Cloud ERP

For dummies®

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Gain productivity and flexibility

—

Have a consistent view across your business

—

Get next-gen technology and enhancements

Ed Tittel

Oracle Special Edition

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Cloud ERP For Dummies®, Oracle Special Edition

Publisher's Acknowledgments

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Introduction

E*RP* is an acronym for enterprise resource planning (but it's never sounded out, to avoid imitating rude noises). More important, ERP describes a kind of software that organizations use to enable and support a company's business strategy. These include such functions as accounting, project management, procurement, risk management and compliance, and supply-chain operations. In addition, a complete ERP software suite includes enterprise performance management software to help organizations plan, budget, predict, and report on financial results.

About This Book

ERP systems are generally designed around a single, comprehensive, well-defined set of data structures within a common database. This approach ensures that all data used across an enterprise is consistent, validated, and based on common definitions and shared user experiences.

Essentially, ERP defines a set of constructs for business information so that business workflows work properly and predictably across business departments. Primarily, ERP serves to enable, simplify, and standardize business processes. This explains how finance, human resources,

engineering, IT, marketing, and operations can exchange valid, compliant data, and how people and systems in those departments can work together well. Simply put, ERP helps people collaborate and ties business processes and technologies together across their organization.

One vital principle that informs ERP is central collection of data for broad access and use. Instead of relying on multiple databases and an outsize collection of disconnected spreadsheets, ERP systems bring order out of chaos. With ERP at their beck and call, all employees — from the CEO to accounts payable staff — can create, store, and use data through a set of common processes, tools, and controls. Backed by a secure centralized data store, all users can be sure that data is accurate, current, and complete. Data integrity automatically applies to every ERP task, from quarterly financial statements or filings to ad-hoc outstanding receivables reports. No need for disconnected, insecure, unprotected, and error-prone spreadsheets either!

Foolish Assumptions

I made some basic assumptions about you, gentle reader, in writing this book:

>> I assume you know a fair amount about ERP systems and software, especially how it provides useful information to users and organizations.

>> I assume you also know something about how ERP systems are defined, set up, and managed.

>> I assume you have a basic understanding of how ERP software works and what kinds of problems and issues your existing ERP software presents to your organization.

Icons Used in This Book

Occasionally, special icons appear in the left margin. They call attention to important or noteworthy terms and topics in the text. Here's what you'll find:

REMEMBER

The Remember icon points out information worth recalling.

TIP

The Tip icon flags something useful or helpful by way of suggestion, advice, or observation.

Beyond the Book

This book helps you discover more about choosing, working with, and using ERP software — especially modern, integrated end-to-end systems and platforms. For more material, try these resources:

» www.oracle.com/erp

» www.oracle.com/applications

» www.oracle.com/what-is-erp

Chapter **1**

Defining ERP for Your Business

Every business or organization is different. That means that, although the kinds of data and business processes that enterprise resource planning (ERP) must handle are somewhat alike, no two operations will ever be identical.

Every ERP Solution Is Unique

The basic characteristics that define modern ERP change only slowly. But the way that ERP systems get implemented — and especially the data that any ERP system stores and uses, along with controls that govern how that data is used, entered, validated, and so on — changes from implementation to implementation.

ERP is the system, or collection of systems, that a business uses to manage its financials and other core business activities. Depending on how a business defines ERP for itself, this may involve one system; multiple integrated systems; multiple, disjointed, and disconnected systems; or even spreadsheets. Organizations use ERP to collect, store, manage, report, and interpret data from their various business activities. Historically, ERP ran as on-site software. Today, ERP is increasingly cloud-based.

The best ERP systems offer a comprehensive, continuously updated view of core business processes using common databases. Thus, ERP systems track resources necessary to conduct business — including cash, raw materials, and production capacity — along with the state of business commitments such as orders, purchase orders, invoices, payroll, and so forth.

Many ERP systems share data across departments — including manufacturing, purchasing, sales, accounting, and more, along with corresponding checks and controls — to provide information and guidance on how

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to conduct business. In fact, ERP acts as a conduit for business information between and among organizational units. Then, too, ERP provides an important source for information to outsiders (partners, public and private investors, venture capitalists, stockholders, and more) in feeding data into public, pro–forma reports and analyses and their private counterparts.

TRACING ERP'S TECHNOLOGY ROOTS

ERP traces its roots back to mainframe computing and inventory control packages in the 1960s. In the 1970s, wholesale adoption of DBMS tools and technologies facilitated a move to materials requirements planning (MRP) systems. By the late 1980s, MRP morphed into ERP through on-premises systems that enabled customization for specific business processes.

In the 2000s, adoption of software as a service (SaaS)–oriented architectures saw ERP extended to supply chains, expense management, and HR and compliance functions. In the 2010s, cloud computing functions ushered in a new ERP era. New digital technologies changed how users interacted with applications, including ERP.

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For each organization, ERP must reflect specific workflows to make sure business processes work. Items and activities tracked in a retail company differ from those for a heavy equipment manufacturer. ERP gains impact and value from its ability to handle the right mix of business capabilities that match the data and workflows in your organization.

Flexibility Is Key to Usable ERP

Today, many companies run their businesses on a patchwork of finance and operations systems commonly called ERP that prevents them from adequately keeping up with constantly changing market environments. This situation creates data silos, along with disconnected processes and user experiences that make it difficult to react to market shifts quickly. They might also compromise data security. Indeed, flexibility is a key ingredient in ensuring that ERP provides the kind of accurate and timely information that businesses need.

ERP doesn't have to be a high-maintenance patchwork resulting from years of customization and mergers and acquisitions (M&A). It doesn't have to slow down the business. New technologies such as machine learning and intelligent automation, as well as immersive user

experiences, make it more valuable and transformative for companies to run their businesses on a new generation of ERP.

Today's technology-driven ERP enables businesses to become more agile and nimble and to keep pace with change, stay ahead of problems, and take advantage of trends and emerging opportunities. In fact, modern ERP fits very well into a philosophy of constant improvement and continuous innovation.

