million and an ROI of 155%.

"We doubled our revenue and margin, and the implementation of SAP S/4HANA Cloud Public Edition played a role. We have the visibility to monitor revenue growth, understand what affects our margin, and make informed decisions on management and organisational changes."

CEO, IT CONSULTING

ROI	BENEFITS PV	NPV	PAYBACK
155%	**$4.8M**	**$2.9M**	**9 months**

Benefits (Three-Year)

TEI FRAMEWORK AND METHODOLOGY

From the information provided in the interviews, Forrester constructed a Total Economic Impact™ framework for those organisations considering an investment in SAP S/4HANA Cloud Public Edition.

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 SAP S/4HANA Cloud Public Edition can have on an organisation.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by SAP and delivered by Forrester Consulting. It is not meant to be used as a competitive analysis.

Forrester makes no assumptions as to the potential ROI that other organisations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the study to determine the appropriateness of an investment in SAP S/4HANA Cloud Public Edition.

SAP reviewed and provided feedback to Forrester, but Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.

SAP provided the customer names for the interviews but did not participate in the interviews.

1. **Due Diligence**
   Interviewed SAP stakeholders and Forrester analysts to gather data relative to SAP S/4HANA Cloud Public Edition.
2. **Interviews**
   Interviewed five representatives at organisations using SAP S/4HANA Cloud Public Edition to obtain data about costs, benefits and risks.
3. **Composite organisation**
   Designed a composite organisation based on characteristics of the interviewees' organisations.
4. **Financial Model Framework**
   Constructed a financial model representative of the interviews using 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 modelling 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 S/4HANA Cloud Public Edition Customer Journey

Drivers leading to the SAP S/4HANA Cloud Public Edition investment

Interviews		
Role	**Industry**	**Operating Regions**
CEO	IT consulting	North and South America
CEO	Retail manufacturing	Philippines
CEO	IT products and services	Switzerland, Germany
Head of controlling for IT and administration	Energy storage	Norway, US, Luxembourg, Finland
Vice president of global IT	Chemical manufacturing	Global

KEY CHALLENGES

Prior to the implementation of SAP S/4HANA Cloud Public Edition, interviewees noted that their organisations were either using other basic on-premises ERP tools or various business-native tools like spreadsheets and time-tracking tools to support finance and business management processes. The interviewees noted how their organisations struggled with common challenges, including:

- **Limited scalability.** All interviewees noted their organisations were in high growth stages — they noted how their previous solutions were no longer able to match their organisation's expansion in terms of cost, functionality and speed. On-premises infrastructure setup were often complex and cumbersome, especially with multiple international deployments. The CEO of the IT consulting organisation highlighted: "As we expanded globally, we needed to create a distinct installation for each country we entered. This was massive and very messy for us."
- **Poor and delayed visibility into business operations.** Interviewees cited inefficient internal processes with the data silos across separate systems and

manual reporting. This often resulted in delays in internal business processes such as financial reporting, hampers accurate budget assessment of product performance, and impacts overall business growth.

- **High infrastructure and maintenance costs.** While using other on-premises ERP solutions, interviewees noted that their organisations incurred high infrastructure and maintenance costs. The CEO of the retail manufacturing organisation mentioned that the VPN costs incurred by their organisation have multiplied and nearly totalled the cost of getting the SAP S/4HANA Cloud Public Edition.
- **Unsatisfactory CX and employee experience (EX).** Interviewees described that employees grappled with sluggish systems and performance bottlenecks, experiencing disruptions in daily tasks across different departments. Employees from the finance team had to take several weeks to complete month-end closing processes, while sales teams also experienced long delays in downloading sales and inventory reports, which caused interruptions in customer service. These led to extended working hours and poor customer service, ultimately negatively impacting CX and EX.
- **High exposures to security risks.** Most interviewees came from smaller organisations within companies without robust data redundancy and disaster recovery planning. Additionally, due to the lack of high-availability architecture, interviewees experienced system outages that lasted from hours to weeks, causing severe disruptions to business operations. The CEO of the IT consulting organisation mentioned that their organisation lost business visibility during a system outage. This disruption hindered cash flow visibility, leading to the unnecessary acquisition of a loan, which resulted in overpayment of interest and additional costs. Additionally, interviewees also reported the need to hire security consultants to mitigate these security risks.

SOLUTION REQUIREMENTS/INVESTMENT OBJECTIVES

The interviewees' organisations searched for a solution that could:

- **Enable their businesses to scale and grow.** All interviewees expressed their needs to acquire a flexible solution that could adapt with their organisation's growth trajectory without extensively expanding their infrastructure and IT

budget. The head of controlling for IT and administration in the energy storage organisation highlighted the importance of a pay-per-use modular licensing model in supporting their expansion. With their organisation's rapid expansion from 10 to almost 200 employees in the past three years, the scalable pricing model enabled them to rapidly scale the system to support business growth.

