



MRPEasy Implementation Guidelines

Let's keep it simple but effective

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Introduction

Traditional approach

It is not a secret that more than 75% of ERP implementation projects fail in part or fully. Is it because of exceeded budgets, complexity, or not being able to go live as scheduled? In any case, achieving success in this field is a complex task.

The classic waterfall approach does not work best, where it's expected that the whole software will be taken into use at once, practically overnight, expecting that it is going to work perfectly. Already because the requirements do tend to change over time, ultimately resulting in an underestimation of time, money and effort required.

Agile in MRP/ERP - 20% Effort, 80% Success

We know that maximal results can only be achieved with maximal effort. Unfortunately, when implementing ERP then investing that kind of effort is often unreasonable, and especially unrealistic for small companies.

When you implement a standardized out-of-the-box MRP software, then you can use agile methods instead. You can start using the software from day 0, implement step-by-step in stages, starting with the business-critical requirements first.

With this approach, the first critical needs can be solved with only a fraction of effort and time, and many benefits can already be reaped at early stages of the project.

Get Your Hands Dirty – NOW!

What? We have not even analyzed all our business requirements!
We haven't prepared all the process maps!

You must know what the company needs by understanding which challenges bring the greatest results when resolved and then begin testing the software. While the classical ERP implementation project is still getting started, a mock-up solution is on paper, your company already has achieved the greatest victories.

With cloud-based SaaS software, you have keys to the kingdom. Read on to learn how to be successful in implementing a cloud based MRP solution.

The Keys to a Successful Implementation

The Foundation for Success

The following two pillars lay the foundation for success:

1. **Understanding the reasons and goals.** The most important bit of a smooth and effective implementation process is deeply understanding why the process is set in motion in the first place.

Plus, there is no other way to convince any stakeholder - the CEO or the janitor - to do something differently, especially if it's demanding at first, if there's no compelling reason to it.

2. **Taking the lead and full responsibility for success.** No one outside of the company can steer or take ownership of the project and results.

This software is for your business's benefit, and for you to use. It's not customer support, consultants or anyone else outside of the company who can take responsibility of the success, or use the software, instead of employees. It's like learning to drive a car: the student drives the car, not the instructor.

Understanding the Reasons and Setting Goals

The situation in which a company finds itself is the result of its habits and its current processes and procedures. The reality is that the issues that need to be addressed are not caused by lack of manufacturing software. Instead, they are caused by the lack of procedures, which manufacturing software can support.

It's key to understand:

- **Why do we want to implement MRP software?**
- **For what do we use MRP software?**
- **What measurable benefits can MRP software bring?**

It is often difficult to distinguish the most important from other less impactful requirements, nice-to-haves, shiny add-ons, or even personal agendas.

For keeping better focus, please clearly define the key issues to solve, key incentives, Key Performance Indicators (KPIs) to measure, and expected effects on revenue and benefits.

Key issues

Choose at most 3 important key issues to solve:

- No clear inventory overview
- Difficult and laborious to gather information
- Difficult to estimate lead-time or costs
- Difficult to reliably schedule production operations and load machines
- Ineffective or slow communication
- Reoccurring mistakes; things overlooked
- Stock outs or excess inventory
- Regulatory demand for traceability and transparency
- Inventory valuation incorrect or missing
- Other: ...

Key incentives

Choose the 3 most important key incentives for your project, what does your company require?

- Accurate operation planning
- Accurate material planning
- Easier quoting

- Better communication and overview (including live production reporting)
- Real-time accurate inventory overview
- Automated stock balance calculation and product costing
- Meeting regulatory demand
- Enforcing quality
- Other: ...

Key Business KPI

Choose your 3 most important Key Performance Indicators (KPI) to improve:

- On-time delivery
- Customer satisfaction
- Lead time reduction
- Loading/Effectiveness increase
- Decrease overhead
- Smaller inventory
- Other: ...

Revenue and Profit

Describe how key issues, incentives and KPI affect the bottom line of your company, the revenue and profit.

For example, better production scheduling could improve lead-time by 25%, and equipment load by 10%, which could be translated into a 10% increase in revenue and 15% increase in profit.

MRPEasy implementation project plan

MRPEasy has developed guidelines for a successful implementation. This requires the following steps:

Stage I: General Acceptance Testing:

1. Choosing the project manager-analyst
2. Preparing the test task
3. Performing the test task

Stage II: Implementation:

1. Preparing the implementation plan
2. Fulfilling the implementation plan

This must be seen through as a formal project. Choosing and implementing manufacturing software are both projects that take time.

