BIOLOGICAL
REFERENCE MATERIALS
GLOBAL LEADER

Building a Digital Foundation for Scientific Innovation with a Unified Platform

A global leader in biological reference materials has been a cornerstone of scientific research for decades, delivering authenticated biological materials and data to researchers worldwide. But as it grew, so did the complexity of its operations.

With massive quantities of paper records generated across its manufacturing, QC, biorepository management, and genomics labs, the organization urgently needed to digitalize its workflows. Manual processes were no longer sustainable, slowing teams down, increasing the risk of human error, and creating barriers to scale.

What the organization needed wasn't just software; it needed a unified platform capable of eliminating silos, adapting to its science, and empowering its team to take ownership of its digital transformation. L7|ESP's low-code framework offered exactly that, enabling users to become Citizen Developers™ who could design and refine workflows tailored to their unique scientific processes.

FROM PAPER TO DIGITAL: THE BEGINNING OF THE TRANSFORMATION

The organization began its journey with L7|ESP by adopting L7 LIMS as its Laboratory Information Management System. Unlike traditional point solutions that force organizations to conform to predefined workflows, L7|ESP's low-code framework gave this institution the flexibility to create workflows that aligned precisely with its scientific processes.

Taking full ownership of the platform, the team leveraged its extensibility to automate key tasks like inventory management and results reporting. This eliminated many of the manual processes that had once defined its operations and paved the way for deeper digital integration.

L7 provided initial LIMS content to get the digital transformation started, but the platform's full power came
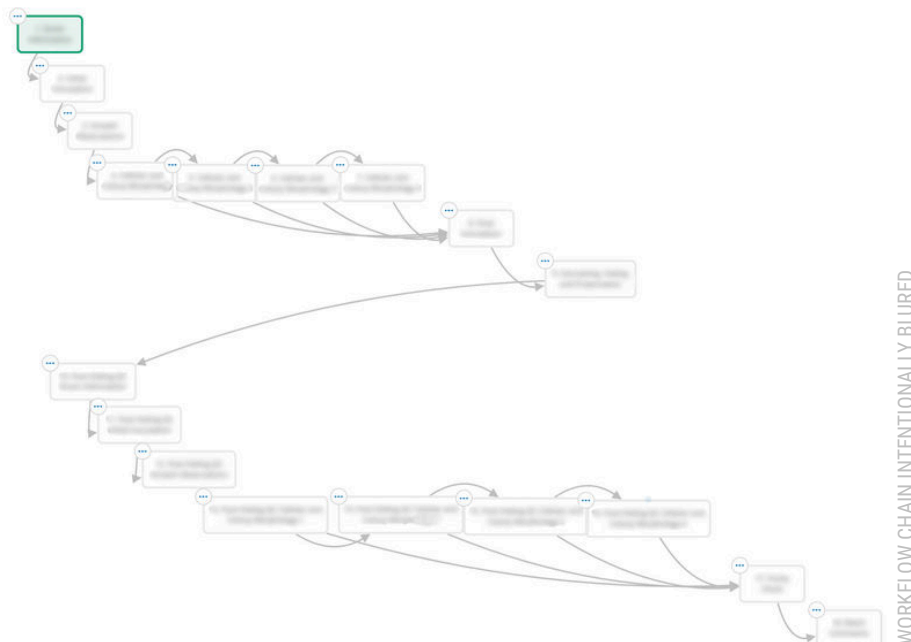
to life as the team's expertise grew, along with its ability to iterate, adapt, and expand, ultimately becoming independent architects of its own solutions.

WHY MES WAS THE NEXT STEP

While LIMS marked a significant step forward, executive leadership soon recognized they could achieve even more by digitalizing batch records with L7 MES (Manufacturing Execution System). They needed a solution that could:

- Reduce reliance on manual documentation.
- Automate processes to minimize errors.
- Centralize quality control and reporting in a single system.

WORKFLOW CHAIN INTENTIONALLY BLURED

During the evaluation process, the leadership team was particularly impressed with L7 MES's out-of-the-box capabilities, which delivered robust quality reviews and centralized batch visibility without the need for extensive customization. The organization tasked L7 with configuring L7 MES to match its needs, requiring seamless integration with what had already been built in L7 LIMS. It was key for this global leader to establish a digital foundation that could grow alongside the organization.

ONE UNIFYING PLATFORM: BRINGING LIMS AND MES TOGETHER

With the MES project complete, the organization merged its existing L7 LIMS workflows with the newly created MES content into a single L7|ESP instance. This was a critical milestone, demonstrating not only the platform's flexibility but also the team's growing proficiency in navigating its digital transformation. By unifying LIMS and MES into one system, the organization eliminated silos and ensured seamless data flow across its operations. This integration allowed for more effective reporting, streamlined quality control, and the scalability needed to address future challenges and opportunities.

OWNING THE FUTURE WITH INDEPENDENCE AND VISION

The success of L7|ESP at this organization goes beyond reducing errors and streamlining workflows; it's about empowering the team to take control of its digital transformation and becoming Citizen Developers™. By embracing the platform's low-code tools, the organization has proven its ability to independently build, refine, and adapt workflows to meet evolving needs.
Its digital transformation highlights what's possible when an organization combines its expertise with a platform built for adaptability, setting a new standard for scientific operations.
L7|ESP solved today's challenges and provided a unifying and flexible system with a strong, contextualized data foundation, enabling the organization to grow without disruption and harness the power of AI and advanced analytics in the future.