

CHAPTER 6

SOFTWARE AND VENDOR SELECTION



LEARNING OBJECTIVES

- 1 Understand the initial steps in the process for the successful purchase and implementation of an ERP (Enterprise Resource Planning) system.
- 2 Determine the Total Cost of Ownership (TCO) and understand what it means to partner with an ERP vendor.
- 3 Recognize why the first steps in the purchase of an ERP system are critical to the change management process.
- 4 Identify and explain the steps involved in negotiating contracts and license agreements with software vendors.
- 5 Appreciate how careful vendor selection affects long-term organizational performance and ERP success.



PREVIEW

- Selecting the right software and vendor is not merely a technical decision—it is a strategic business choice that can define a company's operational effectiveness for years.
- ERP systems are complex, expensive, and deeply integrated into the daily operations of a business. Therefore, choosing the right ERP and vendor is critical to ensure the software aligns with the company's goals, processes, and future direction.
- Companies today often engage in a structured vendor selection process that includes market research, requirement analysis, vendor demonstrations, and detailed contract negotiations. Many even employ specialized consulting firms to guide this process and ensure that technical and organizational needs are properly addressed.
- A well-chosen ERP vendor doesn't just sell software—it becomes a long-term partner, providing support, updates, and continuous improvements as the business evolves.



HIGH-LEVEL ERP PURCHASE PROCESS

- The ERP purchase process can be summarized into eight key stages:

1. Vendor Research and Information Gathering

Organizations begin by identifying potential vendors and collecting data on their software capabilities, client base, financial stability, and industry reputation.

Examples:

- Researching vendors like SAP, Oracle, Microsoft Dynamics, NetSuite, and Infor.
- Reading customer reviews and case studies from companies in the same industry.
- Checking vendor financial stability reports to ensure long-term support.
- Attending ERP expos, seminars, or webinars to learn about available products.
- Consulting independent analysts (e.g., Gartner or Forrester reports) for vendor performance rankings.

2. High-Level Vendor Demonstrations and Evaluation

Vendors provide general product overviews to help businesses understand functionality and alignment with company goals.



HIGH-LEVEL ERP PURCHASE PROCESS

Examples:

- Watching a live demo of SAP S/4HANA's dashboard and reporting tools..
- Attending a presentation by Oracle ERP Cloud highlighting automation features.
- Requesting a free trial or sandbox from Microsoft Dynamics 365.
- Comparing how each system handles inventory management or HR processes.
- Evaluating user interface and ease of navigation across vendors' systems.

3. Needs and Requirements Assessment

The company defines its critical business requirements, both functional and technical. This ensures alignment between business processes and software capabilities.

Examples:

- Listing functional requirements, such as accounting, payroll, and procurement modules.
- Identifying technical requirements, like cloud hosting or API integration.
- Interviewing department heads to understand their system pain points.
- Documenting compliance and security standards, such as ISO or GDPR.
- Prioritizing must-have vs. nice-to-have features for clearer evaluation.



HIGH-LEVEL ERP PURCHASE PROCESS

4. Development of Request for Bid (RFB) or Proposal (RFP)

A formal document detailing specific needs and requirements is prepared and sent to shortlisted vendors.

Examples:

- Writing an RFP document describing business goals and required ERP modules.
- Including project scope, such as data migration and user training.
- Adding evaluation criteria, like price, support, and implementation time.
- Specifying technical environment (e.g., Windows, Linux, or cloud platform).
- Setting submission deadlines and format for vendor responses.

5. Release Request for Bid to Vendors

The RFB or RFP is distributed to vendors, who then submit proposals with pricing, timelines, and implementation plans.

Examples:

- Sending the RFP to SAP, Oracle, and Microsoft for competitive bidding.
- Receiving vendor proposals detailing costs, modules, and project timelines.
- Comparing support options such as on-site, remote, or 24/7 helpdesk.

