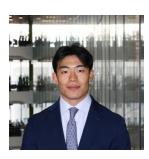




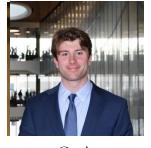
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# **Technology Overview**

## Overview & Industry Trends

The technology sector has experienced rapid growth, driven by the advancement of artificial intelligence, digital transformation of firms, and cybersecurity measures. The industry currently holds a market size of \$6.40 trillion USD and is projected to grow 20% in 2025. The sector encompasses a variety of specialized subsectors, mainly driven by software, hardware, semiconductors, telecommunications, financial technology and IT services.

Growth has been largely fueled by the rise and integration of AI, with Large Language Models (LLMs) leading the momentum, proving to be the most versatile option for multi-use cases. Around 70% of organizations are actively exploring and/or already implementing LLMs into their operation. Alongside this, Small Language Models (SLMs) have gained traction as a cost-effective solution for smaller data-sets and addressing specific tasks. Around 75% of organizations are now opting for SLMs, due to their customizability in niche-use cases. The emergence of autonomous A.I. agents is expected to accelerate growth, expanding A.I.'s ability to independently perform tasks. With the emergence of new AI, businesses continue to spark significant expansion into cloud computing, with global market projections expected to reach \$939 billion in 2025, marking a 14.3% increase from 2024. Software-asa-service (SaaS) accounted for 40.9% of total market revenue, while infrastructure-as-a-service (IaaS) and platformas-a-service (PaaS) contribute 12.5% respectively. With hybrid and remote work environments becoming increasingly common, companies continue to embrace cloud solutions for their connectivity, scalability, and costefficiency. Small and medium-sized enterprises (SMEs) in particular, are turning to the cloud as an affordable alternative to on-premises infrastructure, with 45% of SME's report spending as little as \$600,000 USD annually on public cloud platforms, a fraction of the cost compared to on-premise systems. Lastly, cybersecurity remained a top priority for companies, with total market revenue increasing to \$19 billion. The market is projected to reach \$208.5 billion in 2026, primarily driven by the rise in A.I.-enabled data attacks, prompting businesses to invest heavily in security solution providers. Additionally, growing concerns surrounding quantum computing—and its potential to compromise modern encryption standards—have further reinforced the demand for robust cybersecurity solutions.

# The "Magnificent Seven"

2024 proved to be another strong year for the "Magnificent Seven," comprised of Nvidia, Meta, Tesla, Amazon, Alphabet, Apple, and Microsoft, a group of mega-cap technology giants that continue to play a pivotal role in shaping U.S. stock market trends. All but Microsoft outperformed the S&P 500 by wide margins, with the group now making up 35.5% of the S&P 500 index, delivering an average annual gain of 63%. Excluding Microsoft, the rest of the "Magnificent Seven" outperformed the S&P 500's 23.3% gain for the year. The group's outsized influence in the index and consistent outperformance reflect continued investor confidence in the technology sector heading into 2025. Below, are the respective annual returns of the "Magnificent Seven," in 2024.

NVDA
+171.2%

**META** +65.4%

**TSLA** +62.5%

**AMZN** +44.4%

**GOOG** +35.1%

**AAPL** +30.1%

**MSFT** +12.1%

#### Future Outlook

As A.I. workloads continue to grow, attention has shifted to underlying infrastructure required to support them. Data centers and AI-embedded PCs are expected to see substantial growth, with AI chips projected to make up 11% of the global semiconductor market. Much of this demand continues to be driven by expansion of AI capabilities and deploying custom chips on-site. However, the recent rollout of US. Tariffs has significantly impacted valuations, especially the Magnificent 7. While key consumer electronics remain exempt from 145% tariff rates, these exemptions aren't permanent and are subject to change. Thus, our 2025 future outlook remains cautiously optimistic due to uncertainty in the overall market. Technology companies will continue to innovate and adapt to the current trade landscape, but the potential for further geopolitical tensions necessitates a caution towards future growth.



# **ERP Overview**

## The State of Enterprise Resource Planning

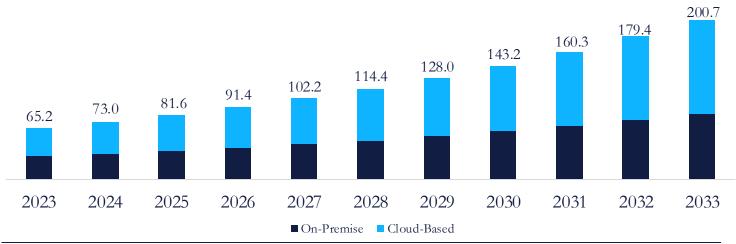
Enterprise Resource Planning (ERP) systems are integrated software platforms that streamline and optimize core business processes. By consolidating data and workflows into a single system, ERP solutions enable organizations to improve operational efficiency, enhance decision-making, and reduce costs. As global digital transformation accelerates, ERP systems are evolving to incorporate automation and cloud-based functionalities, making them more personalized to each firm. Businesses are shifting towards modular ERP solutions with API integrations, allowing seamless interoperability with other software applications. ERP deployment is categorized into on-premise, cloud-based, hybrid, and open-source models. On-premise ERP remains relevant, especially for industries with stringent security and compliance needs. However, cloud-based ERP, particularly multi-tenant SaaS solutions, is experiencing the highest growth. A recent study highlighted that 37% of organizations had adopted on-premise solutions, while 53% of companies consider cloud-based ERP a top priority.

However, high implementation costs, integration complexities, and resistance to change hinder growth potential. As businesses expand globally, ERP systems must also adapt to regulatory environments and data privacy laws, such as the General Data Protection Regulation (GDPR) and the Consumer Privacy Act (CCPA). Despite these challenges, the demand for ERP systems is rising, particularly among small and medium-sized enterprises (SMEs). SMEs are increasingly adopting ERP systems to enhance financial and inventory management while automating manual processes for greater efficiency. The SME ERP market is expected to grow at an annual rate of 7% through 2025, reflecting the increasing adoption. Meanwhile, large enterprises account for 39% of the ERP market share, emphasizing their need for robust systems with extensive customization and industry-specific functionalities. Key players in the ERP market include SAP [SAP], Oracle Corporation [ORCL], Microsoft [MSFT], Infor, and Sage Group [SGE]. This competition is further intensified by innovation and emerging ERP providers focusing on niche markets.

# **Growth Projections**

The global ERP market is projected to reach \$200.7 billion by 2033 at a CAGR of 11.9%. Businesses increasingly turn to ERP systems, with implementations reducing operational costs by 23% and administrative costs by 22%. Adoption rates are growing as 50% of companies actively acquire, upgrade, or plan to implement ERP solutions. Digital transformation remains a top priority for 62% of IT decision-makers, further accelerating ERP investments. As industries evolve and businesses demand greater agility, ERP platforms will continue to serve as the backbone of enterprise digital strategy.

