

Addressing the Unique Challenges of Analytical Data Management in the Modern R&D Environment

Introduction

Commonly used informatics technologies (ELN, LIMS, CDS, Raw data archives, etc.) do not effectively manage the unique challenges of analytical data management.

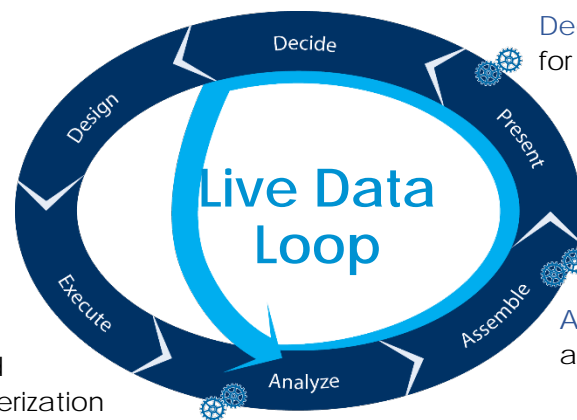
While data abstraction—reduction of analytical data to text, numbers, and images—serves a purpose, it also has limitations since important details, knowledge, and contextual information can be lost.

An Effective Analytical Workflow

Design—experimental planning & master data

Execute—conduct processes and acquire data from instruments

Analyze—data interpretation and comprehensive material characterization



Decide—decision-support dashboard for performance indicator assessment

Present—comprehensive summaries and views with direct connections to interpreted data

Assemble—collect and relate analytical results and chemical data

Automation Options

Design



Execute



Analyze



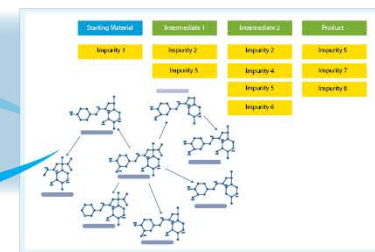
Assemble



Present



Decide



Enrich Your IT Stack With Live Analytical Data

Integration of *live* analytical data with the ACD/Spectrus Platform enables the following:

- **Analytical data aggregation** from all major instrument vendors and techniques (automated if desired)
- Process, analyze, review, re-process, reanalyze, digitally interpret, import, export, and rename with ease
- Storage of **live assembled analytical and chemical data** in a central knowledgebase
- **Chemically intelligent** search and visualization to produce new insights
- Easy, **comprehensive reporting**
- Execution of series of tasks (automated if desired)

