Enabling a Healthier World

Lonza

Strategically Plan Device and Systems Integrations in GMP Manufacturing and Quality

The Key Steps to Planning a Cost-Effective Integration Program, and the Central Role of a Fit-for-Purpose MES

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Introduction

In today's GMP manufacturing landscape, there is an urgent need for manufacturers to cost-effectively deliver high-quality products to the market, faster.

Accordingly, many organizations have their sights set on digital transformation, which offers the promise of more streamlined operations, reduced errors, fewer deviations, and deeper insights into workflows. Successful digital transformation, however, requires comprehensive integration of the right devices and systems.

It's at this stage — integration — that many organizations falter, taking suboptimal approaches with costly consequences that can derail a digital transformation project, or leave companies in a worse-off state post-integration.

In this guide, we have drawn on years of digital transformation experience to share:

— The common pitfalls of integration projects

— How to strategically plan an integration project to avoid setbacks and extract the maximum value from your investment, with a range of helpful tools and tips

— The key role that manufacturing execution systems (MES) play in GMP integrations, and how you can select the best option to drive your digital transformation forward

The Impact of Poorly Planned Integrations

Unfortunately — but understandably — many organizations struggle to realize (and extract value from) an integrated digital technology and equipment stack for manufacturing and quality. GMP integration project failures are often due to several common pitfalls:

- **Not considering critical project needs before starting**
  For example, many organizations fail to consider even the bare minimum requirements, such as servers, networks, connections, drivers, and importantly, stakeholder alignment.
- **Lack of in-house expertise**
  Often, organizations realize far too late that they lack the necessary expertise to drive their integration program through to completion. Such a late realization can make it harder to plug knowledge gaps before those gaps derail their integration program.
- **Lack of project phasing and prioritization**
  Organizations often fail to correctly identify quick and critical wins before expanding their integration programs, which can eat into time and budget, resulting in a poor return on investment.
- **Siloed working**
  Countless integration projects fail because not all key stakeholders are involved from the get-go. For example, in many organizations, automation engineers, who are critical for integration success, are often not part of planning discussions. At the point it becomes clear that their input is needed, it can be difficult to secure their time.
- **Unrealistic expectations**
  Hype around digital transformation can mean organizations have unrealistic expectations around what's possible (and when) during their integration projects. The result is that critical steps in the integration journey are often missed, which can stymie progress.

Brownfield Versus Greenfield Sites — The Impact on Your Integration Project

Organizations often overlook the difference between an integration project in a greenfield versus a brownfield site. In the former, facilities are being constructed from the ground up, giving organizations greater flexibility to build site infrastructure with integrations in mind from the start. In a brownfield site, however, where the facility and its infrastructure are already built and in use for production, much more work and planning is required; **infrastructure may need to be removed and completely rebuilt, meaning organizations must consider (and plan for) the impact on current manufacturing operations**.

The consequences of poorly planned integration projects are substantial and wide-reaching. Organizations could find themselves unexpectedly having to buy new or additional equipment, or source expertise that wasn't initially planned for (to help overcome more complex roadblocks). They may even need to change their approach mid-course, which could involve returning to a manufacturing facility and halting operations again for infrastructure changes.

As a result, organizations could face soaring costs, drastically drawn-out timelines, and delayed production. In the worst case, a poorly planned project can lead to failure. With a history of failed or delayed projects, securing leadership buy-in for future digital transformation or integration projects becomes that much harder.

« Poorly planned integration projects don't end in more efficient, cost-effective, expedited manufacturing and quality operations; they often end in soaring costs, drawn out program timelines, and delayed production — not to mention a harder fight to justify any future digitalization initiatives. »

Robert Reider, Associate Director, MODA® Implementation, Lonza

Your Roadmap to Successful Integrations

To maximize your chances of successful integration, you should follow a logical, stepwise approach that eliminates the common pitfalls, ensures you can extract the maximum value from current and future processes, and that prioritizes the most effective utilization of your organization's resources. In the following, we outline such an approach.

Step 1: Conduct a Gap Assessment

Before anything else, it's important to know what your broader organizational goals are and whether integration can help you to meet them. If integration can help, then the first step of integration project planning is to conduct a gap assessment.

