



Smart Training:

**Implementation Touch Points Pave the Way
for Effective EAM Training**

Notices

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PURPOSE

This paper describes how and why companies can increase EAM/CMMS acceptance and adoption and reduce training time and costs by leveraging role-based project documentation to develop effective training materials.

CMMS software implementations are a critical business event. Your CMMS investment will directly impact the daily life of your entire user population and your business bottom line. Yet, training often fails to receive the attention it deserves.

Too often companies rely on canned, vendor-produced training materials because the budget for customizations is not approved. Pre-packaged materials convey a generic view of how processes can be managed in the new system, but they fail to provide the personal touch - detail relevant to your business, your industry, and your data.

This is a gaping hole when viewed from the perspective of an end user. What they really want is someone to show them exactly how to handle their day-to-day responsibilities in the new system - a meaningful view, without extraneous information - so that they can embrace the new system and hit the ground running at go-live.

The key to supplying meaningful, low-cost training aids is well within reach and yet often overlooked. It is the implementation deliverables developed throughout the course of product selection and implementation. By leveraging the deliverables produced during your CMMS project and incorporating creative presentation techniques, you can supply tailor-made and cost-effective employee training - exactly when it's needed. How those deliverables are selected and when they are utilized requires a keen understanding of the following five keys to success.

FIVE KEYS TO SUCCESS

1. Think Big

Training is a task that should occur early and often - from product selection, through implementation, and followed by ongoing continuous improvement. But take heart, it's not as bearish as it sounds. Throughout the project, documentation is being captured about how you do business, how you want to do business, and how to get your business done in the new system. Each step of the way, more and better knowledge is developed so that the project will culminate with a highly usable system. All of this information is a potential training resource. The trick is to know what to capture and when.

2. Think Smart

Contrary to popular belief, your first training opportunity starts at the very beginning of your product search, not at the end of the implementation timeline. CMMS product selection requires input from "functional leads" who are experts in each business area impacted by the new system, such as maintenance, operations, inventory, procurement, and accounting. These leads help document the current state of the business and define the future direction, and they map out new business processes expected from the new system. *This process map is your first training tool.* It contains information that can orient and excite the broader user population about the need for your new EAM/CMMS and your vision for the future. It's good news!

3. Keep Track

During the implementation, your experts develop key documents that can serve as strategic training tools, providing the foundation for in-depth training and effective change

management. *Data plans, demo scripts, and test scripts for example, can evolve into student guides, detailed reference guides, process cheat sheets, and self-study tools.* These deliverables will be custom tailored to the roles and responsibilities of your own user base. With them, you can convey exactly what an individual needs to know, giving them the knowledge they need to perform their job. No more and no less than is needed.

4. Keep it Simple

There is no need to add complexity to your project by asking a removed partner, such as Human Resources (HR), to develop a training curriculum *from scratch*. Nor should you pay the EAM/CMMS vendor for *generic* and time-intensive product training services. They have a removed understanding of your business processes, your data, your functional needs, and your vision - not the hands-on experience needed to do the job just right. Instead, identify your training coordinator early. This could be an internal user or an expert EAM/CMMS training consultant. Keep that person abreast of the legwork being completed as the implementation progresses and let these deliverables provide the foundation for your training program.

5. Now Act

As stressed previously, training should occur early and often - initially to develop employee awareness and to keep an open line of communication with the end users, then later as a hands-on exercise to understand how individual business processes will be conducted within the new system, and finally as an ongoing continuous improvement effort. Training doesn't end when the system goes live. Remember to save these training materials to support new employee training, provide refresher training, and communicate new processes as the business and system evolve over time.

TECHNIQUES THAT WORK

How many times has your mind wandered in a training class? How often have you been taught by trainers who are strangers to your business? How many manuals do you have collecting dust in a corner? How many times do you call a help desk because you can't remember a procedure or it's not clear in your reference materials? How greatly do you fear the prospect of learning a new system for these very reasons?

Vendor training and product manuals are usually late, too weak, and too generic with few specific examples and no industry-specific language. They explain how to use a screen, not when or why. Vendor trainers are great at following their manuals, but struggle to provide insight into your real world.

