

VERIFIED WORK EPISODES FOR OIL & GAS

Connecting what the process did to what people did, why they did it, and what should improve next.

Master strategy • Partner/ oil & gas



THE CENTRAL THESIS

PART I

Exxon sees process. EON sees work.

Sensors and control systems show consequences.
EON connects them to authorized intent, physical
execution, judgment, evidence, and outcome.



Today's operational nervous system is already powerful

Oil and gas operations combine physical sensing, deterministic control, human supervision, enterprise records and field expertise.

SENSORS

Pressure, flow, temperature, level, gas, vibration and equipment state.

PLC + RTU

Local logic and remote telemetry collect signals and execute fixed control.

DCS + SCADA

Operators supervise plants, pipelines, wells, pumps and valves.

HISTORIAN + ALARMS

Time-series process memory, commands, alarms and event sequences.

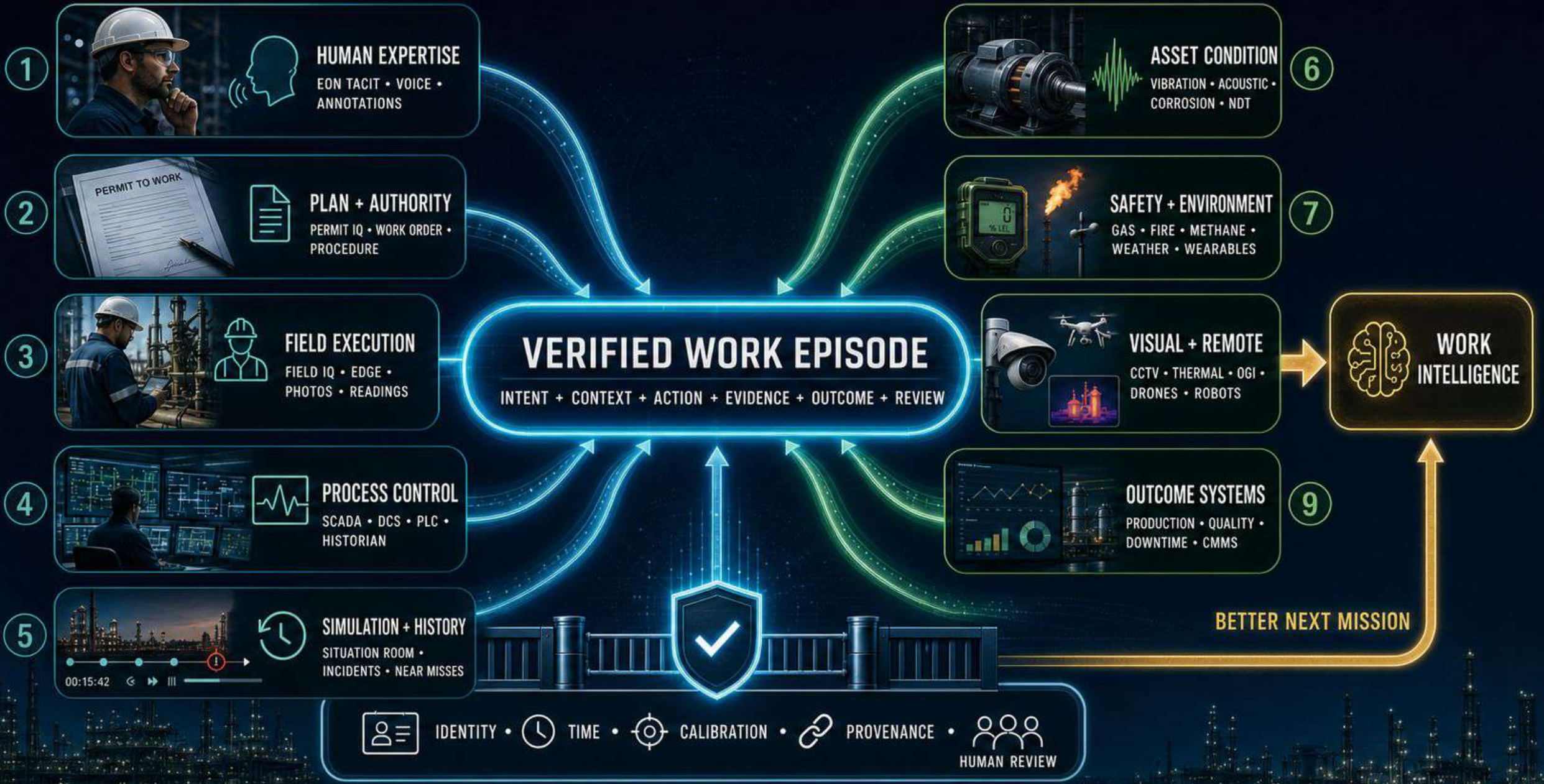
CMMS + OUTCOMES

Work orders, maintenance history, production, quality and downtime.

PEOPLE + PERMITS

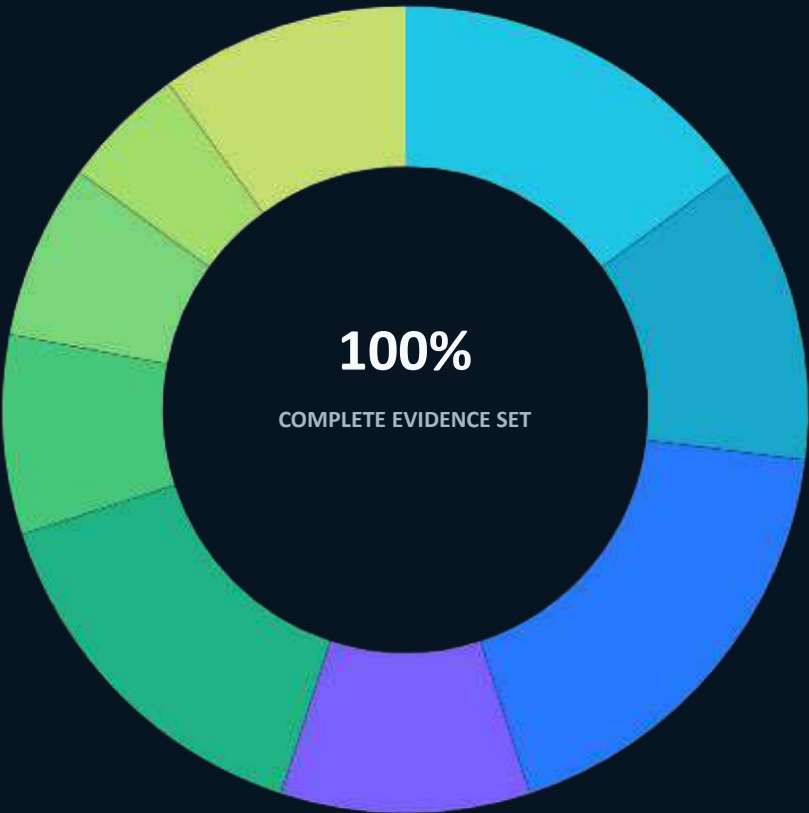
Expertise, authority, field inspection and responsibility.





Where a complete Verified Work Episode gets its value

Nine editable evidence categories. Illustrative model—not audited Partner Statistics.



55% • EON-CREATED WORK CONTEXT

- Human expertise • 15%
- Plan + authority • 12%
- Field execution • 18%
- Simulation + governance • 10%

