

**Unit-II Enterprise Resources Management**

➤ **Prerequisites for Successful ERP Implementation**

Enterprise resource planning (ERP) systems play an important role in streamlining processes, optimizing resources and enhancing overall efficiency. However, implementing and leveraging ERP successfully requires careful planning, strategic alignment and robust execution. Here are 10 key prerequisites essential for achieving ERP success within an organization:

**1. Define Clear Business Objectives for Your ERP System**

Prior to your ERP implementation, it's critical to define clear and achievable business objectives. Identify the specific problems you aim to solve or opportunities you wish to capitalize on with ERP. Align ERP goals with broader organizational strategies, such as supply chain visibility, enhancing customer service or optimizing financial reporting.

The main goals of an ERP system might include:

- Streamlining data collection
- Providing a central storage point/single source of truth for key business data
- Optimizing business processes
- Reducing operational costs
- Helping the business optimize resources
- Giving real-time insights into changing market conditions

To determine whether the ERP system is helping your business meet its objectives, it's crucial to have some KPIs in mind. Measure them before testing the system to provide a baseline for calculating ROI.

Some useful KPIs include:

- Increased revenue
- Reduced time spent on manual data collection
- Reduced inventory holding costs
- Improved customer experience

- Reduced IT spending
- Improved data accuracy

## **2. Gain Executive Sponsorship and Strong Leadership Commitment**

ERP initiatives need strong support from executive leadership other key stakeholders to secure resources, manage change effectively and drive adoption across departments. Executives should actively champion the ERP project, communicate its importance and lead by example.

Weak support from leadership can cause issues at all stages of the implementation, increasing the risk of a rushed or underfunded project and sending mixed messages to department heads and staff.

For the project to be successful, leaders should understand its goal. They should be able to explain the benefits of the implementation to department heads and staff members and answer questions effectively. A lack of interest in or understanding of the project can spark confusion and fear and lead to resistance among those who will use the tools every day.

## **3. Cross-functional Team Collaboration**

Form a cross-functional implementation team comprising representatives from key departments, such as finance, IT, operations and human resources to ensure everyone benefits from the new system.

Each department will have its own workflows, processes and tools. In larger organizations, it's likely that many of those processes are undocumented or differ from the official documentation. Having representatives from each department provide input on the functionalities they require, the problems they're experiencing with their existing systems and any pain points or concerns they have about the upcoming implementation is essential.

## **4. Conduct a Comprehensive Business Process Review**

New technology cannot fix broken processes; in fact, it might exacerbate them. That's why it is critical to conduct a thorough review of existing business processes before your ERP implementation. Identify inefficiencies, redundancies and areas for improvement. Streamline and optimize your processes to align with ERP functionalities and best practices.

Aim to eliminate existing inefficiencies before the ERP rollout, rather than attempting to work around them. It's harder to change your processes once the system is in place, especially if you have multiple systems to integrate or you're working with legacy systems that require data standardization and conversion.

An ERP system should provide your business with reliable data and increase its productivity. This is easier to achieve when your employees follow reliable, standardized and efficient processes and use tools that are properly integrated with your new ERP suite.

## **5. Ensure Data Quality and Data Integrity**

New technology is only as good as the data you feed it. Prioritize data quality and integrity before implementing an ERP to protect the validity of its outputs.

Data cleansing is crucial for organizations that work with multiple software applications or use a mixture of modern cloud systems and legacy IT. The more systems involved, the greater the likelihood of errors, duplicate records, missing data or other problems. Some common issues to watch for include:

Special characters that are handled differently between databases

- Duplicate records across systems
- Orphaned records
- Inconsistent address formats
- Missing data (e.g., customer records missing key fields)
- Inconsistent date and time formats
- Differing data types that may cause clashes between databases
- Differing field lengths leading to truncated records
- Inconsistent numbering

## **6. Assess Infrastructure Scalability and IT Readiness**

Evaluate scalability, network capabilities, hardware requirements and integration capabilities with existing systems and invest in necessary upgrades or enhancements to support ERP functionalities.

Consider whether you'll host the new system on-premises or in the cloud. Large organizations with skilled IT teams may be tempted to stay on-premises, but the cloud can provide benefits like a lower hardware investment and reduce software expenses.

You'll also need to consider cybersecurity. With a cloud-hosted solution, the ERP vendor typically handles security, but you'll need to encourage good password practices and monitor any accounts that connect to the software.

With on-premises solutions, your in-house IT team is responsible for securing the application, the operating system and the network it runs on. They'll also have to handle password resets and other login issues themselves. If you have a small IT team, adding more systems to maintain could expose you to security risks.