A gap assessment, when performed correctly, should give you the data and insight you need to properly understand your current operational state (pre-integration) and your target state (post-integration). From these, you can then begin to identify specific actions you must take to realize your target state.

Mapping Your Current State — Ensuring Accuracy and Sufficient Detail

The scope of your current state map should include your manufacturing and quality equipment, infrastructure, software, processes, and data flow and security. For mapping, we recommend using business process modelling and notation (BPMN) charts, primarily for their visual clarity, ability to capture detail, and because they are standardized by the International Standards Organization (ISO), making them recognizable and understandable to most stakeholders.

Ruthless attention to detail and accuracy are crucial for current state mapping. Having a poor-resolution, incorrect map can mean areas for optimization are missed, or that the proposed target state (created using information from the current state) can actually reduce the performance of your lab or plant. Unfortunately, many organizations select the wrong people to conduct their current state map, which makes the required level of detail difficult to ascertain. For example, mapping typically falls to supervisors who have little involvement with day-to-day shop floor or lab operations, and who don't have the required time or resources to dedicate to the task. That said, when staff familiar with day-to-day processes conduct mapping, there is always the risk that critical elements are simply missed through familiarity blindness.

> *« Organizations have brought us maps of their current states that, once reviewed and properly scrutinized, were shown to be missing ~70% of their current process. Making confident operations-enhancing decisions with such information is very, very difficult. »*
>
> **Jeremy Tanner, Senior Director, Testing & Informatics, Lonza**

It is important that organizations recognize such limitations when it comes to mapping their processes, and that they do their best to mitigate them. In practice, this often means bringing in an independent contractor to conduct your current state map. While this will cost more than mapping in-house, the benefits far outweigh the investment. Bringing in an independent contractor can:

- Provide a resource dedicated purely to mapping
- Provide a clear and objective view of current processes, without being hindered by familiarity blindness
- Ensure the right subject matter experts are convened to extract the necessary level of detail

Ultimately, this **helps drive a more complete, accurate, and robust process map from which to continue your gap analysis**.

Mapping Your Target State

Once you outline exactly how your site operates, you will need to clearly define your post-integration goal state. Goal state mapping should draw on information gleaned from the current state map and should ultimately represent the operations and processes that best meet overarching business goals, while also being realistic for your organization's situation (e.g., financially, as well as in terms of current talent pool and growth targets). Generally, organizations shouldn't look to integrate everything in their manufacturing plant and lab, since the time and resources involved would exceed the value of the integrations. Integrations should, in general, be pursued to the extent that they cost-effectively reduce the most pressing manufacturing risks —such as batch errors and deviations.

As with the current state map, producing a target state map requires granular detail, which hinges on input from the right panel of multi-domain experts (typically quality, operations, and IT personnel), and may be best executed with the support of a dedicated and knowledgeable digital transformation consultant. Again, BPMN charts are the tool of choice here.

Key Considerations for Your GAP Analysis: Data Quality and Security

To maximize chances of integration success, organizations must ensure that two critical elements are considered throughout the GAP analysis — data quality and data security.

Data quality

In a smoothly operating manufacturing and quality landscape, the right data needs to be in the right place, at the right time, and in the right format. Sending too much data indiscriminately can hinder the performance of applications and interfaces, and too little data (or data in the wrong format) may mean organizations don't have the insights required to make the right decisions, and ultimately, ensure the safety and quality of products.

Data quality and flow should, therefore, be front of mind when it comes to mapping current and target states. That means organizations must do a full and thorough audit of their data landscape as part of their current state mapping — developing a clear picture of the amount of data present, where it is stored, what is and isn't relevant, and where it is used. Then, to map the target state, organizations need to carefully consider what information is needed, and where it needs to go. For many years, pharmaceutical organizations simply put all their data into their manufacturing execution systems, providing a wealth of data that was cumbersome and complex to manage.

Crucially, there is no one-size-fits-all process for conducting this initial assessment and building out your future-state data landscape. However, as with all aspects of GAP analysis, organizations exploring their data 'as-is' and 'to-be' states need to make sure the right cross-functional team of stakeholders is brought to the table. This includes quality personnel to determine what data are needed for batch records and product release, IT to input on where data is stored and map out message content and feasible integration architectures, and operations and manufacturing personnel to provide critical broader process context.