The absolute requirement for modern ERP is timely data that takes a unified view of the entire business. It lets business leaders act on real-time insights to make effective and impactful decisions. The ability to act on insights through support for highly automated and seamless processes means that a business can execute faster and spend more time growing and developing new opportunities.

Here's a list of signs that it's time for modern, next-gen ERP:

>> You're stuck on an old version because upgrading heavily customized setups is costly and disruptive.

>> Usability dissatisfaction is mounting, while reporting remains difficult and incomplete.

>> Aging and maintenance-heavy customizations don't sync with business processes.

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- ❯❯ Maintenance costs for hardware and software keep increasing.

- ❯❯ Disparate, disjointed systems provide incoherent or conflicting views of status and situation.

- ❯❯ Current business process may not be supported. Departments may rely on spreadsheets to track and manage their work.

- ❯❯ Major business events — M&A, initial public offerings, headquarters relocation, shared service initiatives, business model shifts, and new management — all demand ERP changes.

- ❯❯ Organizations can't keep up with changing risks, security threats, and regulatory mandates.

- ❯❯ Rapid, global company growth is hampered by the existing ERP system.

- ❯❯ The entire hiring cycle impacts organizations, especially where ERP is concerned. The existing ERP guard is retiring, but retaining employees is hard with aging systems. Recruiting new talent using last-century business systems is harder still.

- ❯❯ You need to invest in new hardware.

- ❯❯ You need to accommodate changes to your business model, shared service initiatives, or new management.

How to Meet Your ERP Needs

By examining drivers for ERP modernization you can evaluate your organization's upgrade needs. These require analysis of ongoing technology and generational changes in the business and how current capabilities may hold things back. Three key inflection points guide this analysis:

» **Operational efficiency:** Does the current ERP system support operational goals? You may need to incorporate another ERP system after an acquisition, your own legacy system may need upgrading, a new subsidiary may be starting up, a new product or business model may be coming online, or you may be moving to a shared services model. For any or all of these, operational efficiency is a must. That puts ERP modernization on the table.

» **Digital transformation:** These days, users demand collaboration and ease of use not typical in on-premises ERP. User expectations for ERP with smartphone-like experiences reflect everyday digital life. Users need a single source of truth for all operational functions, real-time analytics with role-based dashboards, mobile access, and social collaboration tools. ERP must also be easy to update often. Projects can't take years to finish.

» **Growth and compliance:** Growth often means global expansion, increased financial complexity, and regionalized accounting, reporting, and compliance needs. Then, too, growth means an increase in data, with all the issues involved in securing, managing, analyzing, and using that data. Modeling opportunities and their impacts (including M&A, new markets, customer growth, and more) require the right systems with processes in place to support regulatory scrutiny.

A modernization strategy must take these inflection points into account and fit your organization's culture, budget, needs, and timeline. Recognizing where your current system fails to support business objectives is the first step toward ERP modernization.

Adapting ERP to Accommodate Change

To begin with, organizations can use modern ERP to make more and better use of what's already available to them — the data and business processes they already use to handle everyday business functions. Given the flexibility, adaptability, and user-friendly nature of a modern ERP environment, a good initial way to foment change in an organization is to do more of the same — except to perform better and faster.

Next, organizations can look to enhanced access and capabilities that modern ERP systems bring to the table. For example, they can leverage user- and mobile device–friendly applications. Why not let a smartphone photo of an invoice or receipt act as input to a payment system or a reimbursement request, for example? Modern ERP systems make this kind of thing simple and straightforward.

Organizations can build on their employees' current skills and knowledge to extend their capabilities and provide faster, better service. If tech support or frontline workers can easily forward requests for changes in the look, feel, and functions of common everyday applications, change can help boost productivity and improve user experiences at the same time. Developers and managers know that those requests that keep popping up are probably worth investigating, if not implementing, in the interest of getting things done quickly, easily, and with less friction.

In addition, a modern ERP system should enable and accommodate business changes easily and quickly. A new pricing or discount strategy can't affect the bottom line until it plays into the next transaction that occurs. Modern ERP lets businesses translate new strategies and approaches into actionable capabilities, so that they can pivot on a dime, and then pocket that same dime to boost their profitability. Lots of minor improvements add up, as does the ability to encourage and welcome change in a timely fashion.

In general, planning for change also helps make room for innovation. By soliciting input and suggestions from frontline workers and customers, organizations show themselves willing to listen and learn from those with real-world, everyday experience. By implementing changes based on such input, organizations make systems faster, easier to use, and more productive.

Eventually, the benefits of flexibility and a change-tolerant, supportive environment will set people's creative juices flowing. Salespeople will naturally propose more and better ways to sell things, while support staff will do likewise for taking care of service after the sale. This phenomenon will pervade your whole organization as people see what modern ERP can already do and start to understand that it can do interesting and valuable things for them, too. Modern, capable data controls also help organizations identify risks at their point of origin and empower users to make better decisions.

Chapter **2**

Mapping Your ERP Journey

I f your organization needs to modernize its enterprise resource planning (ERP) environment, you need to understand the elements involved in transitioning from the status quo to a new, modern approach. To get underway, take a look at a typical legacy landscape from which most organizations will depart, before pondering what's involved in moving forward into modernized ERP.

The Legacy of ERP's Origins

Introduced in the 1980s, the original ERP implementation — ERP 1.0 — involved on-premises ERP deployment using extensive customization for business processes. The world is both more complex and more competitive than when ERP first appeared on in-house mainframes. Today more than ever, finance and technology are interlinked, with growing volumes of data driving critical business decisions, as well as operations, reporting, and compliance.

That said, the current ERP landscape is often a hodge-podge of discrete and disparate systems — many acquired along with mergers and acquisitions (M&As) and never integrated or aligned with other on-premises platforms and solutions. In addition, a surprising number of companies still rely on spreadsheets or manual analysis to analyze and plan purchasing, handle project management, and drive key financial and compliance reports. These may not even be tied to ERP systems or other databases.