## Global ERP Software Market Size by Deployment Model (in \$B)





# **ERP** Industry Applications

### Manufacturing

real-time data access and scalability, particularly for mid- Information Modeling (BIM) software. market and large enterprises.

### Retail and E-Commerce

Commerce, Oracle NetSuite, and SAP Commerce Cloud are challenges expected to surpass \$8 trillion by 2027, ERP adoption state agencies prefer on-premise ERP solutions. continues to rise to support growing consumer demand.

#### Healthcare

combining on-premise solutions for hospitals and healthcare efficiency. networks.

#### **Financial Services**

and Workday audit readiness by 25%. Financial services ERPs are predominantly on-premise due to security concerns, while cloud-based ERP adoption is rising in fintech.

### Construction and Real Estate

Manufacturing companies utilize a ERP systems such as SAP Procore, Sage 300 Construction, and Viewpoint Vista are S/4HANA, Oracle NetSuite, and Epicor. These systems aim designed to track project costs, contract management, and real to streamline supply chain management and production estate assets in construction and real estate. Cloud-based ERP planning. ERP platforms reduce production downtime by is gaining traction in the industry due to the need for real-time 20% and improve inventory accuracy by 25%. These systems project collaboration and remote accessibility across job sites. often fall under cloud-based deployment due to the need for Large construction firms also integrate ERP with Building

#### Government and Public Sector

Government agencies deploy Oracle PeopleSoft, SAP for the In the retail and E-commerce sector Microsoft Dynamics 365 Public Sector, and Tyler Technologies. These systems address related to public finance utilized to manage omnichannel sales, inventory, and procurement management, and data integration across customer relationships. Retailers can reduce stockouts by 30% departments. Public sector ERPs can reduce administrative and improve order fulfillment accuracy by 25%. Retail ERPs costs by 20% and improve service delivery times by 25%. are predominantly cloud-based, and with global eCommerce Because of security and data sovereignty concerns, federal and

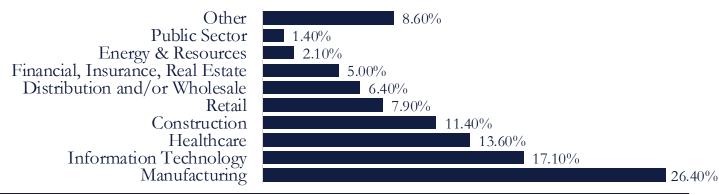
#### Education

Educational institutions leverage Ellucian Banner, Oracle Healthcare organizations rely on Epic Systems, Cerner, and PeopleSoft Campus Solutions, and Workday Student to Infor CloudSuite to streamline patient management, billing, manage student records, financial aid processing, and faculty and regulatory compliance. These platforms address patient administration. Cloud-based ERP adoption is expanding in data security, HIPAA compliance, and resource allocation. higher education due to the need for flexible student systems. Healthcare primarily adopts hybrid ERP deployment, ERP adoption is crucial in modernizing administrative

# **Energy and Utilities**

Energy and utility companies utilize SAP IS-U, Oracle Financial institutions utilize solutions including SAP Fiori, Utilities, and IFS Applications to carry out maintenance, Financial regulatory compliance, and resource planning. Hybrid ERP Management, to manage accounting, risk, and regulatory deployments are common, as large utility firms integrate reporting. These systems help banks, insurance firms, and legacy systems and IoT devices with cloud-based analytics, investment firms reduce reporting errors by 30% and improve while smaller renewable energy companies increasingly adopt cloud ERP with a focus on real-time data access.

# ERP Usage by Industry (%)





# Deeper Dive: ERPs in Manufacturing

### **ERP** Integration in Manufacturing

Manufacturing requires constant coordination across Herman Miller is an international business with inventory management, quality control, supply chain designing and manufacturing interior reduction.

increased visibility across production, the supply chain, into demand forecasting, optimization, defect detection, production process orders, competitive advantage, improving efficiency, reducing how ERP brings value to manufacturing companies. costs, enhancing product quality, and faster decisions.

### Herman Miller's ERP Project

several departments, including production planning, operations in over 100 countries. It specializes in management, and financial management to meet including seating, tables, and storage spaces, for offices, operational efficiency. The implementation of ERP healthcare facilities, and homes. As their international systems enables the centralization of various operations presence expanded, they had outgrown their previous and processes, allowing for better coordination and IT infrastructure, in-house manufacturing requirements visibility across departments with real-time insights for planning solution, and legacy ERP product. Considering management. Through the use of ERPs, manufacturers these limitations, Herman Miller sought to improve benefit from greater efficiency and overall cost visibility and efficiency in their planning, production, and distribution capabilities while maintaining strong environmental and customer service standards. In their Integration with Emerging Technologies ERP implementation project, Herman Miller had advent of smart factories, which utilize several demands for their new system, including the technologies like the Internet of Things (IoT) and AI, capability to oversee and manage their various represents a shift in manufacturing that allows for production sites across the world, supply chain visibility supplies and materials, and customer demands. The use of IoT devices like management. Through their implementation of Infor's sensors, RFID tags, and smart meters enables the Cloudsuite Industrial ERP to support their international collection of real-time data from machines, production operations across the UK, Italy, France, Germany, lines, and inventory systems, which is directed into ERP Brazil, Mexico, Japan, Singapore, and China, Herman systems, where it can then be analyzed by AI, which can Miller realized benefits such as lower inventory, reduced have beneficial insights such as predictive machinery time purchasing components, automated operational supply chain processes, oversight of the production of individual logistical improvements, and supply chain optimization, and enhanced decision making. Through enhancements. Through the case of Herman Miller's these enhancements, manufacturers realize a significant company-wide ERP implementation project, it is clear

# Global Manufacturing Output (\$T)





# Data Privacy and Compliance in ERPs

## Privacy, Compliance, and ERPs

ERPs handle massive amounts of data that span an entire company's operations making them susceptible to newly implemented data privacy regulations and the targets of cybersecurity attacks. To meet regulatory standards, ERP systems must have capabilities to comply with industry and country-specific regulations or client organizations can face hefty fines and long-term reputational damage. With the increasing prevalence of cyberattacks and data breaches, ERP systems have adopted advanced security measures such as zero-trust architecture and end-to-end encryption capabilities.

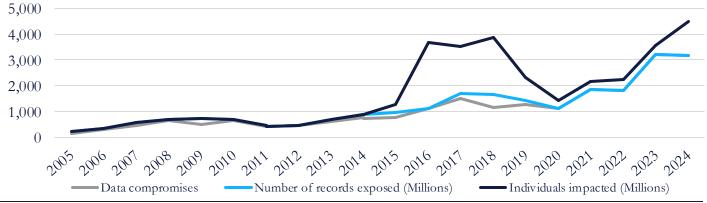
### Governmental Data Privacy Laws

ERPs have become subject to various data privacy regulations and laws that aim to protect personal information. Two notable government regulations that many organizations must comply with include the European Union's General Data Protection Regulation (GDPR) and the US State of California's Consumer Privacy Act (CCPA). The implementation of the GDPR protects individual's personal information such as their name, address, health data, web data, and more, placing these obligations on organizations as long as they target or collect data from people in the EU. Violators face hefty fines if these security and privacy standards aren't met. The CCPA grants California residents the right to know, delete, and opt out of the sale of their personal information, effectively placing these responsibilities on any organization that collects information from California residents. With several data privacy laws, ERP systems must be able to implement capabilities for managing data, access control, and transparency.