Maintain good disaster recovery practices by maintaining backups of essential data and having a plan for quickly restoring essential systems, such as your ERP and CRM, after an outage.

If you're not sure which solutions are most suited to your organization, enVista's consulting team can offer impartial and vendor-agnostic advice to help you choose ERP system software.

## **7. Build a Change Management Strategy**

Develop a change management strategy to prepare employees for ERP adoption, covering things like building buy-in across all departments, employee training, workshops and resources to facilitate smooth transitions.

Follow these steps when developing your plan:

- **Monitor and review KPIs and solicit feedback.** Monitor the system's performance and refine the implementation as required. Solicit feedback from stakeholders to ensure everyone benefits from the new platform.
- **Define the change.** Explain the ERP's benefits to the organization and address any assumptions and constraints that might impact your ability to implement it.
- **Consider impacted individuals.** Identify key stakeholders, describe how they'll be affected by the new ERP system and consider how much influence they should have over design and implementation.
- **Identify gaps and areas of resistance.** Consider and address any technical or procedural challenges the project might face.
- **Create and implement a pilot project.** Develop a plan for a pilot project, share it with leadership and listen to any feedback they provide. Aim for transparent, clear and open communication that enables employees to prepare for upcoming changes and ensure their needs will be met.
- **Provide training in the new ERP system.** Provide training and support across all departments.
- **Implement the system.** Choose a date/time that's usually relatively quiet to start a phased rollout of the new ERP system.

## **8. Prioritize Vendor Selection and Collaboration**

Choose an ERP vendor that aligns with your organization's industry, scale and specific requirements. Collaborate closely with the vendor during implementation, ensuring clear communication and realistic timelines and milestones.

Consider these key factors:

- **Service level agreements.** For cloud-hosted solutions, a robust SLA and uptime guarantee are must-haves. Make sure you can depend on the vendor to keep the software running and answer questions quickly.
- **In-house skills.** For more control over your software, you might want an on-premises solution. If you prefer a more hands-off approach, SaaS solutions may be a better fit.
- **IT infrastructure.** SaaS ERP systems allow you to outsource the hosting of the software. In contrast, on-premise solutions require you to maintain your own infrastructure.
- **Pricing.** When budgeting for an ERP solution, consider not only payment structure but also total cost of ownership.
- **Software roadmap.** Consider if the software supports any third-party applications you use, has all the features you require and will continue to support any legacy applications you're using.
- **Vendor support.** Some platforms have limited support or gate their support lines behind top-tier subscriptions. Ensure you have a dedicated support line you can turn to when issues arise.

## 9. Balance Customization with Standardization

Large organizations with complex IT infrastructures might find that their needs aren't completely met by any ERP software out of the box, in which case some customizations may be necessary. Try to avoid building too many new modules or heavily customizing the software.

If you're thinking of having a module built, ask yourself these questions:

- What is this customization for?
- Is the ERP suite the best place to try to implement this feature?
- Does this feature really need to be a new module, or could it be a report?
- Can I achieve this goal with existing/out-of-the-box features?

- Can I break down this customization into smaller modules to make them easier to maintain?

If you decide to modify your ERP system, review the customizations regularly to ensure they're compatible with software updates and working as intended.

## **10. Maintain Continuous Improvement and Ongoing Evaluation**

A new ERP implementation marks the beginning of a continuous improvement journey. To ensure your organization's continued growth and success and maximize the ROI on the project, establish metrics and KPIs to monitor ERP performance post-implementation.

Every organization will have its own KPIs to track, depending on the type of organization and the goals of the new ERP system. However, some key KPIs include:

- Inventory turnover
- Customer experience
- Employee satisfaction
- Revenue growth
- Sales growth
- IT Spending
- Business productivity

By reviewing these KPIs at least quarterly and refining the ERP implementation based on the results, you'll be able to maximize the system's ROI.

The success of your ERP implementation hinges on meticulous planning, effective collaboration and relentless commitment to organizational objectives. By addressing each of these prerequisites, organizations can navigate the complexities of ERP implementation with confidence and achieve sustainable business transformation.

## **Invest in the Right ERP System for Long-Term Success**

Once you've prepared your organization for a new system, you can look at the finer details, such as selecting a vendor that meets your needs and budget and provides the support you require to meet your goals.

### **➤ ERP Implementation Strategies**

- Properly Set Essentials Before Taking Action

- Assess Your Alternatives
- Record User Procedures
- Single-Step Implementation
- Phased Rollout

## **Properly Set Essentials Before Taking Action**

It is obvious that the scope of your project can be a crucial concern for you. Companies that fail to hold a steady focus on particular system requirements and processes will find that ERP implementation may necessitate added costs and time. A precise scope will assure your project does not pass out of your hand.