- **Improve visibility into business performance.** For high-growth companies, it is important to have clear and real-time visibility into their business performance to maximise business potential without jeopardising the bottom line. The head of controlling for IT and administration at the energy storage company noted, "We now have comprehensive control over our supply chain, including the location of goods in the warehouse, the quality of incoming raw materials and their inspection, inventory traceability, production costs, finished goods and maintenance orders."

> "We need more real-time visibility in terms of how our revenue is growing, and what is affecting our margin, in order to promote changes within the organisation."
>
> CEO, IT CONSULTING

COMPOSITE ORGANISATION

Based on the interviews, Forrester constructed a TEI framework, a composite company and an ROI analysis which illustrates the areas financially affected. The composite organisation is representative of the five interviewees each from different companies, and it is used to present the aggregate financial analysis in the next section. The composite organisation has the following characteristics:

Description of composite. The composite organisation is a midsized company headquartered in the US that's looking to expand globally.

Deployment characteristics. The composite adopts SAP S/4HANA Cloud Public Edition to support its business strategy with key implementation components including core ERP modules covering processes such as order-to-cash, procure-to-pay, finance and accounting, product-industry-centric processes like make-to-order and make-to-stock, service-industry-centric processes such as customer project management, and SAP BTP for extensibility. Within three years of adopting SAP S/4HANA Cloud Public Edition, the composite organisation expands to nine countries in the Americas, Europe and Asia.

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	Cost savings from replacing on-premises ERP solutions	$361,964	$178,704	$204,204	$744,872	$630,169
Btr	Improved efficiency of ERP users	$517,772	$1,226,287	$2,106,853	$3,850,913	$3,067,072
Ctr	Increased profit from reduced risks in market and branch expansions	$44,280	$147,600	$277,200	$469,080	$370,502
Dtr	Revenue growth from consulting business	$149,625	$72,675	$102,814	$325,114	$273,330
Etr	Avoided costs related to lack of a disaster recovery platform	$178,200	$178,200	$178,200	$534,600	$443,157
	Total benefits (risk-adjusted)	$1,251,841	$1,803,466	$2,869,271	$5,924,578	$4,784,230

COST SAVINGS FROM REPLACING LOCAL ON-PREMISES ERP SOLUTIONS

Evidence and data. Interviewees reported that prior to transitioning to SAP S/4HANA Cloud Public Edition, their organisations were using other basic on-premises ERP tools or various business native tools to support finance and business management processes. The cost to maintain this approach would have grown significantly as the business expanded into different regions and grew in size:

- The CEO of the retail manufacturing company mentioned that rising system network cost was a key driver for the move to SAP's SaaS ERP solution: "Our telecommunication company has multiplied the previous VPN costs for each store, and this increase was applied to each of our store. This new expense is now nearly equivalent to what we pay for SAP S/4HANA Cloud Public Edition, which is a key reason for our move towards the solution."
- The CEO of the IT consulting firm highlighted that before switching to SAP S/4HANA Cloud Public Edition, their organisation was paying for a separate project management tool to keep track of time-related project revenue.

- Interviewees shared they also needed to pay for the services and maintenance labour cost associated with prior on-premises solutions.

Modelling and assumptions. Based on the interviews, Forrester assumes the following about the composite organisation:

- The perpetual licence cost of the on-premises ERP solution is $225,600 in Year 1.
- The annual maintenance cost includes both external services and internal labour, and is calculated as 30% of the total cost of the on-premises ERP licence.
- The annual server cost includes costs for the database, web and application servers. This is calculated as 10% of the total cost of the on-premises ERP licence.
- The legacy on-premises system network VPN cost would have been $90,000 in Year 1, which would have increased to $150,000 in Year 3 as the composite organisation continues its expansion.
- There is an additional project management tool cost of $20,000, which the prior ERP solution lacked.

Risks. Cost savings from the local on-premises ERP replacement may vary across organisations due to:

- The prior solution's functionality, scale of implementation, nature of business, etc.
- On-premises maintenance cost in service and labour.
- Infrastructure environment and setup of the company.

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 $630,000.

Three-year, risk-adjusted cost savings from replacing on-premises ERP solutions:

$630,000

"As we expanded globally, we needed to set up a distinct local on-premises ERP solution for each country we entered. That was massive and very messy for us."

