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ERP IMPLEMENTATION

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2 Enterprise Resource Planning (ERP)

2.1 What is ERP?

Enterprise resource planning software, or ERP, doesn't live up to its acronym. Forget about planning—it doesn't do much of that—and forget about resource, a throwaway term. But remember the enterprise part. This is ERP's true ambition. It attempts to integrate all departments and functions across a company onto a single computer system that can serve all those different departments' particular needs.

That is a tall order, building a single software program that serves the needs of people in finance as well as it does the people in human resources and in the warehouse. Each of those departments typically has its own computer system optimized for the particular ways that the department does its work. But ERP combines them all together into a single, **integrated software program that runs off a single database** so that the various departments can more easily share information and communicate with each other. That integrated approach can have a tremendous payback if companies install the software correctly.

Take a customer order, for example. Typically, when a customer places an order, that order begins a mostly paper-based journey from in-basket to in-basket around the company, often being keyed and rekeyed into different departments' computer systems along the way. All that lounging around in in-baskets causes delays and lost orders, and all the keying into different computer systems invites errors. Meanwhile, no one in the company truly knows what the status of the order is at any given point because there is no way for the finance department, for example, to get into the warehouse's computer system to see whether the item has been shipped. "You'll have to call the warehouse" is the familiar refrain heard by frustrated customers.

ERP vanquishes the old standalone computer systems in finance, HR, manufacturing and the warehouse, and replaces them with a single unified software program divided into software modules that roughly approximate the old standalone systems. Finance, manufacturing and the warehouse all still get their own software, except now the software is linked together so that someone in finance can look into the warehouse software to see if an order has been shipped. Most vendors' ERP software is flexible enough that you can install some modules without buying the whole package. Many companies, for example, will just install an ERP finance or HR module and leave the rest of the functions for another day.

3 Enterprise Resource Planning – Oracle Financials

3.1 Overview

The Oracle E-Business Suite is a complete set of business applications that enables corporations to efficiently track detailed business transaction data and turn it into decision making information using a system built on a unified information architecture. Oracle Financials applications are a subset of this suite and are a family of products designed to capture and analyze your financial data on a worldwide basis. Use Oracle Financials applications to better manage business to the targets that are announced to investors. Management can better report to investors and colleagues. Oracle Financials applications also help you to meet your obligations in key areas surrounding the numbers, such as:

- Compliance
- Financial Control
- Regulatory Reporting
- Cost Containment
- Risk Management

3.2 Key Attributes of Oracle E-Business Suite

Four key attributes characterize the Oracle E-Business Suite:

- Common Data Model
- Reduced Number of Instances
- Integrated Applications
- Database Integration

3.2.1 Common Data Model

In creating a suite that spans a large number of diverse modules, Oracle has taken care to ensure that the products share a "Common Data Model" in their architecture. This means that any system entity set up in one product (for example "an employee") is used, to the extent possible, by all other products that require a similar entity.

Consider customer reference data entered into an application and stored in the common data model. This customer data can subsequently be accessed by all applications and functions that use such customer data. Entry of important entities is minimized and revisions are entered only once. There is no need for any replication which is a source of inefficiency and inconsistency. With clean, complete customer data in one consolidated data model, you have a true 360 degree view of your customer for the best possible customer intelligence.

3.2.2 Reduced Number of Instances

Each time you consolidate databases, information increases and costs decrease. Many customers are managing worldwide operations using our unified information architecture on a single instance of the Oracle E-Business Suite. You can consolidate and share information globally and faster. At the same time, you can eliminate duplicate data centers, hardware, and information technology costs requiring multiple databases and separate reporting infrastructures around the world. A global financial system at the lowest possible cost is now within your reach.

3.2.3 Integrated Applications

Oracle E-Business Suite is engineered to work together as an integrated system. You can pass information from one application to another without any incremental integration costs. While Oracle's applications are integrated, they are also modular. Based on your business needs, you can implement one module, several modules, or the entire suite.

Oracle Business Intelligence systems and the transactional systems use the same data and information. There is no passing of data, spinning the facts, or delay; your managers see the data on their personal machines as it emerges from the business front lines.

3.2.4 Database Integration

Oracle Database 10g Release 2 includes dimensionality support, next-generation features, and other features that are exploited by the financial applications. The cumulative effect of having a common data model, all applications on a single instance, and the applications themselves fully integrated, is that all of your information is in one place. As a result, you receive powerful synergies such as:

- A global, unified view into critical information such as sales positions, inventory levels, headcount, revenue, and expenses-across all organizations, lines of business, products, and geographies. The information is accurate and up-to-date as there is integrity in data that is not fragmented.
- The Oracle E-Business Suite includes data from business applications from multiple vendors using our Hubs. For example, Oracle Customer Data Hub gives you a unified, enterprise-wide view of your customer data, no matter whose software you use.

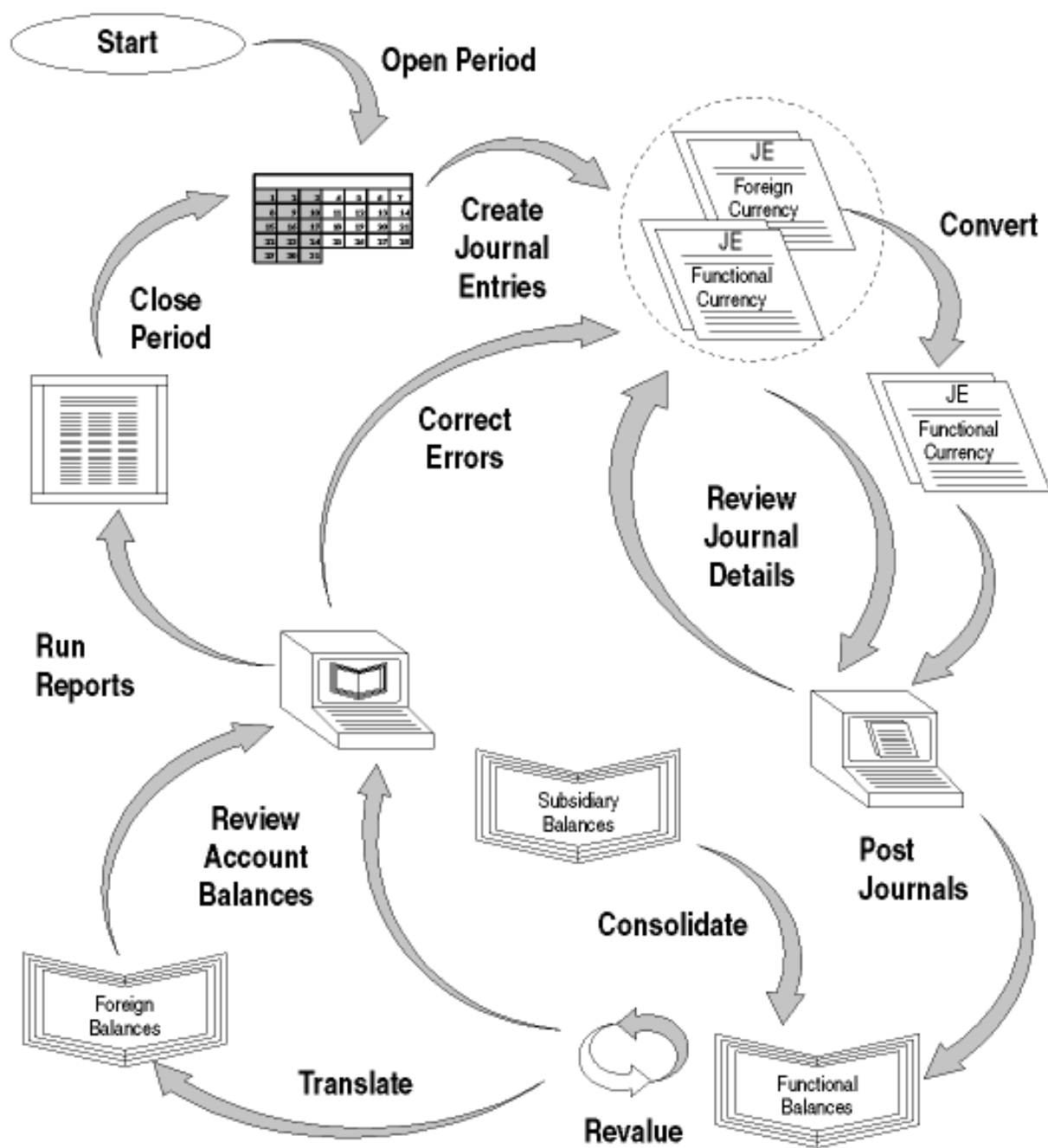
3.3 Oracle Financials Applications Suite

The Oracle Financials suite of applications is comprised of the following subfamilies, organized by standard business flow, to support your firm's financial processes:

- Financial Control & Reporting
- Corporate Performance Management
- Corporate Governance
- Credit-to-Cash
- Procure-to-Pay
- Asset, Real Estate and Lease Management
- Cash & Treasury Management
- Travel & Expense Management

The applications support and closely match these native business flows. The key to exploiting the features implicit in the flows is, more than anything else, to understand the conceptual architecture of Oracle Financials Applications.

4 The General Ledger Accounting Cycle



5 General Ledger Setup Steps (Required)

For each step, we include a Context section that indicates whether you need to repeat the step for each ledger, set of tasks, inventory organization, HR organization, or other operating unit under Multiple Organizations.

Note: You can use Reporting Currencies to maintain your transactions and account balances in multiple currencies.

5.1 Define Your Chart of Accounts

Define your chart of accounts using the Flexfield Title, Accounting Flexfield. When you first define your chart of accounts, you must enable Dynamic Insertion. This will enable you to create the necessary account combinations when you define your ledgers using Accounting Setup Manager. After you complete your ledger options, you can optionally disable dynamic insertion for your chart of accounts.

Context: You can define multiple charts of accounts per installation, or you can define a single chart of accounts that is shared by multiple ledgers within a single instance. If you use multiple charts of accounts, it is recommended that you share the same value set for the balancing segment across all charts of accounts. .

5.2 Define Your Accounting Period Types

You can define your own period types to use in addition to the General Ledger standard period types Month, Quarter and Year. You use these period types when you define the accounting calendar for your organization.

Each ledger has an associated period type. When you assign a calendar to a ledger, the ledger only accesses the periods with the appropriate period type. Thus, you can define an accounting calendar with periods of more than one period type. However, each ledger will only use periods of a single period type.

Context: You need to perform this step only once per ledger.

5.3 Define Your Accounting Calendar

Create a calendar to define an accounting year and the periods it contains. You should set up one year at a time, specifying the types of accounting periods to include in each year. You should define your calendar at least one year before your current fiscal year.

You can define multiple calendars and assign a different calendar to each ledger. For example, you can use a monthly calendar for one ledger, and a quarterly calendar for another.

Note: If you close your balance sheet using the Create Balance Sheet Closing Journals program, you should create an accounting calendar with two adjusting periods, one on the last day of the year and one on the first day of the year. Special Note for Average Balance Ledgers: Create an accounting

calendar with two adjusting periods that are both at the end of the year. The first adjusting period, representing the last day of the fiscal year, is used to generate the Create Balance Sheet Closing Journals program. The second adjusting period, also representing

The last day of the fiscal year, is used to reverse the closing journal. This ensures that the average balance calculation is unaffected in the following year.

