Your Complete Guide to Modern ERP

A handbook for today’s innovative business leaders

Handbooks for the Modern Enterprise | Volume 1 | Third Edition
# Table of Contents

**Overview**
The Clear Imperative for Cloud Applications

**Chapter 1**
Now Is the Right Time to Modernize Your ERP

**Chapter 2**
Characteristics of Today’s Modern ERP

**Chapter 3**
How Companies Deploy Modern ERP Systems

**Chapter 4**
Assessing Cloud ERP Results After Deployment

**Chapter 5**
Why Oracle Is Your Best Choice for Modern Cloud ERP

**Summary**
Your Journey to Oracle Cloud Starts Today
Overview

The Clear Imperative for Cloud Applications

Research shows that legacy ERP systems were not designed for usability and insight. More than three quarters of business leaders say their current ERP system doesn’t meet their present requirements, let alone future plans. These systems lack modern best-practice capabilities you need to compete and grow. To enable today’s data-driven organization, the very foundation from which you’re operating needs to be re-built—it needs to be modernized.

Oracle’s goal is to help you navigate your own journey to modernization by sharing the knowledge we’ve gained working with many thousands of customers who use both legacy and modern ERP systems. To that end, we’ve written this handbook outlining the fundamental characteristics that define modern ERP.

Did you know?

90%
of large global companies will mainstream cloud computing in three years

60%
of productivity-boosting opportunities during the next decade will be cloud-based

44%
of finance applications within three years will be in the cloud

From ERP 1.0 to ERP 2.0

The rapid evolution of the cloud has dramatically altered the ERP landscape for companies of all sizes. Coupled with mobile platforms, our work anywhere and anytime culture requires modern cloud-based ERP systems not tied to yesterday’s back-office, on-premises environments. This next generation of ERP—ERP 2.0—builds on the formidable history of ERP 1.0, but eliminates the need for multiyear projects and heavy customization.

ERP 2.0 delivers solutions rapidly through the cloud so organizations can respond quickly to volatile markets and industry disruption while supporting next-generation employees with security, insight, and agility.

Business-critical collaboration and decision-making depends on both enterprise data access and analysis, and on modern ERP systems that deliver the infrastructure and tools required to get done what you need.

The world is far more complex and competitive than when ERP 1.0 first arrived on in-house mainframes. Finance and technology are inexorably linked, as growing volumes of data drive not just operations and reporting, but critical business decisions. Aligning ERP 2.0 with a company’s people and products delivers digitally enabled business agility, which translates into greater operational and sales success.

1960s
Mainframe computing

Inventory control packages

1970s
Midrange computing

MRP
Material requirements planning

1980s
Client/server computing

MRP II

1990s
Internet computing

ERP 1.0
On-premises enterprise resource planning deployment with extensive customization of business processes

2000s
Service-oriented architecture

ERP 1.0+
Core ERP 1.0 extended with supply chain, expense management, and more, making implementations larger and more costly

2010s
Cloud, mobile, social, analytics

ERP 2.0
splits off functions such as HCM and offers infrastructure for cloud solutions to coexist

Digital technologies fundamentally change how users engage with applications
Chapter 1

Now Is the Right Time to Modernize Your ERP

There’s no argument that legacy ERP 1.0 systems deliver significant horsepower to run your organization, enable external interactions, and directly impact how you fare against competitors. However, you need to consider the technological and generational changes taking place in your business and how your current on-premises environment could be holding you back. Regardless of business size, there are three key inflection points where the need to modernize becomes apparent. Most organizations are experiencing at least one of these today.

1 Operational efficiency—Does your current ERP system support your operational goals? Consider if you’ve acquired a company using a different ERP system, your legacy system is in need of an upgrade, you’re launching a subsidiary, or you’re moving to a shared-services model. If you’re faced with any of these scenarios, achieving operational efficiency has become a priority. Therefore, ERP modernization needs to be part of the conversation.

2 Digital transformation—Today’s users demand a level of collaboration and ease not previously expected from on-premises solutions. In addition, their expectations for ERP systems reflect the ubiquity of digital technology in their lives. They also require a single source of truth that cascades all operational functions, real-time analytics with configurable role-based dashboards, mobile access for applications, and social collaboration tools—all with easy and rapid regular updates.

3 Growth and confidence—Growth is often synonymous with global expansion, increasing financial complexity with distinct accounting, reporting, and compliance requirements. Add in acquisitions, divestitures, new markets, customer growth, or IPO preparations, and the need to model these opportunities and their impacts requires having the right systems with processes in place to support increased regulatory scrutiny.