Organizations are often constrained by monolithic, non-conforming ERP systems. Recent business conditions only magnify the drawbacks of running on a patchwork of such ERP systems, along with various software as a service (SaaS) point solutions, spreadsheets, and other homegrown tools and reporting.

Fragmented environments are subject to vexing limitations. For one thing they often create data silos that keep related business processes separate and disjointed. Sometimes, manual reconciliation is the only way to create global views of data and status. This can lead to variable and unhappy experiences as users seek to overcome such limitations through sheer dint of effort and expose themselves to potential errors and fraud. On-premises solutions may be limited in the data they accommodate and in the access they provide to users. And finally, legacy systems are often difficult (or impossible) to automate, which keeps the burden of obtaining and managing data and reports on users and administrators.

The real problem is that legacy systems are both complex and fragile. They can't accommodate changing business conditions easily or readily, and they neither scale well to handle growth nor adapt well to support innovation and new capabilities.

Moving into Modern ERP

The impetus to make such a move comes along with the desire to improve operational efficiency, accomplish digital transformation, accommodate growth and innovation, and support a 21st-century mindset around education, experiences, and expectations. What then, does modern ERP bring to its adopters to justify making such a move?

Key aspects of modern ERP systems address the leading concerns that organizations face when considering a move into the cloud. These seven aspects belong to two categories: modern platform parameters and modern business application design. Taken as a whole, they define standards for a modern ERP system and create a foundation for agility and growth.

Here are the three modern platform components:

>> **Security:** A "defense in depth" approach to securing data at every layer of the stack is needed to deliver maximum data protection. By using secure data isolation in the cloud stack, organizations reduce risk and enable faster data access and processing.

>> **Integration:** ERP solutions must connect business, people, and processes. They must also connect easily to other systems, whether those systems are on-premises or in the cloud. The best approach to ensure compatibility and scalability is to choose a flexible solution that uses a common framework to integrate easily with other systems.

>> **Configuration (as opposed to customization):** Legacy ERP often incorporated nonstandard or specific business practices as customizations. Over time, these increase maintenance and upgrade costs and challenges. Cloud-based solutions built

around standards-based platforms support personalization and configuration within the ERP application itself. This makes enhancements "upgrade-safe."

> **TIP**
>
> If your on-premises ERP customizations relate to workflows, integrations, and reporting, cloud-based ERP solutions will likely meet your requirements, simplify future maintenance, and reduce total cost of ownership (TCO).

Modern cloud applications can scale as your business grows. They also support new digital technologies to handle your organization's ERP needs. To that end, cloud-based ERP solutions should include these modern business application design components:

» **Completeness:** Best practices get built in to support standardization and provide controls that reflect the business strategy. This lowers costs, increases productivity, and empowers users. Even for incremental, piecemeal cloud transitions, access to a complete collection of best-practice business processes ensures standardization across the enterprise. It's important to evaluate whether a cloud ERP vendor supports a full application suite or whether integration with other cloud solutions are called for. It's important to make sure integration between on-premises and cloud-based applications is feasible, workable, and sustainable.

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>> **Globalization:** A customer (located anywhere) may have global needs. Does the ERP vendor support and facilitate these needs? Local data centers may be required to comply with data sovereignty and regulatory mandates. A complete cloud ERP system shares enterprise data across operations, business units, and HQ.

>> **Insight-driven analysis:** Cloud ERP solutions must provide secure, real-time data access for financials, cost analyses, profitability, cash flow, and more. This establishes a single source of truth across roles, reports, and analyses. It's what makes timely delivery of key performance indicators (KPIs) to frontline managers possible. It also vastly simplifies processes usually dependent on end-of-cycle close operations or separate data warehouse extracts.

Steps for Your Cloud Journey

Planning a modern ERP strategy starts with a deployment team. It should bring implementation partners and cloud provider staff together with internal business, IT, finance, and other experts. Include the following elements in any modernization strategy, regardless of market size and technology choices:

» **Clearly defined project goals.** Choose KPIs to measure business benefits (productivity, financial close rate, and infrastructure costs). Measurements help create consensus and approval, align strategies, and define outcomes.

» **Document processes and inventory systems.** Create a complete map of your IT infrastructure. It should include in-house and third-party solutions, all integration points, and redundant systems. Thus, it documents how the business really works, where processes go beyond what's represented in existing systems. You can document organization structure to match roles to data ownership, management, and use. This includes documenting risk, audit, compliance, and business continuity information. Customers should also take the opportunity to design business processes the way they want them to work. They shouldn't simply replicate existing processes; they should identify where processes are lacking and decide on a remedy. The critical ingredient: a single source of truth for data before the ERP project gets going.

» **Make sure you have strong executive backing.** For all organizations, executive sponsorship is key, with ongoing high-level support throughout the project life cycle. Together with ongoing employee updates, executive commitment to ERP modernization helps ensure project success.

>> **Employ built-in, standard best practices.**
Modern best practices are key built-ins for cloud applications. This makes it safe and easy to replace legacy software and its outdated approaches and processes. Modern ERP includes more than 80 percent of common business processes through built-in standardization; use them in any modernization project.

>> **Put reporting and analytics to immediate use.**
Cloud ERP gives users real-time access to business insight and understanding. If you define reporting and analytics early on, you can generate useful and informative reports as soon as things go live. In addition, organizations will make change management part of their plan and overall approach so that they can keep track of what's new and different and prepare for inevitable and upcoming future change.

Moving your organization onto a cloud ERP platform, even by small degrees, will change the way your people work and consume data. As you plan your own migration, consider these lessons learned from Las Vegas–based Caesars Entertainment:

>> **Don't underestimate the data conversion process.** With numerous sites involved, validating conversions took time but was easy to accomplish.

- **» Give testing your complete attention.**
  Application testing works best if everyone is in the same room.