Context: You need to perform this step for as many unique accounting calendars you need for your ledgers.

5.4 Define Additional Journal Entry Sources (optional)

Define your own journal entry sources in addition to the ones installed with General Ledger to differentiate journal entries and enhance your audit trail. If you have enabled average balance processing, you must also specify an Effective Date Rule for each journal source you define.

Context: Perform this step once per installation.

5.5 Define Accounting Setups

Define an accounting setup using Accounting Setup Manager to link legal entities to ledgers and other setup components, such as reporting currencies, subledger accounting options, intercompany accounts, and intercompany balancing rules, and sequencing options. Each accounting setup must have a status of Complete before

You can use its ledgers and setup components for transaction.

If you plan to use average balance processing, you must specifically enable average balance processing, assign a transaction calendar, and define a Net Income account. If you need to represent your primary ledger transactions in another accounting method, chart of accounts, calendar, currency, and/or ledger processing options, assign secondary ledgers to each accounting setup.

Context: Perform this step once for each accounting setup.

5.6 Set up Budgets (optional)

Use budgets to enter estimated account balances for a specified range of periods. You can use these estimated amounts to compare actual balances with projected results, or to control actual and anticipated expenditures.

Define a budget to represent specific estimated cost and revenue amounts for arrange of accounting periods. You can create as many budget versions as you need for a ledger.

Context: You can create one or multiple budgets for a ledger at any time. You can create budget hierarchies by assigning a master budget to lower-level budgets. This enables you to track budgeted amounts against a control budget.

Note: You must complete this step if you want to enable budgetary control.

5.7 Open Accounting Period

Open and close accounting periods to control journal entry and journal posting, as well as to compute the beginning period balances when opening the first period of New Year.

Context: Perform this step once per ledger.

6 General Ledger – Journal Entry & Inquiry

6.1 Entering Journals

This section discusses various topics related to entering journals, including journal batches, journal and journal lines, taxable journals, entered currency journals, statistical journals, automatically copying journals, checking or reserving funds, and approving journals.

6.2 Creating Journal Batches

You can organize journal entries with common attributes into batches. For example, you might group your journal entries by type or date. You can have multiple journals in one batch, or you can have a separate batch for each journal entry.

A batch can contain multiple journals, each of which can belong to a different ledger, but all of the ledgers within a batch must have the same calendar, period type, and chart of accounts. All journal entries in a batch must share the same period. You can create a journal batch

For any Open or Future Enterable accounting period, but you can only post batches in Open accounting periods.

If you do not want to enter batch information, you can enter a journal directly. General Ledger will create a batch for the entry automatically, using the source (Manual) combined with a unique batch ID and the system date.

6.2.1 To create a new batch with multiple journal entries:

1. Navigate to the Enter Journals window. The Find Journals window appears.
2. From the Find Journals window, choose New Batch. The Batch window appears.
3. Enter an optional Batch name to identify the batch in General Ledger and journal entry reports. The batch name must be unique for the combination of chart of accounts, accounting calendar, and period type level. If you do not enter a batch name, General Ledger creates a default name from the source, combined with a unique batch ID and the system date.
4. Enter the accounting Period for which you want to post the entries in your journal batch. General Ledger defaults to the latest Open period.
5. (Optional) Enter a Description for the journal batch.
6. If you have average balance enabled and your ledger is a consolidation ledger, select Standard or Average as the Journal Type.
7. (Optional) Enter a Control Total if you want to verify the total debits for your journal batch against the batch control total. You can also enter a control total at the journal entry level.
8. Choose Journals to add journals to the batch.

6.2.2 Entering Journals

In Enter Journals, an account is considered valid if it satisfies all of the following rules:

1. The account itself is enabled.
2. All of the individual segment values used in the account is enabled.
3. The effective date of the journal line (or the journal if this is a manual journal) is within the start and end date range specified for the account, if any.
4. The effective date of the journal line (or the journal if this is a manual journal) is within the start and end date range specified for each of the individual segment values used in the account.
5. The account itself is not a summary account.
6. None of the individual segment values used in the account are parent values
7. The account exists OR if the account does not exist, it satisfies all of the following:
 - The individual segment values used in the account are all defined and in the appropriate value sets.
 - Dynamic insertion is turned on.
 - The account does not violate cross validation rules.
8. For actual or encumbrance journals, detailed posting is on for the account.
9. For budget journals, detailed budgeting is on for the account.
10. For actual or encumbrance journals, detailed posting is on for all of the individual segments used in the account
11. For budget journals, detailed budgeting is on for all of the individual segments used in the account.
12. Security rules don't deny the current user access to any of the individual segments used in the account.

6.2.3 To enter a journal:

1. Navigate to the Enter Journals window. The Find Journals window appears.
2. Enter or query the batch for which you are entering journals. To enter a journal without entering batch information, choose New Journal from the Find Journals window and proceed to Step 4.
 - To enter journals for a new batch, choose New Batch from the Find Journals window and enter the batch information.
 - To add journals to an existing batch, query the batch from the Find Journals window and choose Review Batch in the Enter Journals window. The Batch window appears.
3. Choose Journals. The Journals window appears.
4. In the Journals window, enter a unique Journal name for the entry. If you do not enter a journal name, General Ledger automatically assigns a name using the following format: *Source Journal ID Date*.
5. (Optional) Enter a Description for the journal entry. General Ledger uses this as the default description for each journal entry line. You can change the journal entry description as necessary.

- 6.** Select a ledger for your journal. Your data access set must provide read and write access to the ledger, or read and write access to one or more of the balancing segment values or management segment values to select the ledger from the list of values. If you use reporting currencies (journal or subledger level), you can select a reporting currency for your journal.
- 7.** Enter a Category to describe the purpose of your journal entry, such as accrual, payments, or receipts. All lines in a journal entry share the same journal category. General Ledger defaults the journal category if you defined the profile option Journals: Default Category.
- 8.** Enter the Period for the journal entry. If you entered a period at the batch level, you must use the same period for each journal entry in the batch. If you did not enter a period at the batch level, choose any Open or Future Enterable period for your journal entry. Note that you can only post journals in Open periods.
- 9.** Accept or change the default Effective Date for the journal entry.
- 10.** Balance Type is a display-only field. It displays Actual when you are entering actual journals and Budget when you are entering budget journals.
- 11.** If you use document sequences with manual numbering, enter a unique Document number. This field is only available if the Sequential Numbering profile option is set to Always Used or Partially Used.
If you set your profile options to always use or partially use sequential numbering and use a defined Automatic document numbering sequence, General Ledger enters a document number automatically when you save your work.
- 12.** If you are entering an intra-company journal that includes multiple balancing segment values where the total debits and credits for each balancing segment value do not net to zero, you can specify the clearing company to balance the journal.
- 13.** If you use automatic tax on journal entries, enter Required in the Tax field to indicate that you want to enter additional tax information. Otherwise, enter Not Required. This field only appears if you have automatic tax enabled for your ledger.
- 14.** (Optional) If you have average balance processing enabled and your ledger is a consolidation ledger, select Standard or Average as the Journal Type.
In a consolidation ledger, you can create journal entries that affect either standard or average balances. The balances are not linked. In a non-consolidation ledger, you can only create journal entries that directly affect standard balances. Average balances are calculated automatically from your standard balances.
- 15.** (Optional) Enter a Control Total if you want to verify the total debits for the journal lines against the journal control total.
- 16.** Accept the default Currency or change the journal currency to an entered currency or statistical journal.
- 17.** Enter a reversal Period and Method. You can then generate a reversing journal entry for that period. You can also reverse a journal entry without assigning a reversal period. Reversal Method can be either:

• **Switch Dr/Cr:** General Ledger creates your reversing journal by switching the debit and credit amounts of the original journal entry. This method is often used when reversing accruals.

• **Change Sign:** General Ledger creates your reversing journal by changing the sign of your original journal amounts from positive to negative. This reversal method is often used when reversing journals to correct data entry mistakes. If you have average balances enabled, enter a reversal Date, Period, and Method. You can then generate a reversing journal entry for that effective date and period.

18. (Optional) Select the Other Information tab to enter optional reference information about the journal entry.

1. Enter a Reference description to further identify the journal entry on general ledger and journal entry reports.

2. Enter a Journal Reference Date.

19. Select the Lines tab and enter the journal lines.

20. Save your work.

6.2.4 To perform a journal entry inquiry:

1. Navigate to the Journal Entry Inquiry window. The Find Journals window appears.

Note: When you first navigate to the Journal Entry Inquiry window, the Find Journals window appears automatically. After you run the query, you can reopen the Find Journals window by selecting View > Find from the menu.

2. In the Find Journals window, enter query parameters to find the batch or journal you want to review.

Note: Choose the More buttons to see additional fields that you can use to refine your query. To hide these extra fields, choose the Less button.

3. Once you've entered all of your query parameters, choose Find to run the query. The journal batches or journals that meet your query criteria appear in the Journal Entry Inquiry window.

Note: From the Journal Entry Inquiry window, you can view transaction-level detail if the transactions originated in an Oracle subledger application by selecting the Drilldown option from the Tools menu. Similarly, you can view journals or subledger accounting entries in a graphical T-account format in the T Accounts window by selecting the T Accounts option from the Tools menu.

4. Choose:

• **Review Batch button:** to see detailed information about the selected journal batch in the Batches window. From the Batch window, choose the Journals button to navigate to the Journals window, where you can review the journals

• **Review Journal button:** to see detailed information about the selected journal in the Journals window.

- **Line Drilldown button:** available only for journal lines to drilldown from the Journals window to view transaction-level detail if the transactions originated in an Oracle subledger application that supports drilldown. The drilldown functionality can also be accessed from the Tools menu in the Journals window by selecting the Drilldown option.
- **T Accounts button:** available only for journals to view journals or subledger accounting entries in a graphical T account format in the T Accounts window. The T accounts functionality can also be accessed from the Tools menu in the Journals window by selecting the T Accounts option.

7 General Ledger – Budgeting

7.1 Overview of Budgeting

Use budgeting to enter estimated account balances for a specified range of periods. You can use these estimated amounts to compare actual balances with projected results, or to control actual and anticipated expenditures. General Ledger gives you a variety of tools to create, maintain, and track your budgets, including the ability to upload budget amounts from your spreadsheet software.

7.1.1 To create a budget:

1. Navigate to the Define Budget window.

2. Enter a Name and Description for your budget.

Note: Budget Names must be unique in the system.

3. Select the ledger for this budget. If you use reporting currencies (journal or subledger level), you can select a reporting currency

4. Enter the Status of your budget.

Open: The budget is available for update and budget entry.

Current: The budget is open, and it is the default budget when you use most budgeting and inquiry forms. You can have only one Current budget at a time for Budgeting for each ledger.

Frozen: The budget is unavailable for update or budget entry. General Ledger displays the Created Date and Frozen Date, if applicable, for the budget.

5. Choose whether to Require Budget Journals for your budget. If you enabled the Require Budget Journals flag for your ledger, this option will already be selected and cannot be changed. When you require budget journals, you can only use budget entry methods that create journals, namely budget journals, budget transfers, MassBudgets, consolidation of budget balances, and the Applications Desktop Integrator's Journal Wizard.