Data security

Since many integrations are between core in-house and external third-party systems, integration, if done incorrectly, can increase the risk of cyberattacks. The consequences can be severe — from negatively impacted product quality and safety (through data loss), to intellectual property theft and leaked sensitive patient information. Even the smallest errors can cause significant reputation damage and hundreds of millions in lost revenue.

As such, organizations planning their integration project need to clearly understand their data risk as part of their GAP analysis, ensuring that their integrations will be controlled, and their data secure. Generally, this involves carrying out security baseline assessments of internal and external systems and networks, with the aim of understanding the level of security that needs to be applied to each application. That, in turn, requires organizations to understand what type of data sits where in their ecosystem, its level of risk or criticality, and who should have access to it.

Larger pharmaceutical organizations often have the expertise and resources to conduct these assessments in-house. And, to support this, there are a plethora of templated assessments available online that teams can draw on — templates that guide organizations through the assessment process and highlight priority areas where higher risk warrants greater attention. In many cases, however, organizations of sufficient size may already have templated processes developed in-house, so it's always worth checking internally first.

Smaller to midsize organizations, on the other hand, typically won't have the required capacity, knowledge, or processes to conduct such an audit, in which case they may need to draw on a competent external auditor. In fact, even where organizations do have the resources to keep their security audits in-house, we recommend obtaining a secondary external audit from a dedicated IT security firm to ensure the risk space is fully vetted and that future integration plans are watertight.

Of course, cyber security is not a one-and-done activity. Your technology and data landscape will inevitably evolve, and so will the complexity and sophistication of cyber threats. As such, it's imperative that your organization continues to monitor and maintain its cyber security posture through ongoing audits and continual employee awareness training.

Step 2: Prioritize Your System and Integration Needs

Once you have conceptualized your ideal target state, it's time to plan how you will realize it. Here, prioritization is key, since different systems (and integrations between them) play different roles and offer varying levels of value (Table 1), and each organization will have different pain points they are trying to address.

For many organizations, **the most important first step is to implement a manufacturing execution system (MES)**. That's because an MES serves as the digital backbone of the manufacturing plant, digitally controlling, monitoring, and documenting processes on the production floor, in real-time, while also **enabling communication between manufacturing, quality, and operations**.

« A fit-for-purpose MES is the cornerstone of an integrated GMP manufacturing and quality landscape — it acts as the hub that can connect all your devices and systems across the lab and plant. Ultimately, it's what makes a unified, integrated GMP landscape possible. »

Orla Cloak, Senior Vice President, Business Unit Head Cell & Gene, Lonza

Once an MES is in place, **organizations then typically prioritize integration between the MES and their enterprise resource planning (ERP) system** — software that helps organizations track and manage a variety of business functions, from accounting and human resources, to procurement, supply chains, and order processing. By integrating MES and ERP systems, organizations can combine in-depth, real-time shop-floor insights and control capabilities with broader organizational visibility and management to unlock more effective, streamlined coordination of both manufacturing and business operations. In practice, that means better forecasting, fewer errors and delays, minimized risks, and swifter issue detection and resolution.

Deploying a digital quality control (QC) platform — a system that helps automate, schedule, and capture data on the full scope of QC activities — and integrating it with the MES is often high up the priority list, too. This is unsurprising, since QC data forms a critical part of the batch record, and paper-based QC processes can be highly error-prone. In fact, depending on the volume of testing required, the amount of paperwork involved, and where organizations find the greatest number of errors in their activities and processes, organizations may opt to digitalize and integrate their QC operations before their manufacturing operations.

« Having a digital QC platform that can integrate with environmental monitoring systems — total particulate counters, total organic carbon analyzers, endotoxin software, etc. — and then connecting that to your MES, can help significantly reduce batch errors and deviations. No wonder it's an early target in many integration programs. »

Jeremy Tanner, Senior Director, Testing & Informatics, Lonza

Learning management system (LMS) purchase and integration, on the other hand, offers much less value, and thus is typically done much later (if at all) in an integration program (for example, LMS functionality can easily be carried out on paper with minimal impact and disruption to workflows).

