How Advancing the Materials Management Process through Standards and Technology can contribute to common Emissions reporting"

CLEAN DATA IS GREEN DATA

mdo

So who is Tom Cave?

- My first introduction to O&G E&P – North Sea, February 1979…
- Founding in Maintenance Repair and Operations working in the aerospace industry
- First data management project was with Shell in the 90s working with POSC Caesar
- From Noughties to Now in Master Data Management
- Overseen many millions of lines/Tens of $M data optimisation projects
- Chaired the PIDX Catalog &Classification Workgroup
- Been honoured to have been asked to act as event facilitator for PiDX events
- And also available for Bar Mitzvahs and Weddings…

And who are Prospecta? Builders of Data Culture

Founded in **2002** |
MDO Launched in **2008**

1

HQ Sydney | Global Presence | **200+ Employees**

3

2

Focussed on **Data Management & Automation**

SAP **Endorsed Partner**

5

Consumption based SaaS Product Suite

4

Recognised by Gartner & Forrester

Gartner
FORRESTER®

6

FORRESTER®
MDM WAVE 2021

Customers liked the comprehensive solution to manage data governance in SAP ERP, its ease of use, technical support, and native integration with the SAP ecosystem.

"Prospecta is a good fit for customers looking for a low-cost MDM solution that integrates with SAP systems"

-Forrester MDM Wave 2021

The issue we face

"To reach net zero emissions before 2050, we need all business to measure, account for and disclose carbon emissions as a first step to reducing them.
We cannot solve what we cannot measure."

"But measuring carbon and other greenhouse gas (GHG) emissions across product value chains today is almost impossible."

World Business Council for Sustainable Development (WBCSD) May 2021

Difficult Questions

- What is your department doing to reduce the company's carbon footprint;
- How will you get to net-zero if you have no control over materials procurement or stock;
- Are your assets fully utilized, as efficiently as possible;
- How will you go about flat-lining (then reducing) the constant rise in warehouse volume required;
- Do you have the information you need and can trust to help you reduce the carbon tied up in materials, without hitting your pick-rates/production targets;
- And where does digitization play a role in reducing your Scope 3 emissions?

Solution – Turn Data Into Information

Stop buying equipment and spares you already own

Optimize asset utilization

Establish a single source of optimized, accessible, trustworthy source of material data:

