

# Standards as a Service

Interoperability and Usability  
A new way to operationalize standards

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Lars Berthinussen  
Managing Director, PCA

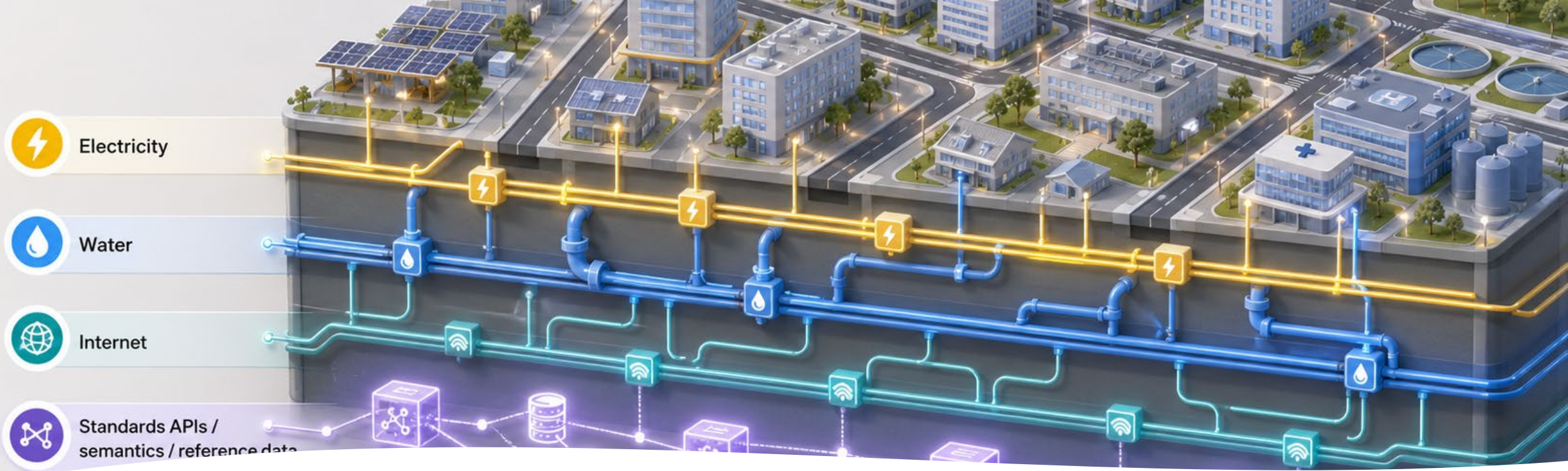


POSC Caesar  
Association

# Standards are essential — but often difficult to use

- Standards are traditionally published as documents
- Interpretation is done independently by each organization
- Implementation cycles become slow and inconsistent
- Heavy dependence on specialists and consultants
- Limited interoperability and high integration costs
- Poor usability for digital systems and AI





## The Shift: Standards as a Service

- Standards become machine-readable and accessible through services
- Reference data is maintained centrally
- Ontologies and identifiers are resolvable online
- Validation and governance become continuous services
- Implementations become reusable and interoperable