Essentially, **prioritization is about making the largest and swiftest steps toward your organization's target state** (and overarching goals) in the most resource-efficient manner. To do it, you'll need to methodically evaluate each target state system and integration with respect to two main factors — value (e.g., cost- and time-saving, product quality gains, risk reduction, etc.) and effort (e.g., resources required to realize/deploy) — and then critically compare these across the various systems and integrations to identify the most important and urgent actions. **Prioritization matrices are an excellent tool** to support this process (Figure 2), as they offer a visual comparison and clear categorization of your desired systems and integrations into high-, low-, and medium-priority tasks (as well as those that may not be worth the investment at all). What's more, experienced informatics vendors and consultants can also offer expert advice and support to help you make more confident prioritization decisions.

In addition, organizations looking to prioritize their system deployment and integrations may find benefit in using BioPhorum's digital plant maturity model (DPMM) assessment tool. With this free online tool, organizations can enter information about their plant's current and future states, and the tool will offer guidance on which tools/integrations are more important for reaching your organizational goals, helping to aid your prioritization.

Table 1.
Summary of possible integrations between manufacturing execution systems/environmental monitoring platforms and other systems and devices in GMP manufacturing and quality.

System	Reasons to Integrate	Communication Direction (Recommended)	Relevant Application(s)	Areas of Focus
Enterprise Resource Planning (ERP)	Accurate data, inventory overview, and real-time data synchronization	Bi-directional	Manufacturing execution system (MES) and digital environmental monitoring platform (EM)	Material master data management Batch management Order management Inventory management
Document Management System (DMS)	Ensure correct SOP usage, eliminate need to interact with paper or separate application	Uni-directional	MES	SOP access WI access
Quality Management System (QMS)	Real-time accurate data regarding deviations, assist in resolution of issues to reduce cycle times	Bi-directional	MES	Exception/deviation information
Computerized Maintenance Management System (CMMS)	Eliminate the requirement to store equipment information in multiple systems, ensure correct caliberated status of equipment	Uni-directional	MES and EM	Equipment definition Calibration status Service status Operational status
Learning Management System (LMS)	Ensure trained personnel carry out required tasks	Uni-directional	MES	User training status
Laboratory Information Management System (LIMS)	Eliminate the need to manually transcribe in both applications. Reduce hand-offs between production and laboratories	Bi-directional	MES and EM	Sample plan request Response to request Sample confirmation Sample result
Historian	Eliminate the requirement to store data in multiple places	Uni-directional	MES and EM	Batch-relevant information Alarms/events (critical process parameters (CPPs), critical quality attributes (CQAs), etc.)
Distributed Control System (DCS)/Process Control System (PCS)	Ensure the right information is in the right application. Eliminate redundant data entry in multiple applications	Bi-directional	MES	Batch information Operation start/stop Status updates Alarms/events (CPPs, CQAs, etc)
Devices and sensors	Eliminate manual transcription errors, eliminate excessive two-step verification	Uni-directional	MES and EM	Process data capture