De-dupe vendor lists, rationalize and rank

Standardized, enhanced, rationalized and maintained

Add CO2-eq to procurement evaluation criteria and price book data

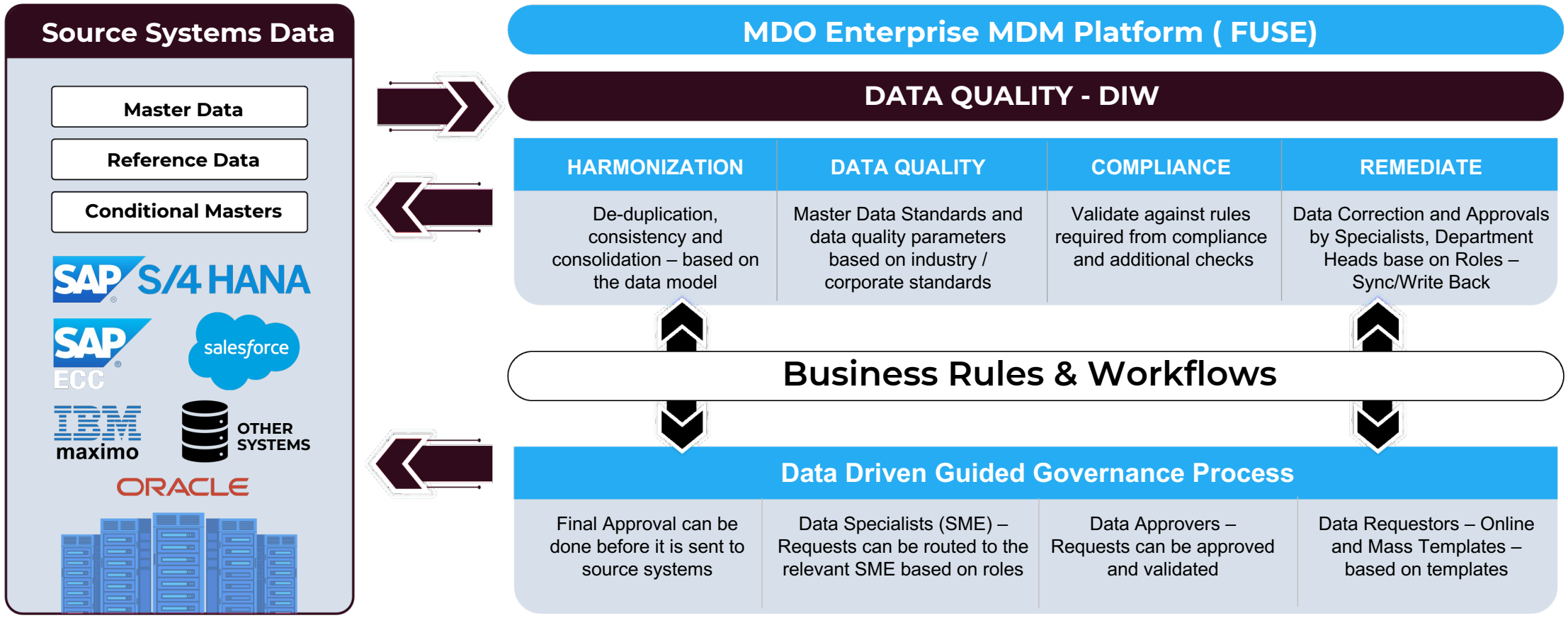
Link all stocked spares to Bills of Materials to remove unrequired stock

Remove duplicates from stock and rationalize bins to reduce warehousing

Case Study Background

- The operator recognized the need for a data standard and technology to manage their materials master data.
- Through participation in the PIDX Catalog & Classification workgroup, settled on two standards and one technology:
  - PIDX's Petroleum Industry Data Dictionary (PIDD) – open standard, designed and maintained by the industry to cover Up and Downstream
  - United Nations Standard Products and Services Code (UNSPSC) – also open standard, designed to enable the grouping of families of items for catalogue management and spend analysis
  - Conscious that 75% of manual data improvement projects fail, they selected Prospecta as a specialist software and services company to leverage these standards and their corporate master data governance rules

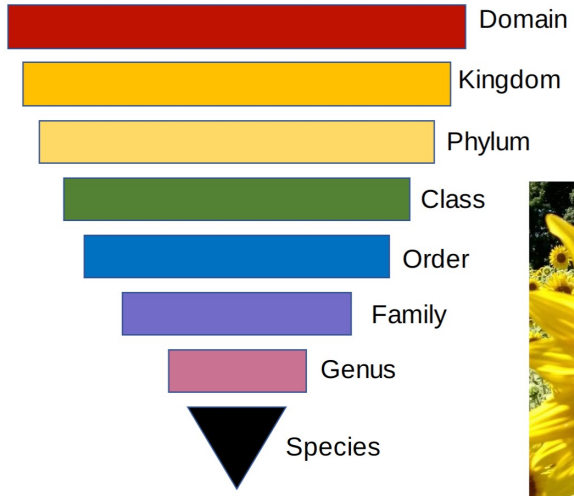
What does specialist technology look like?