6. Enter the First and Last period for your budget.

7. Assign a Master Budget if you want to track your budget amounts against a control budget. You can choose any budget that has the same ledger and period range to be the Master Budget.

8. To open the first fiscal year of your budget, choose Open Next Year, General Ledger launches a concurrent request to open the next year.

Define Budget (VisionUSA_DATA_Access_Set)

Budget

Description

Ledger

Status

☐ Require Budget Journals

Dates

Created

Frozen

Budget Periods

First

Latest Open Year

Last

Master Budget

7.1.2 To assign budget periods:

1. In the Define Budget window, enter the First period of your budget. Once you save the budget, you cannot change the first period.
2. If you want to copy budget amounts from an existing budget, the first and last periods must be the same as the first and last periods of the budget you are copying from, although the year can be different.
3. Enter the Last period for your budget. Your budget can include up to sixty periods per year, and can span an unlimited number of fiscal years.
4. Save your work. General Ledger displays the Latest Open Year in your budget. This is blank until you open the first year of your budget by choosing the Open Next Year button.

7.1.3 To open the next budget year:

1. Navigate to the Define Budget window.
2. Enter or query a budget.
3. Choose Open Next Year.

7.1.4 To create a budget organization:

1. Navigate to the Define Budget Organization window.
2. Enter a Name and Description for your budget organization.
 - To define a new budget organization that includes only specific ranges of accounts, enter a unique name. Budget Organization names must be unique for a ledger. You can only have duplicate names across different ledgers.
 - If you have one or more budget organizations defined already, you can create a budget organization named "ALL" that automatically includes all accounts that are assigned to any budget organization. To do this, enter "ALL" as the budget organization Name.
3. Choose the ledger for your budget organization. You can choose any ledger that shares the same chart of accounts as your current data access set. If you use reporting currencies (journal or subledger level), you can choose a reporting currency.
4. Enter the sort and display options. The Ordering Segment is the account segment General Ledger uses to sort accounts when you review the budget organization assignments, and when you use the Enter Budget Amounts and Enter Budget Journals windows. Specify the Display Sequence for your account segments. You can use this sequence to change the order of your account segments on the Enter Budget Amounts and Enter Budget Journals windows. For each segment, enter a unique sequence number from 1 to n, where n is the number of segments in your account.
5. Enter Effective From and To Dates if you want to set a specific range of time when you can use this budget organization.
6. Assign accounts to the budget organization.
 - To assign ranges of accounts to the budget organization, choose Ranges. See Assigning Account Ranges to a Budget Organization,

- To copy account ranges from an existing budget organization for the same ledger, choose AutoCopy. See Copying Account Ranges from an Existing Budget Organization. If you are creating an "ALL" budget organization, you do not need to assign accounts.

7. (Optional) Select the Enable Security checkbox to apply definition access set security to your Budget Organization. Definition access sets are an optional security feature that allows you to control access to your General Ledger definitions. For example, you can prevent certain users from viewing, making changes, or using your Budget Organization for budget entry. If you do not enable security, all users will be able to use, view, modify, and delete your Budget Organization.

If the Assign Access function is available for your responsibility, the Assign Access button will be enabled once you check the Enable Security check box. Choose the Assign Access button to assign the definition to one or more definition access sets with the desired privileges.

If the Assign Access function has been excluded from your responsibility, you will not be able to view the Assign Access button in the Define Budget Organization window. You can still secure the Budget Organization by checking the Enable Security check box, but only definition access sets that are Auto Assigned will be automatically assigned to this Organization. See your System Administrator for more information on Function Security.

8. Save your work. General Ledger launches a concurrent process to assign the accounts.

9. After the concurrent process finishes, run the Budget Organization Listing report to check your work.

7.1.5 To assign a range of accounts to a budget organization:

1. Navigate to the Define Budget Organization window.

2. Query the budget organization.

Caution: If your Budget Organization has been secured using definition access sets, you must have Modify access to assign accounts.

3. Choose Ranges.

4. Enter a Line number and an account Low and High for each range you want to assign to your budget organization. The ranges cannot overlap other account ranges with the same currency for any budget organization ledger.

5. Select the budget entry Type for the account range:

Entered: You enter budget amounts, enter budget journals, upload budgets, create MassBudget journals, or transfer budget amounts. Use this entry type if you want to use budgetary control.

Calculated: You use budget formulas or MassBudget journals to enter budget amounts. You cannot use this entry type if you are using budgetary control.

6. Enter the Currency for each account range. For accounts with a budget entry type of Calculated, you must enter either the ledger's currency or STAT. To enter only statistical budget amounts for the account range, enter *STAT*

None Do not perform budgetary control for the Accounting Flexfields in the range.

Advisory Check or reserve funds for the Accounting Flexfields in the range. General Ledger reserves funds whether or not there are funds available. If sufficient funds are not available, you will receive a warning message.

Absolute Check or reserve funds for the Accounting Flexfields in the range. General Ledger reserves funds only if

sufficient funds are available. General Ledger has the following amount types: **PTD** General Ledger checks your funds based on the period-to-date funds available balance **QTD** General Ledger checks your funds based on the quarter-to-date funds available balance **YTD** General Ledger checks your funds based on the year-to-date funds available balance

PJTD General Ledger checks your funds based on the project-to-date funds available balance
General Ledger has the following boundary values:

Period General Ledger checks your funds based on the funds available balance as of the end of the period of the current transaction.

Quarter General Ledger checks your funds based on the funds available balance as of the end of the quarter of the current transaction.

Year General Ledger checks your funds based on the funds available balance as of the end of the year of the current transaction.

Project General Ledger checks your funds based on the funds available balance as of the end of the project of the current transaction. General Ledger designates the last period of your latest open budget year as being the end of the project.

7. You can review, add, or temporarily delete individual accounts assigned to your budget organization by choosing Range Assignments.

8. Save your work. General Ledger launches a concurrent program to assign all the existing accounts within the designated ranges to the budget organization. You can review the Status of each range.

Adding: The concurrent request to add accounts from a range is pending.

In Process: The concurrent request to add accounts from a range is running.

Reporting: The concurrent request to add accounts from a range is generating an execution report of all the accounts it created.

Current: The concurrent request to add accounts from a range has completed.

8 General Ledger – Financial Reporting

8.1 Overview of Reporting in General Ledger


General Ledger provides you with a variety of reporting capabilities, including the Financial Statement Generator, online inquiries, and standard reports and listings.

- The Financial Statement Generator enables you to build your own custom reports without programming. You can define reports with complete control over the rows, columns, contents, and calculations in your report.
- You can define reports to report across ledgers in a ledger set. You can even have the same report be reusable for different ledgers, ledger sets, or reporting currencies.
- You can perform online inquiries to search for detailed information quickly. For example, you can perform an online inquiry of your account balances or journal entries for a ledger. You can also review any of your financial statements, accounting reports, or listings online.
- General Ledger's standard accounting reports and listings include trial balances, journals, general ledgers, account analysis reports, chart of account listings, and more. You can set the runtime options for detail or summary information, sort sequence, and the selection of data you want to see on the report.

8.2 Overview of the Financial Statement Generator

Financial Statement Generator (FSG) is a powerful report building tool for Oracle General Ledger. With FSG, you can:

- Generate financial reports, such as income statements and balance sheets, based upon data in your general ledger across a ledger set or a ledger.
- Generate presentation quality financial reports with Business Intelligence (BI) Publisher so that you can have more control with report formatting options, including changing font characteristics, inserting graphical images or logos, and adding color.
- Generate presentation quality financial reports with BI Publisher so you have more control with report formatting options, including changing font characteristics, inserting graphical images or logos, and adding color.
- Define segment value security rules to restrict financial information contained in FSG report output generated by specific users and responsibilities.
- Enable definition access set security to allow specific reports or report objects to only be used, viewed, or modified by certain users.
- Define your reports with reusable report objects, making it easy to create new reports from the components of reports you've already defined. You can also define your reports to be reusable for different ledgers or ledger sets by specifying the ledger or ledger set at report generation time as opposed to in the report definition.
- Design custom financial reports to meet specific business needs.
- Print as many reports as you need, simultaneously.

- 
- Print the same report for multiple ledgers, companies, cost centers, departments, or any other segment of your account structure, in the same report request.
 - Schedule reports to run automatically.
 - Produce ad hoc reports whenever you need them.
 - Print reports to tab-delimited files for easy import into client-based spreadsheet programs

9 Oracle Payable

9.1 Oracle Payables Overview

Oracle Payables has a highly responsive, multi-window graphical user interface (GUI) with full point-and-click capability. You can use your mouse or keyboard to operate graphical controls such as pull-down menus, buttons, poplists, check boxes, or tabbed regions.

9.2 Payables Features

The following Payables features leverage multiple organization access control:

- Supplier sites (supplier sites are at the operating unit level)
- Withholding tax certificates and exceptions
- Financial options
- Payables options
- Reporting entities
- Expense report templates
- Signing limits
- Procurement and credit cards:
- Card programs
- Card profiles
- GL account sets
- Code sets

9.3 Oracle Payables - Invoicing

9.3.1 Invoices Overview

An *invoice* is an itemized list of goods shipped or services rendered, with an account of all costs. Oracle Payables lets you capture all the attributes of the real-life invoice documents you receive from your suppliers. When you enter an invoice in Payables, the invoice information is divided between the invoice header and the invoice lines.

9.3.2 Invoice Types

- **Standard:** An invoice from a supplier representing an amount due for goods or services purchased. Standard invoices can be either matched to a purchase order or not matched.
- **Credit Memo:** A memo from a supplier representing a credit amount toward goods or services
- **Debit Memo:** An invoice you enter to record a credit for a supplier who does not send you a credit memo.
- **Mixed:** An invoice type you enter for matching to both purchase orders and invoices. You can enter either a positive or a negative amount for Mixed invoice type.
- **Prepayment:** A type of invoice you enter to pay an advance payment for expenses to a supplier or employee.
- **Expense Report:** An invoice representing an amount due to an employee for business-related Invoices expenses.
- **Withholding Tax:** An invoice you enter to remit taxes withheld to the appropriate tax authority.
- **Retainage Release:** An invoice created for complex work and advance contract financing

10 Oracle Receivable

10.1 Overview and Customer Transaction

10.1.1 Entering Transactions

Use the Transaction window to enter your invoices, debit memos, credit memos, and commitments. You can also query and update your transactions in this window and review your transactions and chargebacks in the Transactions Summary window. For a list of fields you can update, From this window, you can also quickly view the balance due on a transaction, and drill down to view more details in the Balances window.

When you enter an invoice, Receivables uses your Auto Accounting rules to determine your default general ledger accounts.

You can enter transactions one at a time or in a group called a batch.

Your system administrator determines whether you can delete a transaction.

10.1.2 Previewing Transactions Online

If you use Bill Presentment Architecture (BPA), then you can use the BPA icon to preview completed transactions online.