### **Data Compliance Laws**

There are several compliance requirements that ERP systems must be tailored and able to address. For public companies operating in the United States, the Sarbanes-Oxley Act (SOX) requires them to maintain and implement strict internal controls over financial reporting, ERP systems must be able to have robust logging reporting, and auditing capabilities to track company financial transactions accurately while also enforcing access-control to keep financial data confidential. Similarly, within the healthcare industry, organizations must stay compliant with the Health Insurance Portability and Accountability Act (HIPAA), a US federal law that protects the privacy and security of an individual's health information. To meet these requirements ERP systems must have up-to-date security, availability of data through encryption, and access control capabilities. Within the retail industry, companies must follow the Payment Card Industry Data Security Standard (PCI DSS) to ensure the secure handling of cardholder and payment data. ERPs within the retail space must have encryption capabilities, vulnerability management, and access controls to ensure compliance with this regulation. With several types of data security and privacy regulations across various industries and geographies, it promotes the rise of industry-specific ERPs that allow organizations to stay compliant within their operations and industry. To maintain compliance, several ERP systems automate compliance-related workflows, provide audit trails, include reporting features, enable role-based access control, and incorporate privacy and data management tools.

# Number of Data Compromises and Impacted Individuals in the US





# **Trends**

### Transition to Cloud-Based ERPs

The ERP market is shifting towards cloud-based solutions, driven by their appeal to small and mediumsized businesses. This transition is evident in sectors like manufacturing, IT, and healthcare, which together account for nearly 50% of the market's growth. ERP are essential for providing businesses with visibility into their operations, offering many supply functions including chain management, relationship management, customer and human resources services. Companies are opting for cloud and SaaS-based solutions to avoid the high upfront costs associated with on-site hardware and dedicated IT teams. Cloud-based ERP systems provide offsite management, offering flexibility and scalability that support the growth of expanding organizations.

### Low-Code ERP Solutions

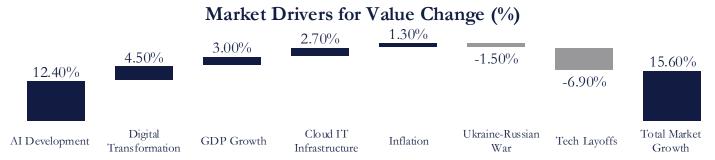
A growing alternative to traditional ERPs is low-code ERP platforms, which allow the user to simplify the developmental process and customize their software to suit specific needs without coding expertise. This enables firms to adapt to changes within their industry. Industries with volatile regulatory environments and changing customer needs, especially benefit from low-code ERPs. The growth of this alternative is driven by the benefit of shorter development time without the need to purchase new solutions in dynamic markets and the potential to maintain a competitive edge.

### **AI-Powered Business Intelligence**

As seen in much of the IT industry, ML (Machine Learning) and LLM (Large Language Models), two subsets of artificial intelligence, are improving the ERP space by offering data analytics, improved decision-making processes, real-time data insights, and business process automation. The integration of these AI models is increasing operational efficiency and visibility into firms' data, allowing for more agile and sophisticated judgment. This trend is prevalent in the highest tier of ERP providers such as Microsoft Dynamics 365, SAP S/4HANA, Oracle NetSuite, and many more with integrated AI capabilities. The advantages in AI integration offer are motivating many firms to transition from legacy ERP systems.

## Digital Transformation & Security

Since Covid-19, the IT sector has needed firms to create secure and mobile systems for hybrid working environments. This digital transformation has pushed ERP providers to incorporate mobile tools, and consequentially, cyber security measures to protect company and consumer information. Features such as end-to-end encryption, MDM (Mobile Device Management), behavioral analytics, and monitoring are among the security enhancements cloud and SaaS-based ERPs require in a world of sensitive digital information.



The integration of AI within ERPs enables predictive analytics, workflow automation, and business intelligence. Organizations undergoing digital transformation often adopt ERPs to centralize data, streamline operations, and improve visibility. Cloud-based ERPs lower upfront infrastructure costs, reducing cost barriers for smaller firms. GDP growth allows for increased corporate spending, while moderate inflation drives demand for cost visibility and forecasting. However, the Russia-Ukraine war has disrupted global supply chains, causing ERP project delays and cancellations, while tech layoffs have led to reduced IT consulting spending and a sign of tightened budgets that delay prospects of long-term projects like ERP implementation.



# Headwinds

### **Economic Uncertainty**

As numerous elections take place globally, uncertainty surrounding future policy continues to loom. In the United States, recent policy trends point towards rising inflation rates, higher borrowing costs, currency fluctuations, shifts in trade values, changes in capital flows, and increased product expenses. The long-term effects of tariffs and deportation policies are expected to manifest in the form of labor shortages and a slowdown in GDP growth by 2026. Current projections suggest GDP growth may decline by 0.04%, settling at 2.4%. Additionally, with the expiration of the Tax Cuts and Jobs Act, many businesses are likely to delay major investments until there is more clarity around the future legislative landscape.

### Sales Cycles & Complex Implementation

Enterprise Resource Planning software (ERP) involves a lengthy and complex sales process, requiring proof of concept and budget planning prior to implementation. Given high upfront costs, organizations are encouraged to develop long-term projections that outline expected costs and timeline for ERP migration. Furthermore, the sales cycle for ERP systems often spans several months to over a year, as it typically involves multiple internal stakeholders—including IT, Finance, and Legal departments. For organizations pursuing a customized ERP solution, the process is more involved, requiring in-depth discussions before a deal can be finalized.

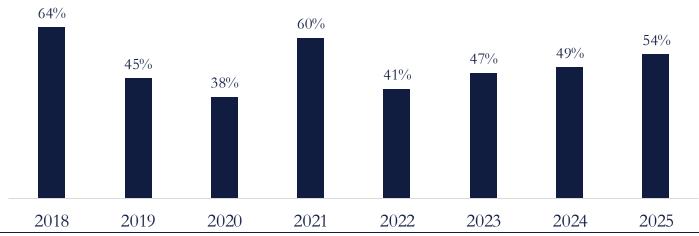
## Migration and Integration Challenges

High upfront costs can deter small and medium-sized enterprises (SMEs) from investing in essential components of ERP implementation—such as software licensing, hardware infrastructure, consulting fees, and installation. As ERP systems are integrated, organizations also face added expenses related to reengineering workflows and providing role-based user training. The excitement around ERP capabilities has also led some organizations to choose standardized systems that are too large or unsuited to their specific needs. Integration challenges continue to be a concern, with 49% of companies in 2024 reporting their implementation projects went over budget. This high percentage indicates a disconnect between projected and realized costs, emphasizing the need for companies to anticipate and plan for unexpected challenges.