End users deserve to be absolutely clear how to conduct business within the new system. Training should not be painful. It should be exciting! It should be meaningful and to the point.

Therefore, EAM/CMMS training must be tailored to the user's role, based on the processes used, and conducted in the end user environment. An effective blend of training vehicles takes the guesswork out of learning a new system:

- Classrooms scheduled just in time should be filled with users who perform the same basic role, with a curriculum that zeros in on what they need to know.

- Paper learning aids for the classroom and on-the-job reference tools should be specific and role-based, with screen shots, meaningful data, and interactive process flows.
- Side-by-side support provided by skilled users is essential during the first days of go-live, as well as to assist new hires and users who change roles.
- Help desk staff must be expert in how to use the system to conduct business and how to get the most out of the system.
- Digital videos, a powerful new form of computer-based training, can provide instant understanding of a process whether in the class or on the job, and they are an excellent tool for generating awareness and excitement before the new system is implemented.

TRAINING GETS EXCITING

Today's media-savvy society expects a faster moving, directly relevant, visual approach to training. Digital videos are hot. Each work process is taught in a 2-5 minute clip, which makes any process look easy, quick to learn and quick to execute. Role-based clips that reflect actual screens and real-life data can address general user tasks such as entering stock issue requests or management tasks, such as approving work requests. Time-to-learn is faster with digital videos, and retention rates are much higher than those achieved in a traditional classroom setting.



As employees watch the digital video clip, a voiceover talks through every step of the process, every keystroke, and every move of the mouse. Trainees can stop, pause, rewind, and fast forward through the video. They can minimize or split their screen, log into the training environment and get hands-on practice in your training environment while the video plays.

Digital videos can be a group or self-training tool. Your trainers won't have to remember everything and repeat it time and again in class after class. Instead, the digital presentation is always fresh and always complete. The trainer can be a facilitator rather than an expert in the system. If a trainee is falling behind, just pause the video and help the trainee catch up. The videos are best used to reinforce training when a new system is being implemented. After go-

live, the videos are a great refresher tool for infrequent users and training aid for new employees getting on-the-job training.

This interactive approach is far superior to deciphering a vendor manual because it incorporates audio, visual and hands on mechanisms to ensure understanding. Another benefit is portability. Rather than flying an expert trainer and hefty manuals from site to site, the class can be accessed from an Intranet, burned onto a CD/DVD and mailed to a training facilitator based on site.

Digital videos can be developed in parallel with the data and environment setup. The technology is such that you can get a head start on developing the videos, even if the training system and data are not ready. Just as you would revise a CRP script, you can quickly and easily recapture screens if needed later in the implementation.

EAM/CMMS training consultants proficient in digital videos will have a template library of typical business processes already made. The time and cost to tailor the videos to specific customer roles, responsibilities, and data is minimal. Clients can save even more if they capture their training environment screens themselves so the consultant can just pull them into custom videos.

EAM/CMMS consultants who utilize video technology can preview each new release and proactively send out an updated video with new features and known gaps or problems in the software. Then you or your consultant can rapidly update your training video library accordingly.

It's also possible for your HR department to establish a process to capture scores and grade the trainees. HR can use digital videos to manage certification training and corresponding salary adjustments.

BUILDING YOUR TRAINING PROGRAM

Now that we understand that training needn't be vague, dull or otherwise ineffective, let's discuss the strategy to develop an EAM/CMMS training program that works.

Identifying Trainers and Communicators

Someone from within, on the floor, who is familiar with your processes and has learned the new system through hands-on implementation experience, best conducts training.

