

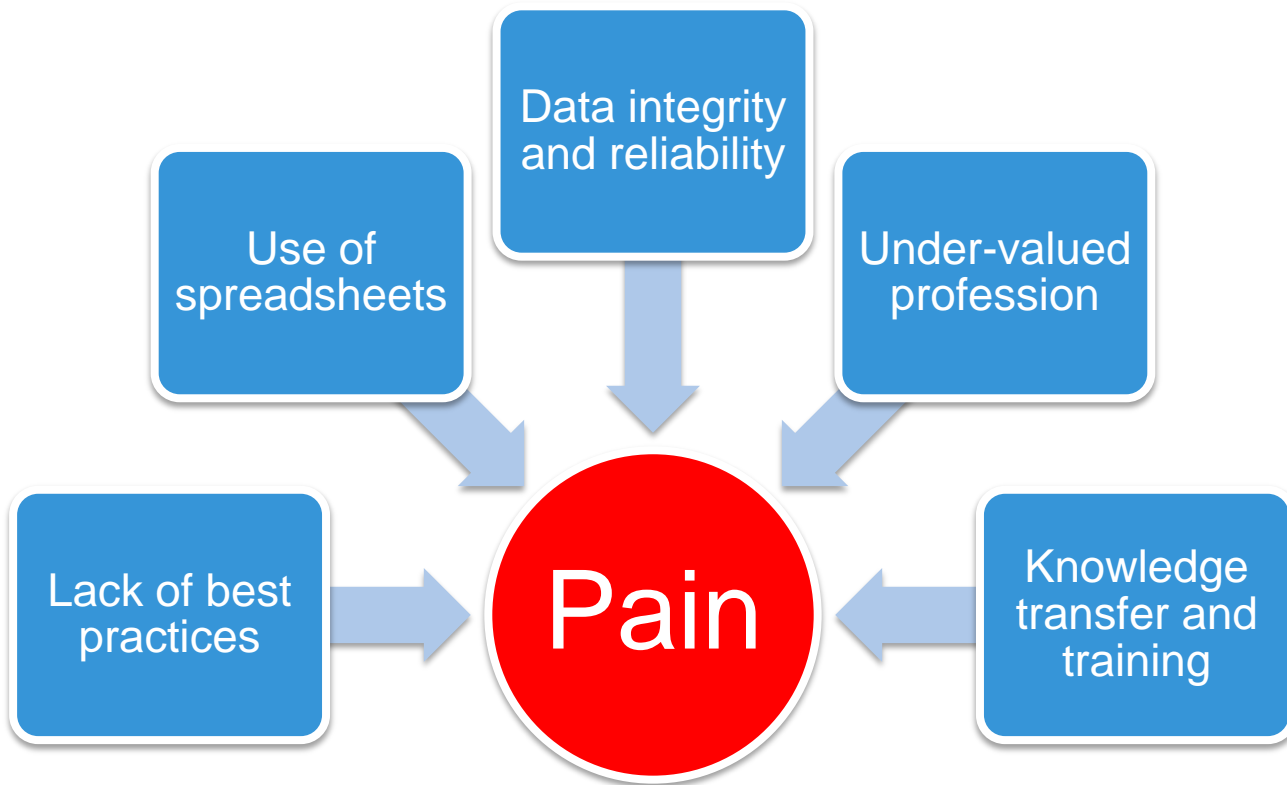
Standards in Hydrocarbon Accounting

Hydrocarbon Management Workshop, Stavanger