MANUFACTURING ERP IMPLEMENTATION CHECKLIST

Over 70 actionable steps to help your ERP implementation go smoothly

GUIDE HIGHLIGHTS

- Building your ERP implementation team
- Migrating your data, testing, training and going live
- Evaluating the success of your ERP implementation
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Written by experience ERP project managers, this checklist breaks down your implementation project into manageable chunks, including:

3 Organize your ERP implementation team
5 Plan your implementation project
7 Migrate your data and train users
9 Plan and launch your ERP system go-live
10 Evaluate the success of your implementation project
As a manufacturing company puzzling out how to implement ERP, you will need to devote some time to thinking through the ERP implementation plan.

Manufacturing companies often have a wider scope of ERP functionality than more general operations. As well as the manufacturing-specific features (lot tracking, batch scheduling, machine integration etc), you’ll likely have required some warehousing and SCM features too.

These provide plenty of long-term benefits, if used correctly. Nevertheless, it does make implementing your ERP a daunting task, particularly given that many manufacturers operate on a 24/7, shift-rota basis. Manufacturers aren’t 9-5, so implementing with minimal disruption can be tricky.

That’s why we’ve put together this manufacturing ERP implementation cheat sheet. We’ve mapped out each step to implementation and, where relevant, flagged up some manufacturing-specific issues to keep an eye on.

CREATE YOUR IMPLEMENTATION TEAM

For any implementation to go well, it’s important to have the right people managing it. To manage it successfully you’ll need a well-balanced mix of project management, IT specialists and employee representatives.

Some vendors offer consultancy services during implementation (either included in the overall price or for an extra fee). These can be a valuable resource, so make sure you consider how best to use them and map out which processes they should be overseeing/assisting with.

✔ RECRUIT YOUR MANUFACTURING ERP IMPLEMENTATION TEAM

☐ Map out your implementation requirements
  ☐ Managerial (project management)
  ☐ Technical (testing, integration, data migration)
  ☐ User acceptance (change management, communication, training)
Promote membership of implementation team by communicating opportunities company-wide and offering incentives (e.g. extra day's holiday, cash bonus, free food)

Recruit your team:
- Talk to department heads about suitable candidates
- Recruit to fill technical and managerial requirements
- Ensure that all key user groups have at least one representative on your team

Decide whether you want to hire an ERP consultant
- Decide on vendor provided or independent consultant
- Get budgetary sign off
- For independent consultants: shortlist candidates, interview and ask for references
- Get budgetary sign off
- Hire your preferred consultant and agree scope of consultancy project

MANUFACTURING ERP IMPLEMENTATION TEAM CHECKLIST
- Project manager
- Application analyst
- Application developer
- Application test engineer
- Shop floor stakeholders and user groups
- Warehouse staff stakeholders and user groups
- Engineering and design stakeholders and user groups
- Sales stakeholders and user groups
- Management stakeholders and user groups
- Vendor/third party consultant
PLAN YOUR MANUFACTURING ERP IMPLEMENTATION

As stated above, implementing manufacturing ERP is a vast undertaking. As such, there's a large scope for large-scale errors.

You get orders wrong due to poor user training? **Revenue decreases.**

You fail to meet customer deadlines? **Revenue decreases.**

You send orders to the wrong address? **Revenue decreases.**

You get the idea. Manufacturing ERP can cause immediate damage if implemented wrong - more so than software for back office functions. That's why managing the change effectively is so essential. Create both a plan for the implementation itself and for how to manage your workforce’s expectations during the transition. Now is also a good time to draw up your budget too.

✔ CREATE A CHANGE MANAGEMENT PLAN

- Establish how much support your vendor is giving you
- Forecast implementation costs and drawing up a budget
- Create an ERP implementation schedule for:
  - Data migration
  - Training your ERP user base
  - Testing and going live
  - On-the-day go-live activities
- Identify evaluation criteria for measurement of project success

✔ CREATE A USER ENGAGEMENT PLAN

- Communicate any anticipated disruption clearly to anyone affected
- Create a user training schedule. Notify employees in advance of when their training slots are scheduled
- Identify evaluation criteria for measurement of project success
- Signpost ways staff can raise questions they have about the implementation - e.g. email
MAP OUT YOUR IMPLEMENTATION BUDGET

- Forecast cost of hardware and network upgrades
- Forecast cost of shop floor overtime pay/extra temporary staff
- Forecast cost of operations overtime pay/extra temporary staff
- Confirm vendor implementation fees
- Forecast cost of data backup and storage
- Forecast cost of productivity loss
- Forecast cost of data backup and storage
- Total up costs and add at least a 10% buffer in case of error or project overrun
MIGRATE YOUR LEGACY ERP DATA AND TRAIN USERS

MIGRATING YOUR LEGACY DATA

The process here is similar enough to migrating data to any new software. Be thorough - best to spend extra time here to get it right, rather than rushing and losing essential data.