### **Assess Your Alternatives**

During the ERP implementation process, inadequately handled and mismanaged evaluation exercises can create serious issues. Businesses with uncertain requirements may proceed to choose the wrong vendor, handle data migration inadequately or result in slowed fulfillment.

One should equip oneself accurately, obtain input from team leads & users, and thoroughly assess both your legacy systems and intended ERP implementation before initiating any important decisions.

### **Record User Procedures**

To understand how users interact with legacy systems, evaluate and improve workflow and equip users with the brief instructions required to steer a new feature-rich working environment, proper documentation is required. One must create and maintain documents describing pivotal user routines and procedures, both before and during ERP implementation.

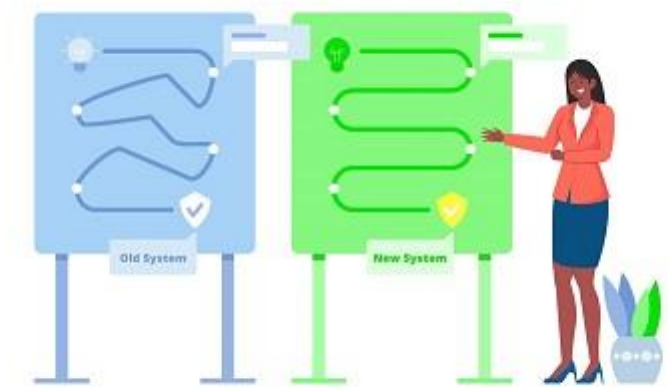


### Single-Step Implementation

Through the single-step implementation model, all users move to the new system in a go. Single-step ERP implementation grants an easy and straightforward way to control the process which is ideal for smaller operations and businesses that may have few users. This in turn helps you to focus easily on your project scope and implementation parameters.

### Phased Rollout

Switching to the latest system incrementally over a lengthened period of time can enable early implementation of essential features, and assure that any complications or issues are secluded from working processes that have already been taken online.



### Phased Rollout

Further, being more manageable than a single-step approach, the phased rollout system implementation approach may involve a more prolonged process, particularly for companies that keep modifying the parameters of an implementation project.

### ERP Implementation Phases

- Research Phase
- Analysis
- Package selection
- Planning
- Budget Planning
- Design



- Development
- Data Migration
- Testing
- Deployment
- Training
- Post-Implementation

As your company grows, markets evolve, and technologies come & grow, your ERP system and how you implement it, becomes a valuable part of your organization as a whole. Therefore, following the below ERP implementation stages rigidly will ensure that the ERP implementation for your business has the best chance of succeeding.

### **Research Phase**

Before choosing any ERP solutions, the research phase involves a thorough study by collecting information on an organization's present procedures and systems to outline the challenge.

This phase establishes a strong basis for the entire ERP implementation process by creating a common understanding of what a successful deployment would entail.

Moreover, in this phase, technical requirements are created to help choose an ERP system and determine if it would be better to provide the system on-premises or through [cloud computing](#).

### **Analysis**

Following the research stage, a thorough analysis step will be conducted to ascertain the strategic plan for implementing ERP successfully.

A thorough business strategy that defines the project objectives and how they will be met by the ERP implementation plan is often the result of this.

An organization can assess the advantages, dangers, and expenses of the ERP adoption process by creating a detailed business strategy.

### **Package Selection**

The requirements of every organization are unique. So, the first and most crucial step is selecting the appropriate ERP software for your company. Picking the best solution for your company's operations might be challenging given the wide range of possibilities in the market. As a result, in this step, ERP components that do not meet your needs are eliminated.

### **Planning**

One of the most significant digitization initiatives a company will implement is ERP software. Therefore, an ERP implementation plan must be prepared to outline the resources needed, the implementation schedule, and the management strategy for the change.

You must choose the steering committee that will be in charge of completing the project as a core component of the ERP implementation plan. Both technical and non-technical team members will contribute to the software's development and give comments on its viability.

While you will need to incorporate software end-users in the design, production, and assessment phases to guarantee the final solution is suitable for the purpose, it is also crucial to include stakeholders in the planning department.

