



Laboratory software

## Digital Science

### Laboratory software project governance

Thermo Fisher Scientific Digital Science handles the design, development, sales, implementation and support of laboratory software. Its sales, service and support operations employ more than 470 employees worldwide. Over 2,500 customers rely on Thermo Scientific LIMS to support their global operations.

From initial consultation through to implementation, to providing ongoing support for continuous uptime, the expertise and experience of our team reduces project risk and delivers robust, proven solutions. Our laboratory software products are trusted to support on-time delivery of products, enable uninterrupted provision of critical services, and deliver information on which critical decisions are made.

**192+** people dedicated to services and technical support

**150+** dedicated to research and development and quality

**115+** dedicated to product management, marketing, sales

**21+** people dedicated to finance, legal, IT, HR and admin roles

- A global leader in laboratory informatics and automation
- Over 3,900 successful informatics deployments globally
- ISO 9001:2015 compliant Quality Management System
- Global support with a follow-the-sun approach
- Highly experienced implementation and validation team
- Committed to scientific advancement

#### Quality management system

Our quality management system (QMS) provides global certification for Digital Science products against the standard ISO 9001:2015. The accreditation covers design, development, sales, implementation and support, ensuring consistent, high-quality delivery of our products and services. Thermo Fisher has had an ISO 9001 accredited QMS for nearly 20 years, demonstrating a robust and mature quality management environment. Simply put, quality is at the heart of everything we do.

## Organizational benefits of a standardized LIMS deployment

Often, our clients already have some form of LIMS in place in their organization. Sometimes, due to acquisitions and legacy strategies, they may have multiple different LIMS in place. The benefits of standardizing on a single LIMS are clear – centralized and simplified system validation, auditing and maintenance, lower overhead costs, standardized and streamlined business processes, easier user training and centralized and standardized data storage and reporting. There are some critical considerations for any organization moving toward a single instance of LIMS:

- **Stakeholders must be consulted to determine key considerations and project approach** – Representatives from all functions and scientific applications must be included to ensure a deployment which benefits the entire team.
- **Consolidation of processes to reach a common standard** – Aligning on processes enables continuous process improvement and eases training requirements.
- **Harmonization of other systems to provide a simplified scientific ecosystem** – Driving down costs and easing the sharing of data and information across groups.
- **Data migration** – Ensuring all the data you need to keep is securely transferred from any legacy systems to your new system, in a way that makes it accessible for future review.

The Digital Science professional services team has significant experience and expertise in local and global LIMS projects, taking all these considerations into account. Our goal is to provide customers with a laboratory software ecosystem which benefits their science and their people and complements their organizational strategy.

## COVID-19 programme

Thermo Fisher Digital Science established a Thermo Scientific™ SampleManager™ LIMS delivery programme to support COVID-19 diagnostic and variant testing. Using SampleManager LIMS workflows, laboratories were able to manage the complete end-to-end process from sample reception through regulatory reporting. Our experience working with government bodies and high-profile testing operations enabled project success.

The team:

- Deployed a single solution, considering various requirements of multiple stakeholders
- Achieved a challenging timeline of two months for the design and implementation of systems for two labs
- Managed multiple projects in parallel, with labs located across the UK
- Enabled successful remote operation, working through COVID-19 restrictions
- Provided 24/7 priority support service for the application and hosting services