This is where the IT staff on your implementation team get to shine. They’re the experts here, so you should delegate running this stage to them and comply with the suggestions they make.

✔ CLEANSE AND MIGRATE YOUR LEGACY ERP DATA

- Cleanse and verify your data:
  - Ensure customer contact details are correct
  - Cleanse redundant internal data, e.g. out-of-date product designs and employee info
  - Cleanse redundant external data, e.g. old supplier addresses and customer contacts
- Configure your databases
- Map legacy data to new database fields
- Transfer data to the new system
- Test and verify legacy data
- Test and verify new data inputs, for example:
  - Inventory data (item location, stock)
  - Production data (order volume, parts required, estimated completion date)
  - Sales data (customer contact, history of orders)
  - HCM data (payroll information, employee benefits)

TRAIN YOUR MANUFACTURING ERP USERS

In contrast to business headquarter operations, most shop floor personnel do not spend large amounts of time on computers. On top of this, many manufacturing operations run around the clock, seven days a week, with a shift-based workforce. Consider this as you plan out your schedule and decide which style of training you employ.
TRAIN YOUR ERP USERS

- Identify and train super users for each key user group to assist with troubleshooting and minor issues during general staff training
- Create your training schedule
  - Decide on deadline for completion of e-learning modules
  - (OPTIONAL) agree on gamification incentives for completion of training
  - Training schedule for face-to-face training - important if your workforce works in shifts
- Train key user groups:
  - Senior management
  - Accounting and finance
  - Engineers
  - CAD designers
  - Shop floor workers
  - Warehouse staff
  - Supply chain workers
  - Sales team
  - HR staff
Similar issue to user training: manufacturing is often a 24/7 operation, involving large numbers of employees working on a shift rota. In contrast to office-based environments, there might not be the option of implementing overnight when everyone has gone home.

The key here is to manage expectations and schedule in extra staff or overtime workers. Explain that there will be some disruption, and draft in enough support to cover it.

LAUNCH YOUR ERP GO-LIVE

- Conduct pre go-live software tests:
  - Integration testing (eg WMS, CRM, HRMS, SCM)
  - Functional testing
  - System testing
  - Stress testing
  - Performance testing
  - Usability testing with key user groups - engineers, designers, shop floor staff, warehouse team, sales
  - Acceptance testing with key user groups - engineers, designers, shop floor staff, warehouse team, sales
- Schedule staff overtime
- Schedule any temporary staff required
- Identify metrics for project evaluation
- Create a communications strategy for system downtime
- Schedule Network speed and reliability checks
- Create data backup processes
- Conduct post go-live software tests
You'll be able to tell immediately if your implementation was a disaster. **Bluntly, it won't work**, no-one will know what they're doing and your business will grind to a halt.

Manufacturing is relatively unforgiving in this - if your system falls down, you won't know how much you're making or who to ship it too.

Assuming it wasn't a complete failure, it's more difficult to ascertain how much of a success it was, mostly because you'll need to monitor key metrics for a while to see which improve over time. Bear in mind that your workforce will need time to get used to the new way of doing things, so monitor your key metrics over a period of months to identify upward trends.

**TO CONSIDER IMMEDIATELY POST IMPLEMENTATION**

- Was your implementation within budget?
- Was your implementation within schedule?
- If not:
  - What went wrong?
  - Can you take any actions to fix it?
  - Could you have done anything better?
  - What can you learn for next time round?
- Are your users embracing your new manufacturing ERP, or reverting back to the legacy system?

**TO MONITOR CONTINUOUSLY POST IMPLEMENTATION**

- Have productivity levels increased?
- Has client satisfaction increased?
- Is human error decreasing (e.g. shipment errors, wrong due-date)?
- Is your new ERP producing a positive ROI? If so, how many months post-implementation?
This guide was written by Shane Starr, ERP Focus Columnist, with contributions from Kathryn Beeson, ERP Focus Editor

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