

EON WORK INTELLIGENCE · FIELD IQ EDGE

FIELD IQ EDGE

A Digital Twin Beyond Connectivity

How Work Intelligence Distillation carries the right intelligence to every worker, anywhere — online or offline.

RECOGNIZE

GUIDE

CAPTURE

ONLINE / OFFLINE

Digital Twin + Work Intelligence Distillation = Field IQ Edge

Executive presentation · Draft v1



THE CONNECTIVITY GAP

Work does not stop when the network does.

The most valuable decisions often happen in the least connected places.

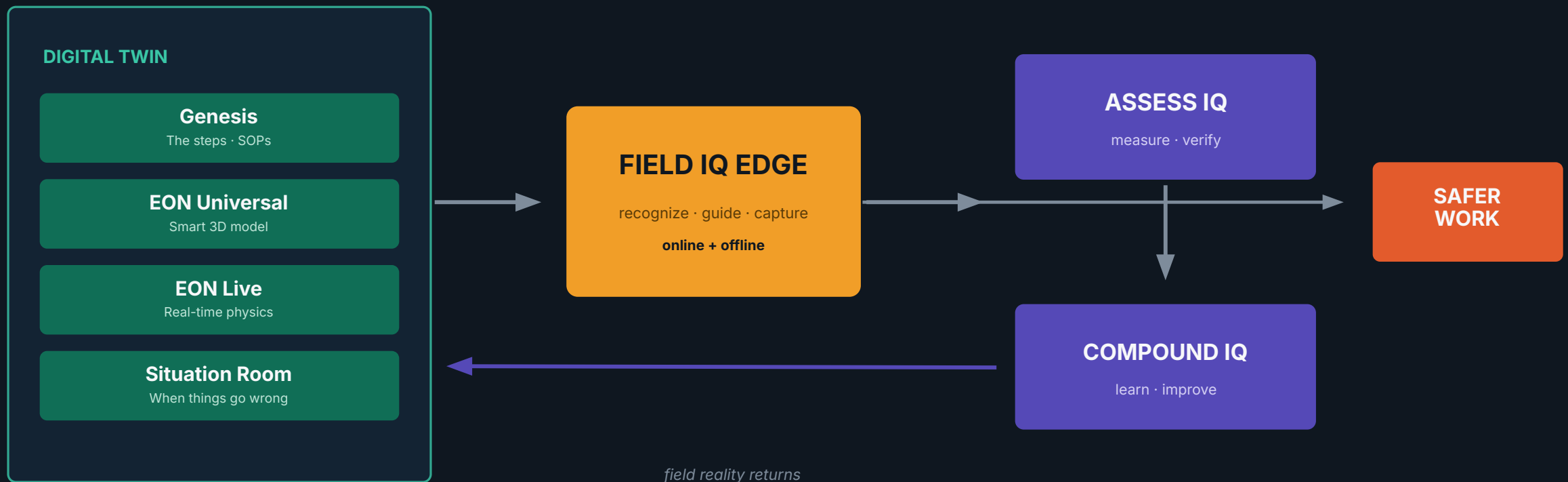
- 1 Dead zones** Offshore, underground, remote and metal-dense facilities.
- 2 Air gaps** Cybersecurity and sovereignty policies can block cloud access.
- 3 Immediate response** Recognition, stop rules and step confirmation cannot wait.
- 4 Cost and resilience** Continuous video and cloud inference are expensive and fragile.

Cloud-only AI is impressive in a demo. Field IQ Edge is designed for the moment the signal disappears.



The existing Work Intelligence flywheel stays intact

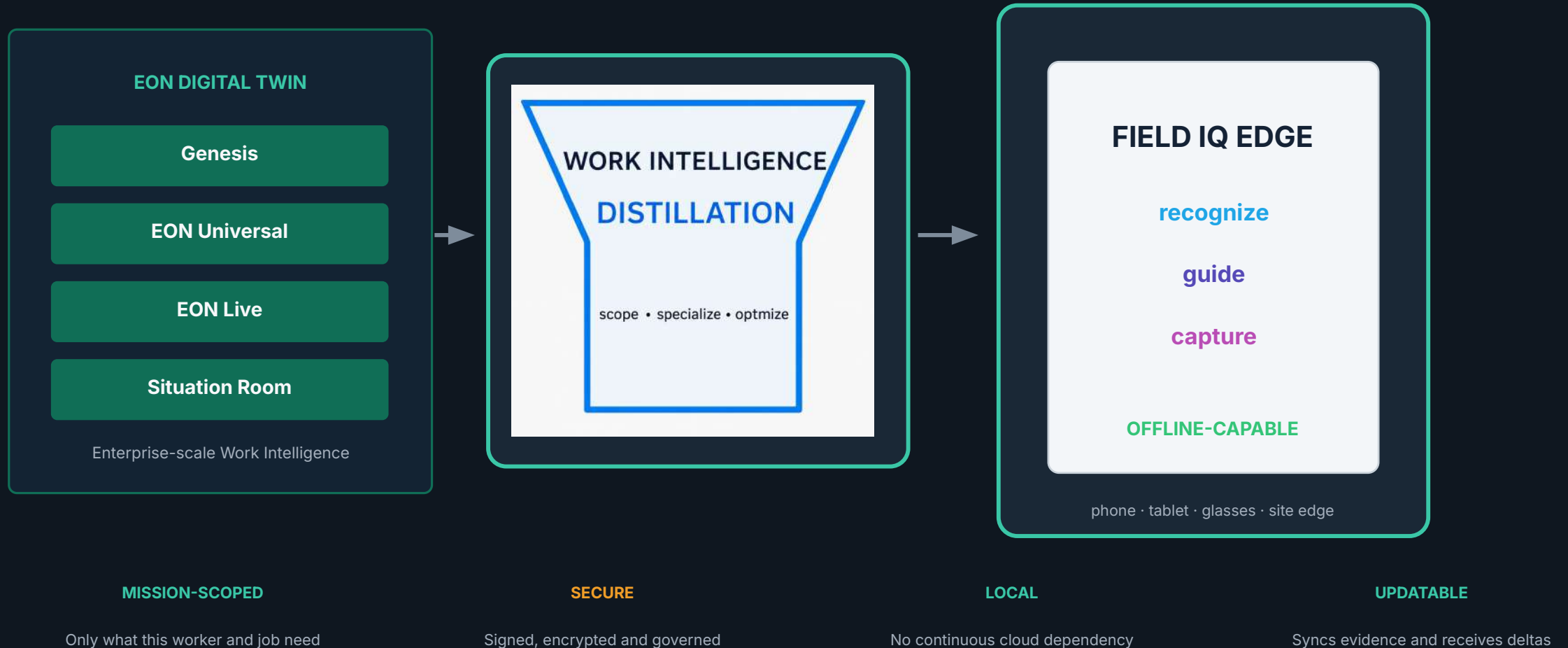
Field IQ Edge extends one existing station; it does not introduce another product ecosystem.