HIGH-LEVEL ERP PURCHASE PROCESS

- Evaluating implementation methodologies (e.g., agile vs. waterfall).
- Shortlisting vendors based on pricing and overall fit with requirements.

6. Analysis and Selection

This includes:

1. Evaluation of bids

- Comparing price quotes and proposals from shortlisted vendors to find the best value.
- Example: The company reviews three ERP proposals to compare license fees, implementation costs, and support packages.

2. Functional and technical assessments

- Checking if the ERP system meets both the business process needs and IT requirements.
- Example: The IT team tests if the ERP supports inventory tracking and integrates with the company's existing database.

3. Vendor-detailed demonstrations

- Vendors showcase their ERP systems in detail based on the company's specific requirements.
- Example: The vendor demonstrates how the ERP handles real-time financial reporting during a live session.



HIGH-LEVEL ERP PURCHASE PROCESS

This includes:

4. Contacting client references

- Speaking with current users of the ERP to verify performance and vendor reliability.
- Example: The company contacts another manufacturer using the same ERP to ask about system stability and vendor support.

5. Calculation of the Total Cost of Ownership (TCO)

- Estimating all direct and indirect costs of the ERP system over its full life cycle.
- Example: The finance team calculates costs for software licenses, training, maintenance, and upgrades over 5 years.

7. Vendor Negotiation

This involves detailed contract discussions, including:

1. Software and maintenance pricing

- Discussing and finalizing the cost of ERP software licenses and ongoing maintenance fees.
- Example: The company negotiates with the vendor to lower the annual maintenance fee from 20% to 15% of the license cost.

HIGH-LEVEL ERP PURCHASE PROCESS

This involves detailed contract discussions, including:

2. Consulting and support services

- Defining the scope, duration, and cost of vendor-provided implementation and technical support.
- Example: The vendor agrees to include 6 months of free on-site support after the ERP system goes live.

3. Contract review and change requests

- Carefully reviewing the contract terms and negotiating any necessary modifications before signing.
- Example: The legal team requests adding a clause that allows the company to cancel the contract if project milestones are not met.

8. Purchase System

The final stage includes formal approval, signing of contracts, and preparation for ERP implementation.

Examples:

- Contract Signing with SAP
- Purchase Order Creation in the Procurement System
- Implementation Kickoff Preparation



VENDOR RESEARCH

- **Vendor research is the foundation of a successful ERP project. It ensures that only vendors capable of meeting the organization's unique requirements are considered.**

STEPS INVOLVED:

1. First step is to identify a short list of vendors who will help to shape business requirements.
 - **Example:** The IT team compiles a list of ERP vendors such as SAP, Oracle, and Microsoft Dynamics after initial research, based on the company's size, industry, and needs.
2. Identifying and researching all aspects of a vendor package will assist companies in determining the total cost of ownership.
 - **Example:** The finance department analyzes each vendor's licensing fees, support costs, and upgrade expenses to calculate the total cost of ownership for a 5-year period.



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STEPS INVOLVED:

3. An exhaustive list of vendors is important for a successful implementation using current web search engines.
 - **Example:** The project team uses search tools like Gartner Magic Quadrant and Capterra to find a wide range of ERP vendors, including niche options like Infor and NetSuite.
4. Ask department managers and subject matter experts for their input in vendor selection.
 - **Example:** The procurement manager consults the HR, accounting, and logistics heads to understand which ERP features are essential for their departments before finalizing the vendor list.



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STEPS INVOLVED:

5. Include end-users to help with change management and build trust for later implementation.
 - **Example:** Employees from accounting and operations are invited to vendor demos so they can share feedback on usability and interface design, improving acceptance of the future ERP system.



VENDOR RESEARCH (CONT'D)

Consider the following for vendor selection:

- **Other businesses using the vendor**

Identify other businesses using the same vendor. Their success (or failure) provides critical insights into vendor reliability.

Example:

- Toyota and Unilever use SAP ERP, proving its reliability for large global operations.

