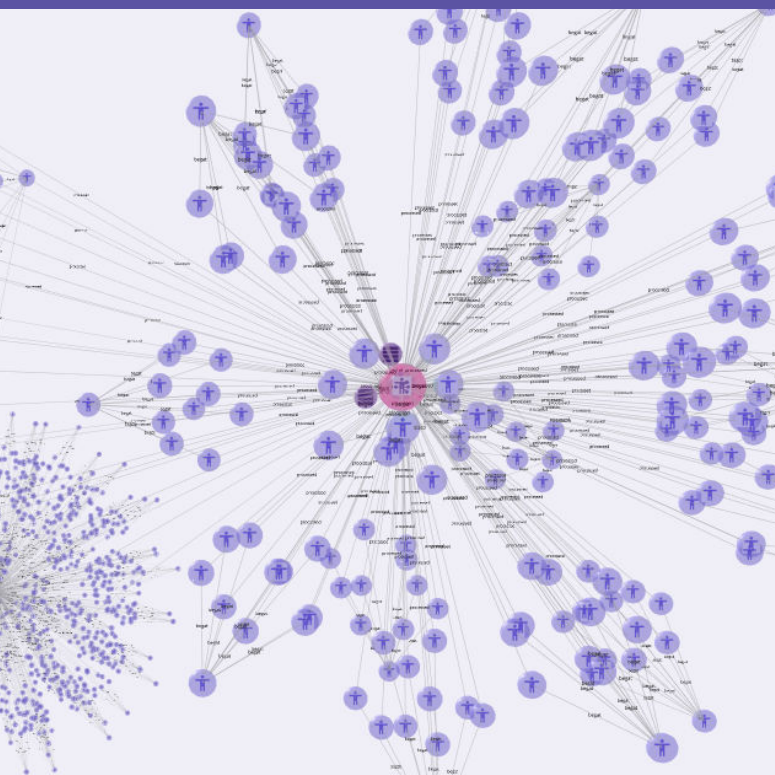# The Power of the Platform:
Unlocking Contextualized Data for Better Decisions

L7|INTELLIGENCE® isn't just another data tool—it's a core component of the L7|ESP® platform and a strategic solution that enables the surfacing of complex scientific and operational data into actionable insights. Designed to enable organizations to easily access and leverage contextualized data, L7|INTELLIGENCE empowers faster, smarter decisions across life sciences, from R&D to Manufacturing to Quality Control to Supply Chain to Diagnostics. By easing access to real-time operational and scientific data, the power of the platform lies in its ability to enable your organization with AI-ready, contextualized data.

Data is not the new gold...
Contextualized Data is the new gold.

THE CHALLENGE: RAW DATA ISN'T ENOUGH

While data is often called the new gold, data alone (especially siloed data across multiple systems) doesn't drive innovation. Data that has been contextualized within a single data model and process model does. In life sciences, the challenge lies not in collecting data but in making it actionable and accessible. Siloed systems, outdated ETL processes, and overwhelming volumes of information can hinder decision-making, delay time to market, and increase operational costs. Without the right tools, organizations risk missing critical insights that drive innovation and efficiency. And it's the difference between simply having data and truly deploying it to its fullest potential.
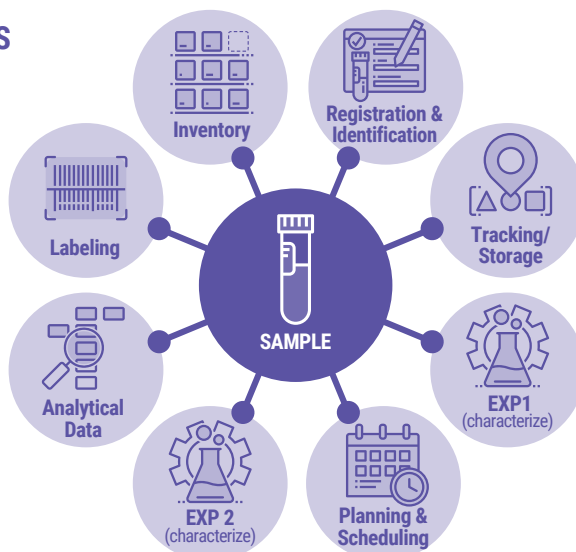
THE SOLUTION: L7|INTELLIGENCE

L7|INTELLIGENCE simplifies how organizations access, manage, and analyze contextualized data, turning it into an enabler for powerful decision-making. By making raw operational data collected within L7|ESP easily accessible, L7|INTELLIGENCE enables users to leverage AI-ready data products to fuel advanced analytics, predictive maintenance, and process optimization initiative using any reporting, visualization, or analysis tool. Your data becomes more than just information—it becomes a strategic asset.