No new product names. No parallel platform. One flywheel — now able to operate beyond connectivity.

The Digital Twin travels with the worker

The cloud creates the full intelligence. The edge carries the exact intelligence required for the mission.



Work Intelligence Distillation

A governed process that turns enterprise-scale intelligence into a mission-ready edge package.

Select, ground, specialize, compress, validate and package the portion of the EON Digital Twin required for a defined industry, customer, site, role, mission, device and risk profile.



Not just model compression: it packages models + approved knowledge + twin relationships + workflows + safety policy + synchronization.

What travels in a Field IQ Edge package

A signed technical bundle — not simply a small language model.

01 Perception models

Object detection, segmentation, OCR and state cues.

02 Identity resolver

Visual evidence + tags + location + twin relationships.

03 Local knowledge

Encrypted documents, structured facts and vector index.

04 Twin subset

Assets, components, geometry, hazards and cached context.

05 Workflow engine

Approved procedures represented as deterministic states.

06 Safety & authorization

Stop rules, role permissions, confidence and escalation.

07 Experience assets

AR anchors, diagrams, animations, speech and language.

08 Evidence & sync

Append-only log, media, readings, versioning and delta sync.

Every package is scoped by industry + customer + site + mission + device + risk.

Offline capability pyramid

The goal is not to reproduce the entire cloud. It is to preserve the assigned mission.

LEVEL 5 · CONNECTED ENTERPRISE INTELLIGENCE

Full simulation · enterprise search · fleet analytics · expert collaboration

LEVEL 4 · ADAPTIVE OFFLINE GUIDANCE

Context-aware troubleshooting · safety gates · bounded abnormal scenarios

LEVEL 3 · OFFLINE ASSISTANCE

Trusted Q&A · local search · voice · procedure retrieval

LEVEL 2 · OFFLINE RECOGNITION

Known assets · components · OCR · QR / NFC · identity confirmation

LEVEL 1 · OFFLINE FOUNDATION

SOPs · manuals · drawings · videos · checklists · evidence capture

FULLY OFFLINE

Levels 1–4 are designed to keep the core job moving without internet.

CLOUD-ENHANCED

One experience across three connectivity states

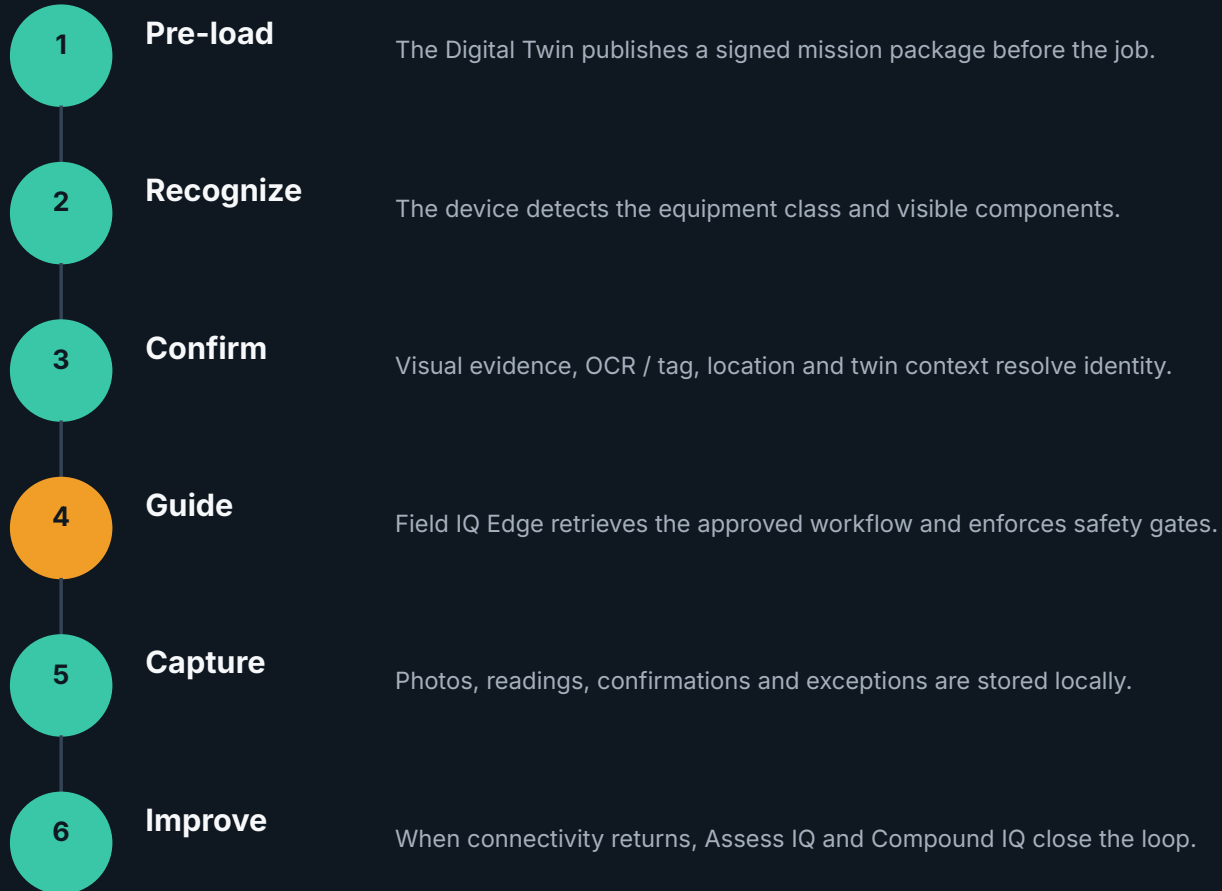
Cloud adds breadth and depth. It should not define basic continuity.

	FULLY OFFLINE No internet	SITE / LIMITED Local gateway or intermittent WAN	FULLY CONNECTED Cloud and enterprise services
RECOGNITION & IDENTITY	✓ Known catalog + multi-signal confirmation	✓ Adds site systems and larger local models	✓ Adds cloud fallback and live enterprise context
SOPS & TRUSTED Q&A	✓ Full within the signed package	✓ Selective remote retrieval and updates	✓ Enterprise-wide search and latest approved content
GUIDANCE & SAFETY	✓ Step workflows, stop rules and evidence	✓ Local collaboration and sensor integration	✓ Remote experts, full simulation and live analytics
LEARNING & UPDATES	✓ Capture locally; queue deltas	✓ Sync through site services	✓ Cross-site learning, package generation and fleet management

Design rule: every critical assigned workflow must be validated on the device alone.

How the field experience works

Example: a technician inspects a pump during a connectivity outage.

