

Chapter 5. Implementation Methodology

There are many theories around project management and this chapter covers none of them... In this chapter we will explore how to go about implementing a successful SAP EM Solution.

It is based on a 6 phase implementation strategy and assumes a big-bang approach. The 6 stages are described as follows:

- **Phase 1: Project Preparation:** Everything you need to set up in order to get rolling – Deciding on the puzzle to build and agreeing on it with all the puzzle makers and interested parties
- **Phase 2: Analysis and Design:** Deciding what pieces of the puzzle are needed and how they are expected to fit together
- **Phase 3: Configuration and Development:** Putting the puzzle together
- **Phase 4: Training and Go-Live Preparation:** Ensuring that the puzzle is put together correctly and training people on how to put it together
- **Phase 5: Operations:** Ensuring the puzzle remains intact
- **Phase 6: Ongoing Optimization:** Can we build the puzzle in a more efficient manner? Should we add some pieces to the puzzle to gain a better overall view?

5.1 Phase 1 - Project Preparation

Many aspects need to be considered when setting up a project for an SAP EM implementation. One of the most important phases, not just for an SAP EM implementation but for any implementation, is the project preparation phase.

The first important task is to establish a trustworthy, knowledgeable project manager that can drive your needs and requirements out into a tangible deliverable.

We'll start with the task of project management.

5.1.1 Project Management

What tasks are critical at this beginning stage of an SAP EM project?

- Establish Executive Sponsorship!!! – Without executive's endorsing the project, it has a very small chance of success. SAP EM is a new technology that will force a change in the way processes are run and monitored. Since you'll be focussing on Exception Management, people's jobs will be changing and changes are hard to enforce without this executive endorsement. Ensure that you obtain this sponsorship and that it's clearly communicated throughout the company.

Plan for success – Don't plan for failure

- Define the scope – What is it that you are implementing? SAP EM has many facets to it and you have to be clear as to what you are about to introduce to the company. At an early stage in the project the scope is more high level (at a process level) but it still serves as a clear indication to all as to what the project is addressing. The goals of the project are also to be clearly defined against each of the processes in scope. E.g. by implementing the procurement SAP EM process we wish to achieve a 20% reduction in cycle time and a 20% reduction in exceptions. The following questions need to be answered in the scope document:
 - Which visibility processes will be implemented?

- Which systems are involved in each of these processes and how are they involved?
 - What are the analytic requirements for each process?
 - How is the operational user status reporting displayed to the user? Standard web interface vs. Custom web interface?
 - Who are the users of the information? Internal, Vendors, Customer, Buyers, Sales Reps, ...
- Resource plan – What resources will make up the project team, the extended business team, the QA team and the operational support team?
- For a typical SAP EM project the following is required for the Project Team members:
 - Project Manager – May be the SAP EM analyst on a smaller project team
 - SAP EM analyst: Performs the analysis and design of the SAP EM solution. Needs to be skilful in all aspects of SAP EM and very knowledgeable on SAP business processes. In addition this person will also perform the SAP EM configuration, do the documentation and coordinate and deliver the SAP EM training
 - SAP EM ABAP developer: Develop the extraction and relevance functions as required
 - Business analysts: For each process these people are responsible for the extraction of the business requirements and for ensuring they are covered in the design. In addition these people are responsible for the QA testing in the QA phase of the project. These are people from the business who will return

to the business after the project is delivered. They will become champions or super users in SAP EM.

- Change management drivers: On large projects it may become necessary to have a dedicated change management function to ensure a smooth change transition
 - Sponsors: Executives owning the project
 - Process owners: Each process should have an owner. It's this owner that ultimately owns the SAP EM solution for their process. This is the person that needs to sign off the QA testing for the solution and provide adequate resourcing of business analysts
 - If you are doing Analytical reporting: A SAP NetWeaver BI developer is needed for the extraction and reporting needs in BI.
 - If you are customizing the operational user status report: A Web developer is needed to enhance the look and feel of the standard report. This depends greatly upon the web tools currently deployed in your organization as to what type of resource is needed.
- Plans – Once the scope is determined more detailed plans can be put in place.
- Schedule – When are the different phases to be started and completed?
 - Resource – Who is going to perform each task in the plan? What equipment and software will be needed during each phase of the plan?
 - Communication – How will the communication be handled with Executives, the project team, the

business and users? How often and how will the communication be conducted?