- **» Involve partners and suppliers in testing.**
  Caesars coordinated with partners, including banks. Data files must be in the right format, and testing efforts require planning and coordination.

- **» Test application extremes.** Because peak demand happens, Caesars tested for latency issues under heavy transaction loads, while also running reports.

- **» Secure top management backing.** The Caesars cloud team met biweekly with executive staff (CFO, CIO, and others), with business partner Grant Thornton, and with Oracle senior development staff.

- **» Tackle change management directly.** The cloud team, led by a Grant Thornton consultant and Caesars business transformation team, identified change risks and barriers from the get-go. The team produced webinars, held online meetings, and called end users to make sure users were ready for a live system.

- **» Dedicate full-time staff to project roles.** Caesars brought in staffers from business partners and accounting, reporting, and IT groups as their modules were implemented. Dedicated testing resources made sure project deadlines could be

met. Ditto for a person devoted to ensuring that ERP reports met business needs and produced valid data and insights.

» **Document everything for best outcomes.** Be sure you can formally document all system testing and checks. Use checklists and document all sign-offs.

» **Add cloud partner and vendor staff to the implementation team.** Caesars included Oracle staff in design and problem-solving sessions and in status and executive meetings. Deep involvement helps resolve testing issues and keeps all parties informed.

» **Engage your network team.** Internet and infrastructure teams need to be kept aware of activities and testing, especially to avoid conflict with other initiatives and projects. Pay special attention to big data conversions or other activities that may affect systems or uploads during cloud migration.

Ready for Compelling Events

Business changes are sure to come along while cloud ERP migrations are underway. Be sure to keep team members, users, and stakeholders informed when and as special

situations arise. This may mean planning to accommodate new business offerings or services as high-priority items. Or it may mean incorporating new data sources, reports, and processes.

Those planning for M&As can get ahead of the curve by adopting a platform designed to accommodate and handle growth and change. When business changes, plans — and ongoing deployments — must follow along. Keep the information flowing, and all should be well.

In a cloud-based ERP environment, organizations can use preconfigured industry templates for quick deployment at scale with three-nines uptime and vendor- or partner-provided systems and support.

Moving to cloud-based ERP may be an even better solution than expected for companies in need of rapid changes or additions.

Chapter **3**

Toward a Simpler, More Modern ERP

The challenges inherent in modernizing ERP lead inevitably to centralization and simplification. Why? Because organizations want to get past over-spending just to maintain systems. They also want to speed the processes involved in information retrieval and analysis, change direction more quickly, cope with M&A activity more effectively, and launch into new territories and business models with dispatch.

Consolidating Multiple Systems

Many organizations start from a fragmented patchwork of ERP systems and related add-ons that can vary across departments, divisions, and countries. Thus, a key initial effort in modernization often involves consolidation of multiple ERP systems, with the incorporation of multiple different applications and data sources under a single, unified framework that includes a single chart of accounts and a common data schema.

The impetus toward IT systems consolidation, including ERP solutions, increases when businesses focus on growth and expansion. This is nearly inevitable as companies seek to leverage the benefits of automation and free up time for their IT staff to experiment and innovate. IT system consolidations usually involve replacing on-premises systems with cloud-based alternatives. Best practices in making this happen are well understood, easy to plan, deploy, and implement.

Consolidation offers benefits

When an organization reviews its technology infrastructure with an eye to consolidation, it must focus on the benefits of modernization. For ERP, the departments (and their stakeholders) who stand to make substantial gains include finance, accounting, purchasing, HR,

logistics, IT security, developers, risk management (audit, risk and compliance), and other departments. All these groups depend on ERP to help them manage and improve their capabilities and outputs. Consolidation confers benefits of a different kind and scale that come at a faster pace.

When an organization pursues technology consolidation, it can expect benefits to occur on three separate levels, each with its own proponents and champions:

» **Operational:** Benefits are tangible — and always substantial — at an operational level. Thus, functional and department heads (finance, HR, accounting, and so forth) typically take the role of internal champion for related consolidation efforts. Operational benefits are highest when they include a common, shared data model, robust reporting, on-demand analytics, and real-time insights that are valuable to all players involved.

» **Tactical:** Increased visibility into business functions and costs promotes faster and more focused business operations, with increased abilities to improve on existing opportunities and introduce new ones. Because CxO executives (usually those in technical roles as CIO, CTO, CFO, CSO, and others) are generally starved for actionable, real-time insight, they find modernized ERP a key tool in mapping out near-term future plans and

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projections. This makes them natural allies for ERP modernization efforts and occasional champions.

» **Strategic:** Modernization of ERP excels at aligning information systems tools and platforms with long-term business goals. This necessarily extends over a longer time horizon but appeals to CEOs, CFOs, business owners, and board members, all of whom have concerns about formulating and achieving long-term strategic goals.

How consolidation works

Finding and enlisting the right internal champions is key to achieving the most success with ERP consolidation. Because consolidation benefits cover multiple functions, regions, and business cycles, buy-in at the strategic level is essential.

Consolidation of legacy ERP systems into a single cloud ERP solution typically leads to cost savings. CTOs and CIOs often find that the reduced overhead and elimination of upgrade expenses lead to significant cost savings when compared to the previous upkeep of multiple older systems.

Getting to globalization

For global organizations, it's critical to have one global ERP system. Thus, signing on to a unified IT platform

that eliminates geographic redundancy through centralization can lead to substantial savings. This is an effort that the head of IT operations, working with the CFO's office, can drive. Expect to realize knock-on savings in other operations areas, too, such as real estate and facilities costs.

About those benefits . . .

Tactical benefits also play an important role because large-scale investments in IT consolidation must deliver more than daily operations savings. Organizations make best use of consolidation if they introduce a single underlying ERP data instance.