### Customization vs. Standardization

Customized ERP systems are built to align with unique business processes and requirements, offering the potential for a competitive edge. However, they come with longer implementation timelines and require ongoing, complex maintenance solutions. Standard systems, on the other hand, are out-of-the-box solutions with minimal modification. These systems come with reduced costs, faster deployment, and are often favored by SME's that may not have the capital or need for a fully customized solution.

## Percentage of Over Budget ERP Implementations





# **Tailwinds**

## SMBs Adoption of ERP

The adoption of ERP systems by Small and Mediumsized Businesses (SMBs) is becoming increasingly essential as these firms strive to scale and remain competitive. Surveys show that 92% of SMBs already use or plan to implement ERP software. As SMBs grow, managing departments, several systems, and a large amount of data becomes overwhelming. This creates a need for ERP systems, which streamline processes across various departments such as finance inventory management, sales, and accounting, CRM. This cohesive platform enhances operation efficiency and ultimately drives business growth and success.

### Adoption of Cloud-Based ERP

Cloud-based ERP systems are gaining significant traction as they streamline core business functions into a unified platform accessible via the internet. This allows for real-time data access from anywhere, eliminating the need for on-premises hardware. As digital transformation becomes a top priority for businesses, cloud-based ERPs are playing a pivotal role in modernizing operations, enhancing scalability, and improving decision-making through data-driven insights. The cloud-based ERP market, valued at \$64.7 billion in 2022, is projected to grow to \$130 billion by 2027, reflecting a CAGR of 15%.

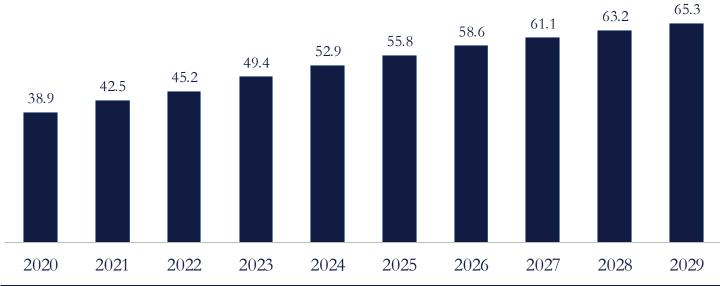
## **Demand for Supply Chain Visibility**

In recent years, supply chain visibility has become more critical than ever, as supply chains serve as the backbone of many businesses, regardless of size or industry. Companies are grappling with the growing complexity of supply chain operations, rising customer demands, and meeting compliance requirements, all of which demand solutions. ERP systems allow businesses to address these challenges by providing real-time visibility, enabling efficient warehouse management, and delivering actionable insights. By leveraging these capabilities, firms can optimize their supply chain and enhance operational efficiency.

## Cybersecurity and Data Privacy

ERP systems have become essential for modern businesses, managing sensitive data across key functions like finance and accounting, CRM, and HR. With rising cyber threats and stricter data privacy regulations across multiple jurisdictions, the need for secure ERP solutions is more critical than ever. In the first half of 2024 alone, data breaches exposed over 7 billion records, pushing ERP systems to adopt advanced security measures to protect sensitive information. The combination of increasing cyber threats, and regulatory demands, is driving market growth and transformation within the ERP industry.

## Global ERP Software Market Revenue (\$B)





# **ERP** In the News

## **Oracle AI Agent Studio**

Unveiled at Oracle CloudWorld London on March 25<sup>th</sup>, 2025, Oracle AI Agent Studio for Fusion Applications is designed to support creation, deployment and management of AI agents and agent teams across the enterprise. The platform features advanced tools for testing, validation, and security, helping businesses streamline and scale AI integration efforts. The studio includes a library of agent templates, allowing users to quickly develop agents using pre-built configurations paired with language models. With access to over 50 template agents, users can incorporate documents, tools, prompts, or APIs to meet specific needs. Team orchestration enables these trained agents to collaborate with human employees on complex tasks, enhancing productivity. Additionally, the AI Agent Studio provides direct access to Oracle Fusion Application APIs, knowledge repositories, and predefined tools. Support for third-party agent integration further extends the platform's capabilities, enabling broader communication and functionality across enterprise ecosystems.

### Infor & Kinaxis Partnership

On March 24<sup>th</sup>, 2025, Infor, a leading privately-owned enterprise software company, partnered with Kinaxis, a recognized leader in supply chain management solutions, to better align supply chain planning with broader business goals for midmarket manufacturers. The partnership launched Kinaxis Planning One for Infor CloudSuite, a solution that integrates Kinaxis's Maestro platform and supply chain planning tools directly into Infor's suite of cloud offerings targeting industries such as automotive, industrial manufacturing, consumer durables, high-tech, aerospace, and defense. The platform enables companies to unify supply chain operations into a single data source. By integrating demand, inventory, and supply planning into a one-view management system, manufacturers gain the ability to model various supply and demand scenarios—helping them make more informed and agile strategic decisions.

### Oracle Cloud ERP: OCBC

On March 13th, 2025, Oversea-Chinese Banking Corporation (OCBC), one of Southeast Asia's largest banks, announced plans to consolidate its finance operations, spanning 10 countries, onto a single platform powered by Oracle Cloud ERP. The move aims to streamline financial processes, enhance reporting and insights, and strengthen compliance and control across the bank's international network. This strategic shift underscores Oracle Cloud's ability to support complex multinational organizational structures. With finance teams operating across various branches—including banking, insurance, and asset management—OCBC's consolidation showcases the global scalability and reliability of Oracle's platform. With over 94% of organizations worldwide now embracing modern ERP strategies, Oracle's global reputation as a trusted ERP provider continues to grow.

### SAP & DataBricks Business Data Cloud

In February 2025, SAP and DataBricks announced a landmark partnership aimed at enterprise data management. The collaboration brings Databricks' expertise in data engineering, machine learning, and AI workloads onto a unified platform, designed to serve as a central hub for all company data, remaining compatible with third-party data formats and storage solutions. The new Business Data Cloud integrates existing data across SAP solutions, including finance, spending, and supply chain data from SAP S/4HANA and SAP Ariba, as well as learning and talent data from SAP SuccessFactors. With the rollout, new insight applications will leverage real-time data, models, and data products to provide advanced analytics and planning tools across key areas like finance, HR and operations. SAP's generative AI copilot, Joule, will also benefit from the data ecosystem, enhancing efficiency in cross function workflows and improving decision-making across the enterprise. This solution is designed to harmonize critical data, underscoring SAP and Databricks' shared commitment to next generation business insights.