45% • EXISTING OPERATIONAL EVIDENCE

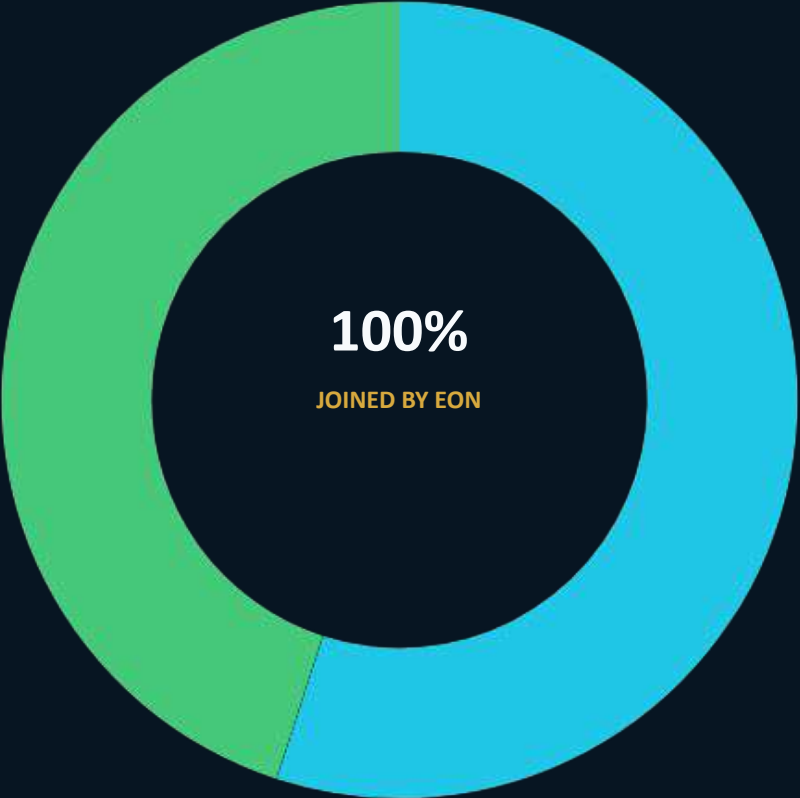
- Process control • 15%
- Asset condition • 8%
- Safety + environment • 7%
- Visual + remote • 5%
- Outcome systems • 10%

100% • EON JOINS AND VERIFIES THE ENTIRE EVIDENCE SET

The strategic value is the contribution plus the governed connection.

What EON contributes—and what already exists

EON creates the missing work context, then joins it with operational evidence already produced by the facility.



55%

EON-CREATED WORK CONTEXT

Tacit expertise • plan + authority • field execution • governed review

45%

EVIDENCE THAT ALREADY EXISTS

Process control • condition • safety • remote sensing • outcomes

THE EON ADVANTAGE

EON makes the 45% usable as part of a verified work story—and governs the full 100%.

55/45 is a starting hypothesis—not a measured Partnerfact. Validate it by job type and available systems.

What existing systems cover—and where the gap remains

Directional planning view, not audited Partner Statistics. Validate by site, asset class and job type.

PROCESS VISIBILITY • HIGH

Strong on critical variables at major plants and pipelines; more selective at remote and legacy sites.

HANDS-ON WORK VISIBILITY • UNEVEN

Field actions, observations and reasoning often live outside control and maintenance systems.

CONNECTED EPISODES • LOW

Plan, authority, execution, signals and later outcome rarely share one reconstructable record.



How governed work happens today

Every job moves through the same basic chain—but its evidence is distributed across people and systems.

REQUEST + PLAN

Work order, asset, scope, procedure and expected outcome.

AUTHORIZE

Permit, roles, safeguards, isolations, limits and stop conditions.

CONTROL ROOM

Signals, alarms, coordination, approved control moves and dispatch.

FIELD EXECUTION

Physical checks, work, observations, adaptations and proof.

OUTCOME

Restart, quality, uptime, recurrence, downtime and maintenance result.

LEARNING

Reviews exist, but the causal evidence remains fragmented.



The control room sees the process consequence

Operators have strong visibility into machine state—but limited visibility into hands-on execution.

- They see pressure, flow, temperature, level, valve state, equipment status, trends, alarms and communications.
- They coordinate field teams, authorize bounded actions, stabilize the process and record commands and events.
- They usually cannot see which physical step was performed, what the worker observed, or why an adaptation was made.



The field worker sees the physical reality

The worker stands where labels, corrosion, access, sound, smell, resistance and unexpected conditions become real.

- They verify the asset, isolation, safeguards and physical condition before touching the equipment.
- They execute the procedure, interpret uncertainty, adapt within authority, stop when necessary and communicate with operations.
- Their most valuable observations and judgment are often captured weakly—or not at all—in enterprise records.



Two true stories remain disconnected

The historian says the process changed. The work order says the job closed. Neither proves the causal work story: what was authorized, what physically happened, what people knew, and what produced the outcome.



A pump repair becomes a complete episode

Synchronize the governed job timeline with the process timeline.