Using the ELT (Extract, Load, Transform) and other processes, L7|INTELLIGENCE eliminates the inefficiencies of traditional ETL (Extract, Transform, Load) processes, ensuring your data is always optimized for analysis. This allows you to harness the power of the platform to generate real-time insights, improve processes, and drive tangible business outcomes.
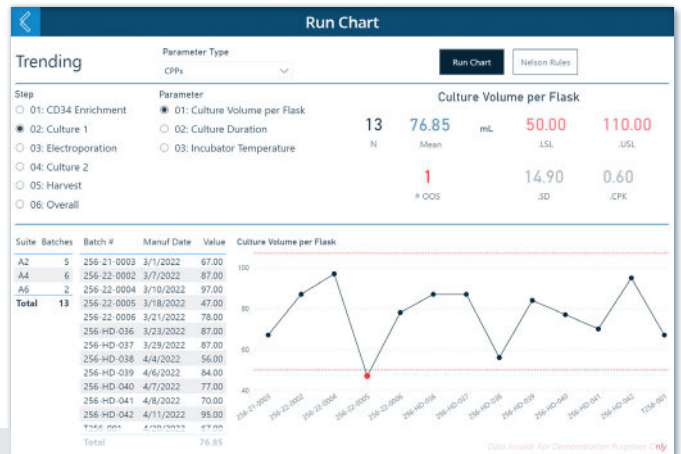
KEY FEATURES: CONTEXTUALIZED DATA AT YOUR FINGERTIPS

- **Self-Service Access to Contextualized Data Models:** This feature provides simplified access to Star Schema data models, reducing the complexity and cost of traditional ETL processes.
- **AI-Ready Data:** L7|INTELLIGENCE takes the contextualized data and makes it easily accessible and queryable to make it AI-ready and enable customers to unlock the power of advanced analytics and Large Language Models (LLMs).
- **Real-Time Operational Insights:** Leverage real-time data through tools like Tableau, Power BI, and Spotfire, ensuring data is always accessible when and where needed.
- **Flexible Integration:** Seamlessly integrates with external data lakes and warehouses like Snowflake, offering a comprehensive and scalable solution.
- **Compliance-driven:** Built-in reference models for regulatory processes, ensuring all data is prepared for FDA submissions and other regulatory needs.

Inventory
Registration & Identification
Tracking/ Storage
EXP1 (characterize)
Planning & Scheduling
EXP 2 (characterize)
Analytical Data
Labeling
SAMPLE

THE VALUE: STREAMLINED ACCESS FOR REPORTING AND ANALYSIS OF CRITICAL SCIENTIFIC & OPERATIONS DATA

- **Reduced Time-to-Value (TTV):** With contextualized data that are ready for immediate use, you can speed up insights, improve decision-making, and reduce time to market.
- **Cost-Efficiency:** Automate manual processes & streamline operations, optimizing resource allocation and reducing operational costs.
- **Enhanced Product Quality and Compliance:** Integrate operational data with quality management systems to ensure product consistency and streamlined compliance.
- **Automated Regulatory Processes:** Simplifies FDA submissions & regulatory reviews, reducing manual effort and accelerating timeframes for compliance.
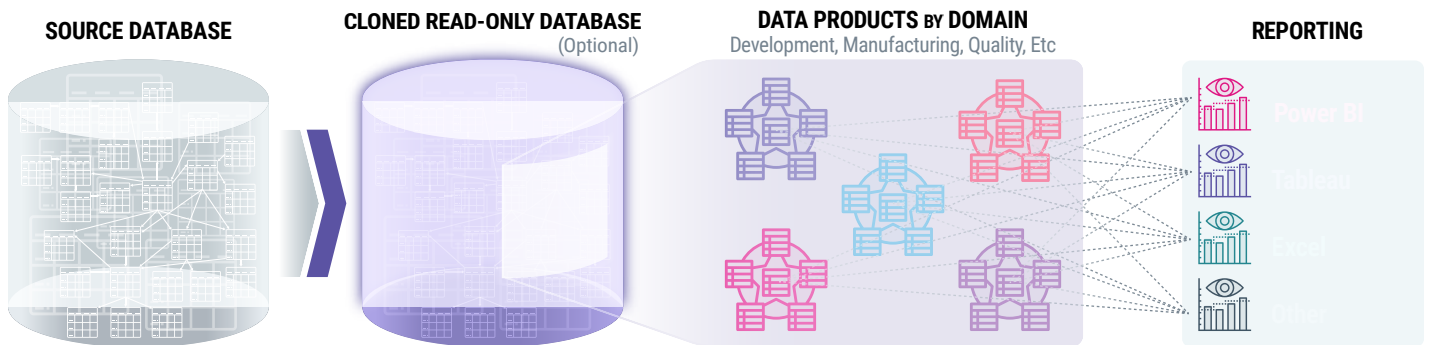