# **ERP Providers and Supporters**

### **Overview**

The ERP space is comprised of several players each offering unique products and services used to integrate and manage core business processes on a unified system. These companies assist organizations in streamlining operations, improving transparency, and enhancing decision-making. The following companies bring value to their customers through a variety of products and services such as providing ERP systems, integrating with pre-existing ERP systems, automating workflows, or serving as managed service providers.

Logo	Company	Ticker	Description	Market Cap (\$Bn)
Microsoft	Microsoft	MSFT	Offers software, cloud services, and ERP solutions including Dynamics 365	\$2,791
ORACLE	Oracle	ORCL	Provides cloud solutions, databases, and ERP systems like Oracle Fusion Cloud Erp and NetSuite	\$487.12
SAP	SAP SE	SAP	Offers enterprise software including SAP S/4HANA for advanced ERP and business process management	\$339.79
INTUIT	Intuit	INTU	Offers Intuit Enterprise Suite, a cloud- based ERP platform used to manage finances, payroll, HR, marketing, and cash flow	\$164.42
IBM	IBM	IBM	Offers IBM Cloud and API Management that can be used to host and streamline ERP solutions	\$241.59
servicenow.	ServiceNow	NOW	Offers a cloud-based platform with ERP integrations that automate workflows and streamline service management	\$203.73
	ADP	ADP	Offers human capital management solutions with ERP system integrations	\$125.38
workday.	Workday	WDAY	Provides a cloud-based ERP platform for managing human resources, finance, planning, and analytics	\$68.64

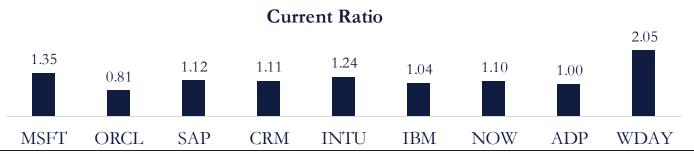
Sources: Yahoo Finance



# Liquidity and Leverage

						Liquidity			Levera	ge
Ticker	Operating Cash Flow	Current Assets	Current Liabilities	Total Liabilities	Current Ratio	Quick Ratio	Cash Ratio	Debt / Equity	Debt / Assets	Debt / Inv. Capital
MSFT	118.55	159.73	125.27	243.67	1.35	1.10	0.66	0.19	0.12	0.17
ORCL	18.67	22.55	31.54	131.74	0.81	0.67	0.39	5.65	0.60	0.86
SAP	5.65	22.27	19.85	29.46	1.12	0.98	0.59	0.00*	0.15	0.20
INTU	5.34	10.73	8.62	15.06	1.24	0.55	0.39	0.34	0.20	0.27
IBM	13.35	34.48	33.14	33.14	1.04	0.89	0.44	1.92	0.43	0.68
NOW	4.27	9.19	8.36	10.77	1.10	0.96	0.69	0.23	0.11	0.19
ADP	4.77	54.25	54.30	59.02	1.00	0.11	0.04	0.65	0.07	0.46
WDAY	2.35	9.08	4.42	7.80	2.05	1.94	1.62	0.38	0.20	0.28
Lower	4.52	9.96	8.49	12.92	1.02	0.61	0.39	0.19	0.12	0.18
Median	5.65	22.27	19.85	32.87	1.11	0.90	0.59	0.34	0.15	0.27
Mean	20.61	38.19	33.88	62.61	1.20	0.90	0.61	1.06	0.22	0.36
Upper	16.01	44.37	43.72	95.38	1.30	1.04	0.68	1.29	0.32	0.57

A comparative analysis of these firm's liquidity and leverage ratios reveals insights into their financial health, operating flexibility, and risk exposure. Regarding liquidity, WDAY has the highest current ratio of 2.05, meaning it has twice the short-term assets needed to cover liabilities. This short-term financial stability gives WDAY the flexibility to invest in growth initiatives without immediate liquidity concerns. SAP, CRM, and INTU all maintain current ratios above 1.1, suggesting reasonable liquidity positions, while ORCL lags with a current ratio of 0.81. Given ORCL's aggressive acquisition strategy with Cerner, a push into healthcare technology, the lower liquidity reflects a capital allocation shift towards long-term investments. Debt levels vary significantly across the industry. ORCL's debt to equity ratio of 5.65 highlights their reliance on leverage. IBM has a relatively high debt-to-assets ratio of 0.43, which relates their ongoing transactions from legacy IT services to hybrid cloud and AI-driven solutions. In contrast, MFST maintains much lower debt-to-equity ratios, reflecting strong balance sheets with manageable leverage. WDAY leads again with an exceptionally high cash ratio of 1.62, suggesting a strong cash position advantageous for acquisitions and R&D spending. Strong cash ratios also provide cushions in times of economic uncertainty. ORCL's cash ratio of 0.39 is relatively low, meaning a larger portion of its liquidity is tied up in receivables and other non-cash assets, which could pose challenges in times of financial stress.



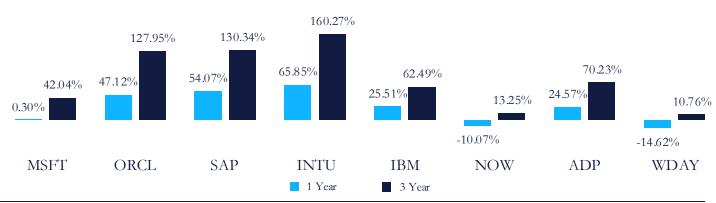


# Profitability and Growth

Ticker	Revenue (\$B)	EBITDA (\$B)	NI (\$B)	TA (\$B)	TE (\$B)	EBITDA/ Rev (%)	ROA (%)	ROE (%)	1 Yr (%)	3 Yr (%)
MSFT	262.80	140.37	92.76	533.90	302.70	0.54	18.37	34.34	0.30	42.04
ORCL	54.93	22.24	11.62	148.48	14.24	0.24	8.24	135.95	47.12	127.95
SAP	36.98	6.11	3.41	77.13	47.67	0.17	4.43	7.34	54.07	130.34
INTU	16.59	4.39	2.92	33.19	18.14	0.26	9.41	16.36	65.85	160.27
IBM	62.75	12.18	6.02	137.18	27.39	0.19	4.44	24.74	25.51	62.49
NOW	10.98	1.91	1.42	20.38	9.61	0.17	7.75	16.45	(10.07)	13.25
ADP	18.78	4.70	5.56	64.10	5.08	0.25	18.71	36.84	24.57	70.23
WDAY	8.16	0.72	1.62	16.42	8.62	0.09	10.62	20.33	(14.62)	10.76
Lower	13.79	3.15	2.27	26.79	9.12	0.23	5.38	13.24	(-0.05)	0.28
Median	36.98	6.11	3.93	77.13	18.14	0.17	8.24	20.33	0.25	0.62
Mean	56.46	22.58	14.40	124.69	54.66	0.40	9.77	33.61	0.23	0.75
Upper	58.84	17.21	8.82	142.83	53.10	0.29	14.32	35.59	0.51	1.29

The growth of these companies, especially considering the 3-year change in stock price, reflects the effect of major tailwinds such as movements towards cloud and SaaS-based solutions and the increasing needs for supply chain visibility. Microsoft is a dominant player in the ERP industry boasting an estimated 25% market share globally through their Dynamics 365 platforms. Their size and scalability relative to the other key players is apparent with \$262.8B in revenue and their strong profitability with the highest net profit margin of approximately 35% with ADP close behind at 30%. IBM and SAP SE are among the bottom of this metric with net profit margins of 9.6% and 9.2% respectively. This can be attributed to the high-level of competition within the market and being less strategically aligned with new drivers in the market. IBM and SAP SE both show low return on assets (ROA) which reflects inefficiency relative to other companies in generating revenue relative to their assets. Oracle, another major player in the ERP space, boasts a high return on equity (ROE) due to its large amount of debt used to fund further investment in the cloud and software initiatives. The diversity in metrics underscores the varying levels of financial health and strategic positions across the ERP space.