10.1.3 Transaction Types

Transaction types determine whether a transaction updates your open receivables, can be posted to your general ledger, the transaction's creation sign, and whether transactions with this type use natural application only or will allow over application. The transaction type also provides the default transaction class, payment term, and printing options for each transaction. You can set up Auto Accounting to use transaction types when determining your general ledger accounts. If Auto Accounting depends on transaction type and you change this value, Receivables displays a pop-up window asking you if you want to recalculate all of your general ledger accounts. If you choose Yes, Receivables reruns Auto Accounting and makes the appropriate changes to your accounts (unless the transaction is a chargeback).

10.2 Receipts and Period End Closing

10.2.1 Entering Receipts

Use the Receipts window to enter new or query existing receipts. You can enter two types of receipts in Receivables:

- **Standard receipts:** Payment (such as cash or a check) that you receive from your customers for goods or services. Also known as *cash receipts*.
- **Miscellaneous receipts:** Revenue earned from investments, interest, refunds, stock sales, and other nonstandard items. You can enter receipts and apply them to transactions in either Open or Future accounting periods. You can also create chargebacks or adjustments against these

transactions. You can apply receipts to invoices, debit memos, deposits, on-account credits, and chargebacks. You can partially or fully apply a receipt to a single debit item or to several debit items. You can also apply receipts to other open receipts.

If you are using Oracle Trade Management, then you can place your customers' overpayments and short payments into claim investigation while the claim is being researched. If you do not specify a customer for a receipt, the receipt is unidentified. In this case, the receipt amount appears in the Unidentified field in the Receipts window (Balances region). You cannot apply an unidentified receipt.

10.2.2 Viewing the Receipt History

Use the Receipt History window to view additional details about your saved receipts. This window displays a history of the receipt's statuses, as well as exchange rate adjustments. You can also view all application notes that were made to this receipt. This window also includes Oracle Cash Management-related information.

10.2.3 Receipt Status

A receipt can have one of the following statuses:

Approved: This receipt has been approved for automatic receipt creation. This status is only valid for automatic receipts.

Confirmed: For manually entered receipts, this status indicates the receipt belongs to a receipt class that requires remittance.

Remitted: This receipt has been remitted.

Cleared: The payment of this receipt was transferred to your bank account and the bank statement has been reconciled within Receivables.

Reversed: This receipt has been reversed. You can reverse a receipt when your customer stops payment on a receipt, if a receipt comes from an account with non-sufficient funds or if you want to re-enter and reapply it in Receivables.

Note: A receipt's state is different from its status.

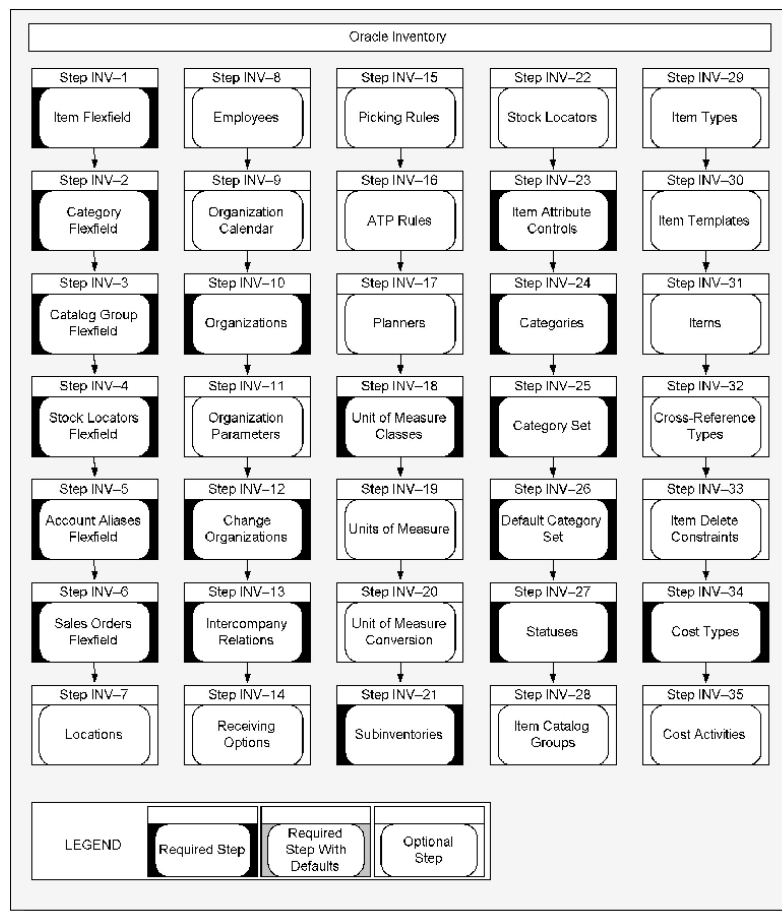
11 Supply Chain Management

11.1 Overview of Inventory Structure

You must plan how Oracle Inventory represents your company's inventory sites and business units. This includes defining organizations, locations, sub-inventories, and locators.

11.2 Setup Flowchart

Some of the steps outlined in this flowchart and setup checklist are required and some are Optional. Required Step With Defaults means that the setup functionality comes with pre-seeded, default values in the database; however, you should review those defaults and decide whether to change them to suit your business needs. If you want or need to change them, you should perform that setup step. You need to perform Optional steps only if you plan to use the related feature or complete certain business functions.



12 Purchasing Fundamentals

12.1 Overview of Requisitions

With online requisitions, you can centralize your purchasing department, source your requisitions with the best suppliers, and ensure that you obtain the appropriate management approval before creating purchase orders from requisitions. You can use Master Scheduling/MRP to generate online requisitions automatically based on the planning requirements of your manufacturing organization. You can use Inventory to generate online requisitions based on *replenishment* requirements. You can use Work in Process to generate online requisitions for outside processing requirements. Finally, you can use Purchasing to create internal requisitions, which are handled as internal sales orders and are sourced from your inventory rather than from outside suppliers like purchase requisitions. Purchasing provides you with the features you need to satisfy the following basic requisition needs. You should be able to:

- Create, edit, and review requisition information online. You should also be able to enter suggested supplier information, delivery instructions, multiple accounting distributions, and notes to buyers, approvers, and receivers.
- Review the current status and action history of your requisitions. You should always know who approves requisitions and whether they are in the approval, purchasing, receiving, or delivery stage.
- Route requisitions according to your approval structure. You should also be able to set authorization limits by amount, charge account, item category, and location.
- Review and approve requisitions that need your approval. You should also be able to see the full requisition detail and review the action history before you approve a requisition.
- Print requisitions (with status Approved, Cancelled, Rejected, In Process, Pre-Approved, and Returned) for off-line review and approval. You should always be able to track the status of requisitions through the approval process.
- Import requisitions from other systems such as material or distributions requirement planning applications
- Perform online funds checking before creating requisitions. You should always know how your planned expenses compare to your budget.
- Automatically source requisitions from outstanding blanket purchase agreements, contract purchase agreements, or quotations you have made with suppliers
- Support flexible pricing rules
- Create requisitions quickly and easily for commonly purchased items
- Create internal requisitions that are sourced from your inventory by means of internal sales orders
- Provide attachments as notes on requisition headers and lines
- Assign requisition lines to buyers and review buyer assignments for requisition lines
- Forward all requisitions awaiting approval from one approver to an alternate approver. Within your security and approval constraints, you should be able to reroute requisitions from one approver to another whenever you want.
- Record suggested foreign currency information for each requisition line

12.2 Major Features Eliminate Paper

With Purchasing, your requestors submit requisitions online. You therefore eliminate the need for paper requisitions that you can misplace or lose during the approval process.

Quick Online Entry

With Purchasing, you can easily create requisitions online. Complete a requisition for any item by simply entering the requestor name, item description, delivery location, Requisitions price, delivery quantity, and accounting distribution. Purchasing uses the Account Generator to enter the distribution automatically whenever possible.

Approval Status

Purchasing automatically displays the approval status of your requisition and informs you whether it is Approved, Cancelled, In Process, Incomplete, Pre-Approved, Rejected, or Returned. You know where your requisition is at all times.

Action History

Purchasing lets you review the action history of requisitions as they move through the approval process. Purchasing uses your security and approval structure to help you forward requisitions. On-line notifications keep your requisitions moving. If someone rejects a requisition, you always know who and why.

Easy Resubmission

Purchasing lets you resubmit a rejected requisition for reconsideration. Depending on how you define system setup options, resubmitted requisitions return either to the original approver for reconsideration or to an alternate approver that you choose.

Easy Cancellation / Final Close


Purchasing lets you cancel or final close a requisition or requisition line before your manager approves it or before a buyer places it on a purchase order. If you are using encumbrance or budgetary control, Purchasing automatically creates negative debit encumbrance entries for the cancelled requisitions. When you final close a purchase order, Purchasing creates credit entries which reverse the encumbrances.

Easy Assignment

Purchasing lets you assign requisitions to specific buyers and review which requisitions are Assigned and Unassigned.

Accurate Accounting

Purchasing uses the Account Generator to automatically supply accounting information as part of a requisition. You can allocate line item quantities to cost centers, organizations, projects, or



departments. You can also create multiple distributions for a single item. For instance, you can allocate a computer system purchase across more than one cost center or organization

Maximum Flexibility

Purchasing provides maximum flexibility by letting requestors create requisitions quickly and add details later. In the requisition header and on each line item, Purchasing provides space for descriptions and notes to approvers, buyers, and receivers.

Quick Customization

Purchasing lets you use Descriptive Flexfields to tailor the format of the requisition header and line blocks to your unique needs without additional programming.

Online Funds Availability Checking

Purchasing lets you verify whether you have enough funds available in your budget before you complete a requisition. You can check and reserve funds for a requisition at any level of a requisition.

Online Approvals

Purchasing lets you approve or reject requisitions online. You can access full requisition detail and prior action history to review the full detail before making an approval decision. Depending on your approval controls, you may be able to update a requisition before you approve it.

Requisition Templates

This feature, accessible through the Supplier Item Catalog, lets you quickly create requisitions for commonly purchased items. Buyers create templates that group commonly ordered items like office supplies into one place.

Quantity Rounding

If Quantity Rounding for inventory sourced lines is enabled in the Purchasing Options window, Purchasing either displays the rounded quantity you should have entered in a warning message or it updates the quantity to the appropriate rounded quantity. The rounding is based on the Unit of Issue (or primary unit of measure if the Unit of Issue is not defined) and the Rounding Factor defined for the item in Inventory. Rounding is up or down to the nearest whole Unit of Issue/primary unit of measure using the rounding factor.

Flexible Pricing

Pricing for your items can default in from the item definition or from negotiated documents. If your pricing is complex you can define your pricing rules using the Requisitions Oracle Advanced Pricing engine. To price requisitions and purchase orders based on pricing rules setup in Oracle Advanced Pricing, the requisition line need simply reference a contract purchase agreement.

Requisition Printing

Purchasing provides a requisition printing capability to provide hard copy requisitions. You can print requisitions after completing them, or have somebody print and distribute all requisitions. Use the Printed Requisitions Report to print the requisitions which have the following status: Approved, Cancelled, Rejected, In Process, Pre-Approved, and Returned. The report does not include requisitions with status Incomplete.