- **The vendor's financial position**

A financially sound vendor ensures longevity and product evolution. For example, companies like SAP and Oracle have decades of consistent market presence.

Example:

- Oracle Corporation shows steady profits each year, proving long-term financial strength.

- **The vendor's implementation philosophy and support issues**

Some vendors follow a “big-bang” approach (all modules at once), while others prefer a phased rollout. The philosophy should match your organization’s risk appetite.

Example:

- SAP S/4HANA allows “big-bang” implementations for companies ready to switch all systems at once.



VENDOR RESEARCH (CONT'D)

Consider the following for vendor selection:

- **The hardware and software infrastructure used to support the ERP**

Assess whether the ERP runs on-premise, in the cloud, or in hybrid setups. Compatibility with current hardware and IT policies is vital.

Example:

- Infor CloudSuite runs fully on AWS Cloud, great for cloud-based organizations.

- **The vendor's direction and currency of software**

Choose vendors that regularly update their software to support new technologies such as AI, IoT, and analytics.

Example:

- Oracle Fusion ERP adds machine learning tools for better forecasting and automation.

VENDOR RESEARCH (CONT'D)

Consider the following for vendor selection:

- **The vendor's release and upgrade strategies**

Vendors should provide seamless upgrade paths without forcing major disruptions or retraining.

Example:

- Microsoft Dynamics 365 provides automatic cloud updates that install during off-hours, ensuring users get new features and security improvements without system downtime or retraining.

- **The vendor's user-base involvement in defining future functional changes**

Active user communities, forums, and customer feedback programs indicate a healthy vendor ecosystem.

Example:

- SAP has an active SAP Community Network (SCN) where thousands of users share ideas and vote on new features. SAP often includes these user suggestions in future ERP updates, showing strong user involvement in product improvement.

- **The vendor's development and maintenance resources**

Evaluate the size and skill of the vendor's technical team responsible for system updates and bug fixes.

Example:

- Oracle has a large global development team that continuously works on system updates, security patches, and performance improvements.



SHORT LIST OF ERP VENDORS

1. SAP

- Serves industries ranging from manufacturing to finance and public sector.
- Products include SAP S/4HANA, SAP Business One, and SAP All-in-One.
- Known for scalability, integration, and strong analytics.
- Provides both on-premise and cloud-based ERP solutions, allowing flexibility for businesses of all sizes.
- Offers strong support for AI, automation, and real-time data processing to improve decision-making and operational efficiency.
- Example: Coca-Cola and Nestlé rely on SAP for global process standardization.

2. ORACLE/PEOPLESOFT

- Oracle acquired PeopleSoft in 2004, expanding its ERP capabilities.
- Offers industry-specific solutions for sectors like healthcare, retail, and education.
- Strong in database integration and enterprise cloud platforms.
- Provides advanced analytics, AI-driven insights, and robust HR management tools.
- Known for scalability and seamless integration with other Oracle applications.
- Example: Universities and hospitals use Oracle PeopleSoft for managing HR, finance, and student information systems.

SHORT LIST OF ERP VENDORS

3. LAWSON

- Focuses on industry-tailored solutions such as healthcare and manufacturing.
- Known for strong financial management and human resource (HR) modules.
- Provides user-friendly interfaces and tools designed to simplify complex business processes.
- Offers cloud and on-premise ERP deployment options for flexibility.
- Integrates well with Infor's broader product suite after being acquired by Infor in 2011.
- Example: Hospitals and manufacturing companies use Lawson ERP to manage payroll, inventory, and supply chain operations efficiently.

4. SSA GLOBAL

- Initially offered Baan ERP; now provides industry-specific ERP systems with shorter implementation timelines.
- Focuses on manufacturing, distribution, and supply chain management solutions.
- Known for its flexibility and modular design, allowing businesses to implement only needed components.
- Provides tools for performance management and business intelligence to enhance decision-making.
- Was acquired by Infor in 2006, further strengthening Infor's ERP portfolio.
- Example: Mid-sized manufacturing firms use SSA Global ERP to streamline production planning and logistics.