# 1Y vs 3Y Returns (%)

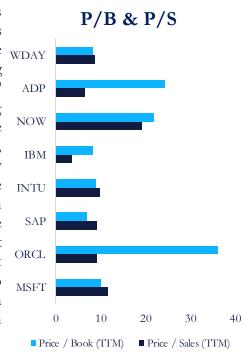




# Valuation Ratios

Ticker	Market Cap (\$B)	Enterprise Value (\$B)	Diluted EPS (TTM)	EV / Revenue	EV / EBITDA	Trailing P/E	Forward P/E	Price / Sales (TTM)	Price / Book (TTM)
MSFT	3,059	3,060	12.41	11.67	21.38	33.22	31.35	11.76	10.12
ORCL	500.43	577.74	4.09	10.52	25.44	43.75	25.51	9.26	36.41
SAP	325.94	326.16	2.65	9.26	44.71	102.75	43.10	9.40	6.99
INTU	164.27	167.69	10.28	10.11	36.89	57.09	30.58	10.05	9.06
IBM	230.49	274.29	6.88	4.37	22.53	38.83	23.09	3.72	8.44
NOW	208.36	204.87	6.42	18.89	89.25	149.39	62.11	19.39	21.96
ADP	124.88	126.95	9.59	6.76	20.69	32.01	30.77	6.70	24.59
WDAY	71.79	67.99	6.09	8.34	63.13	44.32	31.55	8.90	8.32
Lower	144.58	147.32	5.08	7.55	21.96	36.03	27.42	7.65	7.66
Median	230.49	274.29	6.42	9.26	28.62	44.32	30.77	9.26	9.06
Mean	555.37	568.61	7.16	9.81	39.18	61.70	34.15	9.75	14.58
Upper	413.19	451.95	9.94	11.10	53.92	79.92	37.33	10.91	23.28

The growing shift towards ERP solutions is evident through various valuation metrics, such as price-to-earnings (P/E) ratios, price-to-sales ratios, book ratios, and enterprise value-to-EBITDA multiples. Firms like  $_{
m WDAY}$ ServiceNow (NOW) and SAP SE (SAP) exhibit exceptionally high trailing P/E ratios of 149.93 and 102.75, respectively. This reflects investors' willingness to pay a premium for shares in these companies, signaling strong optimism and confidence in their growth prospects. Additionally, the forward P/E ratios for these firms are lower than their trailing P/E ratios, indicating that investors anticipate higher earnings in the future. This may suggest that the companies are currently undervalued based on their future earnings potential. High growth expectations and premium valuations can be seen in the enterprise value-to-EBITDA multiples of companies like ServiceNow (NOW), Workday (WDAY), and SAP SE (SAP, which stand at 89.25, 63.13, and 44.71, respectively. These multiples demonstrate that investors expect significant growth not only within these companies but also across the broader ERP industry. As a result, they are willing to pay a premium for future earnings, aligning with the market's positive outlook on the sector's growth trajectory.





# **M&A** Activity

## **Deal Flow Commentary**

The M&A environment at the end of 2024 has seen a decline in aggregate deal sizes due to factors such as high interest rates, inflation, and tariffs. Although these are more U.S driven, they are still influential globally. We can still see larger ERP providers are looking for transactions that present an opportunity for revenue creation through improvements in product offerings.



#### Advisors

Morgan Stanley



# Goldman Sachs

SAP acquired WalkMe, a Digital Adoption Platform (DAP), in a \$1.495B acquisition to further optimize user experience and productivity across several enterprise software solutions. WalkMe acts as an overlay to existing software, providing users with step-by-step guidance, automated workflows, and integration help through AI. This acquisition solves problems associated with digital transformation, user adoption, and engagement.



#### Advisors

J.P.Morgan

Automatic Data Processing (ADP) acquired WorkForce Software a leading workforce management (WFM) software provider. Although SAP offers WFM software, they have leveraged partnerships for more complex client offerings. This acquisition positions ADP well for continued growth and innovation in the Human Capital Management (HCM) industry without the need to develop new technologies in-house.



### Advisors

**Undisclosed** 

Infor acquired Albanero, a with data migration, management, and meshing capabilities. With this new acquisition, Infor's Industry CloudSuite solutions and external source systems can unify data on a singular platform, allowing for a singular enterprise view of company data and a foundation for AI capabilities. Data migration and meshing capabilities have historically been cost-intensive for midmarket customers, this acquisition further differentiates Infor in the business productivity software space.



# **IPO** Activity

## **Deal Flow Commentary**

The ERP sector has seen a mixed year for IPO activity. While cloud-based ERP providers continue to experience high demand, many companies are opting for strategic sales to larger tech firms or private equity buyers instead of pursuing IPOs. Despite this, investor appetite for ERP stocks remains strong, particularly for companies that integrate AI-driven automation and industry-specific solutions. Valuations for ERP firms have remained high, making it more attractive for founders and early investors to sell rather than go through the rigorous IPO process.

\$4.6B



OneStream

\$20/ Share

July 2024

Lead Underwriters

J.P.Morgan

KKR

Morgan Stanley

OneStream [OS] is a financial software company that provides cloud-based corporate performance management (CPM) solutions with strong revenue growth and scalability potential. Capital raised accelerates its cloud-based solutions, improving the efficiency of its financial tools. With rising demand for streamlined financial planning and reporting, OS capitalized on the opportunity to grow its enterprise customer base. These funds also supported the acquisition of DataSense software, strengthening their competitive position.

\$6.3B



ServiceTitan

\$101 / Share

December 2024

Lead Underwriters



WELLS FARGO ServiceTitan [TTAN] offers a cloud-based platform designed to help home and commercial service businesses manage operations. The capital was used to expand its service management platform, which is focused on integrating AI-driven automation. Investors recognized the firm's strong revenue growth and global operations as key drivers. Funds were also used to acquire Convex, a leading sales and marketing platform. By securing significant institutional backing, the company positioned itself for continued innovation and global expansion.