BEFORE

Permit, asset identity, safeguards, expected procedure, baseline sensor state and predicted response.

DURING

Field actions, observations, exceptions, photos and readings aligned to commands, trends, alarms and events.

AFTER

Restored state, restart evidence, production and quality response, recurrence and qualified review.



Evidence becomes verified only after it passes a trust gate

More data is not enough. The episode must be attributable, synchronized and reviewable.

IDENTITY + AUTHORITY

Correct asset, person or role, job, permit, procedure and decision rights.

TRUSTED TIME + DATA

Synchronized clocks, calibrated sensors, source provenance, integrity and context.

QUALIFIED REVIEW

Human and machine evidence correlated; exceptions resolved; reuse rights approved.



A Verified Work Episode is a governed unit of operational experience

It explains not only what happened—but whether the organization should trust and reuse the lesson.

PLAN + AUTHORITY

Asset, task, procedure, permit, roles, safeguards, limits and expected result.

JUDGMENT + EXECUTION

Cues, decisions, physical actions, deviations, stop-work and expert reasoning.

EVIDENCE + OUTCOME

Field proof, sensor windows, alarms, restored state, business result and review.



EON supplies the missing episode architecture

The value does not come from one model. It comes from governed, verified operational experience that any approved model can use.

EON TACIT

Captures expert interviews, demonstrations, exceptions, cues and reasoning.

PERMIT IQ

Defines authorized intent, roles, safeguards, conditions and evidence contract.

FIELD IQ + EDGE

Captures physical execution, observations and proof—including offline or restricted areas.

SITUATION ROOM

Reconstructs people, systems, evidence, decisions and consequences on one timeline.

ASSESS + COMPOUND

Scores episodes and finds recurring patterns across similar work.

DISTILLERY

Approves reusable lessons and manufactures better next missions.



Permit IQ turns the permit into a controlled handshake

The permit becomes a living agreement between the mission, operations and field execution.

SCOPE

Correct asset, job, boundary, procedure, roles and expected outcome.

CONDITIONS

Safeguards, isolations, prerequisites, stop criteria and approved adaptations.

AUTHORITY + EVIDENCE

Who may decide, what must be proven, when to route and how completion is accepted.



The system carries context; the worker carries judgment

EON reduces cognitive burden without removing human authority.

TODAY

The worker manually connects work order, permit, procedure, local labels, conversations and system state.

WITH EON

The mission arrives with asset context, evidence requirements, safeguards, decision boundaries and relevant experience.

THE BOUNDARY

People retain authorization, stop-work, uncertainty handling, exception judgment and accountability.



Permit IQ describes the evidence contract; Field IQ fulfills it

The handoff makes the episode intentional instead of accidental.

- **Before work: define critical checkpoints, acceptable proof, expected sensor response, stop conditions and escalation routes.**
- During work: capture the smallest sufficient evidence at the moment it matters—even when offline or hands-free.
- After work: confirm restored state, correlate the process window, route exceptions and approve the episode for learning.



A sensor-enriched episode joins three independent keys

The strongest proof combines governed intent, physical confirmation and machine/outcome evidence.

AUTHORIZED INTENT

Work order, permit, procedure, safeguards, roles and expected state change.

FIELD + MACHINE EVIDENCE

Actions and observations synchronized to readings, alarms, commands, trends and events.

VERIFIED OUTCOME

Restored equipment state, later operating result, qualified review and approved lesson.



The learning object is the operational delta

EON compares what should have happened with what actually happened—and explains the difference.

- **APPROVED PLAN:** expected steps, safeguards, evidence, process response and completion criteria.
- **FIELD REALITY:** actual sequence, observations, exceptions, adaptations, sensor response and outcome.
- **CANDIDATE LESSON:** the condition or decision that should improve the next permit, mission, training or model.



Assess, compound and distill the operational gold

One episode can help one job. Governed patterns across episodes create enterprise Work Intelligence.