June 2014

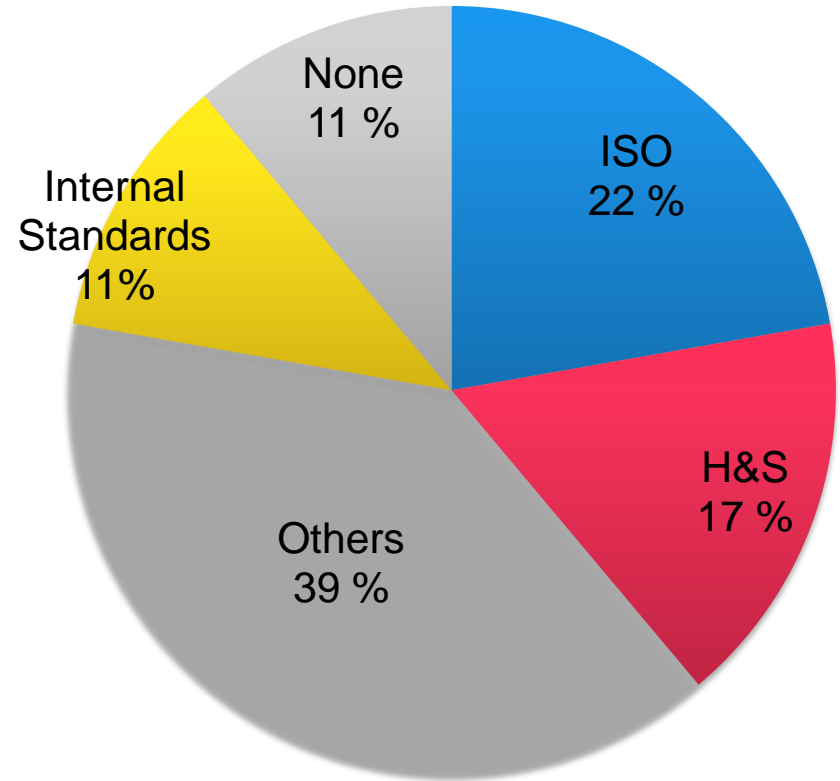
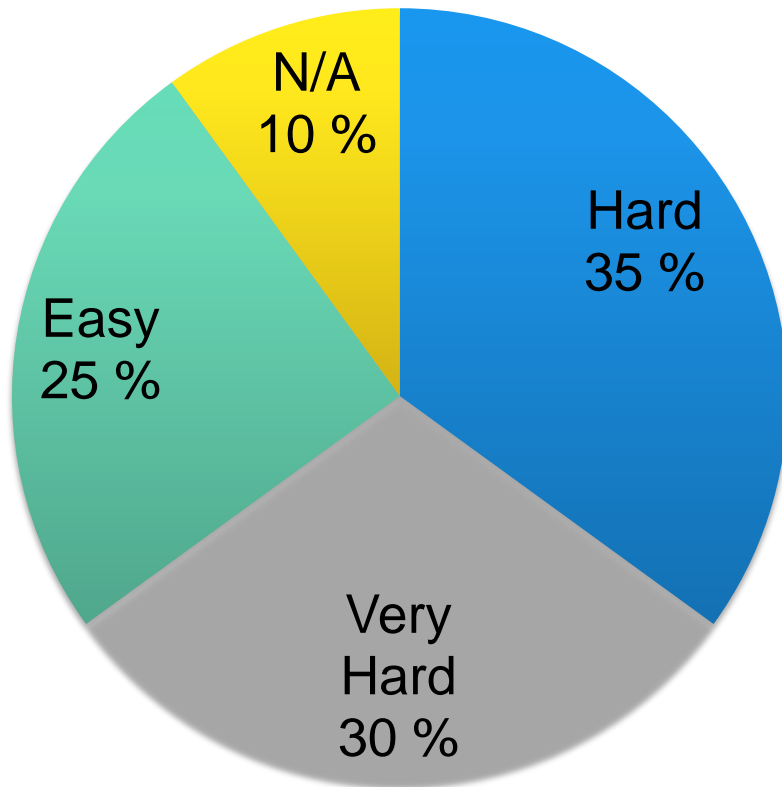
Peter Black



