

AI-ENGINEERING-COCKPIT.

TRANSFORMING AUTOMOTIVE ENGINEERING THROUGH CONNECTED INTELLIGENCE.

JENS VEDDELER | BMW GROUP

KEY CHALLENGES IN ENGINEERING & DEVELOPMENT:

Zero-defect
expectations
from customers

Rising regulatory
complexity

High effort and long cycle
times in ticket/defect
handling

Tool fragmentation and
weak interoperability

“Grown” processes without
an end-to-end strategy

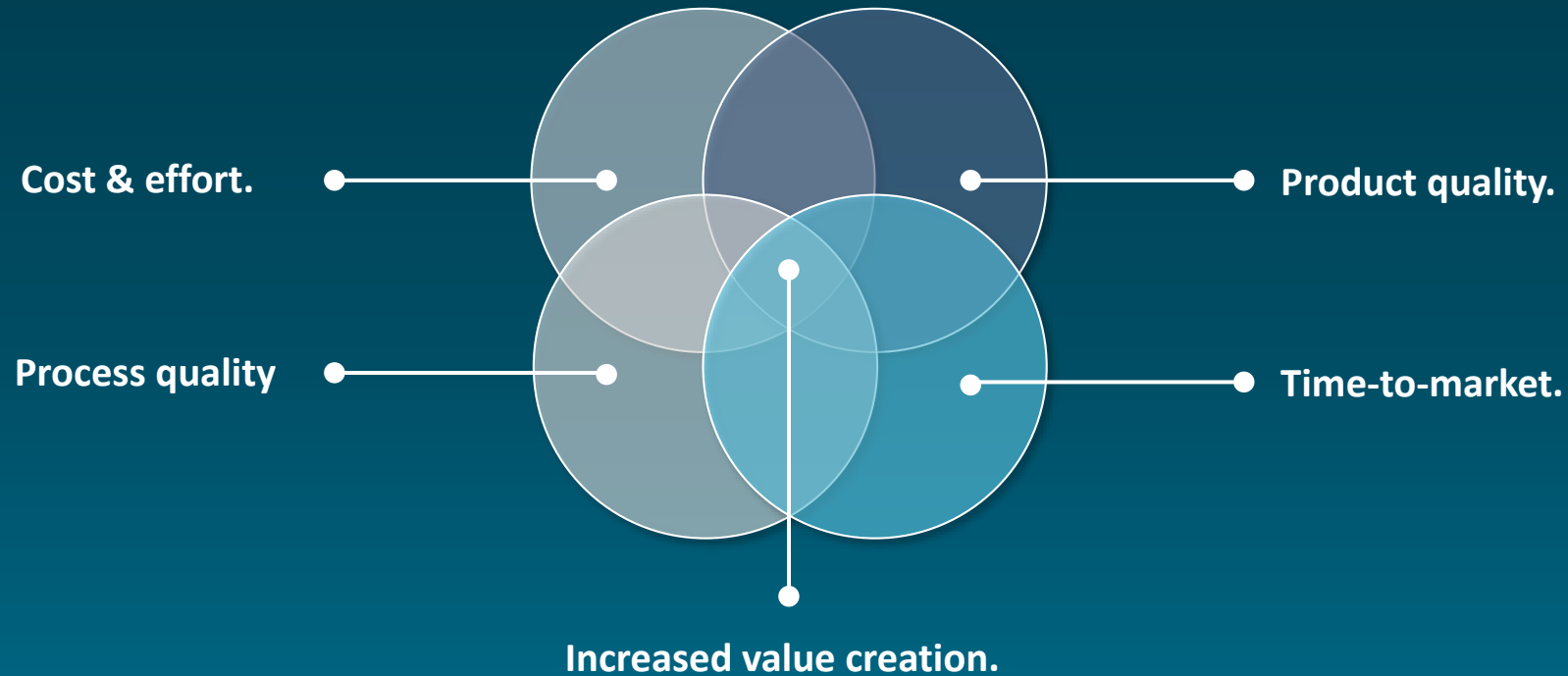


Increasing product &
system complexity

Pressure from new
competitors

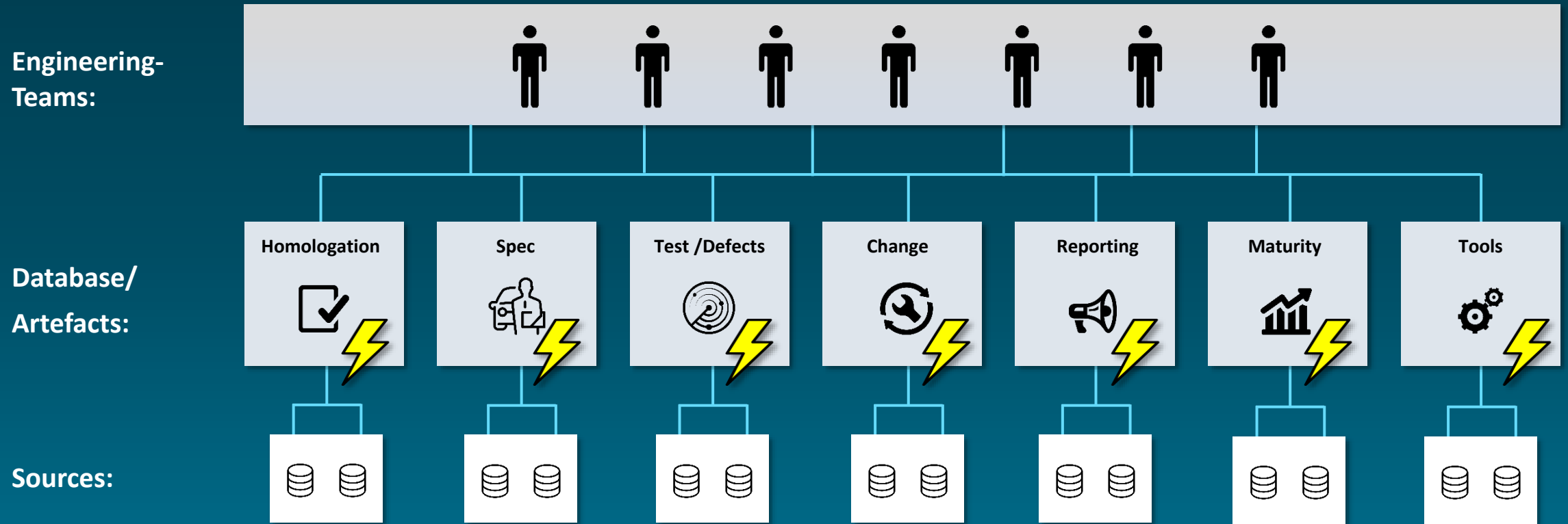
The result: slow decisions, rework, and poor transparency.

GREATER VISION: VALUE UPLIFT ACROSS MAJOR DOMAINS:



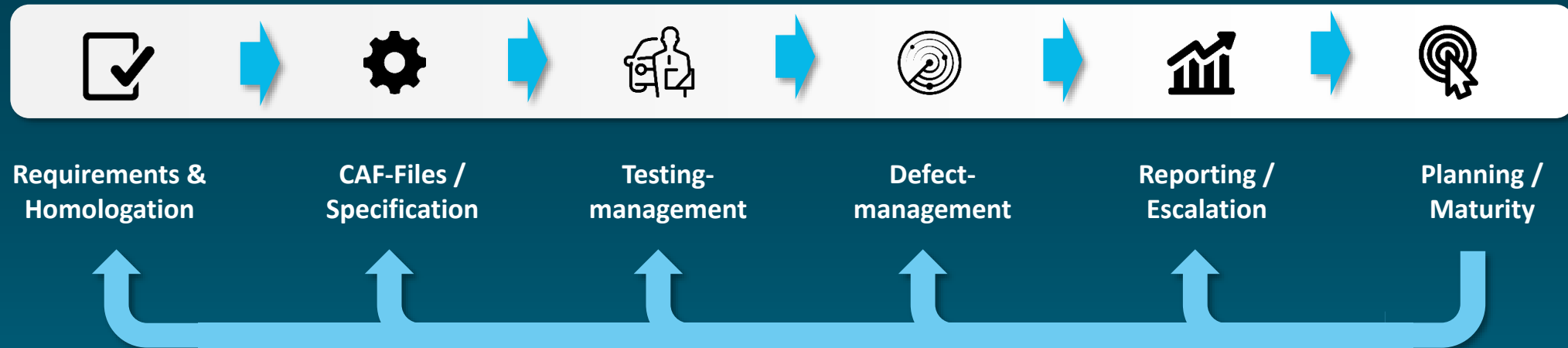
AI connects fragmented engineering data and enables end-to-end decisioning.