ASSESS IQ

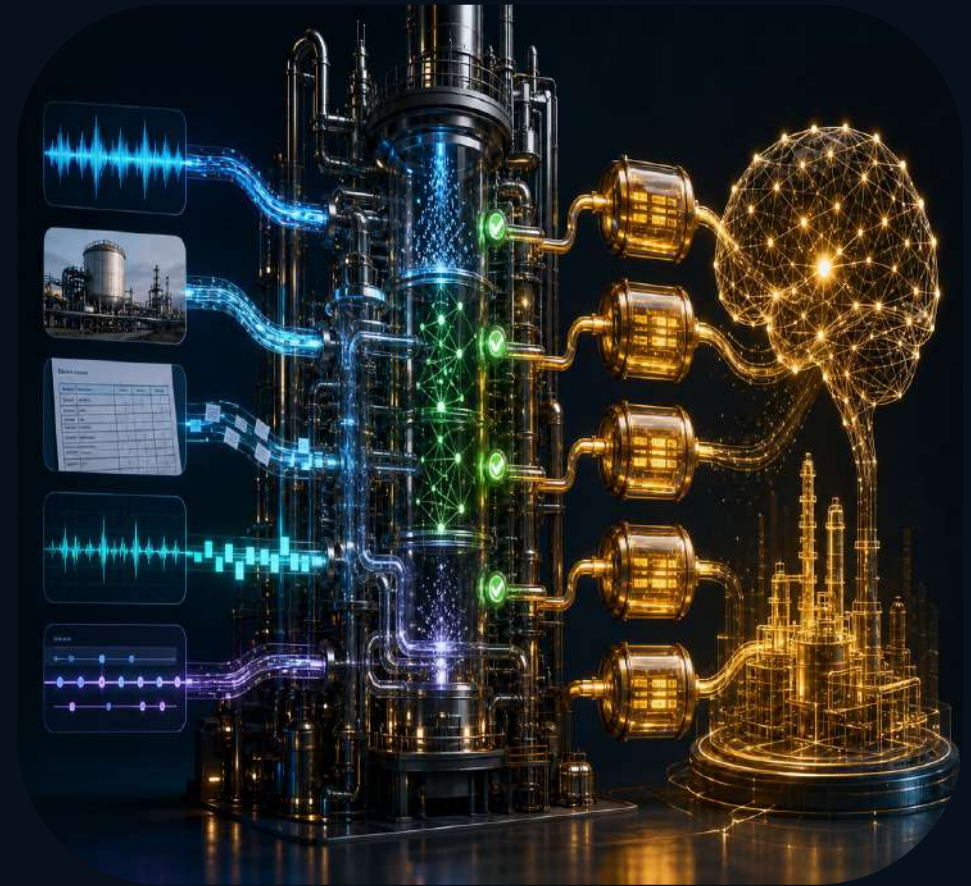
Measure completeness, trust, proficiency, decision quality, coordination and outcome.

COMPOUND IQ

Compare similar episodes to discover recurring cues, failure modes and success patterns.