It might be comfortable to keep it informal, to give orders orally and have a flexible time frame, but that will not bear fruit. Progress can be difficult, but weekly progress is a must and needs to be enforced. Otherwise, the project will bleed out slowly and suffer a long, painful death.

The project needs to be a priority and it needs daily, focused efforts, for which an upfront dedication of time and other resources is required (including fees for consultations and testing licenses).

1. Choosing the Project Manager-Analyst and the Team

All heads of departments that will use the system should be included in the implementation project team, plus the management and representatives of the company's board.

Since acceptance testing of the software requires at least 40–100 hours of work, in addition to analysis of the company's processes, **it is necessary to appoint a dedicated project manager-analyst and to allocate this person enough time to work on the project** (this is at least two full days a week).

The project manager, as a rule, should not be the managing director (MD/CEO/GM), because the MRP project must be the number one priority project for the project manager. The managing director will have conflicts of interests (putting out fires vs. leading a project), which will keep the MRP project from making adequate progress.

Still, the project manager should have authority, a solid position, and special rights; in most cases, he/she should not be chosen from office managers or assistants, positions which are unrelated to production and hence lack specific knowledge and experience.

If the project manager is an external consultant, then this person must first become aware of the manufacturing process, which can only be achieved with a thorough analysis of all the processes.

2. Preparing the test task

It is only possible to decide if the software fits through actual testing by the project manager. There is no other way, or you would be buying a pig in a poke.

The project manager's preparation of the test task takes place in the following stages:

1. Describing the objectives that the company seeks to achieve with the help of MRPeasy.
2. Preparing a simplified test task that covers these objectives.

What does a simple test task mean? It means defining as minimal a dataset as possible to test the important requirements. The goal is just to test the functions and the data (number of articles, BOM, vendors, etc.) is kept to a minimum to avoid the loss of time and mitigate the risk of mistakes in seed data entry.

The following information is part of the test task:

1. Key problems to solve, key incentives and key KPI to improve.
2. Description of current processes and descriptions of what should be improved.
3. List of procedures, by importance, which should be supported by the software.
4. A testing dataset must contain the following information:
 - List of items (articles, SKUs) and their descriptions.
 - Starting inventory levels and costs of items in stock.
 - Purchase terms for purchased items.
 - BOM and routings for manufactured items.
 - Work stations and work station types.
 - List of vendors.
 - List of customers.
5. Usage cases and scenarios to test, including expected outcomes.

3. Performing the test task

As a result of performing the test task:

1. The company learns whether the program does what is required;
2. It's understood if it's easy to use;
3. The implementation difficulty can be estimated;
4. It is possible to weigh the costs and benefits.

The project manager explicitly should be given the authority and time to perform the test task, which could involve recruiting a limited number of employees to run a limited-pilot, where these employees use MRPeasy in parallel with their current planning and reporting tools and documents.

Should any questions or issues arise while performing the test task, the project manager-analyst will contact the provider or supporting consultants to receive more information.

Based on the result, the management decides whether the system is suitable for implementation.

4. Preparing the implementation plan

The aim of the implementation plan is to set:

- The strategy for implementing the software;
- The date when use of the program begins;
- The timeframe of each implementation stage;
- The detailed description of each stage;
- The necessary preparatory activities;
- The circle of people who are involved in the implementation of the system.

The implementation plan must therefore be a proper project with a header, containing the full name of the project, the project deadline, the person responsible and the date.

The implementation plan must contain a list of activities assigned to specific people, together with the signed consent of the executors and written approval from the management. For example:

Activity number	Description of the activity	Expected result of the activity	Executor	Deadline	Executor's consent
# 1	Analysis of requirements	Overview of the core issues that need solving	Person	Date 1	Signature
# 2	Preparation of test data	Test dataset and clear scenarios	Person	Date 2	Signature
# 3	Testing	Clear overview of software capabilities	Person	Date 3	Signature
# 4	Implementation planning	Detailed implementation plan	Person	Date 4	Signature
# 5	Data preparation	Seed data prepared	Person	Date 5	Signature
# 6	Implementing critical functions	Limited functions or departments implemented	Person	Date 6	Signature
# 7	Implementing all functions	All functions or departments implemented	Person	Date 7	Signature
# 8	Developing integrations and customizations	Integrations to accounting software; e-commerce	Person	Date 8	Signature
# 9	Performance review	Overview of realized benefits; project closed	Person	Date 9	Signature

Approved by: *Signature of CEO/GM/MD*

Implement in stages for faster results

While traditional solutions can mostly go live with a big bang, you don't need and shouldn't do that with MRPEasy. Instead, put in order your priorities and these will be your guiding implementation stages. The most important key issues to resolve will bring the most results - get these implemented as soon as possible.