FROM SPEC TO TEST AND MATURITY: FRAGMENTED SILOS CREATE FRICTION.



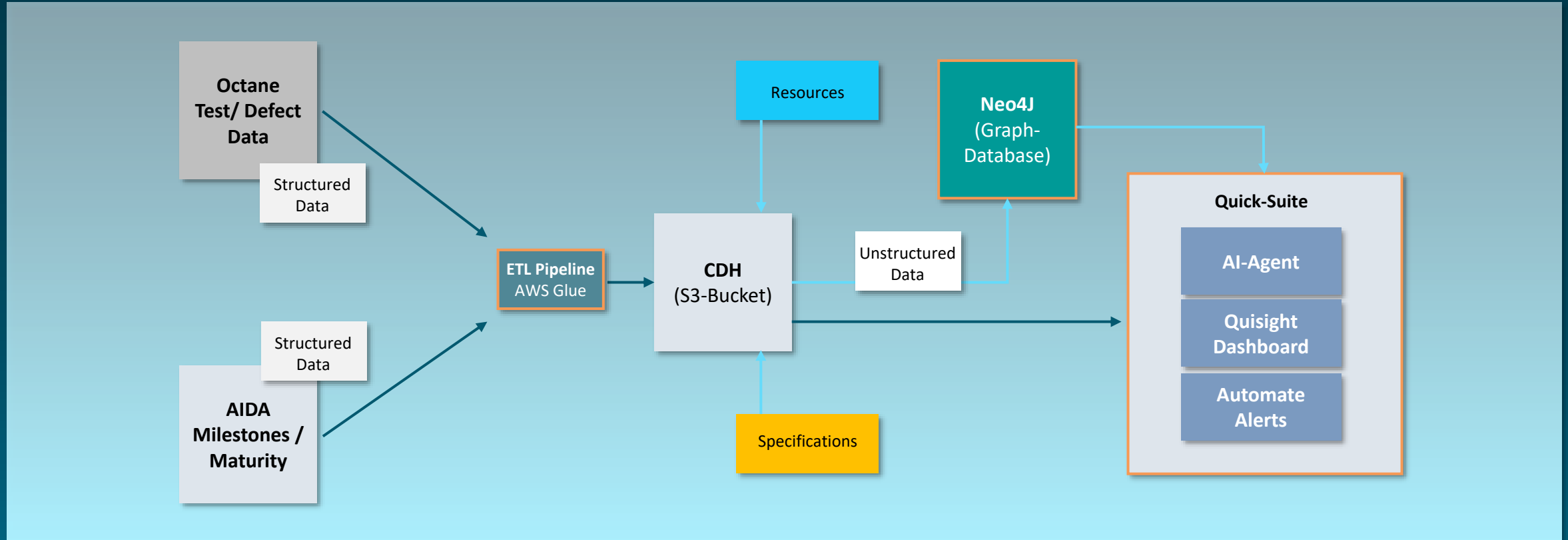
The Engineers don't lack data – they lack of connection of data!

AI-ENGINEERING COCKPIT IN PROJECT-PHASES: PROACTIVE ADVICE AND IMPLICATIONS ON CHANGES AND RISK.



1. Improved data transparency and comprehension.
2. Accelerated decision-making.
3. Improved decision quality.

ARCHITECTURE WITH KNOWLEDGE-GRAPH.