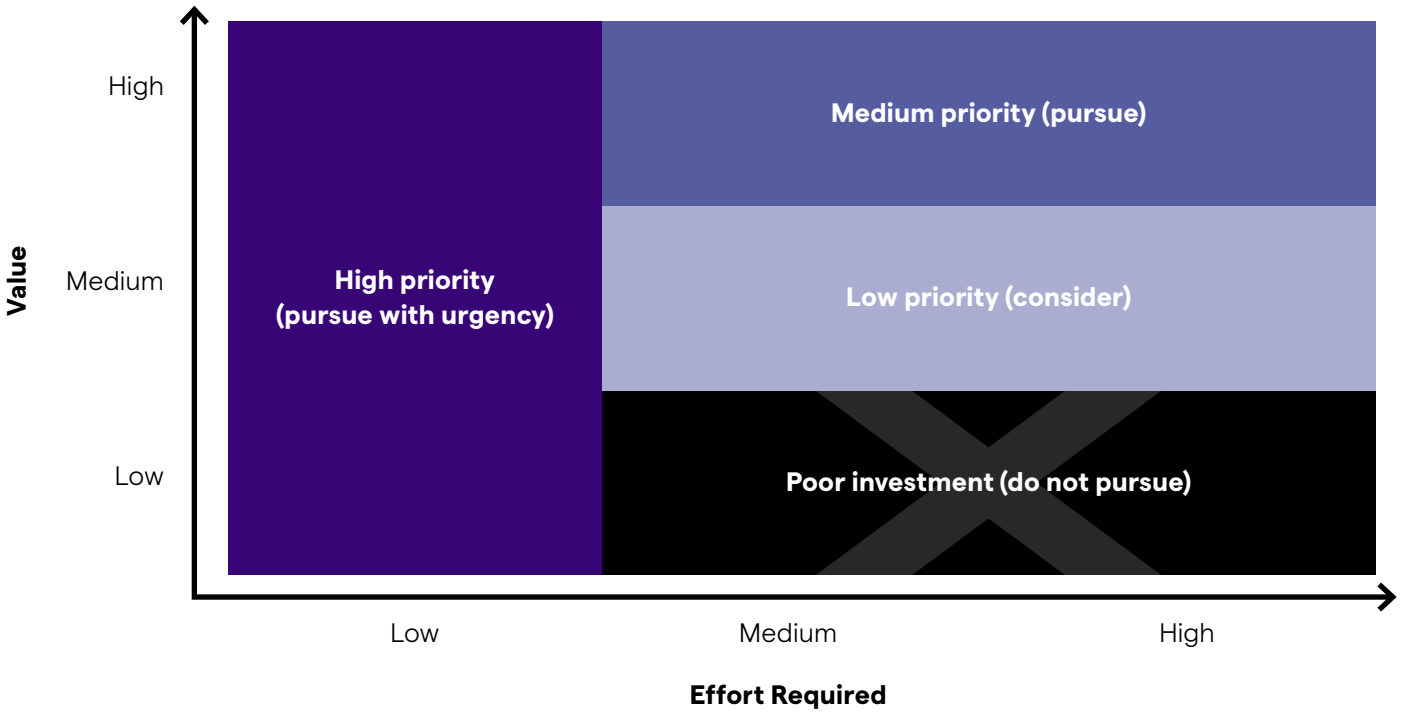

Figure 2.
Prioritization matrices can help organizations prioritize their system deployment and integrations to achieve the best impact, with the least effort, over the shortest time frame.

Step 3: Understand and Secure the Necessary Human Resources for Progression

With your target state defined, and elements of your integration roadmap categorized and prioritized, it's time to understand and procure the human resources required to kick off, sustain, and complete the program.

First, you will need to **identify which stakeholders you'll need**, and then get them onboard and involved — ideally from the get-go. Executing integration programs typically requires a diversity of input from different job functions — from the executives to shop-floor and lab staff, as well as IT professionals and engineers. To find out exactly who you'll need, it can be helpful to draw on the expertise of a dedicated digital transformation consultant who has a track record of successful integration projects.

Getting stakeholders bought into an integration project is often challenging. Digital transformation can upend the day-to-day working practices of many staff, who may be resistant to, and skeptical of, change. To smooth the process and maximize chances of buy-in and fruitful collaboration, do as much as you can to ensure staff feel confident and ready for the change. That typically involves keeping stakeholders up to date using clear, consistent, and frequent communication, as well as seeking, listening to, and incorporating where possible, their input and feedback. Implementing digital upskilling initiatives or adding digital skills to employee development goals can **help prepare staff and give them more confidence**, which can go a long way in promoting greater buy-in.

Most importantly, integration projects are only successful with strong and effective leadership; facility-wide integration can be complex, and overcoming the multitude of inevitable challenges along the way demands a strong, authoritative, and knowledgeable voice to guide teams effectively to their goals. Ideally, a suitable leader should have the following qualities and skills:

— A deep understanding of the digital transformation/integrations process, including what is and isn't feasible

— An ability to bridge the language and incentive gap between implementors and the C-suite

— Skill in diffusing tense situations (which are very common in integration projects)

If you don't have anyone internally who embodies these qualities, it is worth sourcing a suitable candidate externally. Whatever the source of your candidates, though, meticulously vetting them for the right technical competencies and experiences can be a demanding task. As such, it is wise to seek the support of an external agency who has experience in and dedicated resources for recruiting competent digital transformation leaders.