Quick Access to Particular Requisitions

You can place requisitions that you reference frequently in the Oracle Applications Navigator. Placing documents in the Navigator is useful when you need to query large documents with multiple lines, shipments, or distributions. When the requisition is open, choose Place on Navigator from the File menu. When you choose the Documents tabbed region in the Navigator, you can then access that document directly from within the Navigator. You can also do this with purchase orders.

Requisition Import

Using Requisition Import, you can import requisitions from other Oracle Applications or from non-Oracle systems. Requisition Import lets you integrate Purchasing with new or existing applications such as Material or Distribution Requirement Planning systems. You can import requisitions as often as you want. Then, you can review or place these requisitions on purchase orders. While requisitions can be imported with any approval status, they are most commonly approved since they correspond to specific production schedules, outside processing, or stock resupply. However, if you are using requisition encumbrance, Requisition Import changes the Approved status to Pre-Approved so that you can reserve funds for the requisition.

Requisitions within Center-Led Procurement

Requesters can create requisitions that are sourced to global agreements (global enabled Oracle Purchasing User's Guide blanket purchase agreements or contract purchase agreements). This is of particular benefit to large organizations in which management wants other business units to use pricing or terms negotiated by a business unit. This in turn increases the bargaining power of the negotiating business unit with their supplier as they are negotiating on behalf of multiple business units. To take advantage of these global agreements the buyer in the negotiating operating unit must enable the other operating units that are to use the global agreement.

Requisition Types

Benefits of Online Requisitions You can save time, money, and paper by processing requisitions online. With a paper system, you must provide forms to the requestor, the requestor must send the form to someone else to be approved, and the buyer must manually consolidate requisitions to place on a purchase order. Throughout all of these transactions, you may generate a number of errors, waste time, and lose money. Some of the many problems you may incur with paper requisitions include:


- The requestor may not fill in the requisition completely or accurately.
 - The requestor's handwriting may be illegible.
 - Someone without proper authority can potentially approve a requisition.
 - The requestor might have to mail the requisition to an approver at a different location and wait a number of days to get it back.
 - The approver or buyer may lose or damage the requisition.
 - The buyer may translate the information from the requisition to the purchase order incorrectly.
 - You may lose significant quantity discounts if the buyer cannot locate all the requisitions that reference a particular item.
- Purchasing helps you eliminate these problems with online requisition processing. When you create a requisition online, you can instantaneously send it to an approver. The approver can access your requisition from any computer and provide a note, change the requisition, and reserve funds if necessary. You also set controls to ensure that only the appropriate people can approve a particular requisition. After approval, inventory sourced lines on the requisition are handled as internal sales orders. For supplier sourced lines, the buyer can then consolidate all similar requests onto a single purchase order to negotiate the best price. Through all of these transactions, you never have to use any paper. By processing requisitions online, you significantly reduce the length of the purchasing cycle. You can also provide requisition line defaults for both Requisitions supplier and internally sourced lines to speed up requisition entry and automatically source items to improve buyer efficiency. At any point, the requestor can review the requisition online to check the status of the requisition.

Implementing Online Requisitions

Many companies want to provide online requisitions to everyone in the company. Others want to limit the number of users who have access to the system. Purchasing is flexible enough to meet the needs of your company. To give everyone access to the system, simply create a user name for each employee in the company and assign the employee the appropriate responsibilities. You can easily designate a smaller group of individuals as requisition preparers if you want to limit the number of requestors on the system. These people can create requisitions for anyone in the company by identifying the appropriate requestor directly on the requisition line. You might also want to limit some preparers to internal requisitions and others to purchase requisitions. You can also print requisitions to obtain signature approvals if some of the approvers do not have access to the system. You can then assign an individual to update the authorization status for these requisitions.

Purchase Requisitions

Use the Requisitions window to create requisitions. You must choose the requisition type (internal or purchase). You can also provide a description, unlimited notes, and defaults for requisition lines. For each requisition line, you choose the item you want to order along with the quantity and delivery location. You can get sourced pricing from catalog quotations or open blanket purchase agreements. You can also choose a price from a list of historical purchase order prices. In the Distributions



window, you can charge the item to the appropriate accounts, or you can let the Account Generator create the accounts for you. Once you complete the requisition, you send it through the approval process.

Internal Requisitions

Unlike purchase requisitions, which are supplied from purchase orders, internal requisitions are supplied from internal sales orders. Internal requisitions are not picked up when you AutoCreate RFQs or purchase orders, nor can they be assigned to a buyer in the Assign Requisitions window.

Requisition Templates

Use the Requisition Templates window to define requisition templates for items you purchase frequently. For example, if you frequently buy certain office supplies, you can set up an office supplies template for your requestors. This template consists of a list of all items, prices, and sourcing information you want available to the requestor. When you want to order items from this template, use the Supplier Item Catalog, choose the office supplies template, and indicate the quantity you want to order.

Imported Requisitions

Purchasing lets you import or reschedule requisitions from other Oracle or non-Oracle systems. For example, Work in Process uses Requisition Import to create requisitions for outside processing. Master Scheduling/MRP also automatically reschedules existing requisitions by updating the need-by date during this process. If you are using Inventory, you can send a requisition requirement to Purchasing and then run Requisition Import in Purchasing to create the requisition.

Paper Requisitions

You do not need to create a requisition online to purchase an item. Instead, you can reference a paper requisition number directly on the purchase order Distribution Details. Later, you can use the Purchase Orders window to review the status of the purchase orders referencing the paper requisitions.

12.3 Overview of Purchase Orders

Purchasing provides the Purchase Orders window that you can use to enter standard and planned purchase orders as well as blanket and contract purchase agreements. You *must* be defined as a buyer to use this window.

To create purchasing documents more quickly, use the AutoCreate Documents window. Purchasing provides you the features you need to satisfy the following purchasing needs. You should be able to:

- Review all of your purchases with your suppliers to negotiate better discounts
- Create purchase orders simply by entering a supplier and item details
- Create standard purchase orders and blanket releases from both on-line and paper requisitions
- Quickly and effectively manage procurement in a global business environment using global agreements that can be shared across the entire enterprise
- Create accurate and detailed accounting information so that you charge purchases to the appropriate departments
- Check your funds availability while creating purchase orders
- Review the status and history of your purchase orders at any time for all the information you need
- Communicate purchase orders to suppliers flexibly using a number of options
- Inform your suppliers of your shipment schedule requirements
- Record supplier acceptances of your purchase orders. You always know whether your suppliers have received and accepted your purchase order terms and conditions
- Create your purchase orders by providing a quantity and price for each item you are ordering. Alternatively, you should also be able to create your purchase order simply by providing an amount if you are ordering a service that you cannot break down by price and quantity
- Create purchase orders that leverage flexible pricing structures or implement complex pricing from Oracle Advanced Pricing
- Copy purchase orders.

12.3.1 Purchase Order Types

Purchasing provides the following purchase order types: Standard Purchase Order, Planned Purchase Order, Blanket Purchase Agreement, and Contract Purchase Agreement. You can use the Document Name field in the Document Types window to change the names of these documents. For example, if you enter Regular Purchase

Order in the Document Name field for the Standard Purchase Order type, your choices in the Type field in the Purchase Orders window will be Regular Purchase Order, Planned Purchase Order, Blanket Purchase Agreement, and Contract Purchase Agreement.

Standard Purchase Orders

You generally create standard purchase orders for one-time purchase of various items. You create standard purchase orders when you know the details of the goods or services you require, estimated costs, quantities, delivery schedules, and accounting distributions. If you use encumbrance accounting, the purchase order may be encumbered since the required information is known.

Blanket Purchase Agreements

You create blanket purchase agreements when you know the detail of the goods or services you plan to buy from a specific supplier in a period, but you do not yet know the detail of your delivery schedules. You can use blanket purchase agreements to specify negotiated prices for your items before actually purchasing them. Blanket purchase agreements can be created for a single organization or to be shared by different business units of your organization (global agreements). You can encumber funds for a blanket purchase agreement.

Global Blanket Agreements

You may need to negotiate based on an enterprises' total global purchase volume to enable centralizing the buying activity across a broad and sometimes diverse set of businesses. Using global agreements (a special type of blanket purchase agreement), buyers can negotiate enterprise-wide pricing, business by business, then execute and manage those agreements in one central shared environment. Enterprise organizations can then access the agreement to create purchase orders that leverage pre-negotiated prices and terms. You can encumber funds for a global agreement.

Blanket Releases

You can issue a blanket release against a blanket purchase agreement to place the actual order (as long as the release is within the blanket agreement effectivity dates). If you use encumbrance accounting, you can encumber each release.

Contract Purchase Agreements

You create contract purchase agreements with your suppliers to agree on specific terms and conditions without indicating the goods and services that you will be purchasing. You can later issue standard purchase orders referencing your contracts, and you can encumber these purchase orders if you use encumbrance accounting.

Global Contract Agreements

You can use global contract agreements (a special type of contract purchase agreement) to centralize a supplier relationship. Buyers throughout the enterprise can then leverage this relationship by referencing this global contract agreement in your standard purchase orders.

Planned Purchase Orders

A planned purchase order is a long-term agreement committing to buy items or services from a single source. You must specify tentative delivery schedules and all details for goods or services that you want to buy, including charge account, quantities, and estimated cost.

Scheduled Releases

You can issue scheduled releases against a planned purchase order to place the actual orders. If you use encumbrance accounting, you can use the planned purchase order to reserve funds for long term agreements. You can also change the accounting distributions on each release and the system will reverse the encumbrance for the planned purchase order and create a new encumbrance for the release.

12.4 Overview of Receiving

Purchasing lets you control the items you order through receiving, inspection, transfer, and internal delivery. You can use these features to control the quantity, quality, and internal delivery of the items you receive.

Purchasing provides you with the features you need to satisfy your receipt, inspection, transfer, and delivery needs. You should be able to:

- Use routing controls at the organization, supplier, item, or order level to enforce material movement through receiving. For example, you can require inspection for some items and dock-to-stock receipt for others.
- Define receiving tolerances at the organization, supplier, item, and order level, with the *lowest* level overriding previous levels. You can define tolerances for receipt quantity, on-time delivery, and receiving location. You can assign looser tolerances to low-value items that you consume at high volumes. You can set enforcement options to ignore, warn the user, or reject transactions that violate the tolerances.
- Use blind receiving to improve accuracy in the receiving process. With this option, the quantity due for each shipment does not show and quantity control tolerances are ignored. Also, the quantity is not visible in view windows or in reports. However, if you choose to have visible receiving, then your receiving staff can see the quantity due.
- Use Express Receipt to receive an entire purchase order with a few keystrokes. You can exclude certain lines for express transactions.

- Use Advance Shipment Notices (ASNs) to enter receipts in the Enter Receipts

9-2 Oracle Purchasing User's Guide window, reducing data entry time.


- Use the Cascade function to distribute a given quantity of an item from a single supplier across multiple shipments and distributions. This function is enabled by a Receiving Options checkbox, Allow Cascade Transactions, and is available only when you have specified a source and an item in the Find Expected Receipts window.
- Specify match approval levels. You can specify two-, three-, and four-way match= approval levels on a purchase order line. Purchasing uses your receiving and inspection information to ensure that you only accept and pay for the items you order, receive, or inspect. Choose the three-way match approval level if you want to receive items before you allow payment. Choose the four-way match approval level if you require inspection and acceptance of receipts before authorizing payment.
- Print the receiving and inspection documentation you need. For example, you can print Receipt Travelers. Also, you can prepare for incoming receipts by printing the Expected Receipts Report to

help you identify items and quantities you expect to receive. You can use this report to plan your work, identify receipts satisfying an urgent demand, and control unexpected receipts. Finally, you can produce summary and detail receiving transaction reports by item, supplier, purchase order number, and/or receiving date range.