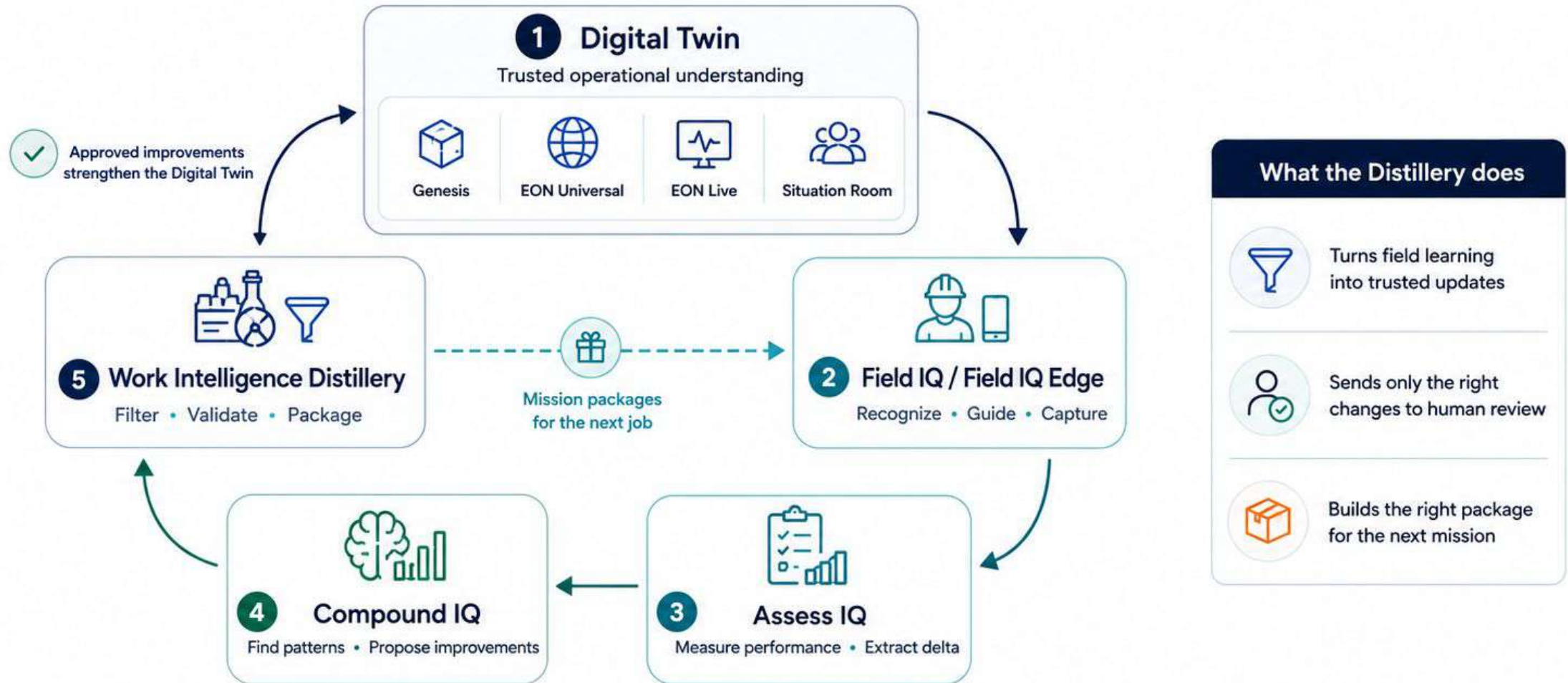
THE DISTILLERY

Qualified review converts candidate lessons into approved, traceable and deployable knowledge.



The EON Work Intelligence Flywheel

From Digital Twin to Field Learning and Back



The flywheel compounds Work Intelligence over time.

Every verified episode improves six downstream systems

The flywheel compounds because the episode is structured, attributable and reusable.

DIGITAL TWIN

Adds operational state, behavior, relationships and proven work history.

PERMITS + PROCEDURES

Improves safeguards, checkpoints, limits, evidence and exception routes.

TRAINING

Creates realistic scenarios based on actual cues, decisions and consequences.

SITUATION ROOM

Accelerates reconstruction, diagnosis, coordination and after-action review.

MISSION PACKAGES

Deploys a better context-rich next job to people and machines.

AI + ROBOTICS

Supplies grounded examples for assistance, simulation, autonomy and evaluation.



Field IQ earns its investment at three levels

It is not another sensor. It is the execution evidence layer that closes the enterprise learning loop.