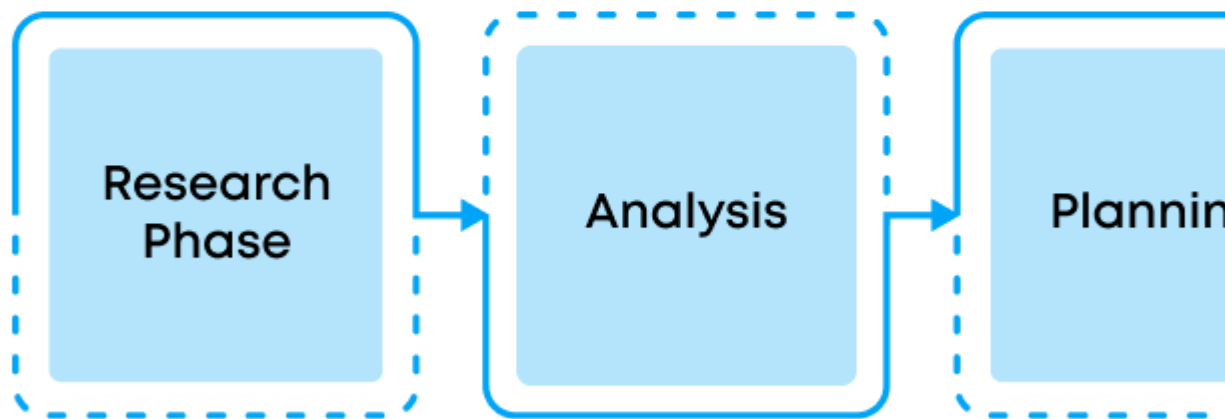
### **Budget Planning**

When putting a new ERP system in place, it might be simple to exceed budget limits, just like with other significant software projects.

However, it's crucial to budget wisely and plan for potential obstacles during the implementation phase. Hence, it's wise to allocate some money in your budget for contingencies right away to cover unforeseen expenses and delays.

This cost estimate can be checked periodically during implementation to make sure it is adequate and can be raised or lowered to reflect the real progress of a project.

# Key Stages of an ERP Implementation



## Design

The research and planning phase findings are used in the design phase of the ERP implementation procedure to develop a thorough functional design that describes how the ERP will allow advanced operations and procedures from the viewpoint of the end user.

Sequence diagrams, which visually depict the workflow and enable how the ERP system will be encountered by the end-user, are a major output of the design phase. Moreover, to illustrate how data and functions will display within the software, this can be combined with UX/UI wireframes.

## Development

The [development process](#) can start as soon as the system and design criteria have been approved.

The selected ERP software will be customized by developers to meet the required functionality, process flows, and wireframes. This typically includes a great degree of customization to match the precise needs of a business.

Across the whole development process, developers must provide good documentation in addition to building new software. This makes sure that no data is compromised after the development process and that any adjustments to the ERP system that come afterward may be made fully aware of the process used to create the system initially.

## **Data Migration**

The deployment team will begin organizing the data migration from older systems into the unified ERP system during the migration phase. Since many old systems will preserve data in various forms and database types, this can be a very complicated issue.

The implementation team will need to create rigid guidelines for managing lost or flawed information as well as make sure that inaccurate details deep cleaned or eliminated before migration to guarantee an effective migration from these older systems.

## **Testing**

This is yet another critical phase of the ERP deployment process. In essence, it is done to identify faults and try to fix them before the application process itself.

The purpose of test cases is to identify weak points in the system. Unit testing, integration tests, vulnerability scans, functional testing, and stress testing are some of the several forms of testing.

## **Deployment**

Once testing is complete and the technical as well as functional aspects are operating properly, the next phase that comes is “Going Live”. Once the system is operational, the old system is eliminated and the new model is used for commercial purposes.

## **Training**

A user of the system will undergo training on how to use it during this phase. Employees are classified together by their abilities, and training is provided to them in groups according to their present skill levels. Every employee receives training for the work that he will be performing.

## **Post-Implementation**

It is the most crucial and significant stage of implementing an ERP strategy. The words ‘Operation’ and ‘Maintenance of the System’ serve as the foundation for post-implementation. Therefore, the success of the training determines how long this phase will last.

## **Criteria to Select and Compare ERP Vendors**

Choosing an enterprise resource planning (ERP) system is one of the most important decisions a business can make. To be sure, there's plenty to consider — not only the ERP systems' features, cost and deployment model, but also the vendors behind them, with whom you'll be working with for many years. A thorough assessment takes time but will prove well worth the investment in terms of quickly realized operational and cost efficiencies, advanced data integration and analysis that informs real-time decision-making and support for future growth. This guide, replete with ERP and vendor evaluation criteria, will help you make the right decision for your company.