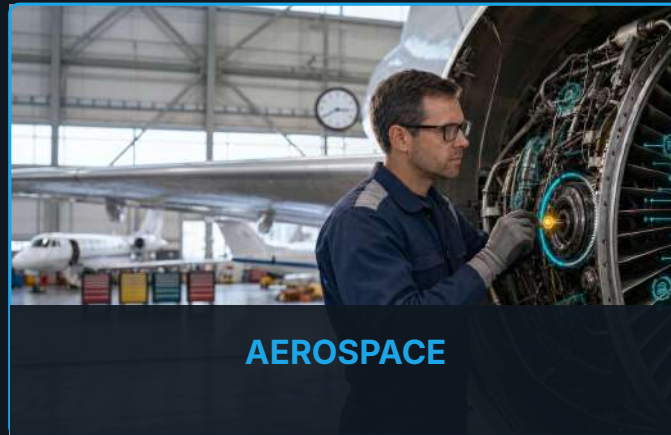


Specialized by industry. Private by customer.

The same edge runtime can carry different industry expertise while preserving customer ownership.



Pumps · valves · isolations
LOTO · inspection · abnormal operations



Task cards · engines · tooling
FOD · inspection · compliance evidence



Equipment setup · clinical workflows
Procedural assurance · audit support

EON CORE

runtime · security · package format

INDUSTRY INTELLIGENCE

ontology · models · hazards · benchmarks

CUSTOMER INTELLIGENCE

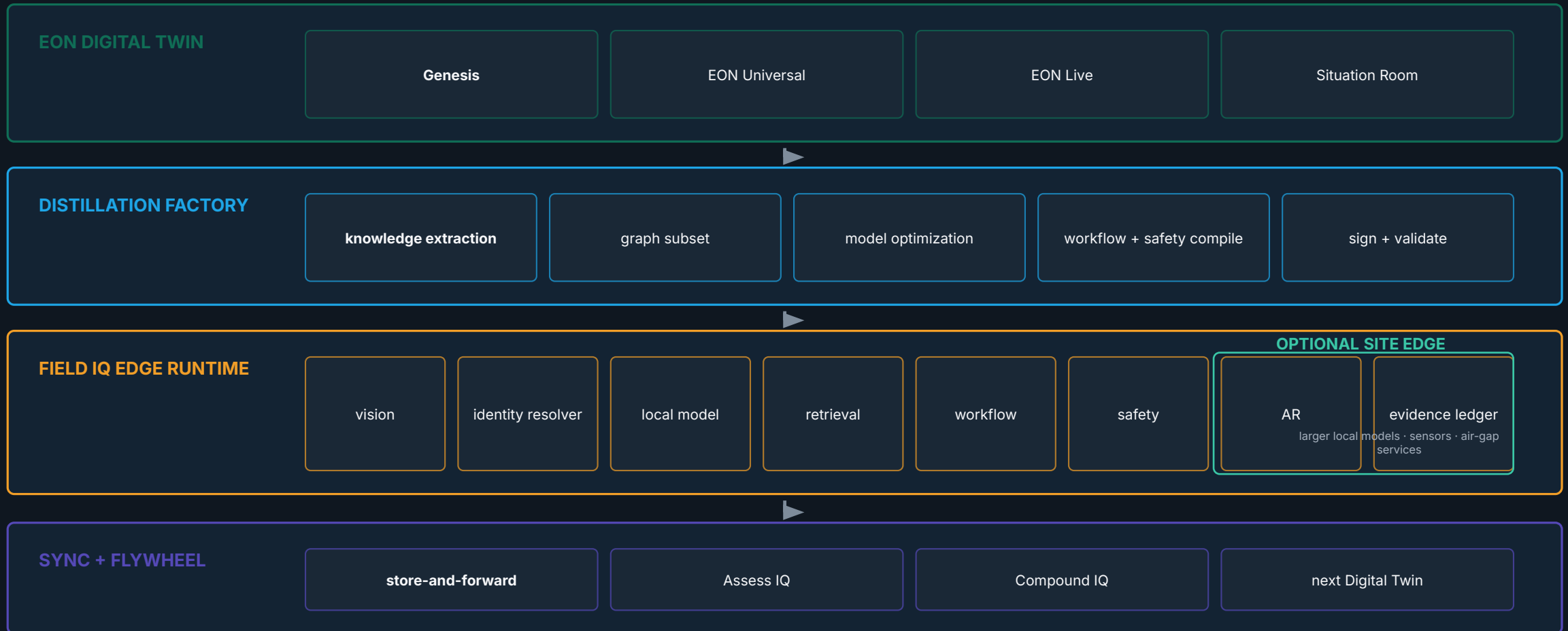
SOPs · assets · history · terminology

MISSION PACKAGE

site · role · work order · device · risk

Technical reference architecture

Device-first, gateway-optional, cloud-enhanced.



Safety and trust are architecture — not prompts

The generative model explains and orchestrates. Approved sources, workflows and safety policy remain authoritative.

APPROVED SOURCES

revision · validity · provenance

DETERMINISTIC WORKFLOW

sequence · prerequisites · evidence

SAFETY & AUTHORIZATION

stop rules · permissions · escalation

LOCAL AI

explain · retrieve · interpret

Authority flows downward. Auditability flows upward.



Identity confirmation

Critical assets require multiple signals and explicit confirmation.



Confidence-aware UX

Low confidence triggers clarification, alternative checks or escalation.



Safe defaults

Expired packages, conflicts or malformed outputs move to a defined safe state.



Full audit trail

Sources, versions, model outputs, workflow transitions and evidence are reconstructable.



Rollback & revocation

A package can be disabled or replaced without waiting for an app release.

LOW CONFIDENCE = CLARIFY, STOP OR ESCALATE. NEVER GUESS.

The IP boundary is a strategic advantage

Use replaceable foundation models. Own the system that turns enterprise knowledge into deployable, compounding Work Intelligence.

EON-OWNED

- ✓ Work Intelligence Distillation pipeline
- ✓ Edge runtime and package format
- ✓ Asset grounding and identity resolver
- ✓ Safety workflow compiler and evaluation harness
- ✓ Reusable industry intelligence and benchmark data
- ✓ Flywheel integration, synchronization and lifecycle

Open-source and commercial foundation models remain switchable.

CUSTOMER-OWNED

- ✓ Private SOPs, policies and operating procedures
- ✓ Assets, site configuration and digital-twin data
- ✓ Maintenance, inspection and incident history
- ✓ Proprietary terminology and expert knowledge
- ✓ Customer-specific adaptations and permissions
- ✓ Raw field evidence and contractually defined derivatives

Ownership, learning rights and isolation are implemented in the architecture and contract.

"Orchestrate the commodity. Own the compound."

Field IQ Edge moves offline capability from a technical feature to an enterprise operating advantage.

