



SUPPLY CHAIN SERVICES
AUSTRALIA

DISCUSSION PAPER

TYPICAL ERP PROJECT

IMPLEMENTATION PLAN



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INTRODUCTION: ERP PROJECT IMPLEMENTATION PLAN 6 STAGES

1. Discovery and Planning

During this period, the project team will be created. There will be initial meetings and documentation developed as the team works to identify current issues and potential solutions. An important part of this phase is constructing the project plan, which will serve as a guide throughout the rest of the project.

2. Design and Configuration

What will the new enterprise-wide system look like and how will it be used in the organization? In the ERP Design phase, the project team and implementation team will be working out the various configurations for the new system, defining roles, and documenting standard procedures.

3. System Development

The purpose of the development phase is to prepare the entire system for going live. This includes activities such as completing any necessary customizations, developing user trainings, and importing data. With ERP implementations, like any custom software development projects – “First, Solve the problem. Then, write the code”.

4. Testing

Is the system’s functionality aligning with the set requirements for the project? The Testing and Development phases will often overlap, as the implementation and project teams jump between the two – constantly fine tuning the configuration. By the end of this phase, project team members will be comfortable doing their jobs in the new system. This is the final step before diving into the live system.

5. Deployment / Go-Live

The project team and implementation team will assess the situation and make the final go or no-go decision. Prior to going live, the final data will be loaded and validated. The project team will train other employees who will then start working in the new system, and completely stop using the old one.

6. Post Go-Live

Once the ERP system has gone live, the purpose of the project team will shift. Over time, as the way the users work within the system evolves, adjustments and changes to the system configuration may be needed.

1. Discovery & Planning

1.1 Establish the Project Team

The project team should represent all aspects of the business. There should be someone from Sales, Customer Service, Purchasing, Materials, Operations, Accounting, and IT. Team members should have strong knowledge of current procedures in their area and be active system users with hands on experience, knowing what the current system does as well as its limitations.

The Project Director should be someone who is higher up in the organization chain – having an understanding of how the business operates and where the business is heading. Depending on the size of the project, the Project Director is often supported by a Project Management structure.

Often times an ERP project can be interpreted by others as just an IT project, particularly if a person with an IT background is the team leader. Watch out for this. It must be seen as a project that involves and affects the entire business – not just IT.

1.1 Hold Discovery Meetings

This is where members of the implementation team interview members of the project team to get an in-depth understanding of various parts of the business at detail level. The team will want to know what are you currently doing, and what you want to do in the future? They will discuss current processes thoroughly and identify pain points with the current system.

1.3 Document Key Processes and Requirements

Overall, this round of documentation will become the foundation for configuring the new system and also helps the implementation team with building out the project plan. This involves meetings with the implementation team and the project team, as well as executive members – looking for red flags, or gaps between the customers' needs and system capabilities. These holes can greatly affect the requirements of the new system and the better they are understood, the better job the implementation team can do guiding the implementation.

Also, this includes discussing broader strategy with the executive team. It may be that there are new initiatives underway that can impact the requirements of the system.

1.4 Identify Potential Gaps, Risks and Solutions

Continuing from the discussions in the previous step, this is where the implementation team will work to identify all of the areas where the current system doesn't meet the company's needs. Then, based on those findings, they will begin formulating potential solutions based on the new system. Areas that require work-arounds outside the system like extensive spreadsheets are prime candidates. The team will use this information to formulate suggested solutions for the project team to evaluate and test.

It is important to identify any risks that might push out the implementation date or that make the conversion more complex. Risks to identify might include things like complex chart of accounts, inaccurate financial records and operational data, significant planned absences of project team members during the implementation and so on. These risks should be listed and steps taken to mitigate them.

1.5 Build the Project Plan

The implementation project plan will serve as a road map for the implementation. Depending on the project it may be fairly detailed or it may be higher level. It is a communication tool for all involved to have visibility of open items and priorities.

The bottom line for the discovery process is that the implementation team and project team must both understand and agree on the business processes and the objectives of the project. The project plan is the end goal of the discovery process and it is the foundation of the rest of the project.

2. ERP Design & Configuration

The design phase of an ERP implementation project can be broken down into these 6 steps:

2.1 Gather and Review Master Records

Early in the design phase the implementation team will want to review the client's master records. This is data that is the foundation of the current system such as:

- Chart of accounts
- Subaccounts if applicable
- Customer master
- Vendor master
- Item master

This information along with the discovery information will form the basis for the implementation team to begin discussions with the project team about how to start configuring the new system.

2.2 ERP System Orientation & Walkthrough

Now the implementation team is ready to begin training the project team on the functionality of the new system by walking through the application. This usually follows the flow of various business cycles and starts the process of mapping out the procedures identified during discovery.