CEO, IT CONSULTING

Cost Savings From Replacing Local On-Premises ERP Solutions

Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Prior local on-premises ERP perpetual licence cost	Composite	$225,600		
A2	Annual maintenance cost of prior on-premises ERP solution	A1*30%	$67,680	$67,680	$67,680
A3	Annual server costs associated to prior ERP solution	A1*10%	$22,560	$22,560	$22,560
A4	On-premises system network VPN cost	Composite	$90,000	$120,000	$150,000
A5	Additional project management tool cost	Composite	$20,000		
At	Cost savings from replacing local on-premises ERP solutions	A1+A2+A3+A4 +A5	$425,840	$210,240	$240,240
	Risk adjustment	↓15%			
Atr	Cost savings from replacing local on-premises ERP solutions (risk-adjusted)		$361,964	$178,704	$204,204
	Three-year total: $744,872		**Three-year present value: $630,169**		

IMPROVED EFFICIENCY OF ERP USERS

Evidence and data. SAP S/4HANA Cloud Public Edition significantly enhanced the efficiency of ERP users by integrating various business functions — such as finance, accounting, procurement and sales — into a unified platform with a central repository. This consolidation led to substantial time savings in reporting and daily workflows.

- Heavy ERP users usually spent majority of their working time interacting with the system, while general ERP users interacted with the system occasionally on a daily basis. For heavy ERP users in finance, accounting and project management offices (PMOs), SAP's SaaS ERP solution's centralised visibility feature provides an improved overview of profit and loss (P&L) across regions. Tasks that were previously time consuming — such as accounts receivable (AR), accounts payable (AP) and tax reporting — were now automated, allowing for near-instantaneous financial reporting. PMOs also benefited from reduced reporting time as all project-related data were consolidated in one system, eliminating the need to access multiple systems.
- The CEO of the IT consulting firm noted a significant reduction in overhead costs due to the internalisation of their accounting functions. This reduction was achieved through the simplification of accounting and legal processes.
- For general ERP users in sales, supply chain and consulting delivery teams, SAP S/4HANA Cloud Public Edition provides real-time access to up-to-date information. Sales teams benefited from dashboards that offered insights into sales performance, inventory levels and customer orders. Supply chain departments used the system for managing stock transfers and monitoring inventory, which enhanced operational efficiency. Meanwhile, delivery consultants could focus more on their projects rather than administrative tasks.

Modelling and assumptions. Based on the interviews, Forrester assumes the following about the composite organisation:

- Heavy users of SAP S/4HANA Cloud Public Edition (e.g., in finance and PMO teams) experience more significant efficiency improvements of 15% in efficiency in Year 1, which increases to 30% by Year 3.

- General users (e.g., managers, sales, consultants and supply chain staff) experience a 5% improvement in efficiency in Year 1, which increases to 15% by Year 3.
- Users experience a lower efficiency percentage improvement in Year 1 as a period of three to four months is required to conduct trainings and stabilise the environment. This is reflected as a post-deployment stabilisation cost.
- The average fully burdened annual salary of different functions may vary. Given inflation adjustments, we have assumed a salary increase of 2% year over year.

Risks. The potential risks that can impact the benefit include:

- The average fully burdened hourly salaries of a finance and accounting specialist, PMO staff, sales/supply chain manager, project manager/consultant could vary depending on the industry, region, tenure, etc.
- Employees' productivity in completing their daily tasks.
- Number of employees dedicated to the target functions in finance, HR, sales and supply chain.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $3.1 million.

Efficiency improvement for heavy users in finance, accounting, HR/ PMO by the end of Year 3:

30%

> "Our sales manager can now quickly generate reports using the sales dashboard. The reports which previously took nearly a full day to manually compile in [spreadsheets] can now be quickly generated and be easily accessible."
>
> CEO, IT PRODUCTS AND SERVICES

> "We were able to internalise our accounting office, which was previously managed by an external firm for the past 10 years. This transition has simplified our accounting and legal reporting, while still providing us with full visibility and compliance with local regulations."
>
> CEO, IT CONSULTING

Improved Efficiency of ERP Users

Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	FTEs dedicated to finance and accounting tasks (e.g., account receivables, audit checks, month-end closing)	Composite	15	18	21
B2	FTEs dedicated to PMO tasks (e.g., analytics and reporting)	Composite	7	8	9
B3	Average fully burdened annual salary of a finance and accounting specialist	TEI standard	$99,900	$101,898	$103,936
B4	Average fully burdened annual salary of a PMO	TEI standard	$84,600	$86,292	$88,018

