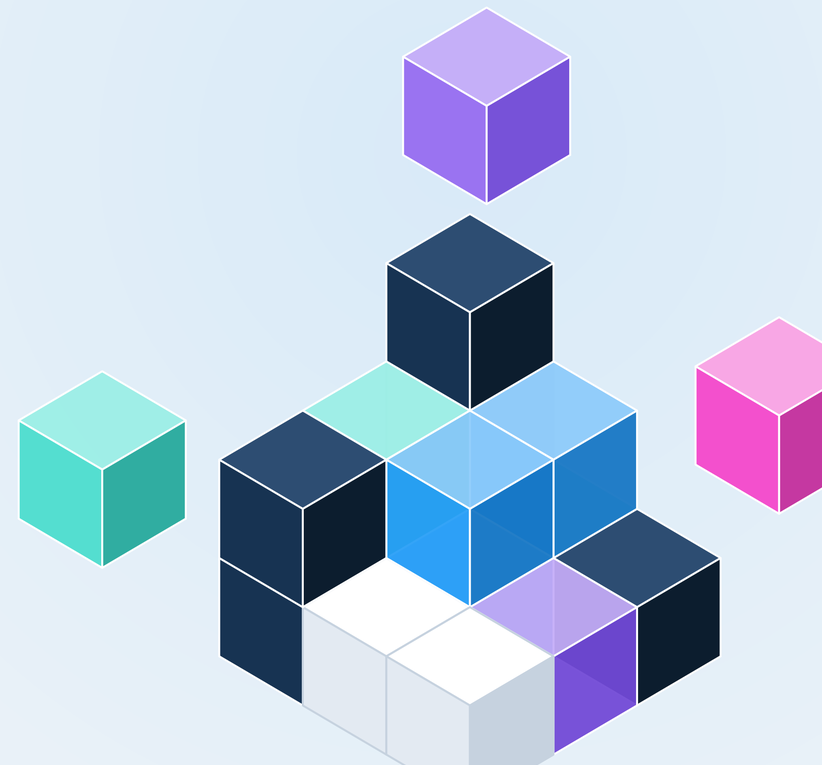
DIGITAL OPERATIONS

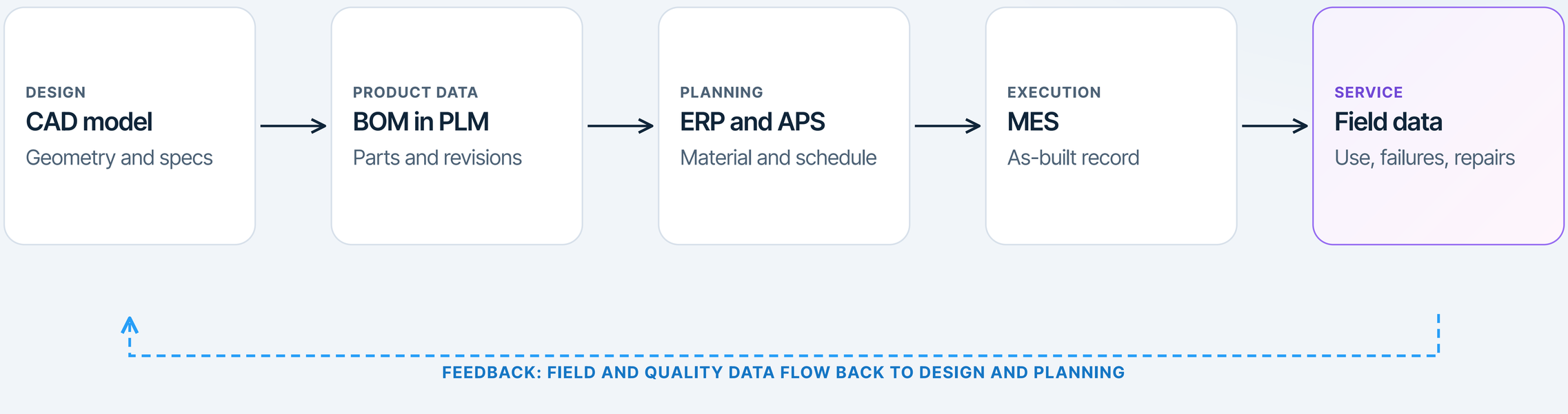
Digital Thread from Design to Service



A digital thread connects product data across the lifecycle, from CAD and BOM through planning and production to service, so each stage works from the same, current information.

01 THE CORE MODEL

LIFECYCLE THREAD · ONE CONNECTED DATA FLOW



Digital thread

A connected flow of product data across the whole lifecycle.

Single source of truth

Each data element has one authoritative origin that others reference.

Closed loop

Field and production data return to improve design and planning.

02 WHY IT MATTERS

Broken threads mean re-keying, errors and slow engineering changes.

BROKEN — CONNECTED

BROKEN THREAD

- Drawings re-keyed into ERP
- Production builds an old revision
- Field failures never reach design

CONNECTED THREAD

+ Changes flow automatically downstream
+ Every unit traceable to its design
+ Design learns from real usage

03 WORKED EXAMPLE

FIELD FAILURE OF A VALVE ACTUATOR · FOLLOWING THE THREAD



04 MANAGEMENT TAKEAWAYS

01 — Start with traceability

Link serial numbers to as-built and as-designed data first.

02 — Agree common identifiers

Part numbers and revisions must match across systems.

03 — Close the loop

Route quality and field data back to engineering.

05 COMMON MISTAKE

LIMITATION

Treating it as an IT project

Without agreed data ownership and processes, connected systems still carry inconsistent data.