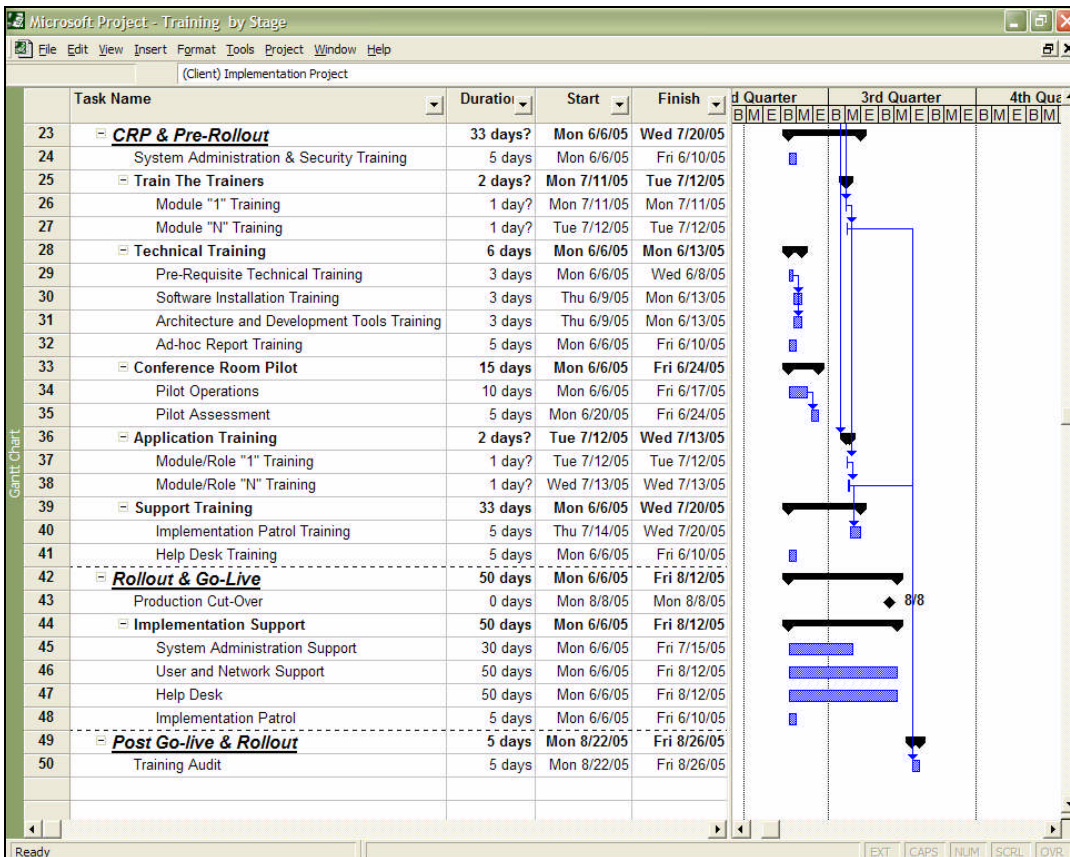
The project team can identify your champions. "Champions" are the trainers and key users who will train and support your end users. Your vendor or consultant may attend the first few training sessions for moral and technical support, but after that your champions can do it on their own.

The Training Plan

As you can see from the list below, developing and executing a training plan is no small task and each step is vitally important to the success of the project.

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1. Define the user roles (including jobs, tasks, and system functions)
2. Group tasks by role (i.e. inventory supervisor, maintenance planner)
3. Define topics by role (i.e. how to enter and track work requests for the work requestor)
4. Define the training method (vendor or internal, in-person or remote, group or self study)
5. Estimate the class duration
6. Determine the class sequence
7. Identify time constraints (i.e. shutdowns, month-end close)
8. Develop the just-in-time training plan (including timing, facilities, and materials)
9. Execute the training
10. Evaluate the training
11. Support the go-live with trainers as roving patrols



A key component of effective training is actual experience on what works best. To help you develop your training program, consider leaning on a company that has previously implemented

and trained on EAM/CMMS systems because they have a wealth of experience that can help you really nail your training requirements.

The Communication Plan

Your first opportunity to introduce the user community to their new system is shortly after product selection. This is an internal sale of the system and you want the users to buy in on it as quickly as possible to get them energized about the coming change. An active communication plan builds understanding and a comfort level with the change, thus reducing resistance to the new system. The corporate philosophy can be tied into all internal marketing and communication vehicles.

At the initial product orientation event, you can use pre-packaged demo scripts in order to build general employee awareness. Having your planner do the demo, not the vendor, can be very reassuring (“If he can do it, I can too.”). The orientation should not be a one-way communication. You want to encourage feedback from the future users.