Whenever inflection point describes your organization, you need a modernization strategy that fits your needs, culture, budget, and timeline. Acknowledging where your current system does not support your business objectives is the first step in your ERP modernization journey.
Top 10 signs it’s time for modern ERP 2.0
You need modern ERP when one or more of these conditions are present:

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<tr>
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<tbody>
<tr>
<td><strong>1 ERP upgrade required</strong></td>
<td>Your on-premises system requires an expensive upgrade as it ages past support dates and your competitors deploy cloud solutions</td>
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<td><strong>2 Usability dissatisfaction increases</strong></td>
<td>Digital native employees complain about usability and ask why their ERP system isn’t like smartphone apps</td>
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<td><strong>3 Reporting challenges increase</strong></td>
<td>Management reporting is too cumbersome because of ERP 1.0 limitations</td>
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<td><strong>4 Requires new hardware</strong></td>
<td>Physical ERP 1.0 infrastructure is past due for an expensive capital replacement</td>
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<td><strong>5 Maintenance costs increasing</strong></td>
<td>ERP system fees and services costs increase annually</td>
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<td><strong>6 Unintegrated systems provide disparate data</strong></td>
<td>Growth in disconnected systems and enterprise data give conflicting answers to key questions</td>
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<td><strong>7 Rapid and global company growth</strong></td>
<td>International expansion, mergers and acquisitions, and core market growth are hampered by your on-premises ERP system</td>
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<td><strong>8 New compliance requirements</strong></td>
<td>Increasing financial and compliance requirements impact your enterprise</td>
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<td><strong>9 Business demands increase</strong></td>
<td>Your business cannot keep up with increasing demands</td>
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<tr>
<td><strong>10 Preparing for an IPO</strong></td>
<td>You are ready for a public offering which mandates stringent financial information and controls</td>
</tr>
</tbody>
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Chapter 2
Characteristics of Today’s Modern ERP

No matter which inflection point represents your organization, there are key components of a modern ERP system that should address the top concerns most companies have when considering a move to the cloud. There are seven components that fall into two categories—modern platform parameters and modern business application design. Together, these seven components define the standards of a modern ERP system. To establish a foundation for agility and growth, these platform components should be considered.

1 Security—Your business data is your business. A multilayer approach to securing data at every layer of the stack is paramount for maximum data protection. Using a secure data isolation architecture in the cloud reduces risk and enables faster data access and processing.

2 Integration—ERP cloud solutions must seamlessly connect your business, people, and processes. Your solution must also connect to other clouds, to your on-premises systems, and to third-party solutions. To ensure compatibility and scalability you should choose a solution that uses a common framework based on industry standards.

3 Personalization (not customization)—With ERP 1.0, nonstandard or customer-specific business practices resulted in customizations that increased downstream maintenance and upgrade challenges. Cloud-based solutions built on a standards-based platform offer personalization and configuration within the application, resulting in “upgrade-safe” enhancements. If your on-premises customizations fall into areas such as workflows, integrations, and reporting, there’s a good chance your requirements can be addressed by cloud-based solutions.

In addition, modern cloud applications should scale with your business and support the latest digital technologies to meet your organization’s needs. These apps should have the following design components:

4 Completeness—Built-in best practices permit standardization, which lowers costs and increases productivity. Even if your cloud transition is incremental, access to a complete suite of integrated best-practice business processes delivers enterprise standardization. Consider whether a cloud ERP vendor supports a full suite of applications or if integration to other cloud solutions will be required. If you initially select a hybrid cloud/on-premises model—a common operational option—who ensures integrations between on-premises and cloud applications?
5 Globalization—Entering emerging markets and new geographies creates complexity by requiring any ERP cloud solution to support multiple subsidiaries and country localizations. Often, local data centers must comply with data residency requirements. The right cloud ERP must enable sharing of enterprise information seamlessly across operations, business units, and headquarters.

6 Insight-driven analysis—An cloud ERP solution must have secure, real-time data access at its financials core to provide a single source of truth across roles, reports, and analysis. This ensures timely delivery of accurate KPIs to front-line managers, and dramatically simplifies a process once dependent on a period close or a separate data warehouse extract.

7 Digital capabilities—For the modern back office, digital technologies must be integrated into business processes and transactions to create a seamless, productive, and intuitive experience. The user experience needs to be engaging and include mobile accessibility for on-the-go employees, native social integration for secure in-context collaboration, and out-of-the-box optical character recognition for invoice imaging.

