

IFF unlocks cloud potential

LIMS migration to AWS sets
formula for quality, business
efficiency, transparency
and compliance





Call for change

Transitions can be difficult—they require careful orchestration of multiple teams and components. Take moving home, for instance. There's a long checklist of things that must be accomplished, from hiring movers to updating your contact information and ensuring that your new abode is habitable. Now, try to imagine moving an entire multinational business with global operations across 345 sites—including 100 manufacturing and laboratory sites—and 500-plus business applications, myriad processes and people. It would be fair to say this would not be an easy feat.

This was the challenge facing International Flavors and Fragrances (IFF).

A global leader in food, beverage, health, biosciences, and sensorial experiences, IFF had acquired the nutrition and biosciences business of a global chemicals company. It asked Accenture

to help it integrate this multinational business. A critical element of this transition would be the integration of this new acquisition's quality control systems—specifically SampleManager Laboratory Information Management System (LIMS) and Northwest Analytics Focus EMI—into IFF's existing business systems.

SampleManager LIMS sits at the heart of quality operations in the manufacturing space. With this system, IFF would gain access to world class manufacturing operations and quality control capabilities that could drive productivity, ensure compliance, streamline processes and improve organizational efficiency. Focus EMI, an enterprise manufacturing intelligence solution, serves as an operational guidance tool. It trends quality and process data and enables visualization in near real time. These were tools that IFF could ultimately extend across its wider business. However, the migration of these key systems presented logistical challenges.

Call for change

The new acquisition's LIMS environment consisted of a global application in Microsoft Azure Cloud shared across five manufacturing sites. Each site migration schedule was independent of others and of the main data center. And the LIMS environment was complex, comprising an integrated ecosystem of approximately eight applications, 300-plus users and more than 400 interfaces—with diverse architecture connecting the global data center with various site applications and systems.

The LIMS system migration would be part of the overall program migration schedule, which included SAP and other applications. The company's global enterprise resource planning (ERP) platform, process historians, lab instruments, printers and workstations all had to be migrated and integrated with IFF's existing system.

With Amazon Web Services (AWS) selected as IFF's cloud provider, the LIMS system would be migrated to AWS. IFF wanted to further leverage this opportunity to take its other enterprise and plant applications to the cloud.

Aware of the underlying complexity, IFF wanted to expedite the migration of the quality systems to the cloud to unlock immediate benefits for its business. To achieve this, it asked Accenture to help guide the post-merger transition. With strong capabilities in complex site migration, system integration and human change management, Accenture was well equipped to lead the end-to-end migration of the manufacturing system while ensuring the seamless transition of people, knowledge, and work processes to the IFF way of business.





When tech meets human ingenuity

The Accenture team brought deep business process engineering capabilities, technical expertise in manufacturing and proficiency in enterprise solution architecture, transformation and change management to meet IFF's needs. The IFF and Accenture teams worked closely together to create a roadmap that aligned the migration with IFF's business needs. The next challenge to address was the site transition.

To minimize business disruption, everything from security badges to phone numbers had to be moved over to IFF. This meant establishing new network connections, transitioning servers and applications over to IFF's network, and defining new file-sharing processes that aligned with IFF's security practices—the list goes on. The transition of the LIMS system from Azure to AWS followed. As part of the cloud migration, there were two major LIMS implementations. One consisted of multiple local

implementations, effectively moving information from one site to another. The other implementation was the SampleManager LIMS migration, a crucial move considering its importance to IFF's operations.

Accenture worked closely with IFF to ensure a seamless transition once the system went live.

Accenture provided capability training, along with supporting artifacts and resources to ensure the IFF team was up to speed on all the latest capabilities and processes, and ready for business. A transitional service agreement ensured the smooth transition from the seller organization. Accenture helped expedite this process by engaging key resources from both IFF and the seller organization, then evaluating the overall migration plan and identifying risk areas and putting in place alternate IFF processes. This spared IFF potential costs associated with delays.

A valuable difference

The go-live for IFF's new cloud-based LIMS was not only a huge success; it will also help unlock the benefits of cloud computing for the wider organization.

Through this project, Accenture enabled new cloud-based capabilities—including SampleManager LIMS and Focus EMI—in IFF's manufacturing space to manage quality-control work processes. This creates a foundation for new cloud opportunities that IFF's other business functions can leverage.

The AWS cloud platform provides extensive scalability and security, and adheres to strict IT standards, allowing structured, controlled business growth for IFF. Systems are now accessible from any part of a plant, secured through roles-based security while allowing data exchange between LIMS, SAP and other plant assets. The reliability, speed and connectivity this cloud solution brings are important from both a financial and process perspective. LIMS analytical data is critical to product release, shipment and on-time revenue. In terms of process monitoring and engineering, LIMS data is used for trending, proactive monitoring of the process and immediate correction if needed. Overall, the new global LIMS will make IFF more operationally

efficient and compliant with industrial and governmental agencies. IFF has also gained greater transparency through secure data-exchange protocols and role-based security. This comes from the integration between the AWS LIMS and its ecosystem applications—it means less time spent entering data, fewer data quality issues and better use of the data IFF generates.

In fact, IFF is already evaluating the move of other business and process historians that are currently deployed in its operation management network applications to AWS. This is driven by the realization, post the successful go-live, of the benefits of scalability, data safety and recovery (disaster management), connectivity and overall managed services that can be achieved with cloud services. The SampleManager LIMS migration demonstrated that a seamless transition was possible and that IFF could retain key business work processes, ensuring its user experience can continually be enhanced moving forward.

Transitions are not easy but for IFF the move to the cloud is one that will continue providing value, positioning the company to continually innovate, advance its capabilities at other sites and businesses, and ultimately make its products better and safer.



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