B5	Efficiency improvement for heavy users in finance, accounting, and PMO	Composite	15%	25%	30%
B6	Annual value of time saved for heavy users	(B1*B3+B2*B4)* B5	$313,605	$631,125	$892,445
B7	FTEs dedicated to sales, supply chain business performance management	Composite	162	186	200
B8	FTEs dedicated to consulting project delivery	Composite	30	50	80
B9	Average fully burdened hourly salary of a sales/supply chain manager	TEI standard	$87,750	$89,505	$91,295
B10	Average fully burdened annual salary of a project manager/consultant	TEI standard	$84,150	$85,833	$87,550
B11	Efficiency improvement for general users in management, consulting and sales after SAP S/4HANA Cloud Public Edition	Composite	5%	10%	15%
B12	Annual value of time saved for general users	(B7*B9+B8*B10)* B11	$837,000	$2,093,958	$3,789,450
B13	Productivity recapture rate	TEI standard	50%	50%	50%
Bt	Improved efficiency of ERP users	(B6+B12)*B13	$575,303	$1,362,542	$2,340,948
	Risk adjustment	↓10%			
Btr	Improved efficiency of ERP users (risk-adjusted)		$517,772	$1,226,287	$2,106,853
Three-year total: $3,850,913			**Three-year present value: $3,067,072**		

INCREASED PROFIT FROM MARKET AND BRANCH EXPANSIONS

Evidence and data. Interviewees reported revenue growth from market and branch expansion due to two main factors: avoided branch opening delays and improved international market expansion. The transition to SAP S/4HANA Cloud Public Edition removed the cumbersome setup processes associated with on-premises solutions, such as infrastructure and VPN installations, which previously caused delays. Additionally, better business and financial visibility enabled employees to make more confident and informed decisions about opening new stores, accelerating international market expansion.

- The CEO of the retail manufacturing company mentioned that before implementing SAP S/4HANA Cloud Public Edition, their organisation faced delays in opening new physical stores due to the time required to install a VPN. These delays resulted in significant losses, as each month of delay meant missed sales opportunities. SAP's SaaS ERP solution enabled the organisation to move from site selection to store opening easily, avoiding these sales losses

and reducing costs associated with delays. This efficiency allowed them to open more stores in less time.

- The CEO of the IT consulting firm highlighted that their new system enabled their organisation to open stores in international markets — a process that was not possible with their previous local on-premises ERP solution due to its cumbersome infrastructure setup. Additionally, financial visibility has greatly improved. Where it once took a long time to close the books and review results, the new system provided much faster financial reporting. This enhanced visibility delivers comprehensive P&L data from all regions and leaders, allowing for immediate corrections and preventing potential losses that could have otherwise gone unnoticed.

Modelling and assumptions. Based on the interviews, Forrester assumes the following about the composite organisation:

- This benefit only associates with revenue that come from the manufacturing business line.
- For the composite, all the branches were in one country before implementation. They opened three new branches in Year 1, and 10 branches annually in Year 2 and Year 3. By Year 3, they are operating in nine countries across the Americas, Europe and Asia.
- The average monthly sales per branch is $40,000 across three years.
- Prior to implementation, each branch would have experienced an average of a two-week delay in branch openings due to cumbersome network infrastructure setup.
- As opening new branches is a business decision, we attribute 30% of the new branch openings to the capability of SAP S/4HANA Cloud Public Edition to scale smoothly and report business performance in real time.
- The operating margin for the manufacturing business line is 10%.

Risks. The potential risks that can impact the benefit include:

- Delays in branch openings, which could vary depending on the network infrastructure setup with the previous local on-premises ERP solution.

- There are multiple factors driving the opening of new branches and expansion into new markets.
- Variation in the business' operating margin.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $371,000.

Three-year, risk adjusted revenue growth from market and branch expansion

$371,000

"We are making better decisions because we no longer rely on estimates. With real-time access to income statements and profit and loss reports for each new store, we can instantly gauge profitability. This visibility has boosted our confidence, allowing us to aggressively expand and increase our store openings and products."

CEO, RETAIL MANUFACTURING

> "With SAP S/4HANA Cloud Public Edition, I now have visibility into my organisation's P&L across all regions and line of businesses. This visibility allows me to make necessary corrections quickly, which has been crucial for our growth over the past three years."
>
> CEO, IT CONSULTING