This makes business operations more visible and transparent to middle and senior managers responsible for planning at tactical and strategic levels. Improved visibility and decision-making improve the sales pipeline, future product development efforts, financials, capacity planning for support (in call centers and the field), and inventory and production management systems. It also strengthens controls and compliance. In short, most business functions have a lot to gain from a well-implemented ERP consolidation.

Strategic benefits, seen through key performance indicators (KPIs) related to time to close the books, improved sales days outstanding, and revenue per salesperson, come from aligning IT and information system strategy, with ERP at its core, and long-term strategic vision. CFOs

get the biggest boosts from improving long-term IT costs at user and transaction levels, optimizing costs to integrate acquired entities, and prepping IT systems and platforms for planned initiatives. This supports sustainable competitive advantage that CFOs will appreciate, and seek to exploit.

> **TIP** For more info, check out `https://blogs.oracle.com/profit/the-benefits-of-an-it-systems-consolidation-v2`.

Bringing Finance and HR Together

With data driving business, labor costs can be tracked and managed with increased precision and control. This sometimes leads to an overemphasis on managing human resources as "just another expense." Benefits of bringing HR and finance together are substantial and meaningful, including the following:

» Faster onboarding of new hires, including controls to ensure security and acceptable use training, to make them immediately productive

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- » Better workforce planning, identifying where workforce gaps exist when considering new business models

- » Understanding gaps and preparing for costs related to expanding into new territories or business niches

- » The importance of retaining talent to reduce costs of turnover and training up new employees

One answer to these issues, and a way to make better overall use of human capital in businesses everywhere, is to bring finance and HR closer together and foster more and better collaboration. Since the turn of the century, in fact, more organizations recognize that a high-performing HR function is essential to corporate success. Thus, the CHRO is often at the strategy table with other C-level execs, and gets the same level of authority and respect.

According to an Aberdeen study (`www.oracle.com/a/ocom/docs/unifying-finance-and-hr-cfo-argyle-report.pdf`), best-in-class companies are 2.3 times more likely (32 percent versus 15 percent) to integrate HR cost planning with ERP budgeting tools. The study found that creating "a single financial management dashboard that can be overseen by HR, the COO, and the CFO" helps make better use of human capital. Among other things, this permits organizations to incorporate their workers

into analyses of operational performance to assess their financial impact.

When HR and finance have fast, reliable access to the same data, they can create an effective working relationship with appropriate controls and access. This provides insights well beyond what mix of permanent and contract labor makes sense. It can also help organizations ask — and answer — important questions like these:

>> Are sales down because price points are off or because key sales positions are unfilled?

>> Do businesses that operate with lean staffing outperform those with more staff?

>> What is the relative performance impact of adding or removing a staff member within a specific department?

With access to a unified ERP system that serves both finance and HR, these questions (and others like them) can be answered. Without such access, those answers are hard to get.

There are other payoffs beyond increased collaboration and improved understanding of employee contributions. Real insights into revenues and costs lead to better hiring, promotion, and transfer decisions. The CHRO can make sure that hiring decisions at the highest levels track

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strategy plans and objectives, too. Also, new systems make things easier for end users, even those lacking formal training in data or analytics. Self-service dashboards and simple query tools help HR and finance workers ask better questions and get more accurate answers.

Connecting Your Supply Chain to Finance and Ops

With the right tools, agility, and technology partner, organizations can do more than remain resilient in times of uncertainty. They can increase operational efficiency and unlock new possibilities for stronger business. Using a flexible, intelligent solution that enables finance and operations to work together using the latest technology, an enterprise can respond to situations with agility. They can even pursue new opportunities to make the business stronger and more competitive.

For operations, research from the Enterprise Strategy Group finds that incorporating Internet of Things (IoT) data into supply-chain systems and workflows reduces average product order fulfillment times (www.oracle. com/a/ocom/docs/dc/esg-research-oracle-emergingtech-0220.pdf). Taking advantage of IoT data, delivery times dropped by an average of 6.1 business days in a manufacturing scenario.

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With finance and operations working together well, the two groups don't just accommodate change and thrive in uncertain times. They can also unlock new business opportunities.

Finance, operations, and supply chain intersect in an integrated business planning process. They connect top-down planning with bottom-up execution. As supply-chain disruptions accelerate, companies keep looking for ways to minimize impacts on costs and service. Truly agile companies can successfully connect financial, sales, and operational planning; supply-chain planning; and operational execution. This enables operations staff to bring the right decision criteria to executives at the right time. The net result: quicker decisions, and enhanced global visibility.

Step 1 is to analyze and understand how changing environments will impact the business. Modern ERP uses the latest technologies to provide real-time, actionable information. Staffers can make best use of analysis and insight tailored to the organization's goals, needs, and circumstances.

Step 2 is to act on responses that ensure the organization remains as resilient and productive as possible. A flexible ERP solution lets finance and operations mesh effectively so that the organization can plan and pivot with agility to respond to any situation in real time.

When resilience is established and assured, the organization can move to Step 3. That's when input from all stakeholders and users helps to identify and pursue new opportunities. This input will do more than simply permit the organization to carry on; it can make the organization stronger, more competitive, and more profitable.

Chapter **4**

Leveraging Next-Gen Technologies

Next-generation technologies such as artificial intelligence (AI), machine learning (ML), and bots are delivering measurable payoffs for those organizations that put them to work. A 2020 Enterprise Strategy Group study surveyed 700 finance and

operations managers who regularly use enterprise resource planning (ERP). They say payoffs come in many ways, including the following:

>> **Fifty-eight percent faster revenue growth:** Organizations using the most emerging technologies — including AI, ML, data analytics, Internet of Things (IoT), and so forth — grew annual revenues 58 percent faster than those not invested in such technologies.

>> **Eighty percent faster net income growth:** Organizations using the most emerging technologies grew annual net income 80 percent faster the those not invested.

>> **Eighty-four percent using one or more emerging technologies:** Of organizations surveyed, 84 percent use at least one emerging technology in production right now.