- Training – With SAP EM being a new solution to the company and exception management a new philosophy for the company, the project team will have to undergo training on the implementation methodology, change management and the SAP EM functionality. The plan also entails a vision for training the business analysts and end users. Who will be trained? How will they be trained? Where will they be trained and by whom?
- High level process definition – This activity maps out the SAP EM visibility processes to be covered together with any deviations to the standard visibility processes as well as any new processes. The relationships between the various visibility processes are also highlighted here.
- Budget – With the plans and scope in place it will be possible to gauge what the required budget will be for resource time, software, hardware and training. Once the budget is delivered it needs to be approved prior to completing Phase 1.
- Readiness Assessment – We have used our automated readiness assessment tool successfully at many projects and it helps the project manager gauge the readiness for an SAP EM implementation. Very often there are steps that need to be corrected first in order to gain the full benefit of the SAP EM implementation. SAP EM is not a transactional system in itself; it is a reporting and status management tool which relies on the input of reliable data from each of its application systems. If the data coming in to SAP EM is unreliable then the data coming out of SAP EM (the

exception notifications) will be unreliable. Sample questions we ask include:

- What is the current organizations trust level regarding the information your ERP (e.g. SAP) system provides?
- Are all your transactions and approvals executed in a system (ERP) or is there still paper activity?
- Do you have visibility to partner service level metrics (internal and external) from within the system?
- How would you rate your current service level to your partners (internal and external) in terms of on-time and in-full delivery meeting their needs?
- How would you rate your current service level FROM your partners (internal and external) in terms of on-time and in-full delivery meeting YOUR needs?

Figure 129 shows the results of a readiness assessment that indicates that the company is in the lowest quadrant. I.e. they are not yet ready for SAP EM as they have major master data and process issues which has left their current users not trusting the data in the system. SAP EM will not fix these issues for you... A partial implementation of SAP EM, without the exception notifications, can be implemented to gain visibility in to your processes and possibly highlight the areas you need to address prior to implementing full blown exception management through SAP EM.

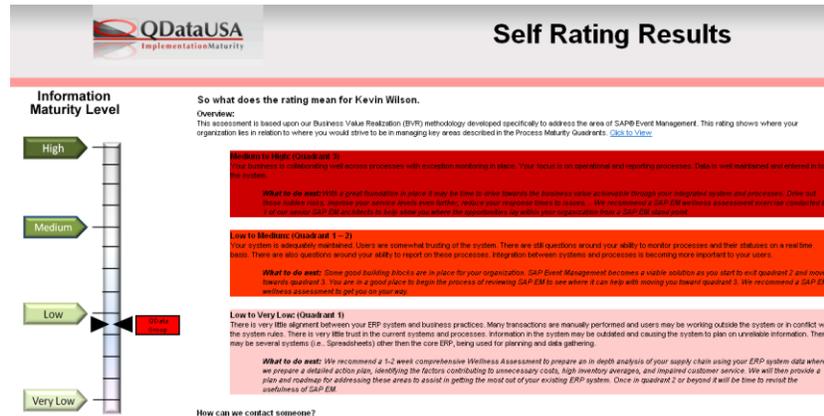


Figure 129: QData On-Line Readiness Assessment

You will first need to clean up your underlying business processes and master data in order to achieve the desired results from a SAP EM implementation

- Reporting – What type of reporting will be required for project management? These mechanisms need to be put in place during this phase of the project.
 - Executive – Status reporting
 - Weekly project team status meeting
 - Daily progress reports
 - New requirements and Defect tracking
 - Conflict resolution
- DELIVERABLES:
 - Project Charter (Charter, Scope statement, Business Case and Vision, Budget, ROI, Value Goals)

- Project Plan: Schedule, Phases, Resources, Milestones
- Communication and Reporting plan
- Change management plan (includes the training / education strategy). Readiness assessment

5.1.2 Technology

What system architecture do we need to deploy the SAP EM solution?