Increased Profit From Reduced Risk in Market and Branch Expansions

Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Global branches	Composite	30	40	50
C2	New branches per year	Composite	3	10	10
C3	Average monthly sales per branch	Composite	$40,000	$40,000	$40,000
C4	Average months of delayed branch opening from network infrastructure setup with prior solutions	Composite	0.5	0.5	0.5
C5	Annual incremental revenue from avoided store opening delays	C2*C3*C4	$60,000	$200,000	$200,000
C6	Annual revenue brought by new branches in international markets	Y2: $C2_{Y2}$*C3*12 Y3: $C2_{Y2+Y3}$*C3*12	$1,440,000	$4,800,000	$9,600,000
C7	New branch openings attributed to SAP S/4HANA Cloud Public Edition	Composite	30%	30%	30%
C8	Impacted revenue from new international market expansions due to SAP S/4HANA Cloud Public Edition	C6*C7	$432,000	$1,440,000	$2,880,000
C9	Operating margin	Composite	10%	10%	10%
Ct	Increased profit from reduced risk in market and branch expansions	(C5+C8)*C9	$49,200	$164,000	$308,000
	Risk adjustment	↓10%			
Ctr	Increased profit from reduced risk in market and branch expansions (risk-adjusted)		$44,280	$147,600	$277,200
	Three-year total: $469,080		**Three-year present value: $370,502**		

REVENUE GROWTH FROM CONSULTING BUSINESS

Evidence and data. Adopting SAP S/4HANA Cloud Public Edition services module enabled a single source of truth for all customer contracts and visibility of the consulting business. Before implementing the solution, interviewees noted that their company data was fragmented across separate systems. SAP's SaaS ERP solution consolidated all project and financial information in one place, providing project managers with immediate insights into resourcing, revenue and contracts. This centralised approach allowed consultants to focus more on delivering projects over toiling at administrative tasks. Enhanced visibility into customer contracts and revenue supported business expansion and increased employees' capacity to handle more projects.

Modelling and assumptions. Based on the interviews, Forrester assumes the following about the composite organisation:

- This benefit only associates with revenue that come from the consulting business line.
- Consulting annual revenue is $8,750,000 in Year 1, increasing to $19,012,500 in Year 3.
- Six per cent of the revenue growth from consulting business can be attributed to SAP S/4HANA Cloud Public Edition.
- The operating margin of the consulting business unit is 30%.

Risks. The potential risks that can impact the benefit include differences in:

- The consulting business' operating margin.
- Factors driving the growth of the consulting business.

Results. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $273,000.

Three-year, risk-adjusted revenue growth from consulting business

$273,000

"We wanted to have one single, unified view of all customer contracts, and now we have consolidated all this information in one place — we did all of this to focus on upselling and cross-selling our software and enhance our customer engagement activities."

CEO, IT PRODUCTS AND SERVICES

INTERVIEW SPOTLIGHT

Creating Additional Revenue Stream and Managing Client Spending With SAP S/4HANA Cloud Public Edition as an IT Services Provider

IT services companies sometimes develop their own software components to generate more recurring revenue. The CEO of the IT products and services company noted that on top of their traditional IT consulting business, they generated more recurring revenue and created their own SaaS licence business model based on SAP S/4HANA Cloud Public Edition. However, doing so also created complexity in contract management.

Their consulting business model was billed by consultant hours, and their customers tend to have a set budget. SAP's SaaS ERP solution allowed their company to have a single and shared source of truth, which freed up consultants' time to work on the project. The interviewee elaborated: "We have a lot of small contracts, so we couldn't afford too much manual time to process them. We are able to optimise and spend less people effort to do the contract."

Revenue Growth From Consulting Business

Ref.	Metric	Source	Year 1	Year 2	Year 3
D1	Consulting annual revenue	Composite	$8,750,000	$13,000,000	$19,012,500
D2	Consulting annual revenue increase	Composite	$8,750,000	$4,250,000	$6,012,500
D3	Attribution to SAP S/4HANA	Interviews	6%	6%	6%
D4	Operating margin	Composite	30%	30%	30%
Dt	Revenue growth from consulting business	D1*D2*D3*D4	$157,500	$76,500	$108,225
	Risk adjustment	↓5%			
Dtr	Revenue growth from consulting business (risk-adjusted)		$149,625	$72,675	$102,814
	Three-year total: $325,114		**Three-year present value: $273,330**		

AVOIDED COSTS RELATED TO LACK OF A DISASTER RECOVERY PLATFORM

Evidence and data. Many small businesses cannot afford a dedicated disaster recovery platform, which can lead to significant issues during system outages. For example, the CEO in the IT consulting organisation said their employees experienced severe disruptions when their local on-premises ERP system was affected by a cyber-attack on their hosting provider. The lack of disaster recovery meant they had no visibility into their cash flow, resulting in excessive interest payments due to the need for overfinancing to maintain cash flow health. Implementing SAP S/4HANA Cloud Public Edition ensured data was continuously backed up and could be quickly restored in the event of an unexpected disruption. This capability minimised downtime and reduced the financial impact of disruptions, mitigating the costs and risks associated with inadequate disaster recovery solutions.