Follow this event with an executive communiqué, a road show, regular newsletters or Webcasts, town hall meetings, or other methods to generate excitement and curiosity about the new system. As the new processes are refined, tailor the demo scripts and introduce them to the process users.

Road Show Status Presentation Extract

Current Project Status:		
Milestone	Projected Date	Status
Contract Execution	4/12/05	Complete
Complete Data Mapping	5/13/05	Complete
Complete “to-be” Process	6/30/05	Complete
Complete CRP #0 Pilot	7/30/05	Complete
Complete Data Cut-Over Plan	8/30/05	35%
Complete CRP #1 Pilot	9/28/05	
Complete BR100 Documents	10/30/05	
Complete CRP #2 Pilot	11/11/05	
System Ready for Production	1/10/06	
Completion of Post Go-Live	2/28/06	
Post Implementation Audit	6/15/06	

Don’t make this mistake: Companies are often hesitant to invest in employee communications, despite the real benefits. In fact, maybe 25% develop a newsletter - one of the least intrusive, least resource-intensive, and least expensive options. Ongoing communication is vital to the

success of the project. As we all know, a technically superior product and implementation will fail if the system is not accepted and adopted by the user community.

Building on Progress

Your business processes are outlined early and honed throughout the implementation. What better way to train your staff than with the actual business processes designed for your operation? You can save time and money by repurposing implementation deliverables into effective, relevant, role-based training materials.

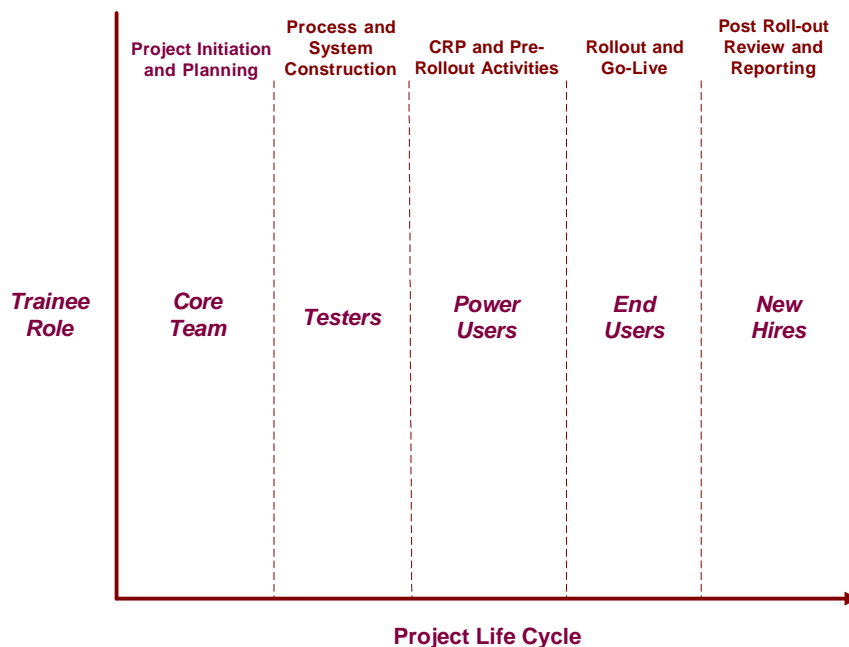
Your product selection team, project team, and test team all generate documents that supply the basis for your training materials. Each deliverable feeds valuable input into the next.

- Role-based “to be” business process flows,
- system data flows,
- role-based demo scripts,
- role-based test scripts,
- role-based conference room pilot (CRP) scripts,
- role-based standard operating procedures (SOP),
- role-based training agenda and lesson plan,
- role-based training booklets, manuals, videos, reference guides, and
- role-based end user training.

The common thread is the role-based focus. Enabling role-based training is far more effective than generic vendor training. Starting with role-based “to be” process flows, at each implementation milestone you should assess and improve your training materials and tailor them to reflect future best practices.