### **Evaluate and Establish ERP Requirements**

An ERP manages an organization's many business functions and processes in a single system, integrating activities and data so that the entire business is working from the same proverbial page. It also boosts cross-department collaboration. Given ERP's broad company-wide impact, an internal team of stakeholders from different areas of the business should have a voice in shaping a checklist of ERP requirements before any system or vendor is ever considered. This evaluation team typically includes top management, project managers and department heads from accounting, sales, procurement, marketing, and other departments, along with IT. Team members' first job is to meet with their own teams to assess their respective goals, the kinds of features needed to meet them, and use cases.

Armed with individual wish-lists, the internal team can reconvene, come to a consensus and devise an overall list of [ERP requirements](#). This is also the time to define and document expected return on investment (ROI) and how long before those benefits will be realized. Doing this in the [evaluation stage](#) will make ROI easier to measure later.

### **ERP Functions**

[Leading ERP systems](#) integrate a multitude of critical business functions, such as supply chain management and marketing. They're also scalable: Separate functions can be [plugged in as modules](#) to the ERP system, so growing businesses are able to purchase new functions as their needs expand. A 2020 survey of companies looking to buy an ERP solution found nearly nine in 10 cited accounting as the [most critical ERP function](#), followed by inventory and distribution. The most comprehensive ERP systems will also include modules for finance, manufacturing, procurement, ecommerce, marketing automation, and different types of management, including inventory, order, customer relationships, (CRM) and workforce.

When considering new functions to implement, consider current business practices and processes that can be improved by automation, thus increasing efficiency and reducing costs. Also, determine whether the ERP can integrate easily with other legacy business systems expected to remain in place.

### **Determine Budget and Timeline**

With requirements in hand, the next step is to determine a budget and timeline for ERP vendor evaluations, demonstrations, implementation, and training. Cloud-based ERP typically costs less than an on-premises system, especially considering the upfront outlay. Time spent by the evaluation team also should be factored as cost. Ensure the ultimate cost of an ERP system will be offset by the resulting cost savings and added efficiency. Once

an ERP is selected, putting it to use can take anywhere from 30 days to more than a year, depending on the complexity of the implementation and deployment model. Cloud-based ERP systems typically take a lot less time to set up.

## **10 Key ERP Selection Criteria**

An ERP system will be a part of the business for years, so it's not a decision to take lightly. Following are 10 key criteria to keep in mind as [your company evaluates its options](#).

1. **Business requirements:** What do you need your ERP system to do? The question may seem basic, but its answer requires a great deal of forethought. That's where a designated internal team of stakeholders from the different areas of the business can be extremely helpful. Each member must first gather feedback from their own teams about how they want to use a new system, including desired features. From there, the internal team can craft a business requirements analysis document that coordinates the feedback, articulates an overall vision for how the system will bring value — aka, ROI — to each applicable part of the business and defines what metrics will be used to measure that anticipated ROI. This document can be used as a guide and/or checklist when evaluating different systems and, ultimately, for measuring the ERP system's ROI.

2. **ERP features:** Different companies and their departments will require ERP features that support their specific processes. But they'll all likely have a common need for an intuitive interface and dashboard that enhances cross-department management and collaboration with easy-to-read key performance indicators (KPIs) and report creation. Other common requirements include advanced business intelligence, data-mining capabilities and data security. An ERP system should also be able to integrate data from existing systems and be customizable (more on both follows).

3. **Total cost of ownership and ROI:** This depends on the chosen deployment model. When ERP is installed on-premises, the business is responsible for all upfront hardware and software costs, as well as costs associated with implementation, customization, upgrades as the business grows, and security. Additional costs include employee training and ongoing maintenance and support. Some costs are one-time charges, others are ongoing; and the number of users may also have an impact. Total cost of ownership (TCO) is typically steep, so realizing the ROI of ERP generally takes longer than for less business-critical systems.

[Cloud-based ERP](#), which is set up, hosted and managed by a cloud vendor, reduces, eliminates, or amortizes many of those costs, potentially lowering TCO and almost certainly speeding up ROI — a main reason why cloud deployment models are popular among growing companies. The ERP system is accessed through the internet, with security managed by the cloud vendor and the software delivered as a service. The vendor also handles software updates, upgrades and maintenance.

4. **System integration:** Not only should an ERP integrate disparate business processes, but leading solutions will also integrate with any existing systems and applications a company wants to continue using. And if they do, the new vendor should have connectors available that do exactly what the name implies, preferably enabling real-time synchronization so data among systems is always up to date.

5. **Support and training:** The ERP system will require support for initial implementation, ongoing daily operations and employee training. Determine whether the vendor provides all those types of implementation support, its particular skill in your business segment, what escalating levels of support are available to match your business's needs and what response time is guaranteed. Managed support may be an option for a monthly fee.