It is possible to stage your implementation in two dimensions:

1. Organizational dimension - the lines of product, production lines and/or departments.
2. Functional dimension - the functions of the MRP software.

Generally, the following functionalities can be implemented separately, in different stages:

1. Inventory control (including sales and procurement activities)
2. Material planning
3. Capacity planning
4. Live production reporting
5. Integrations

The order presented above is the most logical order for a typical implementation; however, depending on needs, the importance of "material planning" or "capacity planning" could be different. "Integrations" must always remain the last stage, when it's clear how everything should be working together.

5. Fulfilling the implementation plan

While previous steps were necessary to plan the work, now, in this stage, it is necessary to stay focused and work the plan.

Here are some tips for fulfilling the project.

Company size matters

Not every company is ready to implement an ERP/MRP system anytime. This is especially true for micro-companies (up to 10 employees). Such companies may not have enough resources and competence for ERP/MRP system installation and operation. Also, the outcome of using ERP software in such a company can be less than expected, since the greatest benefits are derived from better (i.e. automated) internal communication among many employees in various departments.

Avoid micro-tasking

An ERP/MRP system solves major problems associated with manufacturing, so try to identify important tasks, since they will have the most impact, while focusing on micro-automation will lead to more complexity of the implementation project.

Set a limited number of major implementation project goals, which should be closely related to the business processes and problems that you want to solve. Don't waste time and energy on tasks that look nice but have minor impact. Goals should relate to the business, not to the automation itself.

Allocate enough resources

The ERP/MRP system implementation process is one-time, but quite a big project, so allocate resources accordingly. Make sure the

project manager, for the implementation process, has enough time resources and is experienced in ERP/MRP software. All heads of departments that will use the system should be included in the implementation project team.

ERP implementation step by step

Depending on your company's size and structure, you can implement the system by module, by functionality, by production line, or by personnel; for example, when the managers, in the beginning stages, report finished manufacturing orders on their own before passing this function to line workers.

Data classification

Think carefully about data classification and categorization. Name and code the articles logically. Create logical product groups. Structure your workstations, bills of materials and routings effectively. It is nearly impossible to change data classification after go-live.

Keep testing and implementation separate

Have a clear understanding - are you testing, or are you implementing the ERP with real data? Using real data during the testing period will make the process over-complicated and will lengthen testing:

- **Functionality testing is data-agnostic.**
Functions do not care if there is real or made up data, and neither should you when you are testing how it works.
- **More data points lengthen the testing phase exponentially.**
More data points create more confusion, because everything is related, and if you don't yet understand how, you'll spend more and more time on figuring out how things are connected. And you're

likely going to make more mistakes in initial seed data entry before getting it right.

- **Test functions separately, then together.**

Clear the database often while testing, to keep focus and clarity.

- **If real data is mixed with test data, then cleaning the database might be problematic.**

It almost always is, due to limitations set by keeping data consistency and history - an MRP system is not an Excel spreadsheet. Implementation should start from an empty sheet, no remnants of testing should remain, or it'll sneak up on you when you least expect it.

Customization is not the only way

It is practically impossible to find a standard ERP solution that would suit all the needs and align perfectly with your existing business processes and documents. In most cases, you have to adapt or customize. Though customization might seem the simplest solution, in practice, adapting your business processes and documents could be more effective, and may deliver better results in the long run.

Keep future users informed about the goals and project schedule

There will be change and resistance because people's responsibilities will change, and new procedures will need to be taught.

Make sure that all users that will be interacting with the ERP system have a clear understanding of the implementation goals and schedule. This means that a general meeting should be held at the beginning of the implementation, with periodic communication to follow up.

Users must be trained

Every person interacting with the ERP software should be aware of what everyone is doing. Usually, the first one or two trained users pass the knowledge to others. Another option would be software vendor's trainings.

Experience with ERP/MRP systems helps

The implementation project team leader should have prior experience with using and/or implementing ERP systems in your specific industry. If you don't have such a person, then it is a good idea to find a partner consulting company with such experience.

No rush – test, and test again

Test intensively prior to using an ERP system in production mode. It is much easier to fix errors and change procedures during the testing period than during operating with real data.

Keep the old system working

It is better to use the old system in parallel with the new one for at least 1-2 months after having implemented the new ERP software. This helps to make sure that the new solution has been configured and is being used properly; for example, the reports in old and new systems are identical.

Also, in case of any major issues with the new system, you will be able to roll back to the old one.