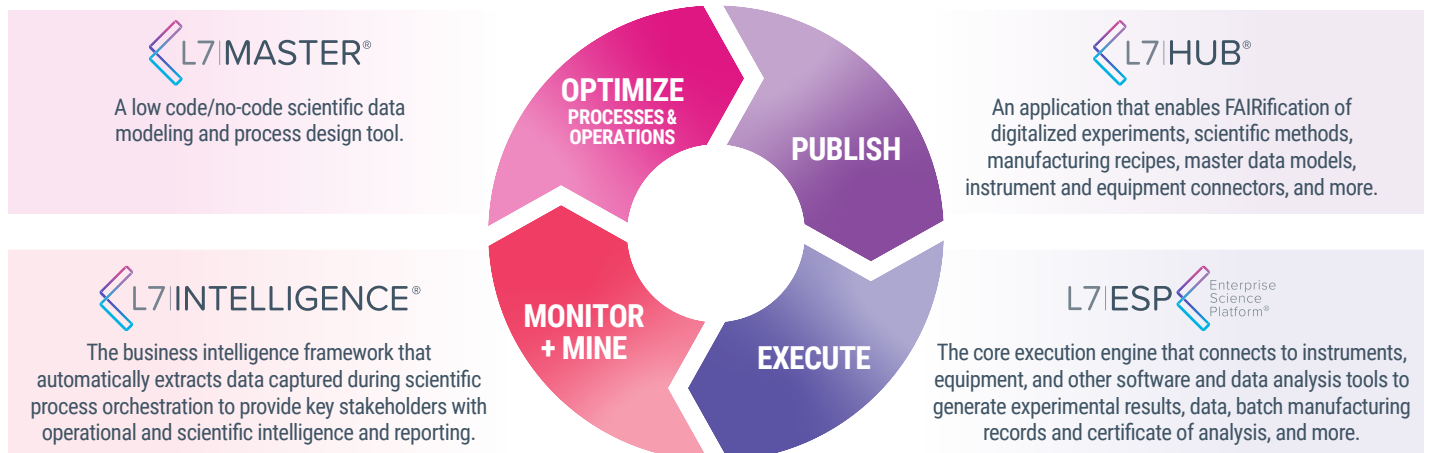### Who Benefits from L7|INTELLIGENCE?:

L7|INTELLIGENCE is built for data-driven professionals across the life sciences sector. Whether you're a data scientist, quality assurance manager, or IT leader, L7|INTELLIGENCE helps you turn contextualized data into valuable insights that drive process optimization, innovation, and faster time-to-market.

A TECHNICAL LOOK AT L7|INTELLIGENCE:

Within L7|ESP, operational data is accessible through database views called Intelligent Table Definitions (ITDs) that simplify how L7|ESP data can be queried. The ITDs provide a structured and efficient representation of all the data, typically from a mirrored read-only database, which enhances performance and eliminates conflicts when the data is accessed. Star-Schema structured data products can be generated through an ELT process that extracts and loads data from the ITDs when working with large data volumes. Multiple data products can be created and maintained for different segments of the data (e.g. research, development, manufacturing, QC, lab operations, etc.). The data is well organized and optimized for analysis, supporting advanced AI and ML applications, from predictive maintenance to precision medicine. By using the ELT paradigm rather than traditional ETL processes, L7|INTELLIGENCE enables faster, more flexible, and more secure data integration.

SOURCE DATABASE   **CLONED READ-ONLY DATABASE** (Optional)   **DATA PRODUCTS BY DOMAIN** Development, Manufacturing, Quality, Etc   **REPORTING**

L7|INTELLIGENCE is part of L7|ESP, where process orchestration + data contextualization drive digital transformation and turn data into a competitive advantage. **The Power of the Platform.**

L7|MASTER®
A low code/no-code scientific data modeling and process design tool.

L7|HUB®
An application that enables FAIRification of digitalized experiments, scientific methods, manufacturing recipes, master data models, instrument and equipment connectors, and more.

L7|INTELLIGENCE®
The business intelligence framework that automatically extracts data captured during scientific process orchestration to provide key stakeholders with operational and scientific intelligence and reporting.

L7|ESP Enterprise Science Platform®
The core execution engine that connects to instruments, equipment, and other software and data analysis tools to generate experimental results, data, batch manufacturing records and certificate of analysis, and more.

OPTIMIZE PROCESSES & OPERATIONS — PUBLISH — EXECUTE — MONITOR + MINE