6. **Implementation:** ERP implementation can take anywhere from one month to more than a year depending on whether the system is deployed on-premises, in the cloud or in a hybrid combination. Generally speaking, a business will be up and running the fastest with a cloud-based ERP system since the vendor handles implementation rather than tying up internal resources. A new ERP is typically [implemented in phases](#) and will involve the migration of data, which requires data cleansing to ensure data quality. Rigorous testing is essential before going live.

7. **Vendor industry expertise:** Along with evaluating the ERP software, it's a good idea to evaluate ERP vendors for their expertise in your industry. The ideal vendor will have a successful history of prior ERP installations for companies in your industry and at roughly the same company size. It also pays to get and check references of satisfied (and perhaps unsatisfied) customers. Financial viability is also important to ensure future support.

8. **Technology:** Advanced technologies continue to emerge and elevate many of the benefits an ERP system can provide. The cloud, artificial intelligence (AI) and, more specifically, machine learning can all improve business processes; provide deeper, more predictive analysis and insights; and enable a personalized experience, among other benefits. Some systems may also support Internet of Things (IoT) devices, such as sensors and cameras that feed information back to the ERP; blockchain, for conducting transactions and the transparent flow of data; and augmented reality.

9. **Vendor product road map:** As a business grows, it's likely to need more from the ERP system than what's included in its initial requirements. As a result, it is important to find out how the vendor will improve, add to and support its product — new versions, features and functions — down the road, as well as how those features will be integrated into the existing software. Another item to consider is the frequency of updates and patches.

10. **Customization:** The need to customize will depend on the complexities of your business processes — and even if you don't need it at the time of ERP selection, it may become important as the business grows. It may also guide the type of cloud deployment selected: single tenant vs. multitenant. The former allows for more customization because the ERP is dedicated to just one company, rather than shared as in the latter model.

## 10 Key Criteria for Selecting an ERP System

Criteria	Considerations
Business	▪ Does the ERP system specifically support my business market

Criteria	Considerations
requirements	<ul style="list-style-type: none"> <li>segment?</li> <li>▪ Does the ERP system match my requirements?</li> </ul>
ERP features	<ul style="list-style-type: none"> <li>▪ Is the user interface intuitive and consistent across modules?</li> <li>▪ Can the ERP software be accessed from a mobile app?</li> <li>▪ Are business intelligence tools included?</li> <li>▪ Can new features/modules be added as my business grows?</li> </ul>
Total cost of ownership and ROI	<ul style="list-style-type: none"> <li>▪ How much will the ERP system cost?</li> <li>▪ How is the software licensed?</li> <li>▪ What does the pricing include?</li> <li>▪ How soon will I see ROI?</li> </ul>
System integration	<ul style="list-style-type: none"> <li>▪ Does the ERP system integrate with other business systems?</li> <li>▪ How easily can existing data be migrated into the ERP system?</li> </ul>
Support and training	<ul style="list-style-type: none"> <li>▪ What level of support is provided during implementation — and after?</li> <li>▪ What is the guaranteed response time?</li> <li>▪ Is employee training provided?</li> </ul>
Implementation	<ul style="list-style-type: none"> <li>▪ How long will implementation take?</li> <li>▪ Are testing tools provided with the software?</li> </ul>
Vendor industry expertise	<ul style="list-style-type: none"> <li>▪ How well does the vendor know my industry?</li> <li>▪ What is the installed base of successful implementations?</li> <li>▪ Can the vendor provide customer references?</li> </ul>
Technology	<ul style="list-style-type: none"> <li>▪ Can new features be added as my business grows?</li> <li>▪ Does the ERP make use of AI/machine learning, IoT, blockchain and other advanced tech?</li> </ul>
Vendor product road map	<ul style="list-style-type: none"> <li>▪ What new features are planned? When will they be released?</li> <li>▪ Does the vendor publish updates on a prescribed schedule? Is there an additional charge to upgrade to the new features?</li> </ul>
Customization	<ul style="list-style-type: none"> <li>▪ Can the ERP system be customized?</li> </ul>



Criteria	Considerations
on	<ul style="list-style-type: none"> <li>▪ What support for customization is provided?</li> </ul>

### ➤ Importance of Vendors, Consultants and End Users in developing ERP

An organization is not able to develop an efficient [ERP System](#) alone. They have to look for Vendors, Consultants, and End Users.

Vendors are those who develop ERP Packages. Consultants are those who develop different Methods and techniques to deal with the implementation of ERP. End Users are those who use the ERP system once it has been developed.

So from that, a question arises.