Business uses for emerging technologies in finance and operations are appearing and maturing rapidly. Businesses that embrace one or more emerging technologies find that they offer powerful enhancements to their systems and capabilities. Key emerging technologies include automation, analytics and personalized data, mobile tools to access ERP, and AI and ML used to drive insight and innovation. In fact, organizations use emerging technologies for mission-critical tasks, not as add-ons or afterthoughts.

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Automating Tasks and Processes

Automation is a key enabler of modern business pro-cesses. It turns sequences of actions and inputs into repeatable, reusable instructions to perform specific tasks or to manage workflows and processes without requiring human intervention or action. Automation confers key benefits that explain its widespread and enthusiastic use, namely:

- **» Speed:** Automation runs at computing speeds (microseconds to milliseconds). Humans are lucky to execute a handful of commands in a minute.

- **» Accuracy:** Automation never makes a mistake, uses improper syntax, or hits a wrong key. Humans do these things, and more.

- **» Time saved:** Automation runs at computing speeds, hundreds to thousands of times faster than humans can go. The more often an auto-mated task gets run, the more time it frees up for humans to do creative productive work.

- **» Repeatability:** Automation runs whenever it's needed, as many times as needed. It never gets tired, needs a vacation, or gets bored when doing the same thing repeatedly.

Automation records all the information it needs to perform tasks or execute workflows and processes. When invoked, automation plays everything back, precisely and quickly, to get things done. So, automation works well to handle tactical, day-in/day-out tasks that range from collecting data, to running reports, to performing analyses, to setting up and running batch jobs, to handling administrative tasks, and a great deal more.

> **TIP**
>
> Automation is at the heart of modern IT. Behind the scenes, automation can set up applications, run virtual machines (or entire virtual infrastructures), and then tear them down when they're no longer needed. Automation works at unimaginable scale to support global cloud providers and the customers who use their compute, storage, and networking capabilities in enormous volumes.

Here are five key areas to automate for best advantage and leverage when modernizing to cloud-based ERP:

>> **Dynamic, flexible financials:** Accounting software and ERP have radically changed how organizations make budgets, track income and expenses, and reconcile accounts. Today, organizations increasingly turn to automation to obtain better, more timely insight into financial performance. Automation helps companies generate and manage narrative reporting (such as Securities and

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Exchange Commission [SEC] filings) and gain insight into sustainability and quality of financial results.

›› Customer engagement in real time: Automation can recommend products or services, offer updates or alerts, and provide a single, coherent view of customer transactions to streamline customer service and deliver positive, consistent customer experiences. This brings higher conversion rates, more repeat purchases, improved customer satisfaction, and more.

›› Contracts, procurement, and logistics: Automated workflows and business processes in an ERP system profoundly impact supply-chain management, procurement decisions, and negotiating terms with suppliers. In fact, companies can use automation and machine learning to optimize freight, payment terms, capital, and more.

›› Employee benefits, retention, and recruitment: When automation handles repetitive tasks, recurring transactions, and routine benefits administration, finance professionals have more time to improve profits, find new markets, and seek out new partnerships. Automation also helps finance teams improve all stages of the sales cycle, from acquiring customers, to procurement and manufacturing, to product sales and promotions.

>> **Compliance and risk management:** Automation changes how organizations manage risk. It can analyze reams of data and spot potential problems as they happen.

Automation also helps organizations adapt to changing rules and regulations and to localize rules by geography. Ultimately, automation saves time and money and gathers data to deliver a competitive advantage when trained via machine learning on changing rules and regulations.

Using Analytics and Personalized Data

Using the rights tools and technologies, everything we see, do, hear, and experience can be captured as data and converted into digital intelligence. This includes all kinds of data — structured data, unstructured data, data at motion and at rest, and data from sensors, websites, and connected devices. All this adds up to an astounding opportunity to be put to productive use. Given the right ERP tools, data can be visualized, analyzed, and personalized for customers and employees, to transform business processes and deliver real-time insights that inform good decision-making.

The challenge is to remake outdated reporting systems and disconnected silos that create organizational chaos. Employees want to gain value from their data and use

self-service analytics to drive independent discovery and intelligent collaboration. Organizations must learn how to extract business value from data and get it to the front lines. This means moving analytics out of the back office and into workers' hands. Data must be contextualized for the applications, activities, and devices that people use daily. Then it can provide timely insight to inform business decisions, automate workflows and business processes, and recommend proper and productive actions.

Modern, powerful analytics empower workers to ask any question of any data in any environment on any device. Such tools help uncover underlying drivers for profitability and optimize working capital. Users can gain actionable insights with ready-to-use, personalized key performance indicators (KPIs). Better yet, users can unify their analyses across applications and extend their findings with additional data sources using a single, cross-functional, and extensible data model.

Using Mobile Tools for a Mobile Workforce

A modernized ERP environment provides a cloud platform that employees can use from anywhere on their mobile devices. With today's workforce using phones, tablets, and laptops to do their jobs, such access is expected and valuable. The ability to conduct work anywhere, any time, on any device is now a basic expectation.

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If employees can't do that, their productivity is compromised. Worse yet, such employees are unlikely to stick around to fill their roles and get work done if they can't be completely mobile.

To build on their capabilities, enterprises can follow an "extend and secure" strategy to define new services for mobile consumption. They can securely manage ERP data even from mobile platforms. They can also deny or allow access through global user management policies that apply for any devices a user may choose (desktop, tablet, smartphone, and so on).

Driving Insight and Innovation with Artificial Intelligence

AI and ML both have extensive abilities to absorb and digest huge volumes of data, to find patterns and relationships that humans may not otherwise see. Cloud-based ERP puts AI and ML to work in all kinds of interesting and useful ways.

It offers a variety of — forgive the term — "smart" assistants to help users with expense reporting (for example, optical scan and intake of receipts, and recognition and absorption of its contents), project management tools for development and analytics tasks, advanced financial controls to identify fraud and error, and even project-driven

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supply-chain management. Likewise, such assistants can provide 24x7 security and audit monitoring as well.