- Import receipts from other Oracle Applications, other non-Oracle systems, barcoded and other electronic receiving sources, and advanced shipment notices (ASN).
- Track, update, and record the receipt of in transit and inter-organization shipments.
- Enter different types of receipt transactions based on your organization's needs. For example, you should be able to record in one transaction a direct receipt of inventory items into inventory.
- Record receipt of unordered items based on your item, supplier, or organization defaults. For example, if your organization does not allow receipt of unordered items, you should not be able to enter a receipt unless it is matched to an order shipment.
- Record receipt of predefined substitute items if you set your receiving options to allow this feature. You define the acceptable substitutes during setup for the items you purchase.
- Automatically update related supply information, inventory balances, WIP operations, requisition details, and purchase order details while entering a single receiving transaction.
- You can record transfers of inventory items from receiving and inspection to inventory or to the shop floor. You can also record transfers of items to different locations in the receiving and inspection area. For example, you might need to move refrigerated items from the receiving dock into a cold storage area while you are waiting to inspect them. Purchasing lets you record these types of transfers in the same window you use to deliver to stock or expense.
- Record receipts against services and labor. You can enter either the total value of services received, or the amount of services tied to an invoice. For example, you might receive 40 hours of consulting services.
- Receive services, inventory, expense, and outside processing items using one screen. You acknowledge receipt of services by receiving amounts of the service, generally related to receipt of an invoice. You receive inventory items to expense or asset sub-inventories, you receive expense items to the requestor, and you receive outside processing to the shop floor (designated operations in your manufacturing process).
- Distinguish closed for invoicing from closed for receiving. Purchasing automatically closes your purchase order for receipt when it is fully received. You can manually close partially received purchase orders if you no longer expect any more receipts against them. Close for invoicing and close for receiving are managed using tolerances. You can specify that when you have received a certain percentage of a shipment, Purchasing will close the receipt. This is a soft close, and you can reopen the receipt. Purchasing rolls up closing to the line and header level, and "Closed" information does not show in the Open Purchase Orders Report. Also, if there is a remaining balance, closed quantities are no longer visible as supply scheduled receipts to MRP/ATP.
- Decide how you accrue un-invoiced receipts. For instance, you can accrue receipts perpetually or at period-end for expense items. Purchasing uses perpetual accrual for your inventory and shop floor item receipts. Purchasing and Inventory together provide you with perpetual visibility and control on

your accrued liabilities for inventory items. Inventory lets you maintain the value of your inventories on a perpetual basis. And Purchasing automatically records your accrued liability in your general ledger as you enter receiving transactions. Purchasing also provides you with complete visibility and control of your inventories values, accrued liabilities for inventory and non-inventory items, purchase price variances, and invoice price variances. And Purchasing provides you with the information you need to facilitate your period close and your inventory, purchasing, and payables reconciliation process.

- Identify and handle hazardous materials. You can use attachments to provide detailed handling instructions. Purchasing displays hazardous material information in the receiving, transfer, and inspection windows as well as on the Receipt Traveler.
- Track the quantity and destination of internally delivered items. You know exactly what items you receive and where to deliver them within your organization.
- Define detailed rules for locator within subinventories for the disposition of inventory receipts.
- Track lot and serially controlled items.
- Define which of your items require inspection. Purchasing lets you inspect received items before you move the items into stock or deliver them to the requestor. You can accept or reject items and provide detailed information about your inspection results. Purchasing lets you review your inspection results on-line. You can review your inspection results by receipt number, purchase order number, supplier, item, and/or transaction date range. Purchasing also provides summary and detail reports to help you analyze your suppliers' performance. You can produce supplier quality reports by buyer, supplier, and item. You can use the receiving inspection register to review your inspections by receipt.
- Record returns to suppliers. You can return items that are damaged on receipt or that fail your inspection process. If you return items that you have already delivered to inventory, Purchasing automatically updates the inventory stock levels.
- Enable the automatic creation of debit memos for Return to Supplier transactions.
- Correct receiving transaction errors. Purchasing automatically updates the inventory balances if you correct the quantities of items that have already been moved into inventory.
- Use flexible search criteria to choose receipts for review.
- View receipts details. You should be able to view all the details of your receipt, including matching purchase order and shipment information.
- Perform transactions with minimal effort. For example, you can record a complete receipt with only a few mouse clicks.
- Use attachments throughout the receiving process to more completely identify transactions and to inform users of special requirements.
- Record drop shipments as receipts once the supplier informs you that the drop shipment has been delivered to the customer.
- Receive purchase orders for kanban replenishment requests that were generated from Oracle Inventory. Once you record delivery of a kanban item through the Receiving Receipts or Receiving



Transactions windows, Inventory automatically receives a status of Full for the order, indicating that the inventory supply has been replenished.

- Capture exchange rate information on the receipt.
- Capture and update an item's country of origin on the receipt.
- Capture movement statistics at the time of receipt.
- Provide support for electronic signatures for receipts and inspections.
- Enable inventory items to display shortage messages upon receipt, if a shortage exists, so that the responsible person can make the item available with a high priority.
- Receive items returned by a customer.
- View inbound shipment details using the waybill number.

13 Order Management

Sales Orders (63472) - Computer Services and Rentals

Order Information | Line Items

Ship To Contact

Main | Others

Customer	Computer Services and ...	Order Number	63472
Customer Number	1006	Order Type	Order Only
Ship To Contact	Brown, Gerry Mr.	Date Ordered	30-MAY-2003 08:47:41
Customer Contact	Brown, Gerry Mr.	Price List	Corporate
Ship To Location	Chattanooga (OPS)	Salesperson	Lewis, Mr. David
	301 Summit Hill Drive	Status	Entered
		Currency	USD
	Chattanooga, TN, 37401, L	Subtotal	0.00
Bill To Location	Chattanooga (OPS)	Tax	0.00
	301 Summit Hill Drive	Charges	0.00
		Total	0.00
	Chattanooga, TN, 37401, L		

[]

Actions | Related Items | Configurator | Availability | Book Order

13.1 Overview of Sales Orders

You can enter, view, and update sales orders using the Sales Orders window. You can also enter returns using the Sales Orders window. You can order standard items, both shippable and non-shippable, and configurations using this window. You can also adjust pricing, assign sales credits, record payment information, attach notes, schedule shipments, query item availability, and make reservations, including selection of subinventories.

You can enter information in the Sales Orders window as you receive it. Order Management validates individual fields as they are entered. When you book an order, Order Capture 2-9 Order Management validates to ensure that all required fields have values, that configurations are complete, and so on. After an order has been booked, it becomes eligible for the next step in its workflow. For orders that you intend to source externally (drop shipments), you can use all aspects of standard sales order functionality. The source type at order entry determines whether an order will be fulfilled from inventory or by an external supplier. For country-specific information, please see the appropriate country-specific user's guide.

13.2 Overview of Sales Agreements

A Sales Agreement is defined as an agreement for a customer that has specific characteristics between a customer and a supplier. Sales Agreements are similar in functionality to the Sales Agreement purchase order in Oracle Purchasing. These characteristics may include the date range of the agreement, the items included, the price of the items, the quantity of each item that the parties committed to as well as other attributes, like freight or payment terms. Once a Sales Agreement is entered for a customer, multiple releases (shipments) against the Sales Agreement can be processed

over a period of time within Order Management. The order is fulfilled and billed according to the terms of the Sales Agreement. Tracking information will also be accumulated for Sales Agreement such as quantity fulfilled, and dollar value fulfilled of released lines. This information will be used to view status of orders executed against a Sales Agreement. Sales Agreements interface with Oracle Pricing to price Sales Agreement lines, default pricing information, and provide special pricing for Sales Agreements. Oracle Release Management discloses all releases against Sales Agreements to determine the current picture of demand. Demand will only be looked at from the release lines. The Sales Agreements functionality includes:

- Windows: Find Sales Agreements, Sales Agreements Summary, and Sales Agreements windows
- Captures agreement information
- Enforce Sales Agreement terms: price list, shipping method, payment terms, ship to, bill to, etc.
- Ability to track revisions to the Sales Agreements
- Ability to secure who can enter Sales Agreements
- Create simple price lists during Sales Agreement creation
- Specify defaulting rules for Sales Agreement attributes
- Support Standard, ATO items, and Kits
- Support Item Categories and all items
- Ability to create releases by Order Import and Process Order API
- View releases of Sales Agreements
- Process the releases to the Sales Agreement
- Default information from the Sales Agreement to the release
- Aggregate information about the releases and access that consolidated information from the Sales Agreement
- Integrations with Advanced Pricing and Release Management
- Effectivity dates of the agreement
- Ability to enter related customer information in the Sales Agreement

14 HRMS and Payroll Overview

14.1 Planning Implementation

The flexibility of Oracle HRMS enables you to develop an implementation project plan that meets your own specific business needs for Oracle Human Resources, Oracle Payroll, Oracle Advanced Benefits, Oracle Learning Management, and Oracle Self-Service Human Resources (SSHR). With Oracle HRMS you choose the functions you want to implement initially. You implement other functions when you need to use them. For example, you might decide to implement for HR users, and then to add payroll processing capabilities in a subsequent phase. Alternatively, you might decide to implement payroll functions during your initial phase. You could choose to extend your range of HR information and functions later. Decision making is an important part of any implementation process and before you begin to configure Oracle HRMS you must decide how you want to use the system. Adopting a staged, or *incremental*, approach to implementation lets you focus on those areas of the system you want to use. Working in partnership with Oracle you can call on skilled consultants to provide you with all of the training, and technical and professional expertise you need. Together you can successfully implement an HRMS system that matches your specific business needs in the most efficient and cost-effective manner.

14.2 Getting Started with the Configuration Workbench

The Configuration Workbench is an integrated toolset that simplifies the tasks of configuration management. Configuration tasks are grouped together in a framework that makes it easy to find the right configuration tool for each task. Added features make it easy to:

- Track your configuration activities or progress
- Store supporting documents
- View related reports
- Link directly to online training and help
- Link to the latest release information on My Oracle Support

With HRMS you tailor each business area of the system to reflect your own data structures and policies or processes. The Configuration Workbench provides one central point with direct access to the tools for configuring each business area of the HRMS system. Embedded in the tools is the distilled knowledge of good practice configuration choices based on our experience of working with many hundreds of customers in different industries and geographies. The wizards provide step-by-step information as you go through them and the pages of the Configuration Workbench contain detailed context sensitive information.

14.3 New or Existing Customers

If you are new to Oracle HRMS, you use the Quick Start Implementation to evaluate different configuration options as part of a conference room pilot (CRP). When you are satisfied with your prototype configuration, you use the Full Implementation.