Step 4: Identifying Fit-for-Purpose Software Solutions

By this stage, most organizations will be aware of one or more priority software tools that they must purchase to push their program forward and unlock their integrated manufacturing and quality landscape goals. For reasons stated in the previous section, the focus of most initial purchases is on MES and digitalized QC systems.

But how should you go about searching for, and finally selecting, fit-for-purpose MES and QC software tools?

As a first step, you should **get clear on exactly what you need from your software**. That means knowing your functional and user requirements, the KPIs that are critical to the organization and leadership team, as well as business limitations (for example, in terms of costs or available technical resources). **When it comes to costs, don't forget both the upfront costs and the total cost of ownership (which includes licensing and support, deployment, training, and maintenance costs)**.

Once you have your requirements, you should prioritize them by grouping them into the must-haves (i.e., understanding the minimum viable product for your goal state) and nice-to-haves (those features that would bring additional benefits but are not essential to meeting your goal state).

Armed with your list of prioritized requirements, it's time to compile a list of candidate solutions and map them against your requirements to narrow them down.

Flexibility, Scalability, and Configurability are Key for MES and Other Software Tools

When considering software options for an integrated manufacturing and quality landscape, it's wise to think of future requirements and not just the requirements of today. Integration projects can be costly, so it makes sense to embed a system and pursue a digitalization approach that maximizes a system's longevity.

One way to achieve this is to prioritize flexibility and scalability as must-have features of your chosen software. Ask yourself, does the candidate solution fit your roadmap for the next 10 years?

Can it be globally scaled to multiple sites efficiently? Finding such a solution means that, as operations, requirements, and goals evolve, so can your chosen software.

Moreover, many software tools can be heavily customized. However, deep customization almost always comes at a considerable financial cost. That's why it's also important to prioritize a solution that's configurable rather than customizable. With a configurable system, you can make the changes you need without paying the premiums for a bespoke tool that needs to be recreated as new versions of the solution are deployed.

Introducing the MODA-ES® Module and the MODA-EM® Module

The Lonza MODA-ES® Module — Digitize Manufacturing

The MODA-ES® Module is a **flexible**, **modular**, and **easy-to-configure** manufacturing execution system at an accessible price. **Designed to be configurable over customizable**, it has an easy-to-use interface, meaning manufacturers can easily build the workflows. System configuration includes areas for data recording, instructional text, electronic signatures, sections, and drag-and-drop workflow.

Deployment is rapid to lower the total cost of ownership, and individual processes can be created and validated to reduce implementation workload — organizations can simply re-use existing validated processes, minimizing the need to create new ones. Additionally, flexible standard methods mean manufacturers can process products of the same family, without needing to build and validate an entirely new process.

Critically, **the system is intended to seamlessly integrate with other GMP-compliant systems and production equipment** for effortless and reliable data transfer.

The Lonza MODA-EM® Module — Paperless Quality Control

The MODA-EM® Module is a regulatory-compliant paperless solution that automates environmental monitoring (including viable, non-viable, and utility monitoring) processes, where users can manage and report on the full spectrum of sampling, laboratory, and quality information. The module **seamlessly integrates with commonly used instruments and media in manufacturing facilities, as well as with external software**.

With the MODA-EM® Module, organizations get timely, accurate monitoring through location-based scheduling, mobile data collection, and paperless lab processing. What's more, **real-time access to data enables on-demand reporting, trending, and visualization** capabilities for in-depth process analysis and ad hoc queries.

Step 5: Prepare for and Attend Product Demos and Proof-of-Concept (POC) Presentations

After completing step 3, you will have a shortlist of candidate solutions to help close the gaps and drive your integration program forward.

To further narrow down your candidates, make a more informed decision, and minimize investment risk, we recommend you attend product demos and proof-of-concept presentations for your most promising candidates. Although often confused, product demos and proof-of-concept presentations are distinct activities, with very different purposes.

With a product demo, you'll be able to get a deeper but more general insight into the product in question, learning how it functions, as well as its key features and benefits.