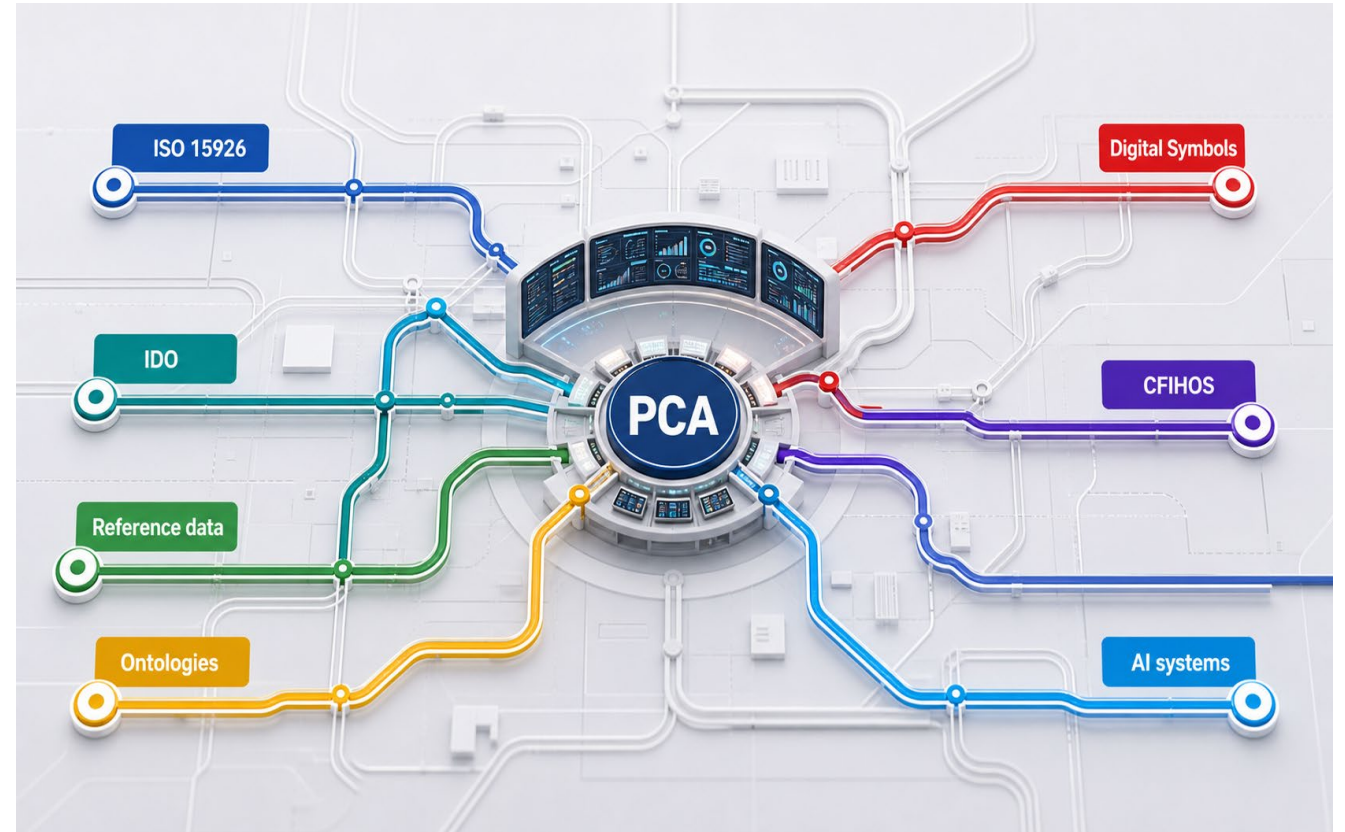


# Why This Matters Now

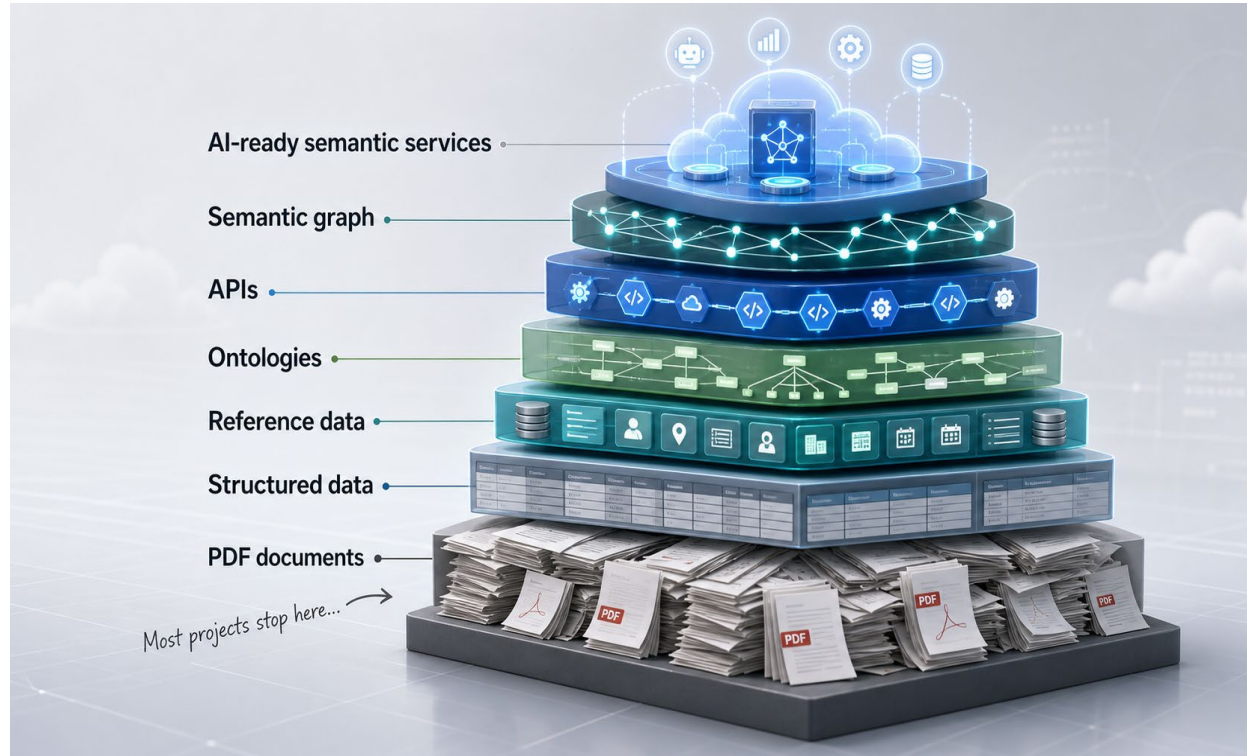
- AI and digital twins require consistent semantics
- Shared vocabularies enable autonomous data exchange
- Cross-organizational interoperability is becoming essential
- Lifecycle information must remain usable over decades
- AI cannot scale on ambiguous or disconnected standards