WORKS ANYWHERE

Core workflows continue in dead zones and air-gapped environments.

SAFER OPERATIONS

Approved procedures and stop conditions remain at the point of work.

FASTER RESOLUTION

Asset-specific guidance reduces search time and expert escalation.

LOWER CLOUD DEPENDENCY

Common recognition and guidance occur locally; cloud is selective.

PRESERVE EXPERTISE

Digital Twin knowledge travels with every worker and every shift.

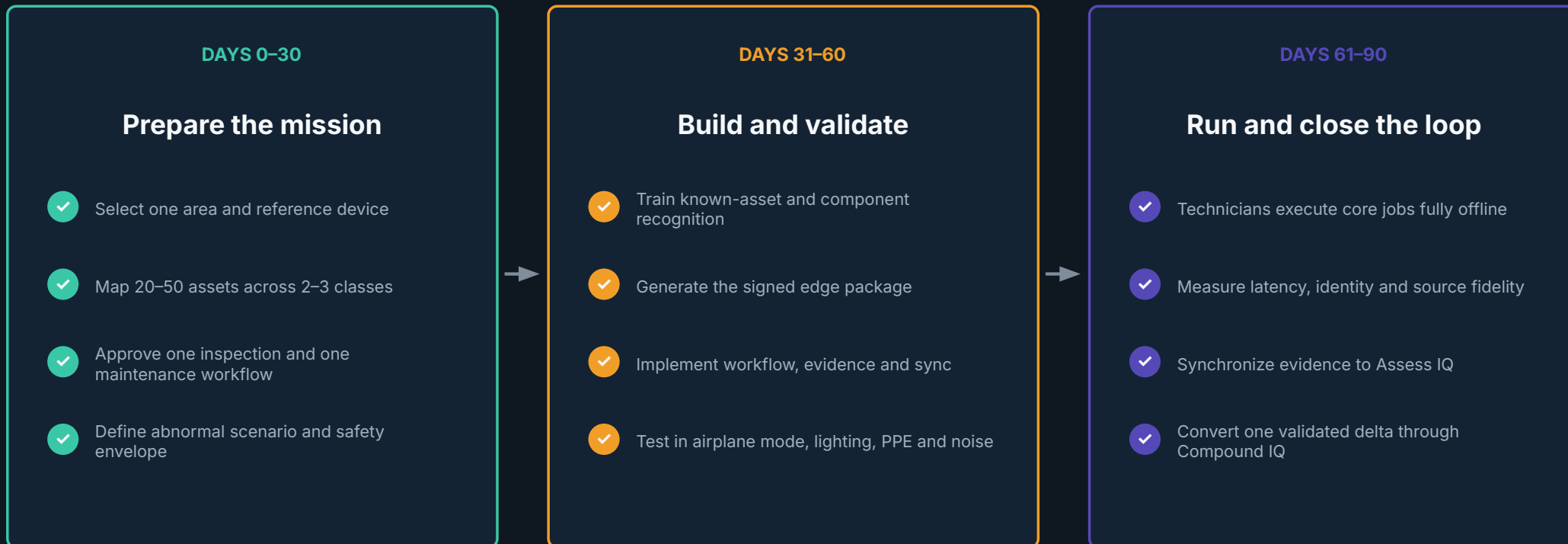
COMPOUND THE ASSET

Every governed field delta can improve the next deployment.

The result: safer execution, lower downtime, faster competency and a Work Intelligence asset that appreciates with use.

Recommended 90-day oil & gas pilot

Prove the architecture on a bounded, real workflow before scaling the package factory.



PILOT SUCCESS

Mission completeness · identity accuracy · source fidelity · usable latency · safe fallback · evidence integrity · flywheel closure

THE NORTH STAR

The Digital Twin should not end at the screen, the control room, or the network boundary.

FIELD IQ EDGE CARRIES IT INTO THE WORK ITSELF.

Build the twin. Distill the intelligence. Carry it to the worker. Learn from every job.

FIELD IQ EDGE · A DIGITAL TWIN BEYOND CONNECTIVITY



Field IQ Edge

A Digital Twin Beyond Connectivity

Specialized Work Intelligence that recognizes, guides and captures evidence — online, degraded or fully offline.

DRAFT V1 · JULY 2026

Source document: Field IQ Edge white paper

The Digital Twin should not end where connectivity ends.

“

Field IQ Edge is the part of the EON Digital Twin that travels with the worker when the network cannot.

One worker experience. Three connectivity states. Clear limits at every step.

OFFLINE

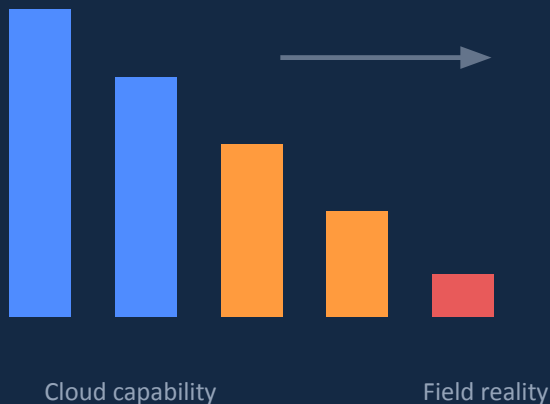
DEGRADED

CONNECTED

Physical work continues where cloud dependence becomes least reliable.

The problem is not whether AI can reason. It is whether the worker can still use it at the exact moment it matters.