Modern ERP routinely includes supplier categorization. This provides a consolidated view of supplier information to support dynamic discounting strategies, and delivers smart recommendations based on supplier and spend data. Overall, modern ERP AI tools help organizations automate smarter by improving core processes and guiding user actions. They also help organizations operate smarter by delivering insights. Humans can act on those insights to make their organizations more agile. They can also use those insights to optimize business processes across procurement, payables and receivables, and supplier and treasury management.

Modern ERP solutions also adopt a pervasive AI strategy through continuous product updates. Plans that incorporate data science can help finance organizations improve the accuracy of their forecasts, and support better decision-making. Also, AI and ML decrease the time it takes to make forecasts. Users only need to add human context to the seeded predictions and adjust them based on their own knowledge and experience.

On another front, AI and ML help organizations maintain high levels of flexibility, adaptation, and security. This encourages rapid adoption, because immediate and timely business results keep finance and operations teams ahead of the technology curve. This lets organizations maintain and extend their competitive advantage as much as possible.

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Working with Chatbots and More

At its best, modern ERP works the way people work to make their efforts more intuitive and productive. Technology is available for people to use ERP the way they use other technologies — by speaking to it, texting with it, taking pictures, and more. The goal is to make working with the platform obvious and to provide an engaging and immersive user experience.

So, for example, finance team members should simply be able to say, "Show me open purchase orders" and get a list they can inspect and dive into. Traveling employees should be able to snap a photo of a receipt while dining. The ERP system should be able to take it from there and generate an expense report (or report item) automatically.

As new and better ways to work with technology emerge, the best ERP solutions will adapt to take advantage of them. This takes the burden of low-level details from developers, and gives them swift, straightforward access to new functionality. With new technologies that incorporate continuous innovation, companies can track the latest technology and use it to stay ahead of the competition. It's a competitive advantage to always apply AI and ML in new areas, to use digital assistants and voice technology to get information faster, and to let technology pick up as much of the work as possible.

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Chapter **5**

Forever Modern

When it comes to business modernization, resting on one's laurels — or anything else for that matter — isn't really an option. There's always another new technology emerging, and often what it brings to your organization will be too good to pass up. That speaks to staying modern by incorporating and accommodating new technologies as they come along.

But there's more to extending or enhancing what your collection of enterprise resource planning (ERP)

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capabilities can do than simply incorporating irresistible new high-tech tidbits. Staying modern with cloud-based applications changes the dynamics on traditional views of the software development life cycle. That new dynamic means embracing the new, as part of a continuous improvement philosophy. This chapter explains what properly drives the impetus not just to achieve modernization, but to stay modern from now on.

Focusing on Continuous Improvement and Innovation

Staying modern is really all about continuous improvement, so systems never go stale or get past their expiration dates. From the user's perspective, such systems keep changing and evolving to get better faster, do more, and become more efficient.

Consider the situation in a business that's still running a legacy ERP system on-premises. That system likely uses old technology and probably hasn't been upgraded in years. It's mostly out of sync with current business processes. Nor does this old system easily share data well with other systems. Using its data to extract insights can be vexing. In short, this old system is a drag to use and operate and a drag on the bottom line. A modern, cloud-based ERP can address all those issues, and then some.

Seen from a business user's perspective, the system is updated on a regular basis, so it benefits from new features and improved security on an ongoing basis. Users can focus on doing their jobs and be happy to take advantage of new features and functions and top-notch security.

Applications are kept in a constant state of improvement across all releases. This includes ample opportunities to implement user requests for changes and enhancements, and to accommodate new capabilities, tools and technologies.

On the cloud-based ERP front, the best modern ERP platforms practice frequent updates that incorporate security and quality fixes, as well as gradual rollouts of new features and functions (internal test, beta test, general users). The idea is to make sure that applications work as well as possible, remain secure, and keep getting better over time. That's what lets organizations bet their futures on what ERP can do for them today, knowing that it will do more and better for them tomorrow.

In addition, artificial intelligence (AI) and machine learning (ML) also promote ongoing improvements and enhancements. AI can see patterns in usage, performance, interactions, queries, reports, and other aspects of system behavior that can benefit from optimization or re-engineering. This kind of input also drives the update cycle, sometimes in interesting and unexpected ways.

Keeping Up with Change

The best modern cloud ERP releases follow a quarterly update cadence. This helps the back office keep up with technology change and ensures data and applications stay safe and secure. Users will want to push these out as soon as their internal testing and validation regimens allow.

The cloud has proven particularly effective as a delivery mechanism for accommodating new and next-gen technologies. Because customers interact with cloud platforms through their applications and services, the cloud constantly integrates and exposes new content and capabilities. Thus, users can take advantage of such capabilities on their own development and release cadences. Modern cloud-based ERP follows a cloud-now perspective instead of a cloud-first one.

User input and analytics insight from ongoing operation of the modern cloud-based ERP environment across all users, thoroughly anonymized, helps lead the way to the best possible change/enhancement experience. This kind of agile, rapid response makes change something to anticipate rather than to dread.

Making Processes Modern

With a modern cloud-based ERP solution on tap, organizations can also continue to improve their financial processes. This means that, finally, they can get past common stumbling blocks, including the following:

>> **Error-prone manual processes:** Such activities often revolve around spreadsheets and complex patchworks of other software — let's call it "Frankenware" — and slow down financial systems. They also require frequent rejiggering to keep them working.

>> **Overly complex ERP systems:** Combining multiple ERP systems and components can easily cause confusion, lead to siloed processes and operations, and cause collaboration issues working across teams and operating units.

>> **Insufficient bandwidth for strategic projects:** CFOs spend too much time tracking down financial data across complex ERP environments (almost one day in five, according to a 2020 Forrester Survey [www.cpapracticeadvisor.com/accounting-audit/news/21155744/90-of-responding-organizations-experience-challenges-with-financial-close-process]) to keep up with strategic initiatives (only 12 percent of their time, or just over half-a-day a week, according to the same source).