- The technology strategy focuses on the following:
 - Solution landscape architecture and plan (SAP EM standalone vs. on SCM server vs. as add-on to SAP ECC 6.0...)
 - Hardware sizing and procurement – If new hardware is required for the project then you need to put the procurement plan together and execute on it.
 - Integration strategy – How are events to be communicated with SAP EM? Via SAP NetWeaver PI as XML messages or via BAPI calls through the Java or .NET Connector or natively from your SAP landscape
 - Security strategy – Project team authorizations, partner security, access to SAP EM data via the web – The decision here impacts whether you can use the standard SAP EM Web UI interface or not!
 - Timing – What hardware and software is required during each phase of the project
- DELIVERABLES:

- Technology strategy – Architecture, solution landscape, hardware procurement decision, security, strategic technology statement, delivery plan

5.1.3 Standards and Procedures

Every project should be left with a well documented solution that is easy to support. Part of making this a reality is performing tasks in a standard way and ensuring that each task is documented in a standard uniform way.

- Documentation standards – What documents are we talking about?
 - Specification of changes – Changes to SAP processes
 - Solution documentation – Configuration, development, security, Standard Operating Procedures, BPPs
 - User acceptance testing
 - Training documentation
- Issue resolution and escalation procedure – How do you want to handle issues on the project? If they cannot be adequately resolved within the project how are they escalated and to whom?
- Standard project team tools – Standardize on a word processing tool, presentation tool, diagram tool, testing tool and document management tool
- DELIVERABLES:
 - Standards – Development (naming conventions, programming techniques), Configuration (naming conventions), Documentation, Testing

- Procedures – Issue resolution, Development, Configuration, Testing, BPP templates

PHASE 1 MAJOR MILESTONE'S

- Executive Sponsorship
- Project Plan
- Project Strategy and Scope
- Technology Strategy
- Procedures and Standards

5.2 Phase 2 - Analysis and Design

Now that the scope has been set, as well as the budget and resource plan it's time to begin execution of the plan.

Firstly, there is the ongoing project management that occurs during each phase as well as communication.

- Execute change management communication – Let's begin telling people what change is coming....
- Training of the project team – Let's get the project team up to speed, especially with SAP EM functionality

5.2.1 Gather Requirements

Once the team is ready and able they need to begin gathering business requirements for each of the processes.

- Workshops - The SAP EM analyst runs workshops with the business analysts and possibly even some users to gain an understanding of the requirements
- Business Process Analysis – Establish the gap between SAP EM visibility processes, standard EM functionality and what

is required by the business. This will indicate where we need to plug in SAP EM events and functionality

- Functional Specifications – With the analysis done and the requirements in hand it's time to develop functional specifications. The business analyst will complete these and have them signed off by the process owner.
 - Conversion programs – Are you going to implement SAP EM on an existing solution and will you need historical data also tracked through SAP EM or just the new transactions?
 - What processes are covered? How do we determine the plan for each of the processes?
 - What fields are needed for reporting purposes?
 - What events need to be captured and from where?
 - How are the processes related?
- SAP EM Design Template - These functional specifications will be converted into SAP EM Design Templates covering each process. The template maps the requirements to SAP EM functionality ready for development and configuration
 - Parameters
 - Events – Expected / Unexpected
 - Status profile definition
 - Locations / Measurements / Partner definition
 - Event Handler / Set definition
 - Application Object definition – Ids, relevance

- Reporting – If there are any special reporting needs then we need to specify, by means of a functional specification, just what is required.
 - Are you using SAP EM for operational efficiencies and visibility or are you using it for analytical reasons, or both?
 - When using SAP EM for operational reasons you are using it to help you manage your process.
 - When you are using it for analytical reasons then you are using it for measurement / KPI purposes. In the latter case there is no need to set up status management and retrieval
 - What is your retention strategy?
 - How current must the information be for each level of reporting needs
 - What are the KPIs you are trying to determine?
 - Service Level Agreements tying in to KPIs
 - Authorization parameter definition – What information is allowed to be searched on and viewed and by whom?
- Archiving – How long must the data reside in the SAP EM system for?
- What is your retention strategy? I.e. how long must the process remain visible in SAP EM before we move it off to SAP NetWeaver BI and archive it off the system?