On-premises ERP 1.0 vs cloud ERP 2.0

These are the top five reasons for moving from ERP 1.0 to ERP 2.0:

- **45%** Avoid infrastructure investment
- **38%** Lower TCO
- **33%** Avoid on-premises upgrade project
- **33%** Rapid access to new ERP functionality
- **24%** One source of data with a global view

Chapter 3
How Companies Deploy Modern ERP Systems

As you plan your modern ERP strategy, you should pull together a deployment team that includes potential implementation partners as well as cloud providers. Consider the following elements of a modernization strategy, which apply regardless of technology and market size.

1 Clearly define project goals—Establish KPIs that measure business benefits such as productivity, financial close speed, and infrastructure costs. Measurable items help you to build project consensus and approval, align to your strategy, and provide a baseline to assess success at milestones.

2 Document processes and inventory systems—Map your complete IT infrastructure, including internal and third-party solutions and their integration points, plus redundant systems. Include your organizational structure to understand roles in conjunction with data ownership, management, and use. It’s also critical to define a single source of truth before starting your project.

3 Get strong executive sponsorship—Regardless of company size, executive sponsorship is critical. You need continuous executive support throughout your entire project. Coupled with ongoing employee communication, leadership commitment to your new cloud ERP system will help drive success.

4 Select an implementation approach aligned to the organization—A migration to cloud ERP will vary by customer, and does not require deploying all cloud ERP applications at once. Many companies choose to incrementally adopt high-value cloud services that will exist alongside their on-premises solutions, resulting in a hybrid environment. Other companies start a modernization journey with core ERP applications, building towards a complete end-to-end transformation.
5 Embrace standard best practices built into the application—Modern best practices are built into cloud applications, so you can replace legacy software along with outdated processes and approaches. ERP 2.0 delivers more than 80% of common business processes you need with built-in standardization—the perfect place to start your project.

6 Study reporting and analytics early—With cloud ERP, users understand your business in real time. Advanced multidimensional analysis and data visualization provide insights quickly without a data warehouse. Define reporting and analytics early in the project plan. Once live, you can quickly generate meaningful reports.

7 Involve users and process owners from the start—End users of ERP systems determine the success of your project. Throughout your implementation, include demonstrations and trials at regular intervals.

With your strategy and roadmap in place, solution choices made, and a partner who supports your vision, you’re ready to execute. Now it is time to plan a party….really. Moving your organization to a cloud ERP platform, even using small, incremental steps, will fundamentally change the way your people work. Celebrate the launch to nurture everyone’s commitment and celebrate again when milestones are reached.

Your Complete Guide to Modern ERP

Emerging technologies further drive modern ERP

Faster revenue growth at companies that have deployed emerging technologies (over a 36-month period versus those that have not deployed)

58% faster

Intelligent automation is the key to regulatory compliance

74% agree

Most financial approvals will be automated with the next five years

77% agree

## On-premises ERP 1.0 vs modern cloud ERP 2.0

Comparing financial models and costs of ownership

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<tr>
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<th>ERP 1.0</th>
<th>ERP 2.0</th>
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<tbody>
<tr>
<td><strong>Business financial model</strong></td>
<td>Capital expenses for on-premises ERP systems divert funds from important business growth needs and often incur taxes</td>
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<td><strong>ERP software</strong></td>
<td>On-premises software requires up-front purchase and taxes; cloud ERP leverages operational expenses month to month</td>
<td>$</td>
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<td><strong>ERP software maintenance</strong></td>
<td>On-premises ERP requires annual maintenance fees to be current with security fixes, critical patches, and updates</td>
<td>$</td>
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<td><strong>Hardware for ERP software</strong></td>
<td>On-premises ERP requires additional capital expenses; hardware typically needs physical upgrade every 3 to 5 years</td>
<td>$</td>
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<td><strong>Hardware maintenance</strong></td>
<td>On-premises ERP hardware often requires annual maintenance fees or contracts, high-cost space, utilities, and staff</td>
<td>$</td>
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<td><strong>Database for ERP software</strong></td>
<td>On-premises ERP systems need an on-premises database, which often requires staff and contractors to deploy it</td>
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<td><strong>Database maintenance</strong></td>
<td>On-premises ERP requires annual maintenance fees and staff to keep the ERP database secure, current, and optimized</td>
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<td><strong>System upgrades</strong></td>
<td>On-premises ERP hardware and software system upgrades can cost from $100K to more than $1M per project every 3 to 5 years</td>
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<tr>
<td><strong>System security</strong></td>
<td>On-premises ERP systems have additional costs for security and monitoring software, with staff needed to monitor and maintain</td>
<td>$</td>
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<tr>
<td><strong>System disaster and recovery</strong></td>
<td>All on-premises ERP systems have large costs for disaster and recovery plans, infrastructure, services, staff, and redundancy</td>
<td>$</td>
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<tr>
<td><strong>Other important factors</strong></td>
<td>IT resources for ERP deployment and maintenance</td>
<td>Many Direct, subcontractor, and partner resources</td>
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<td><strong>Deployment speed</strong></td>
<td>Time needed for project planning and development</td>
<td>1–2 years or more...</td>
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<tr>
<td></td>
<td>All included: No additional or hidden costs</td>
<td>Minimal For business optimization and user assistance</td>
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Chapter 4
Assessing Cloud ERP
Results After Deployment

