A behind-the-scenes-look at a calibration process change
After making the decision to implement a new calibration process, the following step is to outline a system implementation process. It is essential to remember that implementing a fully integrated and automated calibration solution is a process. It simply will not happen overnight, and it needs to be executed in several steps. Below is a review of a few fundamentals to keep in mind:

- There is a large number of interrelated tasks that need to be carried out in an appropriate sequence. Every step is important and decisions need to be made throughout the process.
- Utilizing a proven implementation model will generate a quicker process than a new, or an extremely customized solution.
- The implementation process is usually overseen by a project manager and requires the involvement of several professionals.
- The biggest problems (e.g. scope creep, budget and schedule overruns) are usually caused by poor planning and inadequate resourcing, rather than the individual steps being particularly difficult.

In short, a system implementation process can be broken down into six defined steps: (see figure below).

Initiation

In this phase, the entire framework for the project is established. A target “go live” launch event is defined in this phase, as well as the purpose and the scope for the new calibration system. This phase also involves appointing the project team, preparing a project plan and establishing certain important rules and principles for the project, such as testing and approval procedures and change management for managing changes in the project requirements. Also, defining the roles and responsibilities of both the vendor and the customer is extremely important, as a calibration process change is never a “one man show”. Actually, the majority of the resource requirements typically relate to customer tasks and responsibilities. All this must then be documented in the supply agreement, the project plan, job descriptions and progress reports. To ensure a successful outcome, milestones need to be set and the progress needs to be reviewed constantly. It is important to keep the definition of all deliverables related to each milestone in mind. In this phase, the vendor should act as a consultant, as this role is not just to provide a solution, but to offer support and expert advice from delivery to full functionality.

Process blueprinting

This is perhaps the most significant phase of implementing a new calibration system, because this is when the existing calibration process is documented and the new target calibration process specified. The key question in the entire project is the ability to accept and adopt a new calibration process, as it is more or less impossible to introduce a new system and tools and assume that they can be used in accordance with the old process. However, if the customer feels that he/she is not capable of adopting the new process, the project can still be cancelled in this phase and he/she will have learned a lot about the existing work procedures and new possibilities. Typically, a significant amount of input from a number of users and cross-functional experts, such as IT, compliance and quality is required, as the calibration
process has connections to many different areas. Even though plans have been made and goals set, most likely, there will be some unanticipated functionalities or specifications required. Outlining these processes is important to ensure everyone knows how to respond if such an instance arises.

**Specification**
The basis for this phase is set in the process blueprint. It is a common mistake to jump straight into the specification phase by skipping the initiation and process blueprinting phases. It is important to be sure that the customer is on the same page with the vendor in terms of technical specifications and functionalities, to ensure both parties are working toward the same desired outcome. It is surprising how many different interpretations a single word can have, so going through the technical specifications in detail is justified to ensure that everyone understands them in the same manner. User requirements, functional design and test specifications are all defined during this phase.

**Execution**
If the first three phases have been done well, this is the easy part. The plans prepared are ready to be executed, mainly by the vendor. If something was not specified or if requirements have changed or change, it is possible to refer to the change management procedures that were agreed upon with the vendor in the initiation phase, as the change management procedures are usually described in the supply agreement or project plan.

**Deployment**
The operation phase concludes the implementation of a calibration process change. The system is running and the expected benefits are evident. The new system is used in accordance with the new process that is well-documented with new standard operating procedures and job instructions and everyone is trained to work accordingly. Hopefully, the chosen supplier offers strong customer support if something goes awry.

All in all, implementing an overhaul to a company’s calibration process will take time and resources. After all of it is complete, the customer will realize the benefits of the efforts through improved efficiency, accuracy and savings in time and money.