24/7 operation



50,000-300,000 samples tested per day



System implemented in two labs in two months



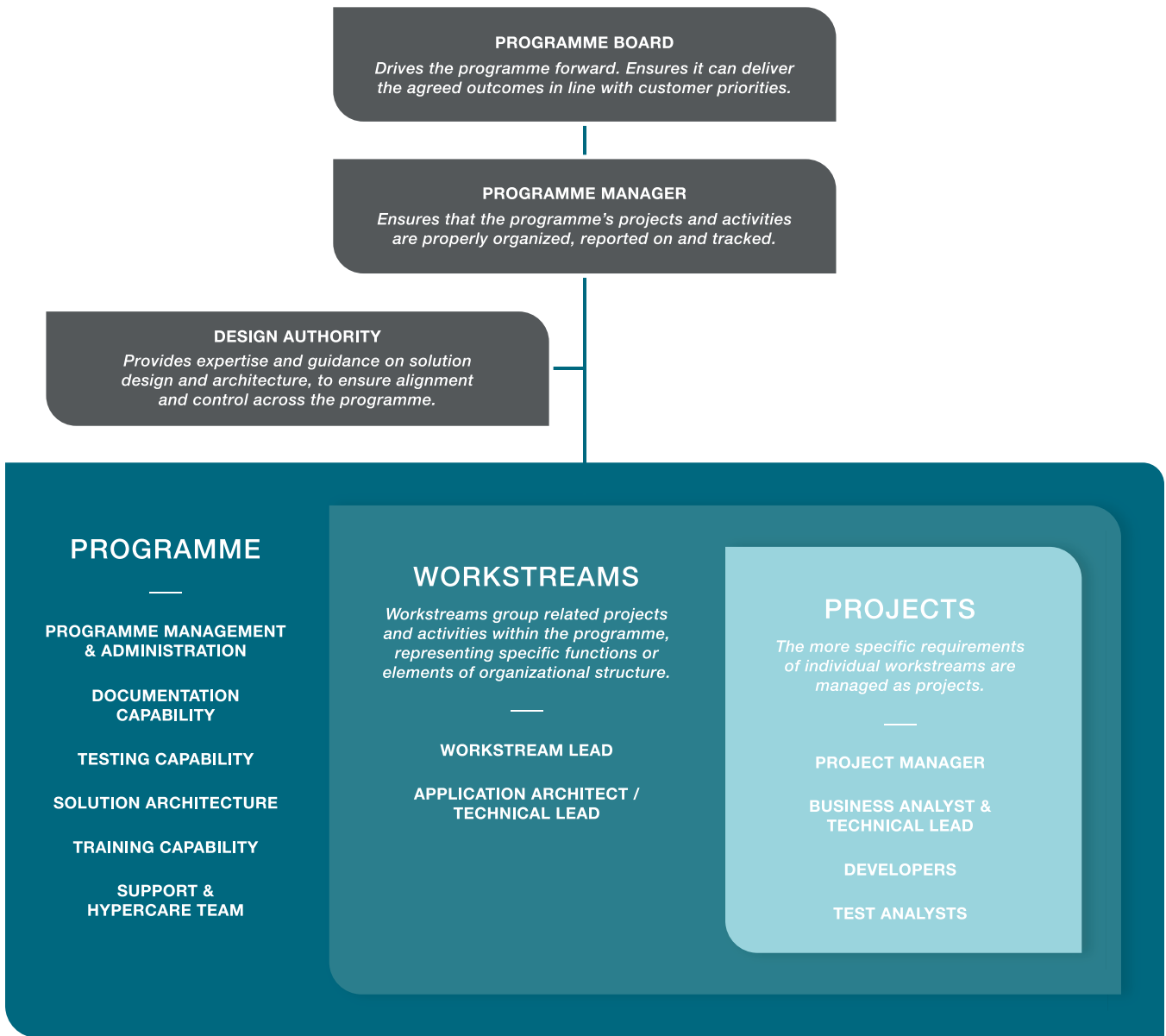
Tested and reported results for over 21 million samples



Secure, long-term archival of high-volume data



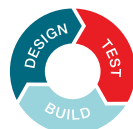
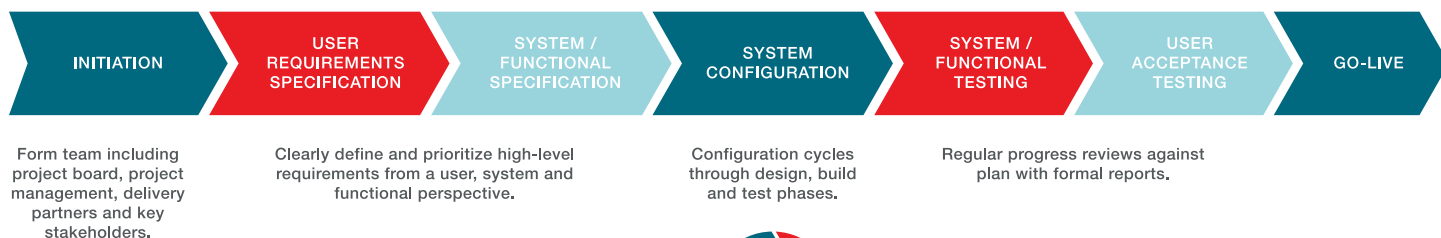
Results delivered between 12-24 hours dependent on sample type



Programme organization and governance structure

Our approach to requirements engineering and system configuration and development combines traditional requirements analysis techniques with an Agile approach to developing and implementing the system configuration.

This approach ensures clearly defined and prioritized high-level requirements, which are then developed and refined through an iterative process of configuration/development, prototyping, testing and refinement:



### Issue resolution

It's critical to have a process in place to manage any potential issues. Throughout the project, regular communication between all those involved should identify any concerns. Whenever issues arise, a formal resolution process is followed to ensure proper consideration, actions assigned to relevant people and clear requirements to close out the issues and drive continuous improvement.

### Change control management

From the outset, the project scope will be agreed and clearly defined. Should requirements change, these will be reviewed and adjusted following each sprint and revaluated to determine a prioritized feature list. Should requirements or scope change considerably, such adjustments will be considered on a case-by-case basis taking into account impact on the overall project. Significant adjustments which may push out project close will need input from the entire project team to ensure agreement.

### Summary

Ultimately the key to successful programme delivery lies with establishing a team with the appropriate balance of skills and experience, combined with a practical management approach that provides the requisite guidance and control. Our teams ensure that the relevant governance, monitoring, communication and control processes, combined with a realistic and measurable plan, are implemented to ensure the programme delivers its objectives.