For example, we would open the accounts payable module and walk through setting up a vendor (contact info, payment methods, terms, etc.), entering an accounts payable invoice, showing the approval processes and the payment cycle steps. This allows the project team to see how they would do their jobs in the new system. During this session, project team members may identify areas where the new system differs in approach from the old system. In designing how to use the new system some compromising might take place between having to make slight changes to processes themselves or customizing the actual software.

2.3 Establish Initial System Configuration Settings

Establishment of the initial configuration settings includes tasks like designing the chart of accounts in combination with the subaccount structure. This is a key decision point and should be done with the goal of supporting the reporting requirements that arose from the discovery process. Done correctly, the proper configuration can support things like companies, divisions, departments, product lines and so on.

This is also the time to decide what the format of customer and vendor ID's – should they be simple numeric values, abbreviations for the names or some combination thereof?

If the client is a distributor and/or manufacturer, design of the item numbering scheme and bill of materials and resources is also critical.

2.4 Create a Prototype

The teams will work together to build a prototype system configured to meet the client's business needs. The system will consist of sample customers, vendors, items that feed financial activity into the accounting system using the first pass at a chart of accounts and subaccounts. This version of the system will be used to train the project team members and prove out some of the decisions made earlier in the design process.

2.5 Define User Roles

Modern ERP systems rely on user roles to control security. These role-based systems can be simple or complex depending on the size of the business and internal control requirements. For example, a sales person should not have access to the cash receipts function, or an AP person to be able to cut a purchase order. The project team will define these roles and users who will be using those roles.

2.6 Document ERP Procedures

Along the way the project team will document how the system should be used by creating procedures for each function. The procedures should include which position submits the initial invoice, how it is reviewed and how it is approved. The project team puts these types of procedures in place to support initial end-user training and the training of new people in a consistent manner. This is probably the most difficult part of the design process for most project teams.

3. ERP System Development

Like any development project, development does not begin with *actual* development work. “First, solve the problem. Then, write the code.” Development must not begin until proper planning and documentation has been done. If not, a severe waste of time and energy is sure to follow.

The objective for the development process is to prepare the new system environment for data migration & validate against requirements. As part of this, the development process includes establishing a testing environment and developing user skills.

3.1 Customization

Modern ERP systems have a great amount of flexibility built into them and there can be a variety of approaches that are possible to address the way customers want to run their businesses. However sometimes during the Discovery and Design phases the implementation team in coordination with the project team determine that some level of customization of the ERP is required to best meet the customer’s needs. Here, the implementation team will build, deploy, and test any required features that were identified during the design phase. This includes modifying or building new screens, developing new processes that fit the ERP system, writing new reports, and building system connections.

3.2 Configure the Go-live System

All of the decisions made regarding needed configurations in the design phase get deployed here. This is where the implementation team will load the chart of accounts, as well as any static data such as the customer master, item master, vendor master, historical financial activity, etc...

Other configurations such as formatting the chart of accounts and sub accounts, as well as setting any numeric sequences for customers and vendors will also be done. Customer classes, vendor classes, item classes and deferral codes for deferred revenue situations are also examples of areas that will be set up during the development phase.

3.3 Simulate a Live Environment

Now that a lot of the data has been added to the system, it’s time to run a conference room pilot – walking through the entire order to cash cycle for the first time in the new system. This preliminary simulation of the live environment is important in providing another opportunity for the implementation team to test the design of the system to see that it meets the business requirements.

It also offers a great deal of training value for the project team, who can now use the new system risk-free with their own data. From generating and sending a quote to reporting the results of the sale, the goal is to have everyone agree that the system has been configured in a way they want it to run the business. It’s also important that the project team understands how they will use it to do their jobs once it goes live.

The implementation team in conjunction with the project team will look at the results of the conference room pilot testing to determine whether the system is ready for go-live.

3.4 Develop End User Training

Now that the approach to using the system has been developed the project team should create training material for the end users. The members of the project team should be subject matter experts in their area of the business and should prepare the training materials for their areas. The procedures developed earlier should be the foundation for the training so that the users learn to use the system in the way the project team designed it to be used.

4. ERP Testing

This is where the organization will really start hammering on the new system. The testing phase as part of an ERP implementation will follow after development, where most of the configurations and customizations were made. End users also began training in a special training environment with sample data. There's no defined boundary between development and testing. In fact, there will be significant overlap between the two throughout the process.

The objectives for the testing phase will be to:

- Validate system functionality alignment with requirements
- Fine tune configuration
- Establish end user proficiency

4.1 User Acceptance Testing

Developing and executing the UAT plan will largely fall on the shoulders of the project team because they know the business. In order for the testing process to be successful, the users have to define what it is they want to see, and then develop a testing plan to the level of comfort need to accept the product as deployed. The implementation team will work with the project team to develop the testing scenarios to ensure all parts of the system are tested.

4.2 Import Sample Data

Part of the go-live process involves loading static and dynamic data. Static data are elements that don't change frequently such as customers, vendors, inventory items and so on. Dynamic data changes frequently and includes things like accounts payable and receivable invoices and inventory quantities.