Poised for IPO



Visma

Current Valuation: €19B

Early 2026

**Notable Investors** 





WARBURG PINCUS

Visma is a Norwegian software company specializing in cloud-based accounting, payroll, and human resources software, addressing the critical need for efficient business operations among SMEs. Their superior product quality has attracted significant investments from firms that recognize Visma's robust strategic market position. Their ARR reached €2.3 billion at the end of Q4 2023, marking a 17% growth from the same period the previous year and reflecting 17 years of uninterrupted, year-on-year revenue and EBITDA growth.



# Notable Private Companies

## Competition of Privately Backed Providers

SME's will continue to demand tailored, cloud-based ERP solutions at a competitive price point. The rise of privately backed, more agile vendors who can provide numerous industry-specific solutions will see significant growth and M&A interest. The growing shift to AI-driven analytics and machine learning capabilities creates opportunities for smaller companies to innovate and develop extended capabilities within their ERP system.



Acumatica, Inc.
606 Employees
\$65.00M Raised to Date

#### **Notable Investors**









Acumatica is the leading private developer of integrated business management applications for SMEs in construction, distribution, manufacturing, retail, and general business. They offer their proprietary xRP platform with comprehensive offerings that stretch across financials, distribution, project accounting, and CRM focusing on customization. They also boast third-party solutions in the Acumatica Marketplace and tools to develop integrations in a no-code/low-code environment.



Epicor Software Corporation 4,100 Employees \$4.28B Raised to Date

### **Notable Investors**







Epicor Software tailors towards mid-sized to large enterprises, with their platform including sales management, supply chain management, and HR management spaces capabilities. Epicor's sophisticated data model is utilized in the aerospace and healthcare industries. They have also maintained their status on the Gartner Cycle for ERPs, outlining their innovative solutions leveraging artificial intelligence and machine learning to boost productivity.



Infor Global Solutions, Inc 17,000 Employees \$1.00B Raised to Date **Notable Investors** 







Infor Global Solutions, Inc., provides strong cloud deployment, on-site, and budget-friendly options for SME companies in industries such as aerospace, automotive, distribution, engineering, healthcare, and more. With user-friendly interfaces and robust analytics capabilities, Infor is utilized by those seeking a scalable solution. In addition to their industry-specific offerings, they also offer Human Capital Management, Supply Chain Management, and Sustainability and ESG add-on products.



# SAP

### **Company Overview**

SAP, founded in Germany in 1972 by former IBM employees, is the world's largest provider of enterprise application and enterprise resource planning software. They also provide software for supply chain management, procurement, travel and expense management, and customer relationship management. SAP helps companies and organizations run businesses profitably, adapt continuously, and grow sustainably. SAP has over 400,000 customers in over 180 countries. The company has grown from a small, five-person endeavor to a multinational enterprise with more than 105,000 employees.

### Latest News

- SAP reported 10% revenue growth on a 27% jump in cloud sales in its 2024 fiscal fourth quarter, beating analyst estimates by \$.49B USD
- SAP has strategically acquired the firm Project Partners Management GmbH, a German IT consultancy firm, to enhance the firms SAP transformation capabilities
- SAP reduced their workforce in Germany by about 3,500 due to restructuring and the firm focusing on growth in the companies AI offerings

#### Market Bulls View

- SAP has delivered 11 consecutive quarters of stable or accelerating cloud backlog growth, expanding from \$8.73B to \$19.65B, defying investor skepticism about its ability to transform customers to the cloud
- Major reorganization of its go-to-market strategy, focusing on expanding its mid-market segments and leveraging its partner ecosystem to drive adoption
- SAPs product has resulted in higher retention rates in the 90%+ range over the last few years, while adoption of the cloud is simultaneously increasing

### Market Bears View

- SAP's stock price has seen significant gains leading to a relatively high P/E ratio of 95.67, which concerns some analyst as it may be overvalued
- Firms migrating to newer versions of SAP cloud-based solutions such as S/4HANA can be complex and risky, with potential compatibility issues with older systems and customizations
- SAP is more expensive than other competing firms due to brand recognition, high implementation and maintenance costs, potentially leading to reduced competitive advantage as more firms start delivering high quality cloud ERP

### **Thesis**

SAP has established itself as a dominant force in the ERP sector, surpassing all financial outlook parameters for FY2024. The company reported a 43% increase in total cloud backlog, a 25% rise in non-IFRS operating profit, and a 10% growth in total revenue, among other strong performance metrics. SAP's continued success is driven by its strategic Integration of AI, with 50% of its FY2024 Q4 deals incorporating AI capabilities. SAP has strengthened its financial position through strategic acquisitions and research development leading to higher customer retention rates and sustained overall growth.

Equity Research Technology | ERP Systems Spring 2025

**Stock Rating: BUY** 

Price Target: \$310.10

Price (3/16/25): \$263.88

**Upside: 17.52%** 

Ticker: SAP

### Research Team

Andrew Shih

Craig Ottaviano

Evan Chang

Hussain Mahesri

Advay Vallabhapurapu

**EV:** \$319.83B

**Market Cap:** \$320.05B

EV/ Revenue: 8.65

P/E: 95.67

**P/BV:** 6.77

**\$0** 

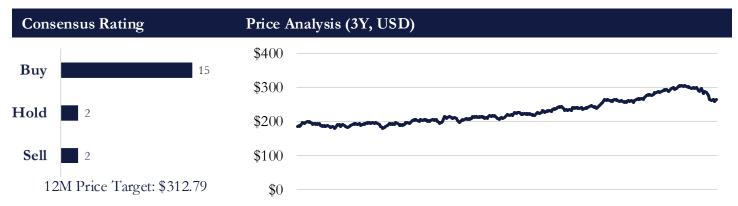
# SAP 52wk Range





# **Alternative Valuations**

### **SAP**



Firm	Analyst	Date	Analyst Rating	Price Target	Comparative Analysis
BBR	Tech Coverage	3/16/25	Buy	\$310.10	
<b>Bank</b>	Derrick Wood	3/14/25	Buy	\$310.00	
BNP PARIBAS EXANE	Ben Castillo	3/10/25	Outperform	\$313.00	
ALLIANCEBERNSTEIN	Mark Moerdler	2/19/25	Outperform	\$316.00	
<b>‰Citizens Bank</b> °	Patrick Walravens	2/18/25	Market Outperform	\$330.00	
<b>BARCLAYS</b>	Raimo Lenschow	2/14/25	Overweight	\$286.00	
Goldman Sachs	Mohammed Moawalla	1/30/25	Buy	\$336.00	
Jefferies	Charles Brennan	1/29/25	Buy	\$310.00	
вмо 🕮 🖰	Keith Bachman	1/28/25	Outperform	\$307.00	

### **Select Commentary**

Barclays	Rating: Overweight	Price Target: \$286	Research Team:
Expect at least a 12% increase	in total revenue growth in F	Y25 due to upside in the	Raimo Lenschow, CFA
cloud and software revenue as	nd EBIT growth		,
SAP expects to benefit from a	ecent AI models like DeepSe	eek, unlike a majority of	Coor of Manufact CEA
big tech companies, due SAP'	s flexibility regarding AI infra	astructure and large	Sven Merkt, CFA
language models			
• FCF was better than expected	, which benefits by roughly \$	\$217m from a change in	Isaac Pillavin
the definition		_	I



# **Initiating Coverage:**

Oracle (NYSE: ORCL)

**Oracle** 

# **Company Overview**

Oracle, founded in 1977 by Larry Ellison, is a leading provider of enterprise applications and infrastructure offerings through a variety of flexible IT deployment models, including on-premises, cloud-based, and hybrid. Oracle pioneered the first commercial SQL-based relational database management system, but also sells enterprise resource planning (ERP), customer relationship management (CRM), and human capital management (HCM) applications. They have over 159,000 full-time employees in over 170 countries, serving to more than 430,000 customers.

