



Q&A

The customer's story

Talking with **Merry Danley**, Associate Director, Bioanalytical Technical Operations & QC for MDS Pharma Services. MDS uses Watson LIMS from Thermo Fisher Scientific.

Describe the laboratories where Watson is implemented. What is the main purpose/primary function of these labs?

MDS Pharma Services has five bioanalytical laboratories using the same Watson LIMS database. With laboratories all over the world, MDS Pharma Services offers complete bioanalytical services by supporting our clients in their drug development programmes.

What types of samples are handled by Watson?

MDS Pharma Services uses Watson to support the bioanalysis of samples generated in clinical (human) and nonclinical (animal) trials to test the safety and efficacy of new pharmaceuticals. The purpose of Watson LIMS for MDS Pharma Services is to provide our clients a secure database, which quantitates or measures a particular compound in biological samples. MDS Pharma Services also utilises Watson to handle sample storage conditions and method validation.

How many samples are tested per day or year?

MDS Pharma Services assays over 500,000 samples per year using Watson LIMS.

What problems/challenges were you facing that led you to look for a LIMS solution?

Each of our laboratories was using different LIMS systems. We needed a global solution that would meet the user requirements, comply with the predicate rules of various global regulatory agencies and provide a centralised database to easily share and view data from across the world.

Prior to implementing Watson, how did you manage data in your labs?

Each laboratory had a homegrown LIMS product to manage the data. Some data analysis was done on spreadsheets or other macro-type programs. There was no centralised storage of any of our bioanalytical data.

Why was Watson selected as your company standard?

Watson is the industry standard bioanalytical LIMS – there is no other LIMS product that handles and processes bioanalytical data as well as Watson. It was designed specifically for bioanalytical work, yet the software is not too restricting as it works well for both contract research organisations (CROs) like MDS Pharma Services, but also pharmaceutical companies, biotech companies and other bioanalytical labs.

What evaluation criteria did you use?

MDS Pharma Services evaluated the options of upgrading our homegrown system, implementing a highly customisable system or purchasing a purpose-built, proven system such as Watson. After a detailed operational and financial evaluation of the options, we decided that we would be looking for the purpose-built system that that would be used essentially 'out of the box'. We did not want to invest a lot of time and money into 'specialising' or custom-designing an application to fit our needs even though we recognised our operation would have to adjust some to match the software's workflow. It was critical that the network environment be 'tiered' such that you could easily deploy one or two users as easily as 600-800 users on the system.

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Which version of Watson have you deployed?

We are on Watson 6.3 and are upgrading to Watson 7.3 in the next few months.

Watson is marketed as an 'out-of-the-box' solution with minimal customisation required. Based on your experience, what are the benefits of deploying a COTS (commercial off-the-shelf) solution?

A COTS system with minimal customisation benefits the company purchasing the system. Each additional 'customisation' required by a system adds cost in areas such as software validation resources, quality assurance resources, IT resources, project time and hardware. If you purchase a system that is configurable versus customised, you will have earlier recognition of benefits. These benefits can include quicker project planning time, less validation time, less resource time and less specialised IT services. Highly customised solutions are often complex in administration, configuration and usability. One aspect that is critical in a complex business environment is the ability to train users easily. New users can be trained on Watson LIMS very quickly with its intuitive menus and functional focused design.

How important was workflow?

In a laboratory processing as many as 8000 samples per week, workflow is extremely important. Not only are you concerned about high throughput of the samples, but the quality and error-free data you are producing. A good software solution will build on your existing workflow and streamline that to make your laboratory more efficient. Watson gives us the ability to not only process the data and samples efficiently, but also the reliability and quality of the data due to the defined workflow, which minimises errors and downtime. The new functionality that Watson provided us allowed us to achieve new efficiencies and increase our overall business value.

What cost, time and resource savings were realised as a result of this implementation?


The implementation of Watson LIMS enabled us to retire legacy systems. In addition we have our servers that support all of our laboratories in a secured data centre, which decreases support and IT costs. Watson also has two-way interfaces to our data sources, eliminating the need for extra data verification steps during the workflow of the laboratory data.

And what about quality or application performance improvements and improvement in laboratory/department performance?

Using Watson has allowed us to standardise data, not only between the MDS Pharma Services bioanalytical sites, but also with many of our customers. We can easily share data in any type of format with our clients. If our clients also use Watson LIMS, which many of them do, it streamlines the data transfer steps even more. Watson LIMS has also provided us the ability to share data between laboratories easily, including the ability to easily transfer methods from one site to another. Thermo Fisher Scientific has continued to build new functionality and regularly upgrades the system to meet current and emerging regulatory requirements. Watson has improved our auditing abilities and provides a solution that produces data as intended. In addition, any authorised user can access the data or critical documents from anywhere and at anytime.

What has been the users' reaction to Watson?

MDS Pharma Services has ~550 users. The laboratory scientists,



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quality assurance, and data support all appreciate the extra functionality Watson has provided. The system consistently produces intended results in a compliant manner, and in a high throughput laboratory like MDS Pharma Services that is a critical requirement. From an IT standpoint the system also integrated seamlessly with existing databases, operating systems and hardware.

How has this integration benefited your organisation?

We use a lot of mass spectrometers and Watson LIMS has great instrument integration for these instruments. We also utilise other interfaces, specifically for other types of analysis such as immunoassay and biomarkers, ICP/MS, and RIA.

In order to implement Watson, did you have to change some of the processes within your labs to conform to the software?

We constantly streamline and try to make our processes efficient. It is important to utilise and make use of the software that drives the workflow. If you can do that, it will reduce lead-time on a project and improve the quality of the laboratory.

What services, if any, did Thermo Fisher Scientific provide as part of the implementation?

Thermo Fisher Scientific provided many resources in the implementation. Specifically, they handled the installation, including software validation, as well as training services. ■