SHORT LIST OF ERP VENDORS

5. GREAT PLAINS

- Integrates ERP with Office and other Microsoft tools.
- Ideal for small to mid-sized enterprises due to flexibility and familiar user experience.
- Offers strong financial management, accounting, and reporting features.
- Provides easy scalability and seamless integration with Microsoft Dynamics 365 after its acquisition by Microsoft.
- Known for its user-friendly interface and strong partner support network.
- Example: Small retail and service companies use Great Plains (now Microsoft Dynamics GP) to manage finances, payroll, and inventory efficiently.

6. EPICOR

- Specializes in mid-market ERP solutions with modular architecture.
- Focuses on manufacturing, distribution, retail, and service industries.
- Offers cloud, on-premise, and hybrid deployment options for flexibility.
- Known for its intuitive user interface and strong customization capabilities.
- Provides real-time analytics and automation tools to improve efficiency and decision-making.
- Example: Manufacturing and automotive companies use Epicor ERP to manage production schedules, supply chains, and customer relationships.



SHORT LIST OF ERP VENDORS

7. INFOR VISUAL

- Provides an intuitive and flexible ERP platform used in industries from aerospace to precision tooling.
- Designed specifically for manufacturers needing detailed production control and scheduling.
- Offers visual management tools that help track workflow, capacity, and job progress in real time.
- Integrates easily with financial, inventory, and customer management modules.
- Supports both on-premise and cloud deployment, allowing scalability for growing businesses.
- Example: Aerospace and industrial manufacturers use Infor Visual to improve production efficiency and quality control.

8. PLEX ONLINE

- A cloud-based ERP designed for manufacturers, integrating MES (Manufacturing Execution System) and SCM (Supply Chain Management) in one platform.
- Provides real-time data visibility across production, quality, and inventory operations.
- Known for its strong focus on automotive, food and beverage, and industrial manufacturing sectors.
- Offers mobile accessibility and automated process tracking to enhance efficiency.
- Continuously updates through the cloud, ensuring low maintenance and rapid deployment.
- Example: Automotive parts manufacturers use Plex Online to monitor shop-floor performance and optimize supply chain operations.



MATCHING USER REQUIREMENTS TO FEATURES

- Successful ERP selection depends on how well system functionality matches actual business processes.

STEPS INVOLVED:

1. IDENTIFY AND DOCUMENT REQUIREMENTS

- Map out existing processes and determine what must change.
- Example: HR may need better performance tracking; finance may need automated reporting.

2. BUSINESS PROCESS RE-ENGINEERING (BPR)

- If legacy systems are outdated, BPR helps redesign workflows to match ERP best practices.

3. CREATE TWO CORE DOCUMENTS:

- Functional Flow Documentation: Illustrates workflows within and across departments.
- Functional Requirement Matrix: Lists features by department with importance levels.

Matching vendor system capabilities to these documents ensures that software selection is data-driven, not influenced by marketing claims.



REQUEST FOR BIDS (RFB)

- Often known as Request for Proposals (RFP)
- Expensive and time-consuming process for both the company and vendor, but it can yield significant software savings when done right.

CONTENTS OF AN RFP:

1. Type of ERP required

- Describes the kind of ERP system the company needs, such as cloud-based, on-premise, or hybrid, and the specific business functions it should cover.
- Example: A retail company might request a cloud-based ERP that manages sales, inventory, and customer relationships.



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CONTENTS OF AN RFP:

2. Hardware/software infrastructure

- Details the company's existing IT setup and the technical requirements needed to support the ERP system.
- Example: The RFP might specify that the ERP must run on Windows servers and integrate with existing SQL databases.



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CONTENTS OF AN RFP:

3. Expected training and support
 - Outlines the level of user training and ongoing technical support the vendor should provide.
 - Example: The company may require on-site training for 50 employees and 24/7 customer support for the first six months after implementation.