THE CONNECTIVITY GAP

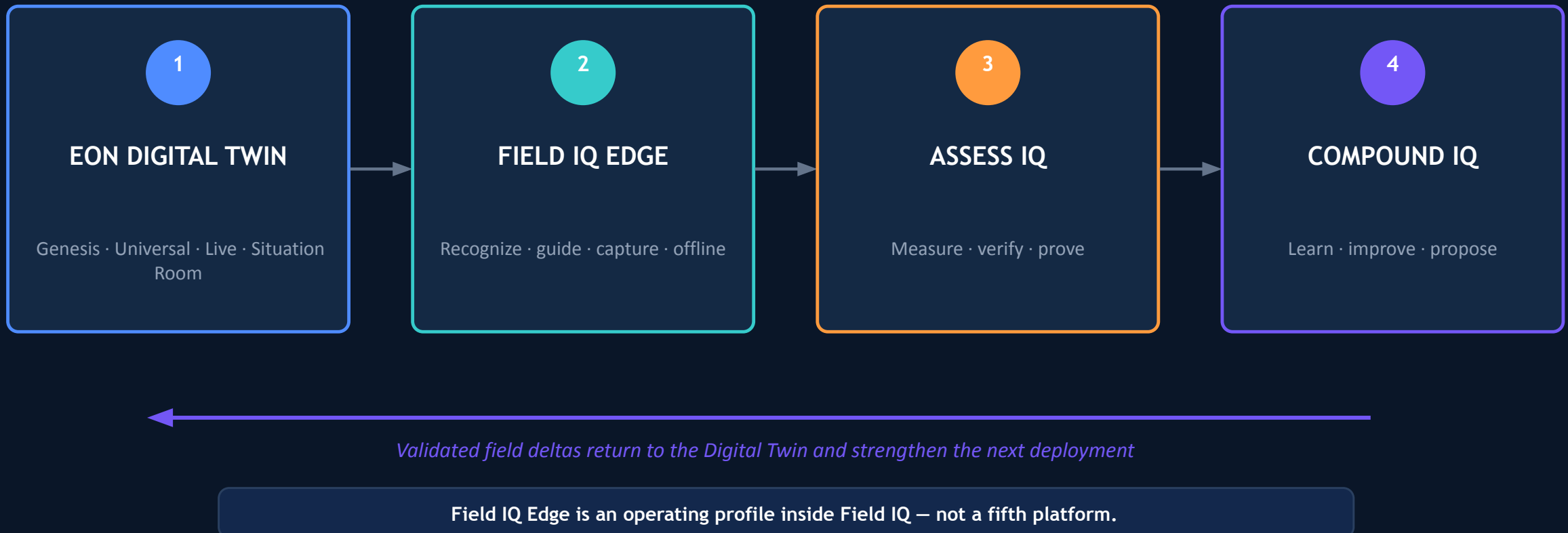


WHERE THIS HAPPENS

- 1 OFFSHORE + REFINERIES** Metal, distance, segmented networks
- 2 MINES + UTILITIES** Underground, remote, air-gapped
- 3 AEROSPACE** Aprons, hangars, secure operations
- 4 HEALTHCARE** Restricted networks, privacy, resilience
- 5 EMERGENCY SITES** Congestion, damage, no infrastructure

No new platform. No new ecosystem. One extended Field IQ.

Field IQ Edge fits the product structure already in market — and adds the operating condition that was missing.



The EON Digital Twin is the source — Field IQ Edge is the deployed extension.

EON DIGITAL TWIN

One operating context assembled from four existing capabilities.

1

GENESIS

Expert knowledge
procedures · behaviors

2

EON UNIVERSAL

Assets · components
spatial relationships

3

EON LIVE

Normal + abnormal
scenarios · physics

4

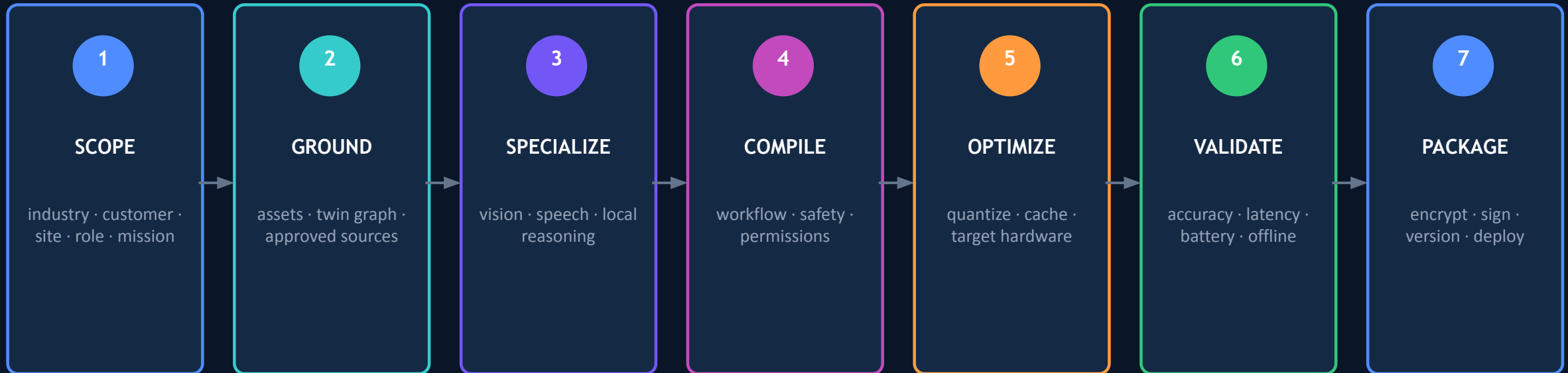
SITUATION ROOM

Events · conditions
risks · awareness

Distilled into the minimum trusted package required for the mission

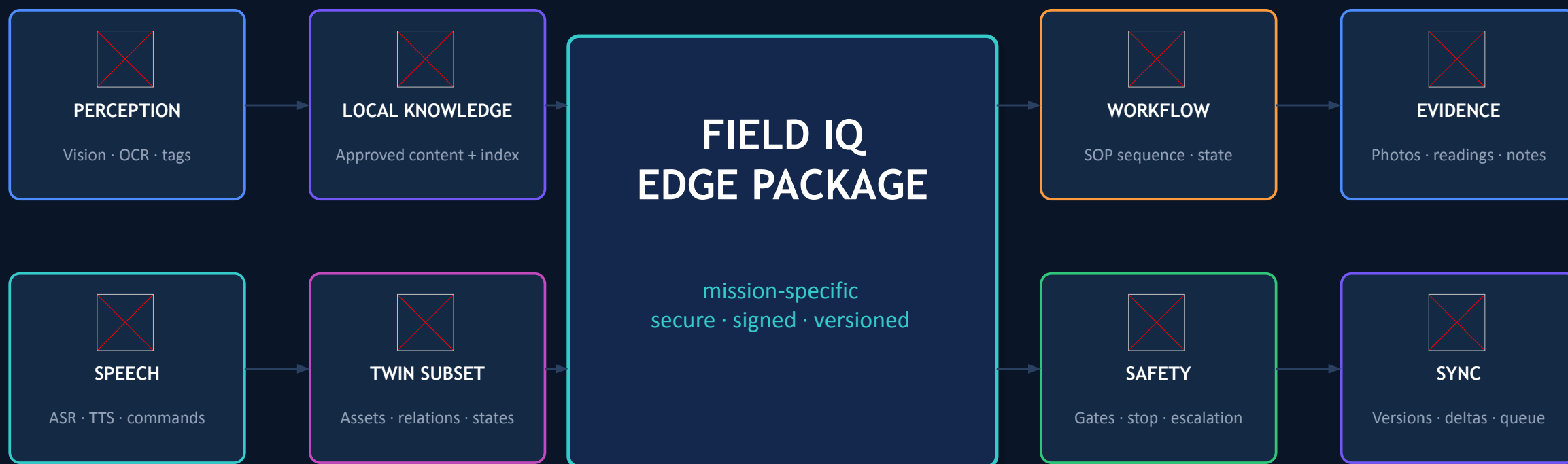
Work Intelligence Distillation

A governed process — not another product name and not simply model compression.