14.4 Oracle HRMS Functional Areas

Oracle HRMS is organized into seven business areas, called functional areas. The seven Oracle HRMS functional areas are:

- Enterprise and Workforce Management
- Workforce Sourcing and Deployment
- Talent Management
- Compensation and Benefits Management
- Payroll Process Management
- Time Management
- HR Information Systems

The current version of the Configuration Workbench supports Enterprise and Workforce Management, Compensation and Benefits Management, Payroll Process Management, and HR Information Systems.

14.5 Implementation Checklist

Use the following checklists to record which parts of Oracle HRMS you want to use. Then refer to the implementation steps to see the high level steps you must complete for each business function you have chosen to implement.

Administration, (Required) Includes key and descriptive flexfields, Extra Information Types (EITs), currencies, "View All" HRMS User, and lookups.

Enterprise and Workforce Management, (Required) Includes organizations, jobs, positions and position control, workflow for transactions, HR budgets, person types, and collective agreements. Payroll Process Management, (Optional) Includes payrolls, payment methods, and payslip information. For Canada, also includes Workers' Compensation, and provincial medical.

Compensation, Benefits, and Payroll, (Optional) Includes grades, grade related pay, benefits eligibility, life events, compensation objects, enrollment requirements, activity rates, elements, salary administration,

leave and absence management, element sets, rate by criteria, and additional setup for payroll processing and health and welfare.

Benefits Implementation Without Total Compensation Setup Wizard, (Optional) Provides the full sequence of steps you follow to set up benefit plans manually.

Workforce Sourcing and Deployment, (Required) Includes recruitment, assignment statuses, contract statuses, assignment rate types for contingent workers, special personal information, global deployments, and requirements matching.

Talent Management, (Optional) Includes competencies, objectives (Workforce Performance Management), qualifications, and appraisals.

Workforce Intelligence, (Optional) Includes predefined Discoverer workbooks and a predefined Discoverer End User Layer based on HRMS transactional tables.

HR Information Systems, (Optional) Includes reports, letter generation, configuration, task flows, user security, audit requirements, Oracle Applications Help, and Web Applications Desktop Integrator (Web ADI).

15 ERP Implementation Strategy and Challenges

15.1 How can ERP improve a company's business performance?

ERP's best hope for demonstrating value is as a sort of battering ram for improving the way your company takes a customer order and processes it into an invoice and revenue—otherwise known as the order fulfillment process. That is why ERP is often referred to as back-office software. It doesn't handle the up-front selling process (although most ERP vendors have recently developed CRM software to do this); rather, ERP takes a customer order and provides a software road map for automating the different steps along the path to fulfilling it. When a customer service representative enters a customer order into an ERP system, he has all the information necessary to complete the order (the customer's credit rating and order history from the finance module, the company's inventory levels from the warehouse module and the shipping dock's trucking schedule from the logistics module, for example).

People in these different departments all see the same information and can update it. When one department finishes with the order it is automatically routed via the ERP system to the next department. To find out where the order is at any point, you need only log in to the ERP system and track it down. With luck, the order process moves like a bolt of lightning through the organization, and customers get their orders faster and with fewer errors than before. ERP can apply that same magic to the other major business processes, such as employee benefits or financial reporting.

That, at least, is the dream of ERP. The reality is much harsher.

Let's go back to those inboxes for a minute. That process may not have been efficient, but it was simple. Finance did its job, the warehouse did its job, and if anything went wrong outside of the department's walls, it was somebody else's problem. Not anymore. With ERP, the customer service representatives are no longer just typists entering someone's name into a computer and hitting the return key. The ERP screen makes them businesspeople. It flickers with the customer's credit rating from the finance department and the product inventory levels from the warehouse. Will the customer pay on time? Will we be able to ship the order on time? These are decisions that customer service representatives have never had to make before, and the answers affect the customer and every other department in the company. But it's not just the customer service representatives who have to wake up. People in the warehouse who used to keep inventory in their heads or on scraps of paper now need to put that information online. If they don't, customer service reps will see low inventory levels on their screens and tell customers that their requested item is not in stock. Accountability, responsibility and communication have never been tested like this before.

People don't like to change, and ERP asks them to change how they do their jobs. That is why the value of ERP is so hard to pin down. The software is less important than the changes companies make in the ways they do business. If you use ERP to improve the ways your people take orders, manufacture goods, ship them and bill for them, you will see value from the software. If you simply install the software without changing the ways people do their jobs, you may not see any value at all—indeed, the new software could slow you down by simply replacing the old software that everyone knew with new software that no one does.

15.2 How long will an ERP project take?

Companies that install ERP do not have an easy time of it. Don't be fooled when ERP vendors tell you about a three or six month average implementation time. Those short (that's right, six months is short) implementations all have a catch of one kind or another: The company was small, or the implementation was limited to a small area of the company, or the company used only the financial pieces of the ERP system (in which case the ERP system is nothing more than a very expensive accounting system). To do ERP right, the ways you do business will need to change and the ways people do their jobs will need to change too. And that kind of change doesn't come without pain. Unless, of course, your ways of doing business are working extremely well (orders all shipped on time, productivity higher than all your competitors, customers completely satisfied), in which case there is no reason to even consider ERP.

The important thing is not to focus on how long it will take—real transformational ERP efforts usually run between one and three years, on average—but rather to understand why you need it and how you will use it to improve your business.

15.3 What will ERP fix in my business?

There are five major reasons why companies undertake ERP. Integrate financial information—As the CEO tries to understand the company's overall performance, he may find many different versions of the truth. Finance has its own set of revenue numbers, sales has another version, and the different business units may each have their own version of how much they contributed to revenues. ERP creates a single version of the truth that cannot be questioned because everyone is using the same system.

Integrate customer order information—ERP systems can become the place where the customer order lives from the time a customer service representative receives it until the loading dock ships the merchandise and finance sends an invoice. By having this information in one software system, rather than scattered among many different systems that can't communicate with one another, companies can keep track of orders more easily, and coordinate manufacturing, inventory and shipping among many different locations at the same time.

Standardize and speed up manufacturing processes—Manufacturing companies—especially those with an appetite for mergers and acquisitions—often find that multiple business units across the company make the same widget using different methods and computer systems. ERP systems come with standard methods for automating some of the steps of a manufacturing process. Standardizing those processes and using a single, integrated computer system can save time, increase productivity and reduce head count.

Reduce inventory—ERP helps the manufacturing process flow more smoothly, and it improves visibility of the order fulfillment process inside the company. That can lead to reduced inventories of the stuff used to make products (work-in-progress inventory), and it can help users better plan deliveries to customers, reducing the finished good inventory at the warehouses and shipping docks. To really improve the flow of your supply chain, you need supply chain software, but ERP helps too.

Standardize HR information—Especially in companies with multiple business units, HR may not have a unified, simple method for tracking employees' time and communicating with them about benefits and services. ERP can fix that. In the race to fix these problems, companies often lose sight of the fact that ERP packages are nothing more than generic representations of the ways a typical company does business. While most packages are exhaustively comprehensive, each industry has its quirks that make it unique. Most ERP systems were designed to be used by discrete manufacturing companies (that make physical things that can be counted), which immediately left all the process manufacturers (oil, chemical and utility companies that measure their products by flow rather than individual units) out in the cold. Each of these industries has struggled with the different ERP vendors to modify core ERP programs to their needs.

15.4 Will ERP fit the ways I do business?

It's critical for companies to figure out if their ways of doing business will fit within a standard ERP package before the checks are signed and the implementation begins. The most common reason that companies walk away from multimillion-dollar ERP projects is that they discover the software does not support one of their important business processes. At that point there are two things they can do: They can change the business process to accommodate the software, which will mean deep changes in long-established ways of doing business (that often provide competitive advantage) and shake up important people's roles and responsibilities (something that few companies have the stomach for). Or they can modify the software to fit the process, which will slow down the project, introduce dangerous bugs into the system and make upgrading the software to the ERP vendor's next release excruciatingly difficult because the customizations will need to be torn apart and rewritten to fit with the new version.


Needless to say, the move to ERP is a project of breathtaking scope, and the price tags on the front end are enough to make the most placid CFO a little twitchy. In addition to budgeting for software costs, financial executives should plan to write checks to cover consulting, process rework, integration testing and a long laundry list of other expenses before the benefits of ERP start to manifest themselves. Underestimating the price of teaching users their new job processes can lead to a rude shock down the line, and so can failure to consider data warehouse integration requirements and the cost of extra software to duplicate the old report formats. A few oversights in the budgeting and planning stage can send ERP costs spiraling out of control faster than oversights in planning almost any other information system undertaking.

15.5 What does ERP really cost?

Meta Group recently did a study looking at the total cost of ownership (TCO) of ERP, including hardware, software, professional services and internal staff costs. The TCO numbers include getting the software installed and the two years afterward, which is when the real costs of maintaining, upgrading and optimizing the system for your business are felt. Among the 63 companies surveyed—including small, medium and large companies in a range of industries—the average TCO was \$15 million (the highest was \$300 million and lowest was \$400,000). While it's hard to draw a solid number from that kind of range of companies and ERP efforts, Meta came up with one statistic that proves that ERP is expensive no matter what kind of company is using it. The TCO for a "heads-down" user over that period was a staggering \$53,320.

15.6 When will I get payback from ERP—and how much will it be?

Don't expect to revolutionize your business with ERP. It is a navel-gazing exercise that focuses on optimizing the way things are done internally rather than with customers, suppliers or partners. Yet the navel gazing has a pretty good payback if you're willing to wait for it—a Meta Group study of 63



companies found that it took eight months after the new system was in (31 months total) to see any benefits. But the median annual savings from the new ERP system were \$1.6 million.

15.7 What are the hidden costs of ERP?

Although different companies will find different land mines in the budgeting process, those who have implemented ERP packages agree that certain costs are more commonly overlooked or underestimated than others. Armed with insights from across the business, ERP pros vote the following areas as most likely to result in budget overrun.

15.7.1 Training

Training is the near-unanimous choice of experienced ERP implementers as the most underestimated budget item. Training expenses are high because workers almost invariably have to learn a new set of processes, not just a new software interface. Worse, outside training companies may not be able to help you. They are focused on telling people how to use software, not on educating people about the particular ways you do business. Prepare to develop a curriculum yourself that identifies and explains the different business processes that will be affected by the ERP system.

One enterprising CIO hired staff from a local business school to help him develop and teach the ERP business-training course to employees. Remember that with ERP, finance people will be using the same software as warehouse people and they will both be entering information that affects the other. To do this accurately, they have to have a much broader understanding of how others in the company do their jobs than they did before ERP came along. Ultimately, it will be up to your IT and businesspeople to provide that training. So take whatever you have budgeted for ERP training and double or triple it up front. It will be the best ERP investment you ever make.

15.7.2 Integration and testing

Testing the links between ERP packages and other corporate software links that have to be built on a case-by-case basis is another often-underestimated cost. A typical manufacturing company may have add-on applications from the major—e-commerce and supply chain—to the minor—sales tax computation and bar coding. All require integration links to ERP. If you can buy add-ons from the ERP vendor that are pre-integrated, you're better off. If you need to build the links yourself, expect things to get ugly. As with training, testing ERP integration has to be done from a process-oriented perspective. Veterans recommend that instead of plugging in dummy data and moving it from one application to the next, run a real purchase order through the system, from order entry through shipping and receipt of payment—the whole order-to-cash banana—preferably with the participation of the employees who will eventually do those jobs.