THE TRAINING EVOLUTION

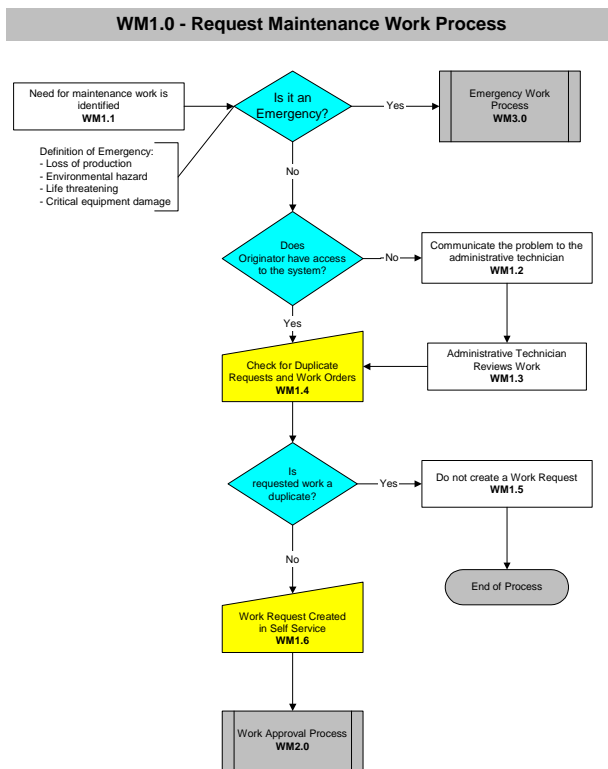
As illustrated below, the training audience evolves throughout the progression of the project:



Core Team Training: Project Initiation and Planning

After the project team is identified, they'll spend several days evaluating the state of the operation and gaining a high level view of how the new system fits in as they develop a project plan. The implementation team will receive early product training that focuses on the use of best practices and higher-level software terminology. This training orients the team to the software and how its functionality will solve business problems and improve business results.

This process of discovery includes a full site study supported by interviews, questionnaires, and tours in order to scope out the “as is” current state of the operation. From this analysis of people, processes, data, and systems, the project team will develop easy-to-follow “to be” process flow charts. *These role-based flow charts will lay the foundation for your training program.*



Tester Training: Process and System Construction

The “to be” process flows outlined in the planning stage are at this point documented into meaningful and functional documents. Each flow is pulled into *rough process scripts that are useful for demos* and testing and will be enhanced over time.

The ideal process script includes:

- The purpose or user role,
- A diagram of the process flow,

- How to navigate to the starting page,
- Screen prints to illustrate the process,
- The steps to follow to complete the process,
- Alternate methods if available, and
- Predecessors that come before this process.

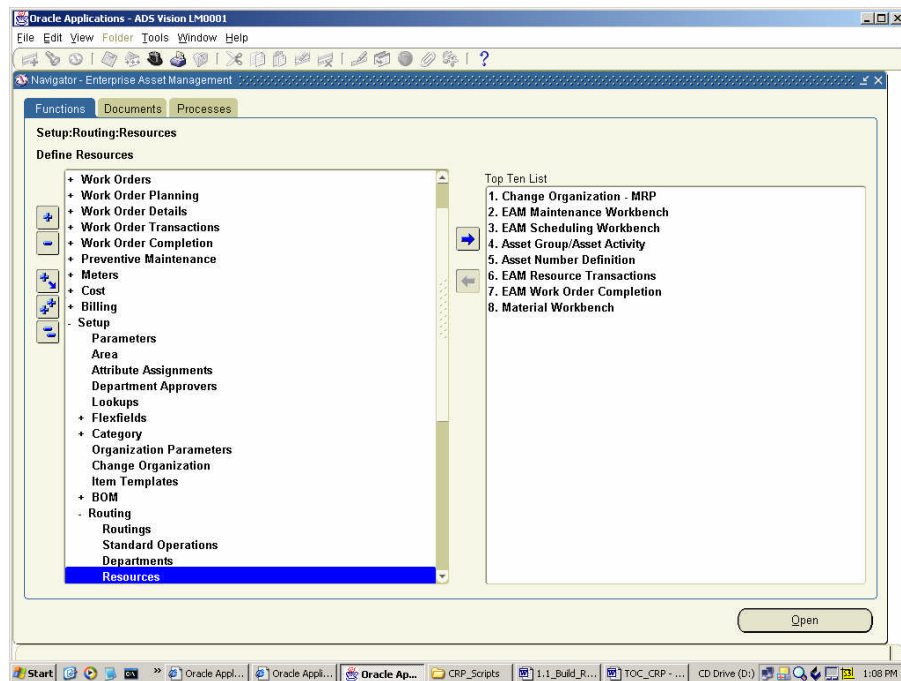
Draft Script: Setup People Resources

PURPOSE / User Role

Planners will use this function to enter new people and tool resources. Resources are a grouping of skilled people or tools used to perform work on a work order.

