Introducing KNIME at Tata Steel in Europe

The best way to start with data analytics is to start with data analytics

Together we make the difference
Introduction to the Tata group

One of the world’s fastest-growing and most reputable corporations

- Spans seven major industry sectors
- Operations in more than 150 countries and has almost 720,000 employees
- Total revenues of more than US $113 billion
- Tata Sons 66% owned by philanthropic trusts
- £170 million invested in community projects last year

Global ranking of Tata Group companies

- 1st international wholesale voice provider
  - Tata Communications
- 2nd largest tea company
  - Tata Global Beverages
- 2nd largest producer of soda ash
  - Tata Chemicals
- Top 11th steelman
  - Tata Steel
  (*by World Steel Association)
- Top 10 commercial vehicle manufacturer
  - Tata Motors
Raw materials - Iron - Steelmaking - Casting - Rolling - Coating
Internal Audit & Assurance at Tata Steel Europe

- Department with 22 auditors
- Located IJmuiden (NL) and Port Talbot (UK)
- Performing general, operational and IT audits
- Two main hubs and several smaller sites

Data analysis is becoming much more important to:
- Test and validate controls
- Identify anomalies and trends
- Quantify potential risks and savings

- KNIME has helped us to make our data analysis more repeatable and reusable

- Also support business to use the available data and enhance their control procedures
Why KNIME for data analysis? We are happy with Excel
How to get started with data analytics and KNIME

- After the introduction with KNIME I have:
  - Practiced with old Excel analysis as example
  - Experimented with staff from several departments
    - Replaced some labour intensive & error prone reports prepared with Excel
- Held presentation and workshops for various departments
  - Steep learning curve
  - Takes time and effort
  - Pilots projects often successful
- Supported colleagues to use data analytics and KNIME for their audits and other use-cases

- Learned to focus on the Early adopters and accept that not everyone needs to become a data analyst and start using KNIME.
Some examples of data analysis using KNIME

**Contract Management: Industrial Cleaning Services**
- Employees with very long working hours and weeks breaching working time regulations
- Double charged services
- Incorrect tariffs and surcharges

**Sales Price Analysis**
- Incorrect priced invoices and orders

**Product Master Data** (e.g. dimensions, tolerances, mechanical & chemical properties)
Inconsistencies identified between:
- Customer orders
- Sale order data / order confirmations
- Product Master data
- Industry Norms
- Test Instructions
- Product Certificates
Questions