The objective is not “the smallest model.” It is the smallest verified package that can safely complete the assigned mission.

A Field IQ Edge package is an operational capability — not a chatbot.



One runtime. Layered intelligence. Clear ownership.

EON CORE

runtime · distillation compiler · package format · evaluation · security

INDUSTRY INTELLIGENCE

domain ontology · generic recognition · adapters · safety patterns

CUSTOMER INTELLIGENCE

SOPs · assets · private history · site terminology · customer adapters

MISSION PACKAGE

role · work order · permitted scenarios · expiry policy · target device

Contract rule: customer data never enters a shared industry model unless the customer explicitly authorizes it.

Offline is not binary. It is a five-level capability pyramid.

The boundary is how much intelligence can be safely bounded, validated and executed on the device.



One experience across three connectivity states.

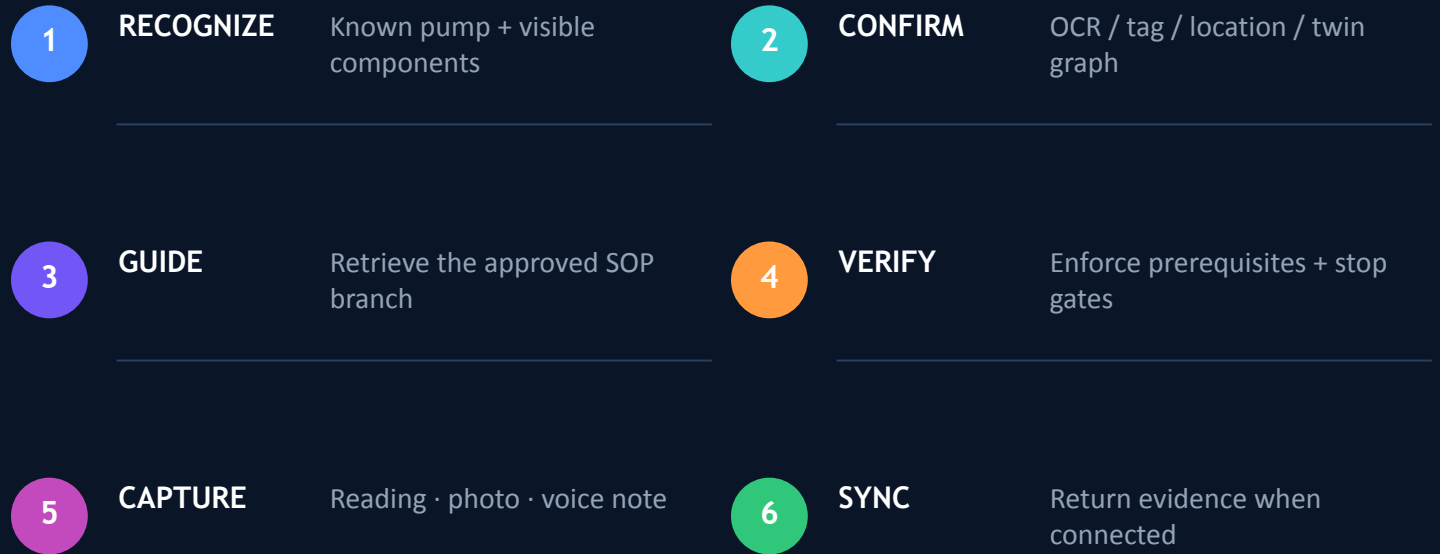
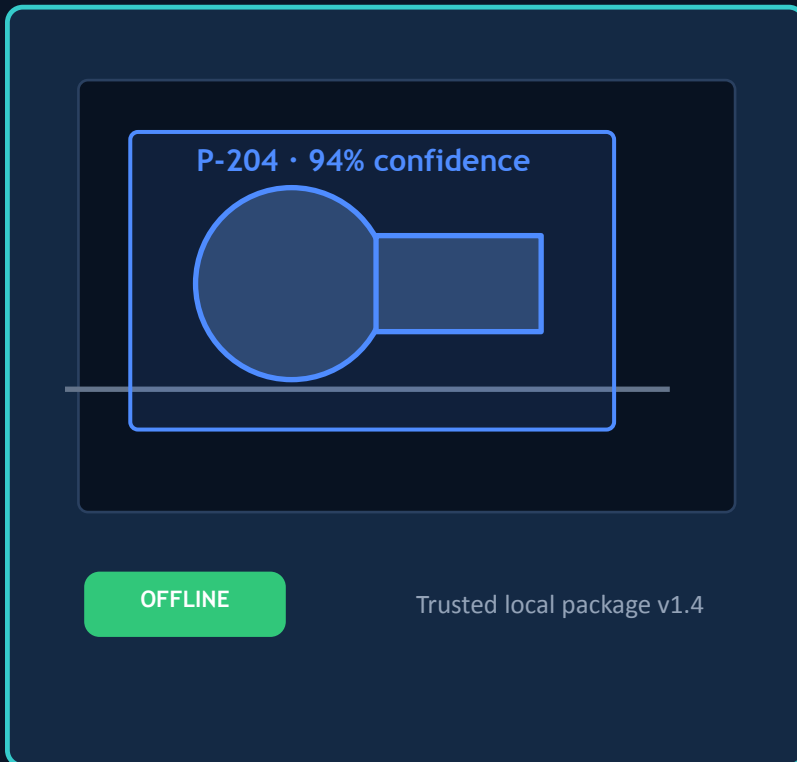
Field IQ Edge must always show the current mode and never imply that unavailable cloud capabilities are local.

One experience across three connectivity states



Field IQ Edge never hides the current mode or silently invents capabilities that are unavailable.

A technician approaches Pump P-204 with no internet.



The model explains. Approved procedures and deterministic safety logic remain the authority.

Start with three industries. Reuse one architecture.