Navigation

- 2.1 Log on to Oracle eAM. From the Welcome screen select the Enterprise Asset Management option.
- 2.3 When the organization selection screen pops up, enter or search for the maintenance organization code for organization. For the MAGSA CRP this code is "CRP".
- 2.4 Expand (double click each step) the menu option:
Setup>Routing>Resources
- 2.5 The Resources window will open. Begin entering a new resources or searching for defined resources by selecting the "query" button in the toolbar:



Steps (TBD)

Predecessors (TBD)

Data migration exercises will produce a master reference sheet that maps old system data to the new system nomenclature and numbering systems. *This will be an effective reference tool for users unclear on how to locate data in the new system.*

Data Map Extract: Asset BOM Form

Oracle Field Name	Signum Data Sheet. Field	MP5 Form Name. Field	MP5 Table.Field (TBD by Barrick IT)	Comments
Asset Number	Asset BOM.Asset (temporary column)	N/A	R5OBJECTS.OBJ_CODE	This field will not be imported to eAM but will be used as a reference for the export from MP5 to the import worksheet. The worksheet will have to be scrubbed to define Asset Group BOM.
Asset Group	Asset BOM.Asset Group	N/A	N/A	See comment above
Item Seq	Asset BOM.Item Seq	N/A	N/A	Default in intervals of "10"

Power User Training: CRP and Pre-Rollout Activities

The conference room pilot (CRP) is the first real system test and the first time many of your users will actually work on the system. During the planner-led CRP, processes and functions will be tested and validated using scripts as guides. Real life situations on real life data with real interfaces and reports will be assessed. The testing environment is a replica of the new production environment, key performance indicators (KPIs) and all.

Rough process scripts are now refined into CRP tools that are colorful, concise, informative, and educate in both words and pictures. Scripts will be given to each CRP participant based on their specific roles and responsibilities, along with a menu with the system functions they need to perform. Well-documented CRP scripts have links that pop out to the actual system so you can easily practice the process or workflow. *The CRP scripts are excellent tools for both classroom and on-the-job training environments.*

End User Training: Rollout and Go-Live

CRP scripts are an ideal training tool, and they can be expanded into detailed end user reference manuals, trimmed down into quick reference guides, or enhanced into digital videos. If your system supports custom help text, just copy and paste the language from your custom training materials. Thanks to careful tracking throughout the implementation, you now have the fuel you need to provide role-based, custom training materials for your user community.

Super User Manual: Table of Contents Extract

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General training sessions can occur in a classroom environment - better at your site than a vendor location. Targeted training and remote employees may be better served by digital videos.

New-Hire Training: Post-Rollout Review and Reporting

Keep an archive of all training materials to support new employees and role changes. Process flows, test scripts, and digital videos provide the basis for an ideal learning environment and should be kept on hand in the training lab. When new hires come on board, or someone assumes new responsibilities, you'll have just the right tools in your impressive training library.

CONCLUSION

Better knowledge leads to a cleaner implementation and quicker ROI. It gives your users confidence in their ability to navigate the new system and conduct their responsibilities efficiently. By leveraging materials produced throughout the system implementation and repurposing them as effective, exciting training tools, you can enable the most efficient transition possible to your new EAM/CMMS system.

ABOUT THE SIGNUM GROUP LLC

Founded in 1994, Signum Group is a leading enterprise asset management consulting and systems integration company.

Signum's team of senior asset management consultants has delivered over 100 projects to over 30 Oracle customers across a wide range of maintenance-intensive industries.

Signum customer support incorporates **SignumWay™**, a suite of proprietary implementation, data management, and training toolkits that combine the benefits of streamlined software implementation with a business process management approach.

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