When you’re finished crafting a strategic and comprehensive ERP modernization strategy, with carefully documented KPIs, you’ll have the baseline for assessing your results—you simply need to look back in order to look ahead.

When establishing KPIs, be realistic about how you’ll measure value. Document your status quo metrics before you kick off the implementation and set reasonable intervals at which to assess results. Based on those assessments, you can configure features to adjust to your business goals and needs—something that’s much easier to do with cloud applications.

In addition, it’s important to establish baselines for priorities using a maturity model mapped to your organization by assessing and quantifying project goals. For example, a goal to reduce accounts receivables through rapid, automated invoicing with faster close and reporting processes as well as reduced IT costs. But a comprehensive assessment is not just about technology. People, governance, process, and strategy are also key factors for success.

For meaningful results, incorporate holistic measures related to these factors into your KPIs that connect back to your original business case. Whatever your path, it’s important to craft a business case to justify your approach. Leverage resources that help you understand cloud technologies, the positive impact they can deliver, and the financial advantages of modern cloud ERP 2.0.

Nontechnology factors drive success

Four factors aside from technology directly influence the success of every cloud ERP project.

People—Users gain a modern design that exceeds expectations and improves their experiences.

Process—Updated processes deliver desired outcomes, reports, and data.

Governance—Active project oversight and risk management lowers schedule risk and delivery cost.

Strategy—Proactive enterprise promotion and training drives rapid adoption.
Chapter 5

Why Oracle Is Your Best Choice for Modern ERP Cloud

Oracle delivers a single cloud ERP that is enterprise-grade and ready to help grow your business today. It’s built on a robust union of platform, applications, and approach using financial, procurement, project portfolio, and enterprise performance management.

Our platform and applications include:

1 Modern standards-based platform—Oracle leverages this fundamental, up-front design principle to help deliver
   - Security and scalability
   - Integration and connectivity across enterprise applications
   - One unified business system
   - Emerging technologies including AI, blockchain, and IoT
   - Gen 2 cloud infrastructure

2 Modern best practice-based applications—ERP cloud applications combine modern technology, best practices, and connectivity with knowledge built from decades of experience.
   - 21st-century global accounting
   - Embedded analytics and reporting
   - One suite for a complete solution
   - Future-proof enterprise applications
   - Industry-focused solutions

3 Modern innovative approach—There’s economic benefit when you modernize your ERP system in the cloud. Oracle and its partners offer tools to determine the financial advantages of a cloud ERP project to ensure a successful implementation.
   - Enterprise benefits calculator
   - Finance self-assessment
   - Access to Oracle Consulting
   - Cloud Marketplace partner catalog

In fact, Oracle Cloud ERP can offer substantial savings in an OpEx rather than CapEx model.
Summary

Your Journey to Oracle Cloud Starts Today

Every organization can leverage Oracle Cloud. Our sales teams and partners will get you started on your journey to a modern cloud that’s the foundation for growth and success. And if you’re already an Oracle on-premises applications customer, consider Oracle’s unique Customer 2 Cloud program.

One complete SaaS solution with comprehensive security, scalable deployment, and high performance for

**ERP | SCM | HCM | EPM | CX**

Delivered by one experienced, innovative, and global cloud vendor.

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About Oracle

The Oracle Cloud offers a complete suite of integrated applications for Sales, Service, Marketing, Human Resources, Finance, Supply Chain and Manufacturing, plus Highly Automated and Secure Generation 2 Infrastructure featuring the Oracle Autonomous Database. For more information about Oracle (NYSE: ORCL), please visit us at oracle.com.