### “Why Can't Company Develop their own ERP Packages ?”

- Developing an ERP Package is a complex and time-consuming activity that requires lots of skilled people and other resources.
- Such Specialized Computer Work is not the main business of many companies.
- It costs too much for the companies to develop their own ERP Package as compared to purchasing from others.
- An organization has to hire a skilled person for creating and maintaining ERP systems which acts as an extra cost for the Organization.
- The team which is developing ERP must have organization skills, project management skills, team management skills, and project management skills and also have experience in this field.

### How ERP is Developed?

ERP is developed by the three Main Person's which are:

- Vendors.
- Consultants.
- End User.

A. **VENDORS:** Vendors are the people who develop ERP packages, they spent a huge amount of time and effort in research and development to create the package solution which flexible, easy to use, and efficient. ERP vendors spent a large amount of money so that they become experts to develop flexible ERP Package.

### Roles of Vendors:

- The vendors should supply product and its documentation as soon as the contract is signed.
- Vendor is responsible to fix bugs that are found during implementation process.
- Vendor also provides training to the company's users and also to the people who are involved in implementation process.
- Vendors take care of quality control factors while developing ERP.
- Vendors participate in all phases of an implementation in which he gives advice, answers to all technical questions about product and technology.

**B. CONSULTANTS:** Consultants are professional people who develop the different methods and techniques to deal with the implementation process and with the various problems that will help during implementation. They are experts in the field of administration, management, and control activities.

They have experience that ensures successful implementation. The only limitation to Consultants is that they are expensive.

ERP consultants are specialized professionals who help businesses implement, manage, and optimize ERP systems. They are experts in understanding how ERP solutions can be used to centralize and automate core business processes, from finance and supply chain to human resources and customer relationship management.

The role of ERP consultants isn't limited to just technical assistance; they also act as strategic advisors, helping organizations choose the right ERP software to meet their unique needs.

In simple terms, ERP consultants bridge the gap between business needs and the technical capabilities of ERP systems. Their deep knowledge in specific industries and ERP platforms enables them to recommend best practices that align with an organization's objectives and goals.

The role of ERP consultants is pivotal, especially during the digital transformation era, when companies aim to digitize their processes efficiently.

### ➤ **Different Types of ERP Consultants**

It's important to note that ERP consultants are not one-size-fits-all. Depending on their focus area, ERP consultants can be classified into:

- **Functional ERP Consultants**

These consultants specialize in understanding the business processes and aligning them with the ERP system's functional capabilities. They are particularly skilled in configuring the ERP system to match an organization's workflow.

- **Technical ERP Consultants**

The role of ERP consultants with a technical focus involves customizing, coding, and integrating the ERP software with existing systems. They handle all the backend technicalities that ensure the ERP solution works seamlessly with other business tools.

- **Industry-Specific ERP Consultants**

Some ERP consultants specialize in particular industries, such as manufacturing, healthcare, or retail. Their deep domain knowledge allows them to provide industry-specific solutions that meet regulatory and operational standards.

## **Roles of Consultants:**

- They have to make a plan to carry activities in the right direction during the implementation process.
- They provide best optimum result such as reduction in cycle time, increased response time, improved productivity to satisfaction of customers.
- They have to make ERP implementation for an organization as their own business.

1. **Assessment and Requirement Gathering**

Before implementing any ERP system, the role of ERP consultants is to understand the company's current processes and challenges. They engage in detailed discussions with various stakeholders to gather requirements, ensuring the ERP system they recommend aligns perfectly with business needs. This stage is critical in avoiding costly mistakes down the road.

2. **ERP Software Selection**

ERP consultants help businesses navigate the overwhelming number of ERP options in the market. From industry-specific ERP solutions to large-scale platforms like Microsoft Dynamics 365 or SAP, they provide insights into the best systems available. The role of ERP consultants here is to recommend a solution that matches the business's size, industry, and budget.

3. **Customization and Configuration**

Once an ERP system is chosen, ERP consultants configure it to meet the specific needs of the company. The role of ERP consultants involves making sure that all functionalities are properly aligned with business processes. If the standard features don't fully meet the company's requirements, ERP consultants will customize the system, adding new features or modifying existing ones.

4. **Data Migration**

Migrating data from legacy systems to a new ERP platform is a daunting task. The role of ERP consultants during this phase is crucial. They ensure that the data is accurately transferred without loss or corruption, safeguarding sensitive business information.

## 5. **Testing and Training**

After configuration and customization, ERP consultants test the system to ensure that it functions as expected. They also train employees on how to use the new software, ensuring that the transition to the new system is smooth. The role of ERP consultants extends to providing user manuals, conducting workshops, and offering continuous training support.