01

OIL & GAS

Asset-centric field work

Pumps · valves · compressors
Inspection + maintenance
Bounded abnormal conditions

INDUSTRY LAYER + CUSTOMER LAYER

02

AEROSPACE

MRO + ramp operations

Aircraft systems + components
Task-card guidance
Evidence + human factors

INDUSTRY LAYER + CUSTOMER LAYER

03

HEALTHCARE

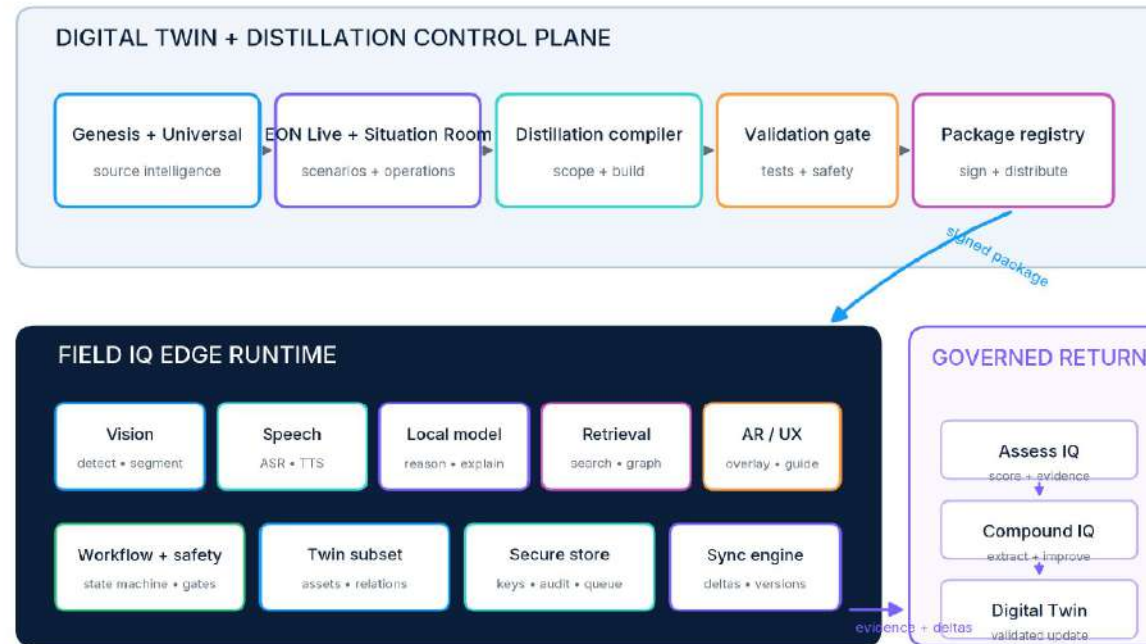
Device + procedure support

Medical equipment recognition
Approved workflows
Privacy + network isolation

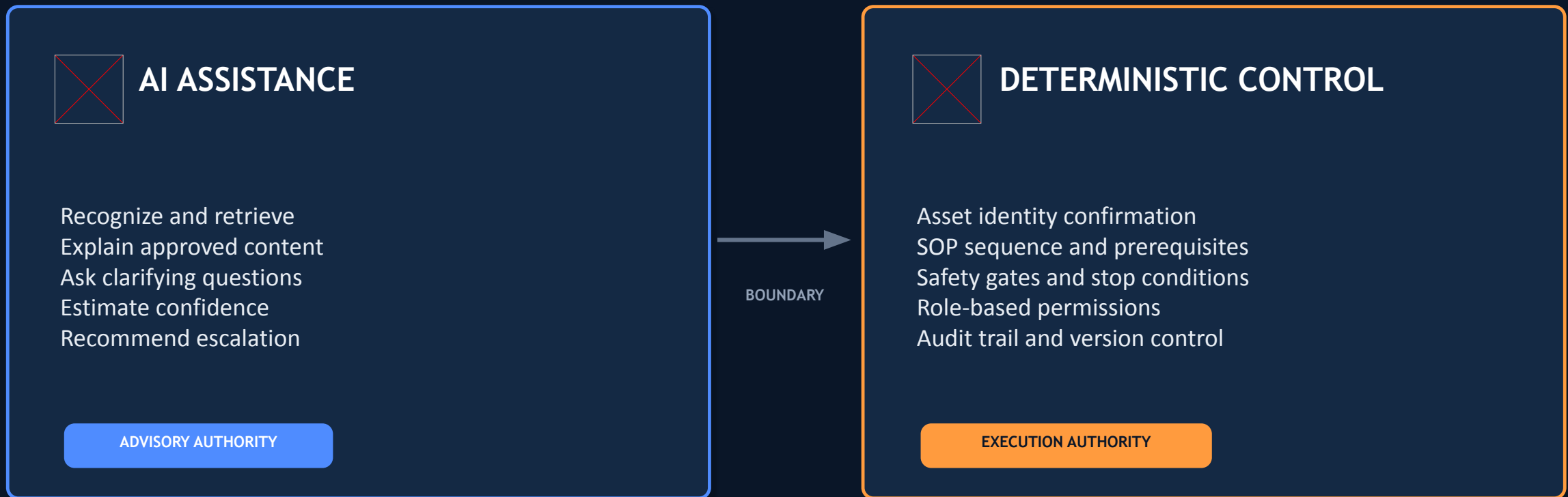
INDUSTRY LAYER + CUSTOMER LAYER

Cloud intelligence. Edge execution. Governed return.

Reference architecture: cloud intelligence, edge execution, governed return



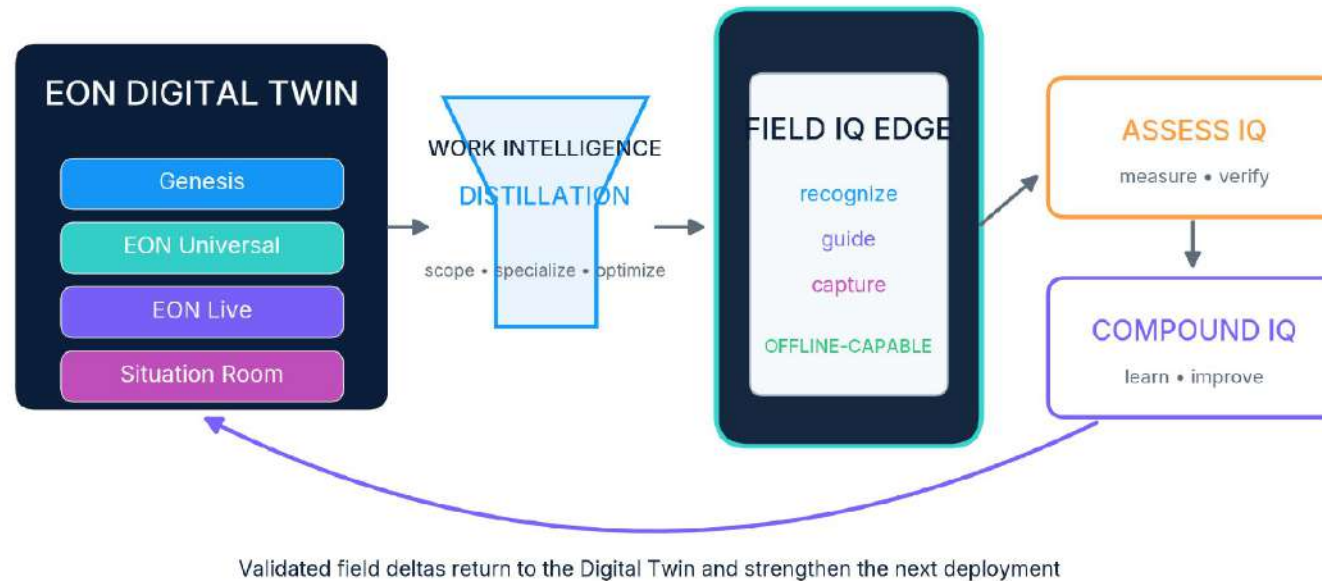
Generative intelligence assists. Deterministic controls authorize.