IMMEDIATE JOB VALUE

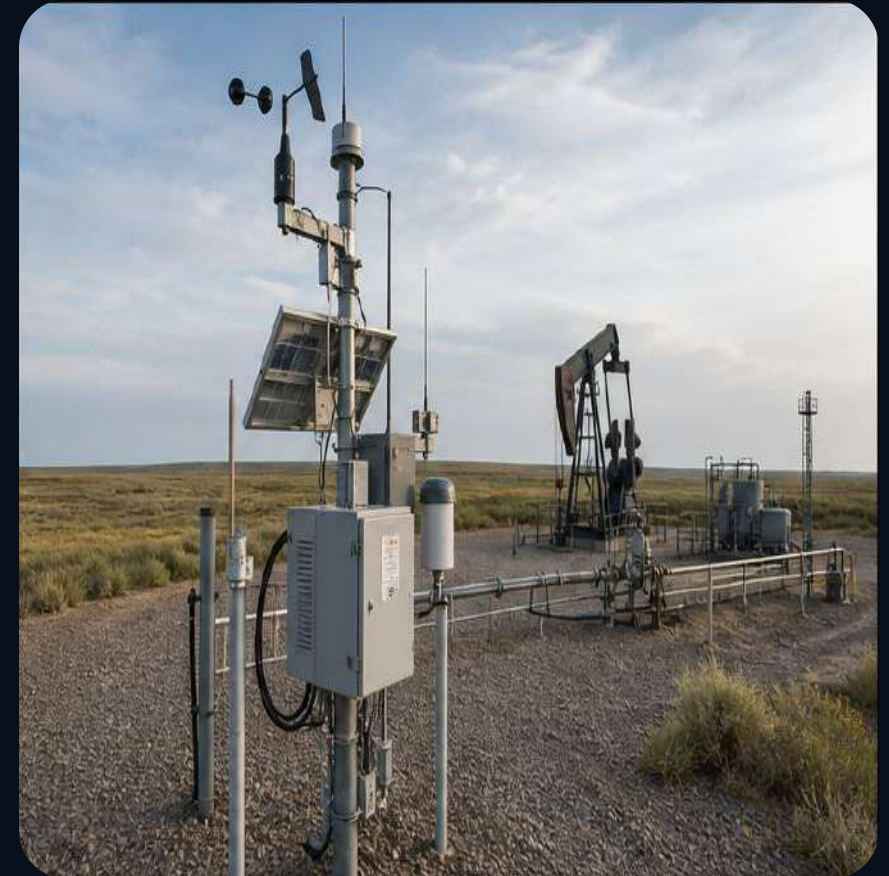
Fewer wrong assets, missed checks, repeat visits, incomplete evidence and delayed closeout.

EPISODE VALUE

Proves the relationship between authorized work, physical execution, process response and outcome.

WORK INTELLIGENCE VALUE

Compounds verified field experience into better missions, training, procedures and AI.



The training center is the safest entry point

Fifty physical skids, a simulated process and coordinated teams can manufacture known-ground-truth episodes.

PHYSICAL SKIDS

Pumps, valves, compressors, separators, instruments, isolation points and tactile field work.

CONTROL ROOM + FIELD TEAM

One scenario, two viewpoints, closed-loop communication and coordinated action.

INSTRUCTOR + SITUATION ROOM

Fault injection, synchronized replay, assessment, after-action review and approved learning.



Use a progressive data strategy—do not begin with the can of worms

Prove value and governance before asking for broad production-system access.

1 • SYNTHETIC + TRAINING DATA

Create known ground truth with simulator signals, alarms, permits, field evidence and outcomes.

2 • APPROVED HISTORICAL WINDOWS

Use bounded exports around selected jobs, incidents and recurring failures.

3 • CUSTOMER-CONTROLLED READ-ONLY PILOT

Integrate only the approved tags, events and jobs required to test the hypothesis.



Recommended pilot: prove the episode before scaling the platform

One asset family. One governed job. One abnormal condition. One measurable operating result.

PHASE 1 • SINGLE-SKID PROOF

Pump-seal or valve-isolation mission with Permit IQ, Field IQ, simulator signals and synchronized replay.

PHASE 2 • MULTI-SKID COORDINATION

Add cascading alarms, handovers, conflicting indicators and control-room/field communication.

PHASE 3 • BOUNDED CUSTOMER HISTORY

Add approved historian windows, alarm logs, work orders and outcomes through controlled interfaces.



Measure proof, not activity

The pilot should quantify immediate operational value and the quality of the learning asset created.

JOB QUALITY

Correct asset and step, first-pass completion, evidence completeness, closeout time and repeat visits.

COORDINATION + SAFETY

Recognition, escalation, closed-loop communication, stop-work decisions and safe restoration.

LEARNING + SCALE

Episode verification rate, reusable lessons, mission improvements, recurrence and adoption burden.



Sell the verified connection

Oil and gas companies already see the process. EON makes the work itself observable, explainable and reusable.

- **Acknowledge the strength of existing control, historian, maintenance and safety systems.**
- Join those systems to authorized intent, physical execution, human judgment and outcome.
- Start in the training center, then move to bounded customer data and selected field missions.
- Protect worker trust: verify the work and equipment state—do not build surveillance scoring.
- Compound the verified episodes into EON's most valuable strategic asset: Work Intelligence.