Modelling and assumptions. Based on the interviews, Forrester assumes the following about the composite organisation:

- The annual cost of overfinancing due to major system downtime incidents is $600,000.
- The probability of experiencing such system outages is 33% per year.

Risks. The benefit of avoided cost related to the lack of disaster recovery may vary across organisations due to differences in:

- The type of disaster recovery plan per major system downtime before the implementation of SAP S/4HANA Cloud Public Edition.
- The probability of a security incident occurring.
- Cost and need of additional financing.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $443,000.

Three-year, risk-adjusted revenue growth from the avoided cost related to the lack of a disaster recovery platform

$443,000

"Our hosting company was under attack, and we experienced a 45-day outage with our ERP system. This disruption resulted in at least two months of financial loss, primarily due to excess interest payments to the bank each month [as a result of] insufficient visibility into our cash flow."

CEO, IT CONSULTING

Avoided Cost Related to Lack of a Disaster Recovery Platform

Ref.	Metric	Source	Year 1	Year 2	Year 3
E1	Cost of overfinancing interest per major system downtime incident	Composite	$600,000	$600,000	$600,000
E2	Probability of an incident	Composite	33%	33%	33%
Et	Avoided cost related to lack of a disaster recovery platform	E1*E2	$198,000	$198,000	$198,000
	Risk adjustment	↓10%			
Etr	Avoided cost related to lack of a disaster recovery platform (risk-adjusted)		$178,200	$178,200	$178,200
	Three-year total: $534,600		**Three-year present value: $443,157**		

UNQUANTIFIED BENEFITS

Interviewees mentioned the following additional benefits that their organisations experienced but were not quantified:

- **Improved security.** Interviewees noted how moving to SAP's SaaS ERP Solution enhanced data security by eliminating the risks associated with database backups and manual workflows. Unlike on-premises systems that may face delays in backup and recovery, cloud solutions provide continuous protection and quick restoration in case of cyber-attacks and system outages. This minimised operational disruptions and reduced the risk of significant downtime.

  The CEO of the retail manufacturing organisation stated: "We are no longer vulnerable to hacks since the data is stored in the cloud. Before the public cloud implementation, we uploaded our database every night — if something happens the following day, then you know our backup is late by one day. If a hack happens, our operations would stop for a day or two, and all workflows would be manual."

- **Improved compliance.** The Head of Controlling for IT and administration in the energy storage organisation also highlighted how the built-in compliance feature within SAP S/4HANA Cloud Public Editions met stringent regulatory requirements in many countries and regions. SAP's SaaS ERP solution's systems included specialised access controls and support programs that helped ensure adherence to local regulatory standards, addressing compliance needs more effectively than some traditional software providers that may lack the necessary expertise.

- **Improved CX.** SAP S/4HANA Cloud Public Edition improved CX by minimising delays in generating and accessing complex reports. In a retail context, where timely transactions were crucial, the cloud-based system streamlined data processing, which led to faster access to information and more efficient service delivery.

  The CEO of the retail manufacturing company remarked, "Previously, if someone needed to download a really complex report during operating hours, it would delay the entire system in all stores, which slowed down the sales transaction process for customers."

- **Fostered a transparent and innovative culture**. The CEO of the IT products and services company noted the benefit of cultivating a more transparent and collaborative work environment with greater access to information. Teams could quickly access and review data during meetings, which facilitated more effective problem-solving and informed discussions. This approach encouraged a culture of innovation and efficiency, where data was readily available to support decision-making and strategic planning.

> "SAP S/4HANA Cloud Public Edition ensures that we are in compliance with stringent Sarbanes-Oxley Act (SOX) requirements through its specialised access rights modules and direct support programs. In contrast, our Norwegian software providers often lack the expertise on these compliance needs."
>
> HEAD OF CONTROLLING, IT AND ADMINISTRATION, ENERGY STORAGE

FLEXIBILITY

The value of flexibility is unique to each customer. There are multiple scenarios in which a customer might implement SAP S/4HANA Cloud Public Edition and later realise additional use cases and business opportunities, including:

- **Scaling with a scalable licensing model.** SAP S/4HANA Cloud Public Edition's scalable licensing model was instrumental in supporting the rapid expansion of interviewees' organisations. As all interviewees were in high growth organisations, they were able to scale up and expand their cloud ERP scope as their organisation size and business complexity increased.