## 6. **Post-Implementation Support**

Even after the ERP system is up and running, the role of ERP consultants does not end. They provide ongoing support, troubleshooting any issues that arise and helping businesses optimize their use of the system. Their role also involves monitoring system performance and suggesting improvements for better efficiency.

C. **END USERS:** End users are the people who use the ERP system once it has been developed. End-users are given training as to how to use various functions that are automated in the software.

### **Roles of End Users:**

- End users are the people who are doing functions that are automated by ERP System.
- They analyze and provide suggestions where customization needs to take place.
- They should be able to balance their loyalty to the client and project.
- Consultant should create a knowledge base and train people so that knowledge stays in the organization when consultants leave the project.

## **1. Data Entry & Transaction Processing**

- Enter master data (customers, vendors, items, employees)
- Record daily transactions (sales orders, purchases, production entries, payroll, etc.)
- Ensure data accuracy, which directly affects reports and decisions

## **2. Following Standardized Business Processes**

- Users must follow ERP-defined workflows and procedures
- Avoid shortcuts or parallel manual systems
- Ensure consistency across departments (finance, HR, inventory, production)

## **3. Decision Support & Reporting**

- Generate operational and management reports
- Monitor KPIs and dashboards
- Use real-time data for planning and decision-making

## 4. Compliance & Control

- Follow authorization levels and segregation of duties
- Ensure transactions comply with company policies and legal requirements
- Maintain audit trails by using the system properly

## 5. System Adoption & Continuous Improvement

- Actively use the system instead of bypassing it
- Provide feedback on system issues or improvement needs
- Participate in upgrades, testing, and process refinement

## 6. Security & Responsibility

Users are responsible for:

- Protecting login credentials
- Accessing only authorized modules
- Reporting security or data issues immediately

## 7. Training & Knowledge Retention

- Stay trained on ERP functions relevant to their role
- Help transfer knowledge to new users
- Reduce dependency on external consultants over time

### ➤ Role of Top Management in ERP Implementation

Top management (CEO, CIO, CFO, Directors) plays a **strategic and leadership-driven role** in ensuring the success of ERP implementation. Their involvement influences planning, execution, adoption, and long-term benefits.

### 1. Defining Vision and Objectives

- Establish a **clear vision** for why ERP is being implemented
- Align ERP goals with organizational strategy (growth, cost control, compliance, efficiency)
- Define expected outcomes such as process integration, real-time reporting, or improved customer service

Without this clarity, ERP becomes an unfocused IT initiative.

## 2. Project Sponsorship and Leadership

- Act as **project sponsors** and visibly support the ERP initiative
- Communicate the importance of ERP to all employees
- Demonstrate commitment through active participation in reviews and meetings

Visible leadership reduces resistance and increases user confidence.

## 3. Resource Allocation

- Approve and release sufficient **financial resources**
- Assign experienced employees as **key users** and project team members
- Provide necessary IT infrastructure (servers, networks, licenses)

ERP failures often occur due to inadequate resources rather than technology issues.

## 4. Decision-Making and Governance

- Take high-level decisions related to:
  - ERP vendor and implementation partner selection
  - Business process reengineering (BPR)
  - Customization versus standard ERP processes
- Form steering committees to govern the project
- Resolve cross-functional conflicts quickly

ERP projects require **fast and firm decisions**, which only top management can provide.

## 5. Change Management and Culture Building

- Prepare the organization for **process and role changes**
- Address employee resistance through communication and involvement
- Promote a culture of transparency, discipline, and accountability

ERP success depends more on **people acceptance** than software features.

## 6. Risk Management and Control

- Identify major risks (cost overruns, delays, data issues)
- Monitor implementation progress against milestones
- Ensure compliance with legal, regulatory, and audit requirements

Strong oversight prevents ERP projects from derailing.

## 7. Communication and Stakeholder Management

- Ensure continuous communication across departments
- Keep internal and external stakeholders informed
- Reinforce that ERP is an organization-wide initiative, not a departmental system

Clear communication minimizes misunderstandings and fear.

## 8. Training and Skill Development Support

- Approve training budgets
- Ensure adequate training for end-users, key users, and IT staff
- Encourage knowledge transfer from consultants to internal teams

Well-trained users directly impact ERP effectiveness.

## 9. Post-Implementation Review and Continuous Improvement

- Evaluate ERP performance after go-live
- Measure benefits against predefined KPIs
- Support system upgrades, enhancements, and process optimization

ERP implementation is a **continuous journey**, not a one-time event.