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CONTENTS OF AN RFP:

4. Customization expectations

- States how much the ERP system should be tailored to fit the organization's specific workflows and processes.
- Example: A manufacturing firm may ask the vendor to customize modules for production scheduling and materials tracking.



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CONTENTS OF AN RFP:

5. Implementation timeline and milestones
 - Provides a detailed schedule for ERP deployment, including major phases and completion targets.
 - Example: The RFP might require system testing to be completed within three months and full go-live within six months.



REQUEST FOR BIDS (RFB)

- Often known as Request for Proposals (RFP)
- Expensive and time-consuming process for both the company and vendor, but it can yield significant software savings when done right.

CONTENTS OF AN RFP:

6. Pricing Models and Licensing Structure
 - Specifies how costs should be presented, including software licenses, maintenance fees, and subscription models.
 - Example: A company may request vendors to quote both perpetual license pricing and cloud subscription options for comparison.



VENDOR ANALYSIS AND ELIMINATION

- **A systematic process used by organizations to evaluate, compare, and narrow down potential software vendors before making a final selection.**
- **The goal is to ensure that the chosen vendor not only meets the organization's functional and technical requirements but also aligns with its long-term strategic goals, budget, and support needs.**

EVALUATION DIMENSIONS:

- **Functional Evaluation** — Does the software meet operational needs?
- **Technical Evaluation** — Is it compatible with the existing IT infrastructure?
- **Cost Evaluation** — What is the total cost over its lifecycle?
- **Vendor Evaluation** — Does the vendor have strong post-implementation support?

Outcome:

Vendors are scored and ranked. Those that fail to meet key requirements are eliminated. The final decision is based on the best fit, not the lowest price.

TOTAL COST OF OWNERSHIP (TCO)

- TCO represents the complete cost of owning and operating an ERP system throughout its entire lifecycle — from purchase and implementation to maintenance and eventual upgrades.
- It includes both direct costs (like licenses and hardware) and indirect costs (like downtime and employee productivity).

TCO includes all direct and indirect costs associated with ERP ownership, such as:

- Software licensing
- Hardware and IT infrastructure
- Customization and integration
- User training
- Maintenance and support
- Upgrades and cloud subscriptions
- Downtime and productivity impacts

TOTAL COST OF OWNERSHIP (TCO)

TCO includes all direct and indirect costs associated with ERP ownership, such as:

1. Software licensing

- The initial cost of purchasing the ERP software or subscribing to it (for cloud-based systems).

Example:

A business may pay a one-time ₦3 million license fee for an on-premise ERP or ₦100,000 per month for a cloud-based subscription.

2. Hardware and IT infrastructure

- Covers servers, computers, networking equipment, and storage systems needed to host and run the ERP system.

Example:

An on-premise ERP might require new high-performance servers and backup storage systems costing ₦2 million.

TOTAL COST OF OWNERSHIP (TCO)

TCO includes all direct and indirect costs associated with ERP ownership, such as:

3. Customization and integration

- Costs related to modifying the ERP to fit the company's specific workflows and connecting it with existing systems (like payroll, CRM, or inventory).

Example:

A manufacturing company may spend ₱1.5 million customizing ERP modules to match its production and supply chain processes.

4. User training

- Expenses for educating employees on how to use the new ERP effectively. This may include workshops, online sessions, and training materials.

Example:

A company might invest ₱500,000 in employee training sessions to ensure smooth adoption of the new system.

TOTAL COST OF OWNERSHIP (TCO)

TCO includes all direct and indirect costs associated with ERP ownership, such as:

5. Maintenance and support

- Ongoing costs for software updates, bug fixes, technical support, and vendor assistance after implementation.

Example:

The ERP vendor might charge ₱300,000 annually for maintenance and 24/7 customer support.

6. Upgrades and cloud subscriptions

- Costs for future system updates, version upgrades, or renewal of cloud subscriptions to keep the ERP up-to-date.