- **Solution enhancement with SAP's partner ecosystem using SAP Build platform.** The solution scope and business model of SAP S/4HANA Cloud Public Edition was enhanced through SAP Build platform. It provided a suite of low-code and pro-code tools designed to accelerate application development and automation with the power of generative AI. The platform provided extensive possibilities for expansion and customisation, which allowed users to access different functionalities.

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix A).

> "After deploying the solution, we could start using it in the production environment right away while still developing and refining additional features. This approach allowed us to implement core functions first and make gradual refinements based on business requirements. It also helped reduce costs by concentrating on only the essential adjustments needed for the initial setup."
>
> HEAD OF CONTROLLING, IT AND ADMINISTRATION, ENERGY STORAGE

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**
Ftr	SAP S/4HANA Cloud Public annual subscription fee	$0	$307,930	$376,358	$467,597	$1,151,885	$942,288
Gtr	Core implementation costs	$434,219	$0	$0	$0	$434,219	$434,219
Htr	Training, post-go-live support and continuous innovation	$0	$349,606	$115,141	$117,443	$582,190	$501,218
	Total costs (risk-adjusted)	$434,219	$657,536	$491,499	$585,040	$2,168,294	$1,877,725

SAP S/4HANA CLOUD PUBLIC EDITION ANNUAL SUBSCRIPTION FEE

Evidence and data. Interviewees noted their organisations incurred annual recurring subscription fees for SAP S/4 HANA Cloud Public Edition. The key modules they deployed were core ERP modules, product-centric industry modules, services-centric industry modules, the business technology platform (BTP), and the integrations between other systems.

Pricing may vary. Contact SAP for additional details.

Modelling and assumptions. Based on the interviews, Forrester assumes the following about the composite organisation:

- The annual subscription fee for the composite is $279,936 in Year 1 and increases to $425,088 in Year 3 as the number of employees grows rapidly with the business expansion.

Risks. The potential risks that can impact the cost include:

- Discount may apply and vary.
- Potential price adjustment over the years.

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 $942,000.

SAP S/4HANA Cloud Public Annual Subscription Fee						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
Ft	SAP S/4HANA Cloud Public annual subscription fee	Composite		$279,936	$342,144	$425,088
	Risk adjustment	↑10%				
Ftr	SAP S/4HANA Cloud Public annual subscription fee (risk-adjusted)			$307,930	$376,358	$467,597
	Three-year total: $1,151,885		**Three-year present value: $942,288**			

CORE IMPLEMENTATION COSTS

Evidence and data. A typical implementation process consisted of two main phases. The core implementation phase included steps such as discovery, preparation, configuration and setup, data conversion, testing and deployment, to develop the essential functions. Following this, the post-deployment stabilisation phase allowed users to continuously refine and enhance their operations.

Modelling and assumptions. We have considered the following factors when calculating the cost of core implementation phases:

- The cost calculation includes the expenses for the core implementation phase, which lasts seven months.
- During this phase, eight internal full-time employees are involved, each dedicating 25% of their working hours to the implementation.
- Each full-time employee involved in the core implementation has an average monthly salary of $9,113.
- The partner cost is set at $250,000.

Risks. The potential risks that can impact the cost calculation include:

- Variation in implementation phases and timeline.
- Quality and cost of implementation partner.
- Number of internal FTEs involved in core implementation.
- Productivity of internal FTEs involved in core implementation.

Results. To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $434,000.

Core Implementation Costs						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
G1	Core implementation phase (months)	Composite	7			
G2	Internal FTEs involved	Composite	8			
G3	Average monthly salary	Composite	$9,113			
G4	Time required	Composite	25%			
G5	Partner cost	Composite	$250,000			
Gt	Core implementation costs	G1*G2*G3*G4+G5	$377,582	$0	$0	$0
	Risk adjustment	↑15%				
Gtr	Core implementation costs (risk-adjusted)		$434,219	$0	$0	$0
Three-year total: $434,219			**Three-year present value: $434,219**			

TRAINING, POST-GO-LIVE SUPPORT AND CONTINUOUS INNOVATION

Evidence and data. The post-deployment stabilisation phase lasted four months, where users engaged in ongoing training and system monitoring to ensure optimal performance and value expansion. Internal teams addressed multiple issues, conducted testing and refined operations to ensure everything functioned smoothly.

Modelling and assumptions. This section explains how the modelling is done.

- There is continuous work involved for training and innovation to ensure the composite organisation continues to expand the value it gets from the implementation.
- Ongoing maintenance costs include expenses for maintenance, learning and expenses resulting from the post-deployment stabilisation phase.
- The post-deployment stabilisation phase lasts four months and involves eight internal FTEs, who each dedicate 50% of their time to this phase.