# PCA as a Real-World Example

- ISO 15926 reference data services
- CFIHOS 2.0 RDL
- IDO - Industrial ontologies and semantic interoperability
- URI-based identifiers and shared reference libraries
- Maintenance Agency for ISO
- Living semantic infrastructure instead of static publications
- Extendable content – immediately shareable and usable



# From Documents to Infrastructure



1. Standards documents
2. Formal information models
3. Reference data libraries
4. Ontologies and semantics
5. APIs and resolvable identifiers
6. Validation services
7. Governance and lifecycle management

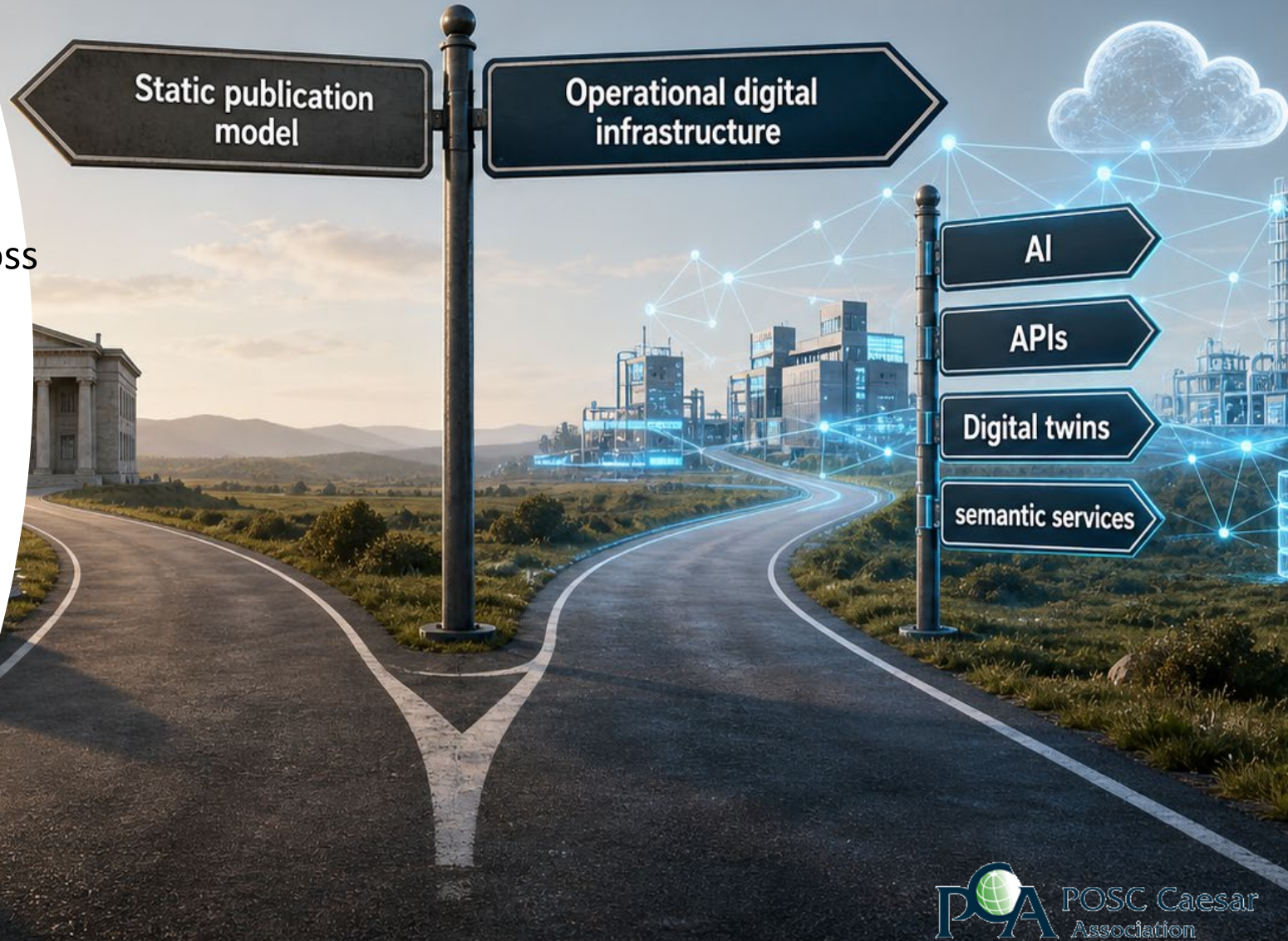


# Benefits for Industry

- Better lifecycle continuity
- Reduced vendor lock-in
- Improved AI readiness
- Lower integration costs
- Faster supplier onboarding
- Greater trust and interoperability

# A Strategic Question for THTH

- How can standards organizations evolve toward service models?
- What infrastructure should be shared across industries?
- What governance models are needed?
- How do we support AI-native interoperability?
- Can standards become operational digital platforms?



# Final Thoughts

- Interoperability is no longer achieved simply by agreeing on documents
- It is achieved by operating shared digital meaning
- Standards remain critical — but usability must improve
- Service-oriented standards infrastructure is emerging
- PCA provides practical examples already in operation

