



Managing Relationships Among Operations, IT and Engineering

BY LUIGI DE BERNARDINI | TUE JUL 22 2014

 Comments typically overheard in discussions involving multiple technology groups in a manufacturing facility: “If you ask the IT department, the project will never start ...” “We cannot ask the production department because the project will get overly complicated ...” “That was decided by engineering, but we don’t work that way.”

When a system integrator discusses a manufacturing execution systems (MES)/manufacturing operations

management (MOM) project with an end user, he has to relate to three different entities: operations, IT and engineering. Each has a key role and will try to influence the choices from a different point of view.

The system integrator needs to understand and keep in mind the characteristics and the role of each entity to ensure the development of a successful project.

Failing to understand or ignoring the point of view of even just one of the entities is one of the main risks of the project and may have a significant impact on its success.

Following is an outline of the biggest concerns for each group:

Operations - this group is the end client on an MES/MOM project. It's important not to lose sight that the system you are working to install will bring benefits to operations, regardless of the main objective of the project.

IT - has a key support role. It should provide the infrastructure and deliver a service in terms of system availability, continuity of use, compliance with safety criteria, and compliance with corporate policies. IT is therefore a non-negligible entity, which must be involved in any architectural discussion. However, IT can only support the user requirements collections, not define them. More specifically, IT can help in defining the user requirements from a performance point of view, but certainly not from the functional point of view.

Engineering - in some ways, this group is the farthest entity from the end client in MES/MOM projects. Engineering may support the definition of specifications and some aspects of the MES/MOM architecture, but I

have found that, in these kinds of projects, engineering interacts on very different issues from those that they normally handle. For this reason, engineering relates to the project with curiosity and annoyance, feeling involved and responsible for solutions that stand out of their sphere of comfort. Normally, engineering tends to favor the simplest solutions and those that can more easily be connected to their domain of expertise.

The system integrator has to manage, coordinate and sometimes mediate the interaction of these three groups. However, it should not be forgotten that the end user – the department that will use the solution on a daily basis, reap the benefits, suffer the inefficiencies, and ultimately determine the return on investment – is operations. Given that, it's important that the system integrator pay great attention to the demands and requests of operations. This is not always as simple as it may appear because the relationship of the system integrator to the operations groups tends not to be direct, but filtered through one of the other two entities.

This filtered relationship may not necessarily be a bad thing, as it can streamline the process and prequalify requests, reducing the time for analysis and discussion. In some cases, however, this makes it very difficult to understand the real needs of operations and define the objectives.

To ensure the success of a MES/MOM project, be aware of the critical role of the relationship among the entities.

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