How do they get past these hurdles? For one thing, rapid and reliable automation replaces slow, error-prone manual processes when modern cloud-based ERP is available. For another, consolidating multiple, disparate ERP systems into a single, globally accessible cloud-based ERP makes it easier to build apps based on a single source of truth for financial data and analyses. Overall, this approach frees up incredibly valuable time so that CFOs and finance team members can concentrate on business strategy rather than tactical tasks and basic accounting issues. A single, global cloud-based ERP environment provides a complete solution for all data handling needs. Intelligent automation relieves the tedium and does away with staff involvement in routine tactical tasks. Finally, a flexible, easily updated environment provides a platform that can readily accommodate change (and even, next-generation technologies) to help the organization maintain its competitive advantage.

Delivering New Features and Technology

Planning for change and growth prepares ERP for continuous improvements and enhancements. Modern ERP environments are designed with change and growth in mind, making it easier to continuously deploy improvements and enhancements.

REMEMBER

Inside the organization, new features need executive and stakeholder buy-in. The same kinds of planning, education, and by-the-numbers involvement from such people applies as much to ongoing improvements as it does to initial investment, launch, and wholesale adoption. New features and functions may need review from stakeholders to make sure they use their capabilities to best advantage. Work with your champions to provide payback and return on investment (ROI) information.

The cloud provides continuous and ongoing access to improvements and enhancements in the underlying modern cloud-based ERP platform. But until your IT staff makes such things available in applications and services for your users, there's not much to see or appreciate. This works best if you have dedicated resources tasked with keeping up with such changes and additions, and communicating about them with interested parties. Regular meetings to learn about and evaluate "what's new" can help organizations pick and choose new features they'd like to deploy themselves.

Thus, an important question to answer in your organization becomes "Who drives ERP when it comes to introducing, managing, and making changes and

enhancements work?" Experience teaches that CxO champions will be interested when changes have strategic implications. Primarily, however, changes will be of greatest interest to department or function champions whose productivity and innovation opportunities may benefit.

Chapter **6**

Ten Solid ERP Benefits

E very *For Dummies* book ends with a Part of Tens chapter. It covers the key messages from this book and delivers important takeaways to its readers. Here it comes!

From Patchwork to Single Source

Business modernization delivers tremendous benefits to organizations. It demands deep involvement from IT,

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development, operations, and business/departmental leaders and stakeholders. Things go best with enthusiastic buy-in from executive staff — from CxO offices all the way to the very top of the organization — along with support from business owners, stakeholders, and other key players.

There is a substantial pot of gold at the end of this rainbow when your organization tackles business modernization. The most profound, important, and meaningful benefit of the switchover to cloud ERP is a single, indisputable, carefully curated and maintained source of truth about the organization's data, assets, activities, costs, productivity, and more.

No patchwork of loosely connected or unconnected ERP systems fragmented by uncontrolled spreadsheets, baling wire and chewing gum. The data that finance uses to reconcile accounts is the same data procurement uses to make orders; and HR uses to calculate salaries, benefits, and bonuses; and IT uses to obtain and install equipment, software, and service contracts. Everything fits together — and makes sense — because all data is in agreement and comes from a single, trustworthy source. Bliss!

Other Benefits of Modern ERP

Beyond the confidence and trust that a single source of truth enables, modern cloud-based ERP offers a legion of other benefits. These include at least the following:

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- » Modern ERP includes a set of core constructs for business information so that business processes work properly and predictably across and between business departments.

- » Built using a secure, centralized, common data structure, users can rely on data to be correct, current, and complete, with data integrity and compliance controls in effect.

- » Modern ERP helps improve operational efficiency, accomplish digital transformation, and accommodate growth and innovation.

- » Modern ERP delivers built-in platform components to organizations that support the key characteristics of security, integration, and personalization.

- » Today's ERP delivers modern design elements to support powerful capabilities — namely, completeness and standardization, globalization, insight-driven analysis, and full digitalization — for an intuitive and immersive user experience.

- » Modern ERP lets organizations consolidate fragmented systems and related add-ons to simplify operations and reduce IT costs.

- » The best available ERP offers an organization's functional departments — especially finance, HR, logistics, and more — significant opportunities to improve capabilities, outputs, and innovation. Automation frees professionals from repetitive,

tactical tasks so that they concentrate on innovation and improvement.

» Today's modern ERP offers organizations an opportunity to engage with and take advantage of emerging technologies to establish further competitive advantage. From automation, to artificial intelligence, to analytics and personalized data, to mobile access and intuitive system interactions, it lets workers get things done easily and intuitively.

» Through deliberate attention to constant improvement and innovation, modern ERP delivers ever-increasing capability and value to organizations that put it to work. This lets organizations make best use of technology and keep getting better.

Modern ERP is to legacy ERP as a smartphone is to a rotary phone: Both make calls, but the smartphone does much, much more. Modern ERP makes business processes work faster, better, and easier, and it leaves the door open to future improvements and enhancements.

For more information about truly modern cloud-based ERP, read about Oracle's Fusion Cloud ERP at www.oracle.com/erp.

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Modernize your business with cloud-based ERP

Gain immense benefits using a single cloud ERP solution for finance and operations. Many businesses use a mashup of legacy ERP systems that impede responsiveness. Coupled with next-generation technologies, like machine learning, artificial intelligence, intelligent automation, and immersive user experiences, cloud ERP increases speed and agility. It's easier to embrace change, drive strategic decisions, lower risk, stay ahead of problems, and undertake new opportunities with cloud ERP. No more expensive upgrades, and always be secure and on the latest release and technologies.

Inside…

- Use one set of enterprise data
- Reduce business risk and improve compliance
- Increase operational efficiency
- Achieve digital transformation
- Eliminate ERP data center requirements
- Leverage next-generation technologies
- Embrace and thrive on change

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