Choosing a topic



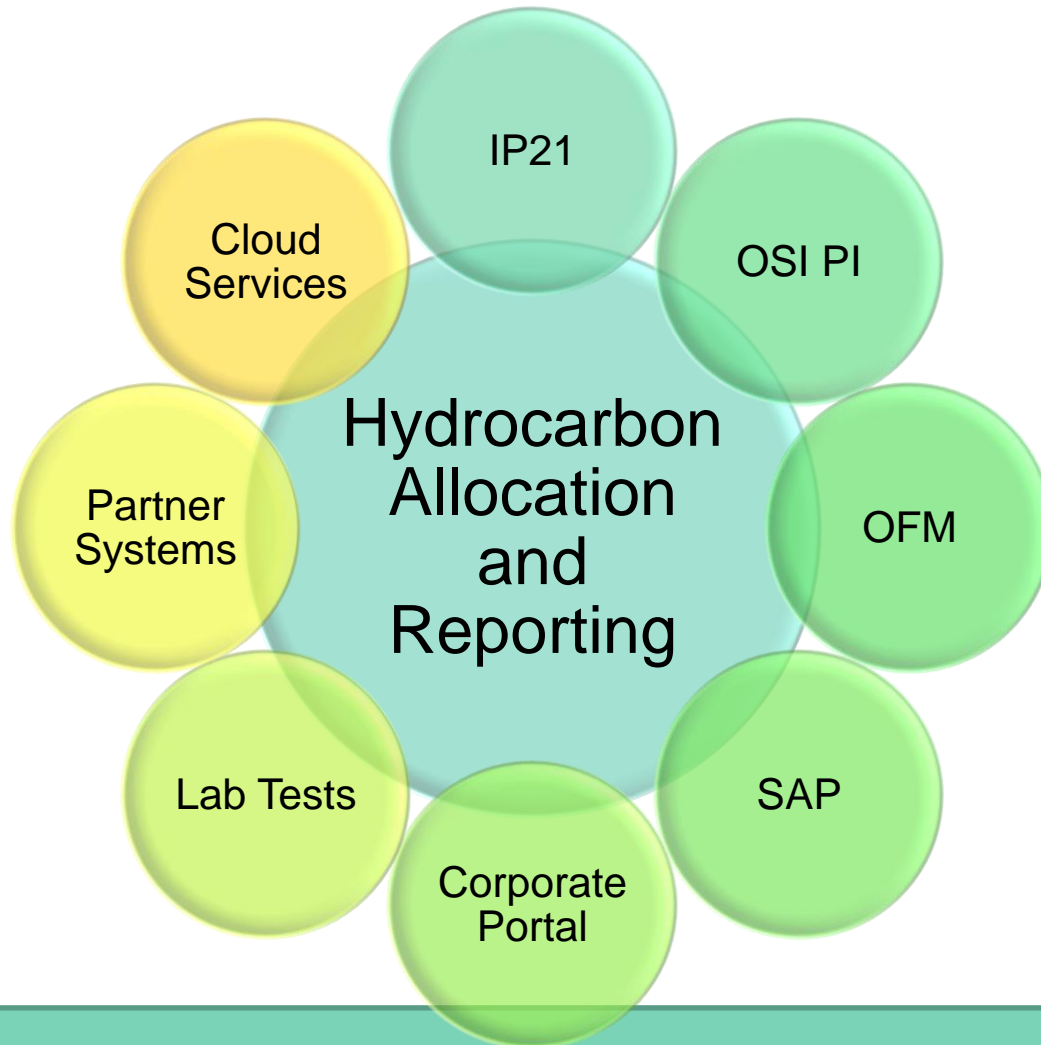
Identifying best practice



Standard needs

- Process standards
- Service standards
- Data standards

Integration challenges



Security



ISO 15926

“Having developed a generic data model and Reference Data Library for process plants, it turned out that this subject is already so wide, that actually any state information may be modelled with it.”

Designing standards

- Design initially for usefulness
- Draw upon existing installed bases
- Expand your installed base fast before adding features
- Make it simple
- Modularise

The First Rule of Standards

Adoption Beats
Perfection

Coverage

- DTS measurement
- Fluid analyses and samples
- Flow networks
- Production operations reports
- Production reports
- Historian data
- Well tests
- Wireline formation tests

PRODML: The Bad

- Size
- Inadequate user guidelines
- Lack of reference applications
- Implicit relationships
- Lack of hyperlinks
- Rigid structure

The Open Data Protocol

- REST-based
- OASIS standard
- Support from Microsoft, SAP, PetroWEB, EnergySys...
- Fundamentally changes users' interaction with data
- Removes distinction between cloud and on-premises
- Metadata at the core