Often it makes sense to export that data out of the old system and import it into the new system. Part of testing should include the export and import processes. Particularly with dynamic data you will want to ensure that process works efficiently so as to minimize system downtime during conversion.

Importing some static and dynamic data enables the project team to perform system testing with familiar information and better enables simulating running the business in the new system.

4.3 Adjust Configurations

During the "testing" phase the teams may determine that some slight adjustments are necessary to some configurations in order to optimize the use of the system in running the business. If adjustments are required, they are made in both the test and go-live systems.

4.4 Establish "Cut-off" Strategy

Transitioning from the old system to the new system can take a variety of paths. In the past, companies converted systems one module at a time, or they would run both systems in parallel. The problem with those approaches is the workload for users more than doubles. They have to build interfaces to get the systems to communicate or work in both systems, and reconcile differences.

The typical approach now is to build confidence in the new system and user training through thorough testing, and then cut over all at once. At this point in the process the teams should have a full understanding of how to do the conversion. They should put in place a plan to finish training other users and bring over the static and dynamic data.

4.5 Simulate Running the Business

Just prior to the go-live decision, the teams should work jointly to perform one final test of the system, sometimes referred to as a conference room pilot. The project team should prepare a final test scenario that simulates running the entire business in the new system. Hopefully this will either confirm that the team and the system is ready for the final step – going live.

4.6 Deliver End User Training

Once the confirmation has been made by the project team, members fan out to train the end users in their respective departments.

5. Deployment / Go-Live

This is where we pull the trigger and migrate to the new system. By the end of this phase of the project, the entire organization will have switched to the new enterprise resource planning system with clean, reconciled financial and operational data.

5.1 Assess End-User Proficiency

End user training began in the development stage and will continue into deployment until all employees who will be using the new system have been sufficiently trained. Project team members will need to become subject matter experts within their respective areas and should also be given enough time to train others on the new system. For example, a controller will learn all about accounts payable and receivable, and general ledger. Then, the executive team needs to give the controller enough time to train the AP clerks, AR clerks, and so on. Before going live, all users must have enough time working with the system to comfortably do their jobs.

5.2 “Go / No Go” Decision

As the project approaches the scheduled go-live date, the project team and implementation team should work through a final evaluation of system and user readiness by simulating running the business. Based on that testing, the teams should have a discussion to decide whether or not they are ready.

5.3 Load Static and Dynamic Data

With the teams concluding that they should go live, the data load process starts. During the testing phase, the processes to load should have been tested. Now that it is time to go live the teams extract data from the legacy systems like vendors, customers and inventory item master records as described previously.

Once that data is loaded and validated, the team will extract the dynamic data and import it into the new system. That includes open invoices from accounts payable, accounts receivable, inventory balances, open sales orders, open purchase orders, open projects, etc.

5.4 Validate & Balance Against Legacy System

For each financial and operational area the teams must validate the data that was loaded into the new system against the data in the legacy system. This is a critical step to ensure that the systems match and that you have informational integrity as users start using the new system. Accurate underlying data will help users and decision makers build confidence in the new system.

5.5 Start Using It

Employees start doing their jobs in the new system and stop using the legacy system. Companies used to run parallel, which meant that during a painful transition period, people would do their job twice – once in each system, and then reconcile the differences. The problem is that it more than doubles the workload. It is now quite common for companies to make a complete switch to the new ERP system.

This is why it is important for users to have had enough practice and training so that they are comfortable doing their jobs.

6. Post Go-Live

It's like using Excel. When you first start using the program you use basic functions as you build a foundation, then over time you learn more capabilities that address more complex situations.

6.1 Converting the Project Team

This optimization process begins as a joint effort between the implementation team and the project team, but shifts as the project team takes on more of the lead role. Eventually they will convert to more of an IT steering committee that looks at new system requests from users and compares them with the IT resources available.

Responsibilities for the steering committee also include ensuring that new users are properly trained in the use of the system. Studies have shown that a departing user transfers roughly 10% of their knowledge to the new user. And if that role has several changeovers in a period of a few years, the way the system is used may diverge from how it was designed to be used. This can lead to a high level of frustration with the system, a loss of productivity as users develop unnecessary workarounds and degradation in the quality of information available in the ERP system.

6.2 Identify Problem Areas & Develop Solutions

If there are some longer term structural changes such as acquisitions, or adding new business units there may be a need for rolling out new features in the ERP system that were not necessary before.

So even though thorough planning and testing was conducted along the way, generally, there will always be a need for proper care and feeding of the ERP system as the business progresses. This should be managed by the steering committee and members of the implementation team should be engaged where appropriate.

References

- *The 6 Phases of any Business Software Implementation, Art Olsen, 2016*
- *Various internal Supply Chain Services Australia documents*