LTI’s Digital Work Instruction for Lab
Digital Solutions for Automated Lab Instruction & Improved Efficiency
Highlights

- Unified Lab Experience
- Digital Lab Instruction
- Accelerated Innovation
- Centralized Quality Monitoring
- Sample Lifecycle Visibility
- Automated Sample Scheduling

Overview

Today’s laboratories are besieged by demands for improved efficiency, increased productivity, improved data quality, immediate access to work instructions and data available for analysis. The traditional paper-intensive laboratory management systems cannot address these demands, or efficiently manage the volume of information generated.

LTI’s Digital Work Instructions for Lab is a disruptive innovative solution to realize benefits of today’s efficiency and tomorrow’s growth. It provides an integrated analytical laboratory which is designed to manage, review, store and analyze sample information more effectively. Our objective is to provide highest quality labs with next-generation features for accelerated innovation.
Approach to Resolution – The LTI Advantage

Leveraging the power of IoT and data analytics, our industry experts have developed digital solutions for labs to provide business intelligence for decision makers at any point in their sample life cycle. The step-by-step approach starts with mapping the processes and system to visualize the flow of data. This goes further with the collection of data and metadata, centralized data management and industry 4.0 data analytics to generate insights. The outcome is a unique informative solution that provides right instructions at the right time to the Lab Operator, coupled with an integrated view of laboratory for Lab Manager and meaningful insights for R&D Manager to accelerate innovation.
LTI’s digital work instruction provides a **unified portal** for locating lab services, scheduling, tracking and reporting samples.

**Connected lab** ecosystem integrated with LIMS, CDS, ELN and other lab execution systems for seamless sample interface.

**Speed up Innovation** with knowledge manager, associating every set of new reports with metadata for analysis ready environment.

Complete **visibility of sample lifecycle** and comparison of each step for Standard vs Actual time to track process efficiency.

**Accelerate milestones** with smart tool manager for automated data acquisition and performing analytics for test results using IoT integration.

Step-by-step Digital lab instruction for **guided workflow** and adherence to SOP.

**Automated sample scheduling** and based on pre-defined business rules considering instrument availability, analyst competence and non-testing activities.
Logical Architecture

Visualization

Knowledge Manager (Authoring interface)
Lab Devices Connect (Smart Tool Manager)
Job Order Scheduling
Smart Connected Guide (Operator Advisor)
User Administration
KPI Dashboards & Reports

Accelerators & Frameworks

Flow
Asset Advisor
Controls Advisor
Operator Advisor

Logs & Alerts
Model Definition
Security Model
Mashup Builder

Orchestration

Flow Connectors
Knowledge Catalog
Work Orders
User Skills & Certifications
SOP for Operator Advisor
Media & Documents

Connectivity

Gateway

Proprietary Interfaces

Data Sources

Lab Devices
Media & Documents, Knowledge Catalogue, SoP, Work Orders, User Skills & Certifications
LTI (NSE: LTI) is a global technology consulting and digital solutions company helping more than 400 clients succeed in a converging world. With operations in 31 countries, we go the extra mile for our clients and accelerate their digital transformation with LTI’s Mosaic platform enabling their mobile, social, analytics, IoT and cloud journeys. Founded in 1997 as a subsidiary of Larsen & Toubro Limited, our unique heritage gives us unrivalled real-world expertise to solve the most complex challenges of enterprises across all industries. Each day, our team of more than 33,000 LTItes enable our clients to improve the effectiveness of their business and technology operations and deliver value to their customers, employees and shareholders. Find more at http://www.Lntinfotech.com or follow us at @LTI_Global.