### Latest News

- Amidst national security and data privacy concerns over TikTok's use of Chinese technology, the Trump Administration and Oracle are currently in discussions of bringing TikTok under U.S. ownership in which Oracle would store U.S user data on their servers
- Oracle is in current discussions with the Indonesian government to establish cloud data centers on Batam Island, a deal that aligns with Oracle's planned \$6.5B investment in cloud facilities in Malaysia, further expanding Oracle's presence in Southeast Asia

### Market Bulls View

- Oracle is planning on expanding its cloud infrastructure to compete with larger providers with expectations to double data center capacity in 2025
- Oracle reported \$130B of remaining performance obligations, a 62% YoY increase
- Oracle's joint venture involvement in "Stargate" alongside OpenAI, Softbank, and MGX plans to invest up to \$500B in AI infrastructure across the US by 2029; this project would allow Oracle to be a dominant AI infrastructure provider benefitting from long-term growth in cloud computing, AI data centers, and enterprise software demand

### Market Bears View

- In Oracle's recent 2025 Q3 reported earnings per share of \$1.47 and sales of \$14.1B, missing analyst's projections of \$1.49 and \$14.4B
- Oracle's guidance for the May-ending quarter of 9% revenue growth missed forecasts of 9.5%, indicating more conservative near-term growth prospects
- Similar to many stocks that benefitted from last year's AI enthusiasm, Oracle has been affected by concerns over the return on it's large technology infrastructure investments

#### **Thesis**

Oracle's aggressive investments in the cloud infrastructure space, AI-powered cloud solutions, and resilient enterprise software revenue model make Oracle a compelling buy with long-term growth prospects. Through their positioning as one of the leading providers of cloud database and enterprise software solutions alongside their future prospective involvements in TikTok, Stargate, and expansion in global markets, Oracle's near-term high capital expenditures and investments will set them up for strong future positioning and long-term shareholder gains.

Equity Research Technology | ERP Systems Spring 2025

Stock Rating: BUY

Price Target: \$175.00

Price (3/14/25): \$149.27

**Upside: 17.24%** 

Ticker: ORCL

### Research Team

Andrew Shih

Craig Ottaviano

Evan Chang

Hussain Mahesri

Advay Vallabhapurapu

**EV:** \$497.04B

**Market Cap:** \$418.59B

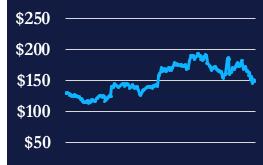
EV/ Revenue: 8.91

**P/E:** 35.04

**P/BV:** 25.02

\$0

# Oracle 52wk Range





# **Alternative Valuations**

### **Oracle**



Firm	Analyst	Date	Analyst Rating	Price Target	Comparative Analysis
BBR	Tech Coverage	3/12/25	Buy	\$175.00	
<b>BARCLAYS</b>	Raimo Lenschow	3/11/25	Overweight	\$202.00	
CANTOR Ditagerald	Thomas Blakey	3/11/25	Overweight	\$175.00	
cîti	Tyler Radke	3/12/25	Neutral	\$160.00	
<b>/</b> Deutsche Bank	Brad Zelnick	3/11/25	Buy	\$200.00	
Goldman Sachs	Kasthuri Rangan	3/11/25	Neutral	\$165.00	
Jefferies	Brent Thill	3/11/25	Buy	\$220.00	
J.P.Morgan	Mark Murphy	3/11/25	Neutral	\$135.00	
MIZUHO	Siti Panigrahi	3/10/25	Outperform	\$210.00	

### **Select Commentary**

M	lizuho	Rating: Outperform	Price Target: \$210.00
•	Strong RPO growth of 63% Y/	Y or \$130B (vs. consensu	s of \$104B) that further
	increased management confiden	nce in accelerating revenu	ne growth from 8% in
	FY25 to 15% Y/Y in FY26 and 2	20% in FY27	

• Near-term results could be impacted by the timing of OCI capacity coming online

• Oracle's broad portfolio of infrastructure and application products, its muti-cloud strategy through hyperscaler partnerships, and unprecedented AI demand position it well to reaccelerate growth

### Research Team:

Siti Panigrahi

Phillip Leytes

Chad Tevebaugh, CFA

Sameer Kalucha



# Team Outlook

The long-term outlook of the ERP industry is strong following the larger trend of digital transformation with several secular tailwinds including the adoption of ERP systems by small and medium-sized businesses, an increasing need for supply chain visibility, the wide-scale adoption of cloud-based ERP systems, and automated data privacy and security compliance measures. As ERP systems become more advanced and embedded within company operations, integrations with other technologies such as the Internet of Things and artificial intelligence-powered business insights allow organizations more detailed oversight, improved operational efficiency, enhanced management decision-making, and reduced costs. Despite these advances, the ERP industry continues to face challenges such as data migration and integration challenges, cost overruns during implementation, mismatches between company objectives and ERP systems. Additionally, the sales cycle and implementation timeline of ERP systems can be arduous for organizations requiring significant time and investment, creating barriers to entry. In 2025 we believe that the adoption of ERP systems will slow due to general economic uncertainty and legislative changes that may delay major investment from companies.

Looking ahead, the ERP industry can be expected to undergo change through technological innovation and evolving business demands. The shift towards Low-Code ERP systems will allow companies to adopt solutions more flexibly aligning systems with specific needs while reducing implementation time and cost. The growing integration of artificial intelligence will enhance ERP capabilities by automating tasks like reporting, forecasting, and decision support. Additionally, ERP platforms are becoming central hubs for an organization's digital ecosystem with seamless connection to several CRM, HR, and supply chain tools through the usage of open API's and low-code configurations. Data privacy and security regulations will continue to prompt changes to ERP system's data management capabilities that also include continual improvements in cybersecurity measures. As ERP systems continue to evolve unlocking greater operational agility and automation for organizations, their broad adoptions across industries is likely.



# Let's Talk



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