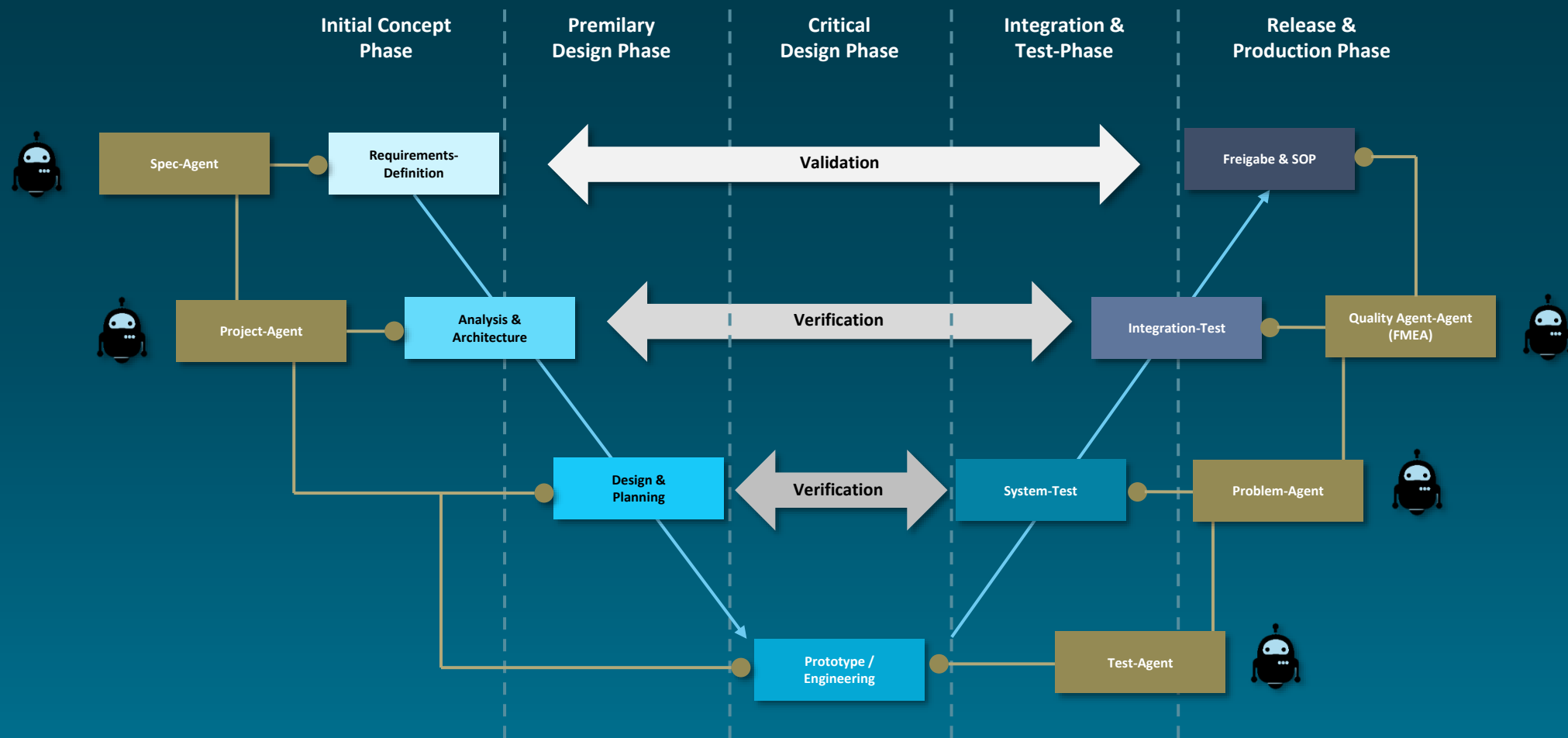
1. Ingest structured data (test/defect, milestones/maturity).
2. Combine with unstructured artefacts (specs, documents) > Store & connect via graph database.
3. Expose via “Quick Suite”: AI assistant, dashboard, automated alerts.

AIDA & Ticket-Prozess in Octane:
Root-cause & dependency analysis across requirements, test & defects.

AIDA & Ticket-Prozess in Octane:

Root-cause & dependency analysis
across requirements, test & defects.

LONG-TERM VISION: MULTI-AGENT SYSTEM FOR DEVELOPMENT.



Goal: faster validation & verification with clear guardrails along all project-phases.