With a proof-of-concept presentation, however, you'll receive a more comprehensive overview of the product's functionality and key capabilities, this time *tailored to your production processes and specific requirements*. Proof-of-concept presentations are critical, as they offer a solid opportunity to get better, hands-on experience with the solution in a relevant context, so you can better know what you might be walking into with your investment.

To make the best use of demos and proof of concept sessions, it's critical that you are clear on your list of user requirements, and that team members with technical knowledge of your manufacturing and quality processes attend these sessions. That way, your organization will be best placed to evaluate the information that vendors share in the context of your organization's needs and goals.

Getting the Most Out of Vendors — Key Questions to Ask

To ensure you get the most value out of your time on a product demo, be sure to ask the following:

How many years' experience do you have in this sector?

It's important to establish how competent, credible, and trustworthy your potential vendor is. One way to do this is by exploring how many years the vendor has offered software solutions in the sector.

What wider experience does your team have in manufacturing and quality processes and operations?

A vendor that has a team with extensive experience in manufacturing and quality, beyond just providing software solutions, means that the vendor will have the on-the-ground knowledge of the challenges and pitfalls involved — knowledge that they can build into software solutions to maximize benefit to the end-user.

Who are some of your current customers?

It's important to know that the vendor can support an organization of your size. So, ask who their current customers are, as well as their size and throughput.

How easily can this system be integrated with my existing systems, devices, and software?

This question speaks for itself. A solution that is not intended to easily integrate with your devices and systems and other software in a vendor-agnostic manner could hamper your journey towards a fully integrated, smoothly operating manufacturing and quality landscape.

What support do you offer for deployment, training, and troubleshooting?

Adopting an entirely new software tool can be daunting. So, it's wise to ensure the vendor can offer the level and frequency of support needed to minimize friction and maximize uptime.

How quickly can the system be deployed?

The quicker your chosen system can be deployed, the faster you can start making a return on investment. Ask for both the average implementation time and the best-case scenario, along with any case studies or examples they can share.

How often do you update your software?

Change is the only constant in the pharmaceutical manufacturing space. As such, you should ensure that your vendor is committed to continual software improvements. Ideally, your vendor of choice will operate according to agile development principles, enabling them to ship high-quality improvements that better meet end-user needs, more frequently.

How easy will it be to train end-users on the software?

End users can be resistant to digital transformation, owing to the huge changes it entails for their day-to-day operations. Making sure the tools you deploy are user-friendly and frictionless can go a long way in mitigating resistance and promoting buy-in.

Is the tool configurable?

As noted earlier, many software tools are customizable. But customization can be costly; any change to your process will entail further customizations to your software, which often requires time- and resource-intensive coding. Configurable solutions, however, ensure flexibility to meet your needs, out of the box, and as needs and processes evolve — no coding required.

A Smoother Path to a Well-integrated Pharma Manufacturing Landscape

Pharmaceutical organizations are seeking ever-more effective ways to drive higher-quality products safely to market at pace. A well-integrated manufacturing and quality landscape, supported and enabled by the right software tools, can offer several benefits that can help organizations achieve this goal.

The path to integration, however, is fraught with challenges, and the cost of poor planning is hard to overstate. To maximize your chances of success, you must follow a logical, stepwise plan that sidesteps common pitfalls, ensures the right stakeholders are involved from the start, and that rigorously scrutinizes candidate software solutions such as MES to help you select tools that are suitable for the needs of today and tomorrow.

Lonza has extensive experience in pharmaceutical manufacturing and informatics, and has worked with customers across the globe, spanning all therapeutic modalities. More than 175 sites across 90+ organizations have implemented Lonza's MODA® Platform solutions to help cost-effectively drive their digitalization and integration initiatives forward.

With our depth and breadth of expertise, we can help you reap the benefits of integrated manufacturing, partnering with you to define an integration roadmap that cost-effectively meets your short- and long-term goals.

Ready to take the next step towards fully integrated pharmaceutical manufacturing? Then **contact our informatics experts**.

To learn more about the Lonza MODA® Platform, visit **our website** or download our **free MODA®Platform eBook** today.

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RT-DS056 06/24

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