Example:

A cloud-based ERP may require ₱120,000 yearly for subscription renewals and feature upgrades.

TOTAL COST OF OWNERSHIP (TCO)

TCO includes all direct and indirect costs associated with ERP ownership, such as:

7. Downtime and productivity impacts

- Indirect costs related to system outages, user learning curves, or temporary drops in productivity during and after implementation.

Example:

During the first month of ERP rollout, employees might take longer to complete tasks, leading to ₱200,000 in lost productivity.



CONTRACT MANAGEMENT AND LICENSE AGREEMENTS

- A well-negotiated contract ensures mutual protection for both vendor and customer.

ESSENTIAL ELEMENTS:

1. DELIVERABLES AND DELIVERY DATES

- Each module, service, or milestone must have clear deadlines.

2. ACCEPTANCE AUTHORITY

- The customer should approve each stage before payment.

3. ROLES AND RESPONSIBILITIES

- Clearly define who has authority for changes or issue resolution.

4. MAINTENANCE AND SUPPORT TERMS

- Specify how updates, bug fixes, and upgrades will be delivered.

5. IMPLEMENTATION SERVICES

- Define whether professional services are included or billed separately.



CONTRACT MANAGEMENT AND LICENSE AGREEMENTS (CONT'D)

- A quality manager or contract monitor appointed by the program manager will have primary responsibility for making sure both sides abide by the terms and conditions of the contract.
- Changes should only be made when necessary due to unforeseen circumstances, mutually beneficial reasons, or unintended mistakes.
- Communicating progress keeps all involved and will also help to maintain momentum.
- It is best to over-communicate during this phase: Communicating progress keeps everyone involved.

IMPLICATIONS FOR MANAGEMENT

- Management must play a role in choosing the right system that will meet the company's needs and requirements.
- Management must allocate enough time to evaluate the system, observe a complete and comprehensive demonstration, and communicate to references and others using the system.
- Discussions with the vendor about future improvements and direction must be scheduled.
- Negotiating with two vendors is time-consuming, but it will yield a better purchase price.

SUMMARY

- **The majority of ERP systems today are purchased**
- **Steps involved in purchasing a system include:**
 - Vendor research
 - Defining business requirements
 - Requesting information
 - Matching requirements to system functions
 - Request for bids
 - Analyzing vendors
 - Meeting business needs
 - Determining total cost of ownership
 - Negotiating a contract and license agreement
- The ERP purchase process involves several key steps. It begins with vendor research to identify potential suppliers, followed by defining business requirements to determine what the organization needs. Next, companies request information and match requirements to system functions to evaluate system compatibility. A request for bids (RFB) is then issued to vendors. After that, vendor analysis is conducted to assess proposals and ensure the system meets business needs. The organization then calculates the total cost of ownership (TCO) to understand all expenses involved. Finally, contract and license agreement negotiations are completed to finalize the purchase.
- In summary, modern ERP systems are purchased through a structured evaluation and negotiation process that ensures the chosen system aligns with business goals, budget, and long-term requirements.

SUMMARY CONT'D

- **A business must deal in facts with every step of purchasing an ERP system. A decision will be made based on:**
 - Gathering information
 - Researching vendors
 - Documenting business processes
 - Reviewing vendor bids.
- **During the implementation phase, it is important to know detailed information on ERP system functionality and business requirements as it is the basis for setting implementation expectations.**



REVIEW QUESTIONS

- 1. What are the steps in purchasing an ERP?**
- 2. Who generally needs to be involved in the ERP selection process and why?**
- 3. What is total cost of ownership (TCO) and why should it be a part of the ERP selection process?**
- 4. What are the key components in the contract negotiation and licensing?**
- 5. Why is it important in the request for bid process to make the vendors reply in a specified format?**

REVIEW QUESTIONS (CONT'D)

- 6. Why is communication important in this phase?**
- 7. What is the difference between RFI and RFB?**
- 8. What are the benefits of a bidding process to purchase an ERP?**

THANK YOU