Field IQ Edge extends the Work Intelligence flywheel – it does not become an island.

The Field IQ Edge extension of the Work Intelligence flywheel

No new product layer: one deployable edge capability inside the existing EON structure.



The moat is the conversion system, not a small open-source model.

Layered ownership: protect EON IP while preserving customer control

EON CORE

runtime • distillation compiler • package format • evaluation • security

EON INDUSTRY INTELLIGENCE

domain ontology • generic recognition • domain adapters • safety patterns

CUSTOMER-OWNED INTELLIGENCE

SOPs • assets • site twin • private history • customer adapter

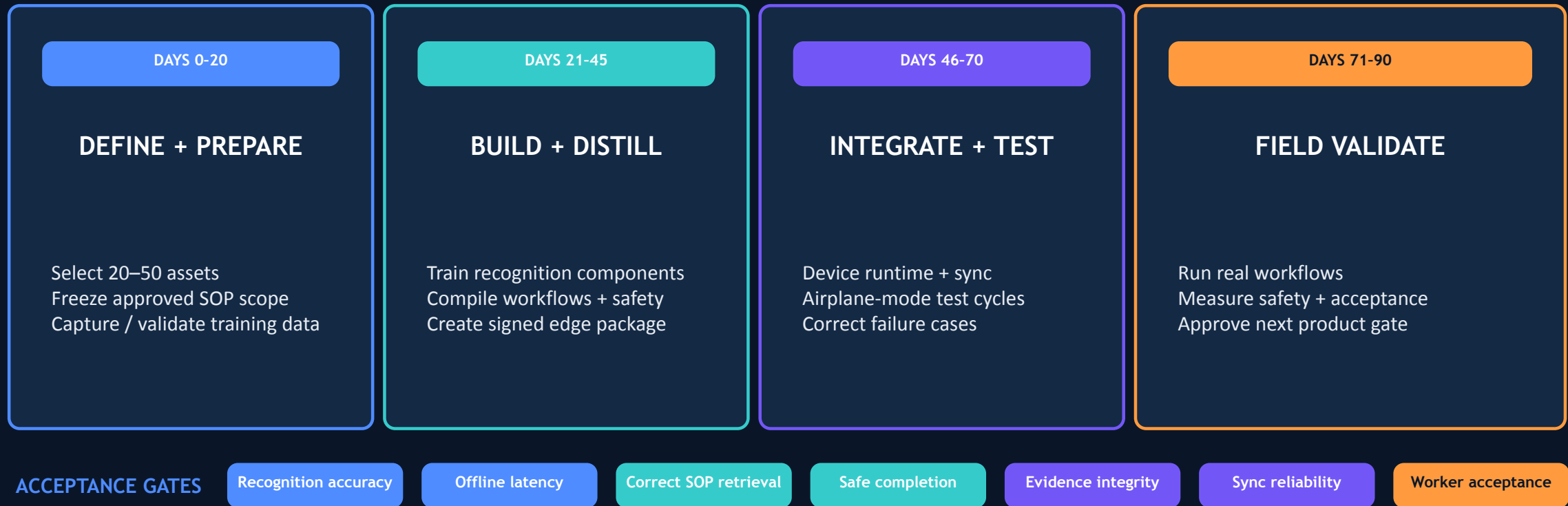
MISSION PACKAGE

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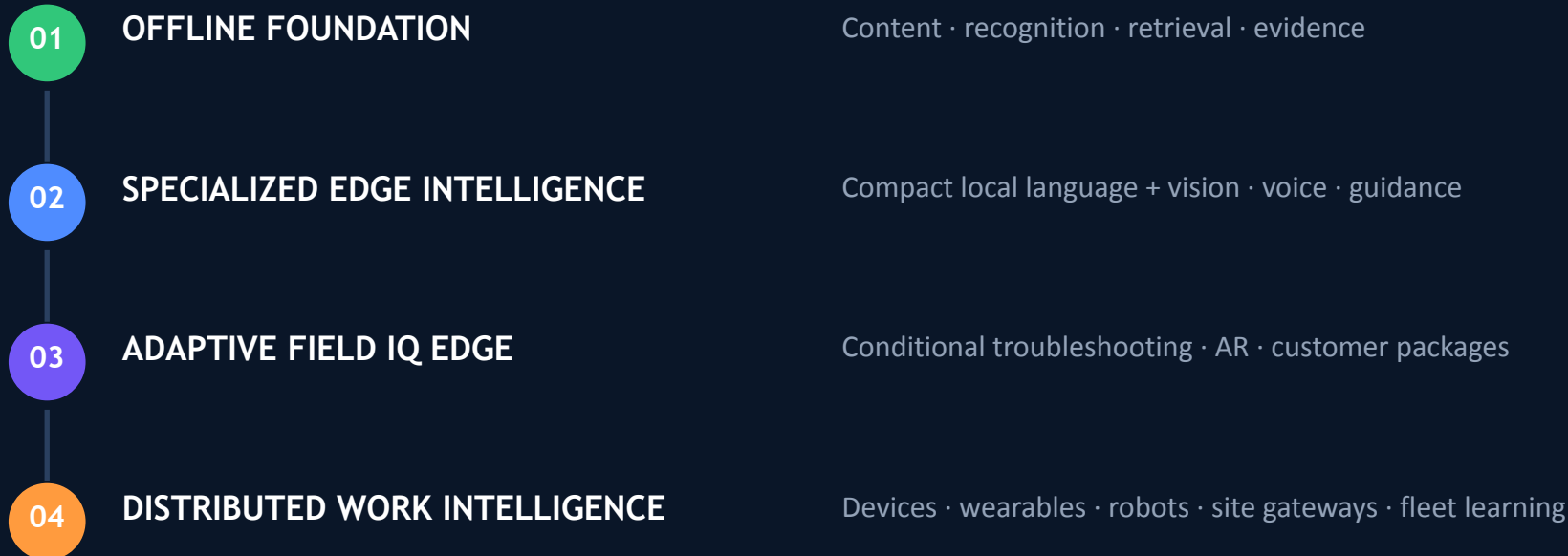
Contract rule: no customer data enters a shared industry model unless the customer explicitly authorizes it.

Technical rule: each layer is separately versioned, encrypted, signed, and replaceable.

A 90-day oil & gas pilot proves the product before broad productization.



From offline foundation to distributed Work Intelligence.



The Digital Twin does not stop at the control room. With Field IQ Edge, it travels with the worker.