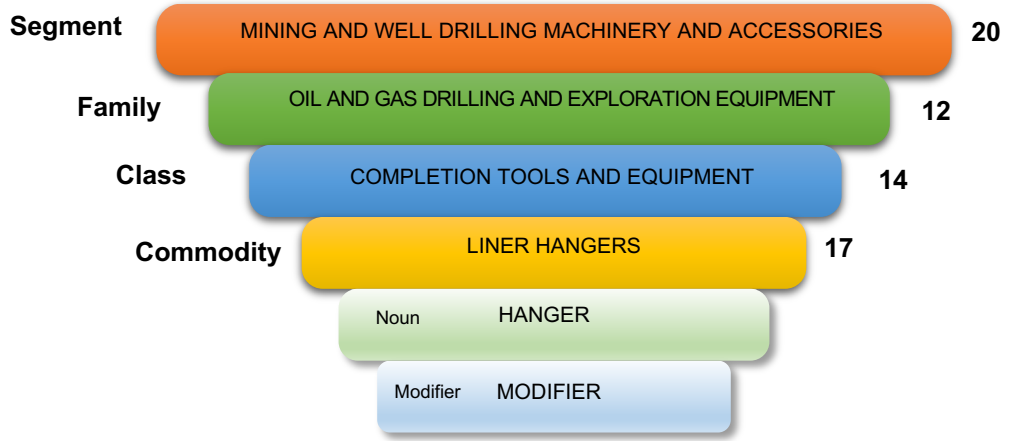
1. Easy to Deploy and Maintain
2. Adapt to Changes – Business & Technology Low Code
3. Pre-Defined Data Models /Accelerators & Integration Lean Deployment – In weeks
4. Cloud Based – Faster ROI
5. One Solution – Data Quality & Governance

Data Standards - UNSPSC

- A binomial nomenclature system – A what!?
- Resolves down to two words, a Noun and Modifier, to group items into families; think Linnaeus and kingdoms to species…
- Allows grouping of ‘families’ of items from Segments to Commodity level
- Importantly – it’s NOT a data dictionary/taxonomy