The OData Stack

Semantics: \$metadata

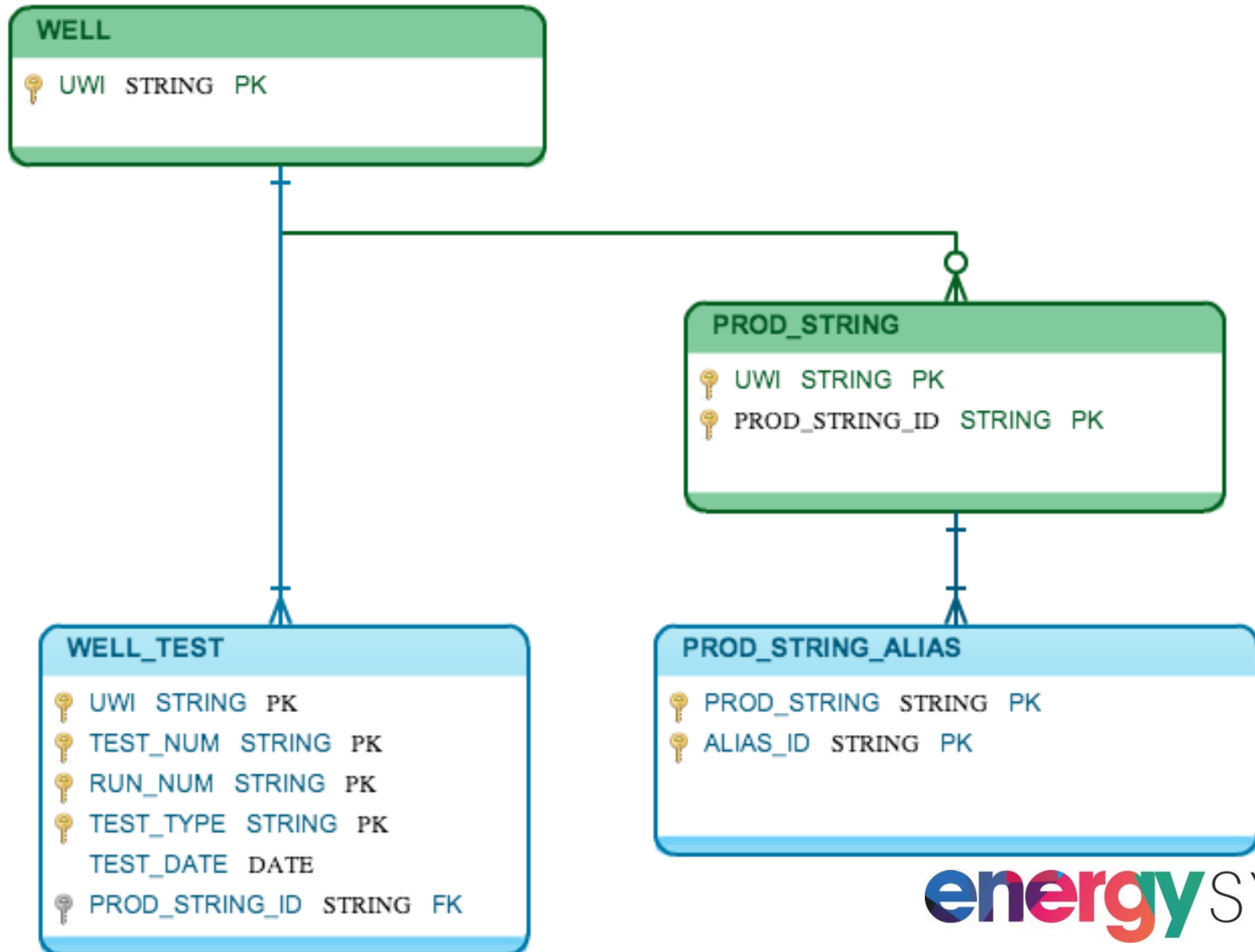
Syntax: AtomPub or JSON

Protocol: HTTP

Identifiers: URI

Character Set:
UNICODE

PPDM Well Data Model



A Definition of Agile

ag-ile (adjective) \ 'a-jəl, - ,jī(-ə)l\

- able to use change to gain a business advantage
- quick, smart, and clever