- Heavy users require an average of 20 hours for learning to maximise the value of the platform. Key activities include attending workshops and in-person trainings.
- General users require five hours of training, and most are conducted through training videos and learning from other colleagues. In Year 1, 192 general users need training, which decreases to 44 users in both Year 2 and Year 3.
- Maintenance involves three FTEs, who spend 30% of their time on such tasks.
- The fully burdened annual salary of an internal FTE is $109,350 on average in Year 1, which increases to $113,768 by Year 3.

Risks. The potential risks that can impact the cost include variations in:

- Learning and continuous innovation time for heavy and general users on the solution.
- Number of internal FTEs involved in the post-stabilisation phase.
- Productivity of internal FTEs involved in the post-stabilisation phase.

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 $501,000.

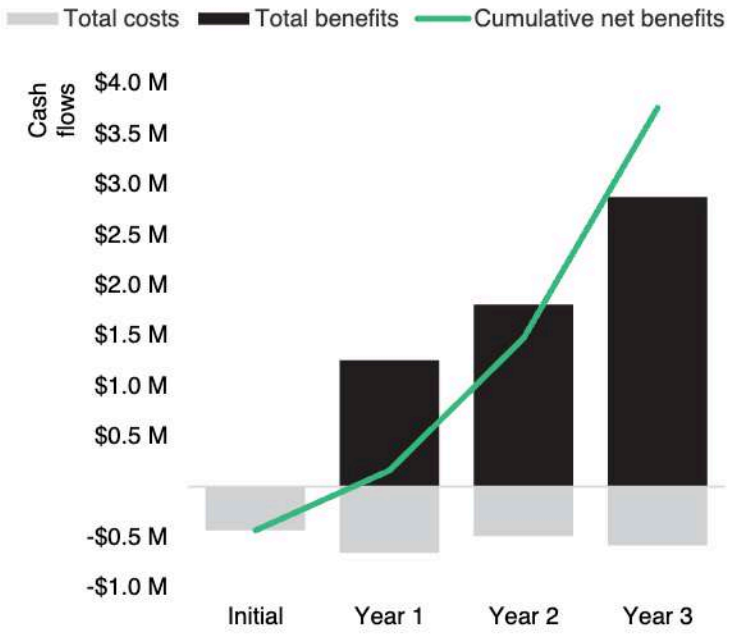
Training, Post-Go-Live Support, And Continuous Innovation						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
H1	Post-deployment stabilisation phase (months)	Composite		4		
H2	Internal FTEs involved for continuous improvement phase	Composite		8		
H3	Percentage of time spent for post-deployment stabilisation	Composite		50%		
H4	Average learning time required per heavy user (hours)	Composite		20	20	20
H5	Heavy users requiring training	Composite		22	4	4
H6	Average learning time required per general user (hours)	Composite		5	5	5
H7	General users requiring training	Composite		192	44	44
H8	Fully burdened annual salary of an internal FTE	Composite	$109,350	$109,350	$111,537	$113,768
H9	Annual learning cost per user	(H4*H5+H6*H7)* H8/2080		$73,601	$4,290	$4,376
H10	Internal FTEs required for ongoing maintenance	Composite		3	3	3
H11	Average percentage of time spent on maintenance per FTE	Composite		30%	30%	30%

H12	**Subtotal: Cost of post-deployment stabilisation phase**	**H1*H2*H3*G3**		**$145,808**		
H13	**Subtotal: Cost of learning and maintenance**	**H9+H10*H11*H8**		**$172,016**	**$104,673**	**$106,767**
Ht	Training, post-go-live support and continuous innovation	H12+H13	$0	$317,824	$104,673	$106,767
	Risk adjustment	↑10%				
Htr	Training, post-go-live support and continuous innovation (risk-adjusted)		$0	$349,606	$115,141	$117,443
Three-year total: $582,190			**Three-year present value: $501,218**			

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 organisation'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 estimates)

	Initial	Year 1	Year 2	Year 3	Total	Present value
Total costs	($434,219)	($657,536)	($491,499)	($585,040)	($2,168,294)	($1,877,725)
Total benefits	$0	$1,251,841	$1,803,466	$2,869,271	$5,924,578	$4,784,230
Net benefits	($434,219)	$594,305	$1,311,967	$2,284,231	$3,756,284	$2,906,505
ROI						155%
Payback period						9 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 achieve the tangible value of IT initiatives to both senior management and other key business stakeholders.

Total Economic Impact approach

Benefits represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organisation.

Costs consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for 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. Having 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 feeds 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. Organisations typically use discount rates between 8% and 16%.

Payback period

The break-even 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] 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 achieve the tangible value of IT initiatives to both senior management and other key business stakeholders.

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