Sunflower: *Helianthus annuus*
Honey bee: *Apis mellifera*

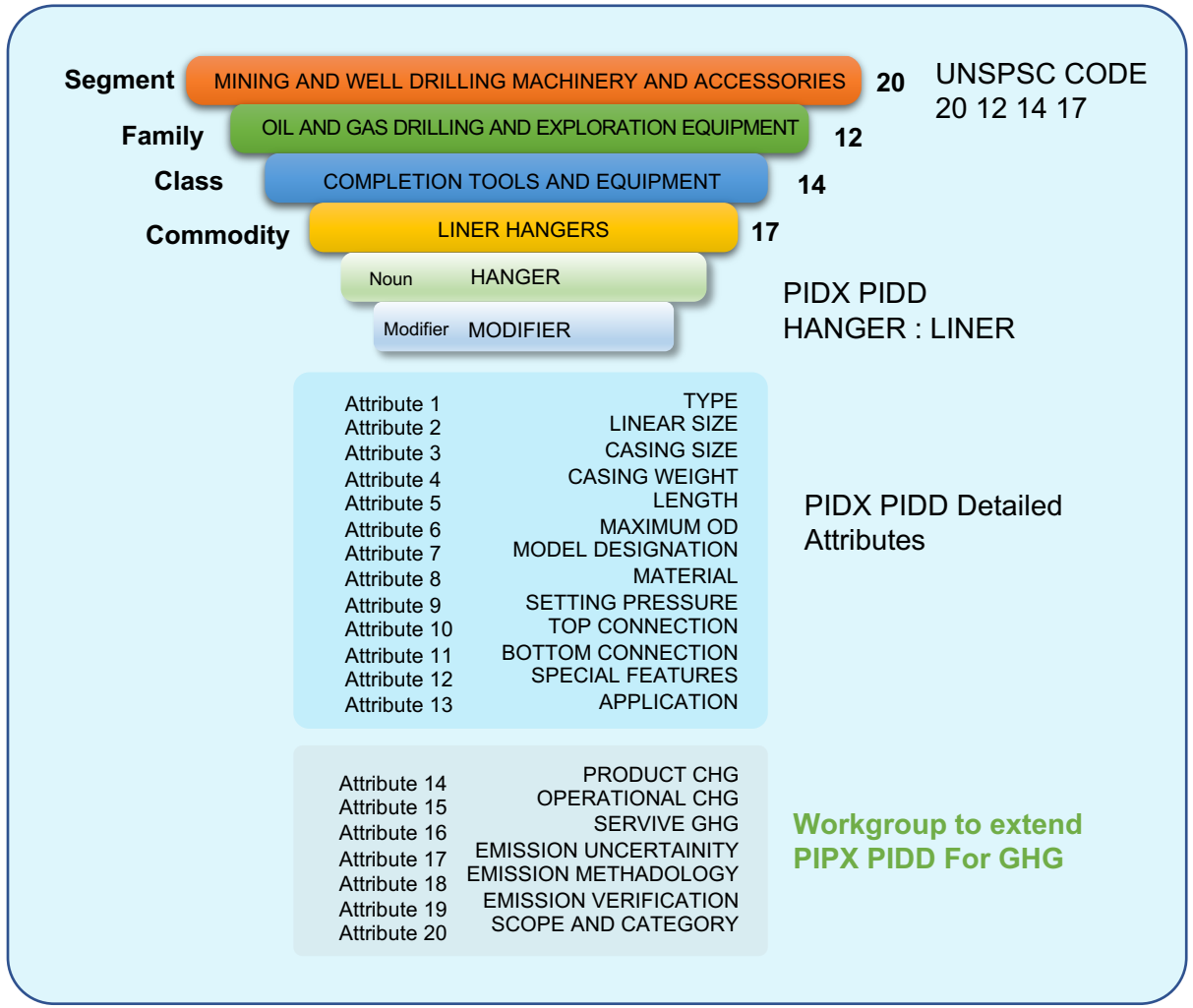


UNSPSC CODE 20
12 14 17

Data Standards - Petroleum Industry Data Dictionary

- Structured descriptive templates based on NOUN;MODIFIER:ATTRIBUTE 1 to n
- Includes Universal Standard Products and Service Classification (UNSPSC) to commodity level – i.e., Liner Hanger
- Adding GHG attributes for data collection
- GHG data captured here can be used in ERP systems, like SAP Sustainability Control Tower and for vendor and item selection and use.

PIDX™
EMISSIONS TRANSPARENCY



Case Study

Fortune 500 American global E&P independent, they recognized the issue they had with ungoverned asset and spares master data. Their aims were to:

- Create cost and time benefits across inventory management procurement, maintenance & reliability, and IT
- Establish “plans for every part”,
- Improve user experience,

Their next step was applying these capabilities to emission and sustainability goals.

Key Benefits & Expected Results

	Much friendlier user experience (People)	MM workflow allowing for a "Plan for every part" (Process)	Advanced platform functionality (Systems / Tools)
Key Benefits	• Broader user base, elimination (MM) request spreadsheets • Superior search functionality • Connections to external master data cloud to help enrich MM characteristics • Reduced duplicate materials	• Ensure BoM connection • Connect MM's to the procurement process to increase contract reference • Ensure MM supply strategies resulting in optimized inventory levels	• Tools to govern taxonomy, descriptions, duplicate prevention and business rules. • Self-service supplier portal • Supplier RFI functionality • Mobile functionality
Results Achieved	• Improved Efficiency • Decreased MM creation time • Reduction of MM duplicates • Increased PO accuracy leading to improved P2P efficiency	• Improved Minimized down time, aiding in safe / reliable operations • Faster, more accurate part ID leading to lower WO cycle time • More automated procurement • Optimized stock and pick rates	• Higher use of analytical insights • Vendor managed data • Easier MM catalog and business rule stewardship • Track emission goals/sustainability

Clean data is green data

Optimizing materials and asset data is one of the very few areas where “going green” does not incur a net cost:-

- Reduced working capital tied up in MRO
- Simplified and improved user experience
- Reduced waste diverted from landfill through reuse programs
- Reduced Scope 3 emissions by purchasing only what is needed
- Reduced demand for warehousing
- Improved pick rates, even with lower inventory levels
- Improved procurement efficiencies
- More able to calculate impact on asset utilization and optimisation
- Better ‘wrench time’
- Aggregated purchasing to achieve volume discounts
- Staff morale and retention

ANY QUESTIONS?

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