15.7.3 Customization

Add-ons are only the beginning of the integration costs of ERP. Much more costly, and something to be avoided if at all possible, is actual customization of the core ERP software itself. This happens when the ERP software can't handle one of your business processes and you decide to mess with the software to make it do what you want. You're playing with fire. The customizations can affect every module of the ERP system because they are all so tightly linked together. Upgrading the ERP package—no walk in the park under the best of circumstances—becomes a nightmare because you'll

have to do the customization all over again in the new version. Maybe it will work, maybe it won't. No matter what, the vendor will not be there to support you. You will have to hire extra staffers to do the customization work, and keep them on for good to maintain it.

15.7.4 Data conversion

It costs money to move corporate information, such as customer and supplier records, product design data and the like, from old systems to new ERP homes. Although few CIOs will admit it, most data in most legacy systems is of little use. Companies often deny their data is dirty until they actually have to move it to the new client/server setups that popular ERP packages require. Consequently, those companies are more likely to underestimate the cost of the move. But even clean data may demand some overhaul to match process modifications necessitated—or inspired—by the ERP implementation.

15.7.5 Data analysis

Often, the data from the ERP system must be combined with data from external systems for analysis purposes. Users with heavy analysis needs should include the cost of a data warehouse in the ERP budget—and they should expect to do quite a bit of work to make it run smoothly. Users are in a pickle here: Refreshing all the ERP data every day in a big corporate data warehouse is difficult, and ERP systems do a poor job of indicating which information has changed from day to day, making selective warehouse updates tough. One expensive solution is custom programming. The upshot is that the wise will check all their data analysis needs before signing off on the budget.

15.7.6 Consultants ad infinitum

When users fail to plan for disengagement, consulting fees run wild. To avoid this, companies should identify objectives for which its consulting partners must aim when training internal staff. Include metrics in the consultants' contract; for example, a specific number of the user company's staff should be able to pass a project-management leadership test—similar to what Big Five consultants have to pass to lead an ERP engagement.

Replacing your best and brightest

It is accepted wisdom that ERP success depends on staffing the project with the best and brightest from the business and IS divisions. The software is too complex and the business changes too dramatic to trust the project to just anyone. The bad news is a company must be prepared to replace many of those people when the project is over. Though the ERP market is not as hot as it once was, consultancies and other companies that have lost their best people will be hounding yours with higher salaries and bonus offers than you can afford—or that your HR policies permit. Huddle with HR early on to develop a retention bonus program and create new salary strata for ERP veterans. If

you let them go, you'll wind up hiring them—or someone like them—back as consultants for twice what you paid them in salaries.

15.7.7 Implementation teams can never stop

Most companies intend to treat their ERP implementation as they would any other software project. Once the software is installed, they figure the team will be scuttled and everyone will go back to his or her day job. But after ERP, you can't go home again. The implementers are too valuable. Because they have worked intimately with ERP, they know more about the sales process than the salespeople and more about the manufacturing process than the manufacturing people. Companies can't afford to send their project people back into the business because there's so much to do after the ERP software is installed. Just writing reports to pull information out of the new ERP system will keep the project team busy for a year at least. And it is in analysis—and, one hopes, insight—that companies make their money back on an ERP implementation. Unfortunately, few IS departments plan for the frenzy of post-ERP installation activity, and fewer still build it into their budgets when they start their ERP projects. Many are forced to beg for more money and staff immediately after the go-live date, long before the ERP project has demonstrated any benefit.

15.7.8 Waiting for ROI

One of the most misleading legacies of traditional software project management is that the company expects to gain value from the application as soon as it is installed, while the project team expects a break and maybe a pat on the back. Neither expectation applies to ERP. Most of the systems don't reveal their value until after companies have had them running for some time and can concentrate on making improvements in the business processes that are affected by the system. And the project team is not going to be rewarded until their efforts pay off.

15.7.9 Post-ERP depression

ERP systems often wreak havoc in the companies that install them. In a recent Deloitte Consulting survey of 64 Fortune 500 companies, one in four admitted that they suffered a drop in performance when their ERP system went live. The true percentage is undoubtedly much higher. The most common reason for the performance problems is that everything looks and works differently from the way it did before. When people can't do their jobs in the familiar way and haven't yet mastered the new way, they panic, and the business goes into spasms.

15.8 Why do ERP projects fail so often?

At its simplest level, ERP is a set of best practices for performing different duties in your company, including finance, manufacturing and the warehouse. To get the most from the software, you have to get people inside your company to adopt the work methods outlined in the software. If the people in the different departments that will use ERP don't agree that the work methods embedded in the software are better than the ones they currently use, they will resist using the software or will want IT to change the software to match the ways they currently do things. This is where ERP projects break

down. Political fights break out over how—or even whether—the software will be installed. IT gets bogged down in long, expensive customization efforts to modify the ERP software to fit with powerful business barons' wishes. Customizations make the software more unstable and harder to maintain when it finally does come to life. The horror stories you hear in the press about ERP can usually be traced to the changes the company made in the core ERP software to fit its own work methods. Because ERP covers so much of what a business does, a failure in the software can bring a company to a halt, literally.

But IT can fix the bugs pretty quickly in most cases, and besides, few big companies can avoid customizing ERP in some fashion—every business is different and is bound to have unique work methods that a vendor cannot account for when developing its software. The mistake companies make is assuming that changing people's habits will be easier than customizing the software. It's not. Getting people inside your company to use the software to improve the ways they do their jobs is by far the harder challenge. If your company is resistant to change, then your ERP project is more likely to fail.

15.9 How do I configure ERP software?

Even if a company installs ERP software for the so-called right reasons and everyone can agree on the optimal definition of a customer, the inherent difficulties of implementing something as complex as ERP is like, well, teaching an elephant to do the hootchy-kootchy. The packages are built from database tables, thousands of them, that IS programmers and end users must set to match their business processes; each table has a decision "switch" that leads the software down one decision path or another. By presenting only one way for the company to do each task—say, run the payroll or close the books—a company's individual operating units and far-flung divisions are integrated under one system. But figuring out precisely how to set all the switches in the tables requires a deep understanding of the existing processes being used to operate the business. As the table settings are decided, these business processes are reengineered, ERP's way. Most ERP systems are not shipped as a shell system in which customers must determine at the minutia level how all the functional procedures should be set, making thousands of decisions that affect how their system behaves in line with their own business activities. Most ERP systems are preconfigured, allowing just hundreds—rather than thousands—of procedural settings to be made by the customer.

15.10 How do companies organize their ERP projects?

Based on our observations, there are three commonly used ways of installing ERP.

The Big Bang—In this, the most ambitious and difficult of approaches to ERP implementation, companies cast off all their legacy systems at once and install a single ERP system across the entire company. Though this method dominated early ERP implementations, few companies dare to

attempt it anymore because it calls for the entire company to mobilize and change at once. Most of the ERP implementation horror stories from the late '90s warn us about companies that used this strategy. Getting everyone to cooperate and accept a new software system at the same time is a tremendous effort, largely because the new system will not have any advocates. No one within the company has any experience using it, so no one is sure whether it will work. Also, ERP inevitably involves compromises. Many departments have computer systems that have been honed to match the ways they work. In most cases, ERP offers neither the range of functionality nor the comfort of familiarity that a custom legacy system can offer. In many cases, the speed of the new system may suffer because it is serving the entire company rather than a single department. ERP implementation requires a direct mandate from the CEO.

Franchising strategy—This approach suits large or diverse companies that do not share many common processes across business units. Independent ERP systems are installed in each unit, while linking common processes, such as financial bookkeeping, across the enterprise. This has emerged as the most common way of implementing ERP. In most cases, the business units each have their own "instances" of ERP—that is, a separate system and database. The systems link together only to share the information necessary for the corporation to get a performance big picture across all the business units (business unit revenues, for example), or for processes that don't vary much from business unit to business unit (perhaps HR benefits). Usually, these implementations begin with a demonstration or pilot installation in a particularly open-minded and patient business unit where the core business of the corporation will not be disrupted if something goes wrong. Once the project team gets the system up and running and works out all the bugs, the team begins selling other units on ERP, using the first implementation as a kind of in-house customer reference. Plan for this strategy to take a long time.

Slam dunk—ERP dictates the process design in this method, where the focus is on just a few key processes, such as those contained in an ERP system's financial module. The slam dunk is generally for smaller companies expecting to grow into ERP. The goal here is to get ERP up and running quickly and to ditch the fancy reengineering in favor of the ERP system's "canned" processes. Few companies that have approached ERP this way can claim much payback from the new system. Most use it as an infrastructure to support more diligent installation efforts down the road. Yet many discover that a slammed-in ERP system is little better than a legacy system because it doesn't force employees to change any of their old habits. In fact, doing the hard work of process reengineering after the system is in can be more challenging than if there had been no system at all because at that point few people in the company will have felt much benefit.

15.11 How does ERP fit with e-commerce?

ERP vendors were not prepared for the onslaught of e-commerce. ERP is complex and not intended for public consumption. It assumes that the only people handling order information will be your employees, who are highly trained and comfortable with the tech jargon embedded in the software. But now customers and suppliers are demanding access to the same information your employees get through the ERP system—things like order status, inventory levels and invoice reconciliation—

except they want to get all this information simply, without all the ERP software jargon, through your website.

E-commerce means IT departments need to build two new channels of access in to ERP systems—one for customers (otherwise known as business-to-consumer) and one for suppliers and partners (business-to-business). These two audiences want two different types of information from your ERP system. Consumers want order status and billing information, and suppliers and partners want just about everything else.

Traditional ERP vendors are having a hard time building the links between the Web and their software, though they certainly all realize that they must do it and have been hard at work at it for years. The bottom line, however, is that companies with e-commerce ambitions face a lot of hard integration work to make their ERP systems available over the Web. For those companies that were smart—or lucky—enough to have bought their ERP systems from a vendor experienced in developing e-commerce wares, adding easily integrated applications from that same vendor can be a money-saving option. For those companies whose ERP systems came from vendors that are less experienced with e-commerce development, the best—and possibly only—option might be to have a combination of internal staff and consultants hack through a custom integration.

But no matter what the details are, solving the difficult problem of integrating ERP and e-commerce requires careful planning, which is key to getting integration off on the right track.

One of the most difficult aspects of ERP and e-commerce integration is that the Internet never stops. ERP applications are big and complex and require maintenance. The choice is stark if ERP is linked directly to the Web—take down your ERP system for maintenance and you take down your website. Most e-commerce veterans will build flexibility into the ERP and e-commerce links so that they can keep the new e-commerce applications running on the Web while they shut down ERP for upgrades and fixes.

The difficulty of getting ERP and e-commerce applications to work together—not to mention the other applications that demand ERP information such as supply chain and CRM software—has led companies to consider software known alternately as middleware and EAI software. These applications act as software translators that take information from ERP and convert it into a format that e-commerce and other applications can understand. Middleware has improved dramatically in recent years, and though it is difficult to sell and prove ROI on the software with business leaders—it is invisible to computer users—it can help solve many of the biggest integration woes that plague IT these days.