Digitalisation – How shipping can adapt and benefit from digital solutions here and now!

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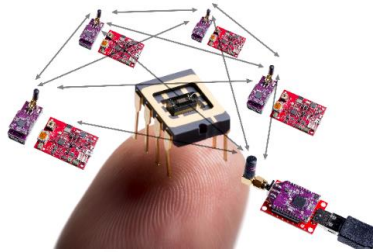
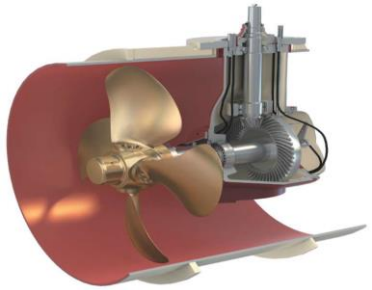
Digitalisation – What are we talking about?

Picture courtesy of Imec and Holst Centre, and Phys.org

And why are we talking about this now?

- **Sensor development & the internet of Things**

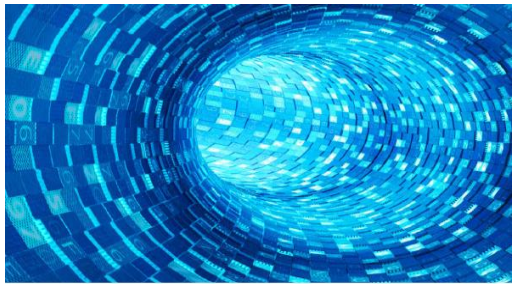




- **Connectivity development**

- **Handheld devices**

- **Big data & Analytics**

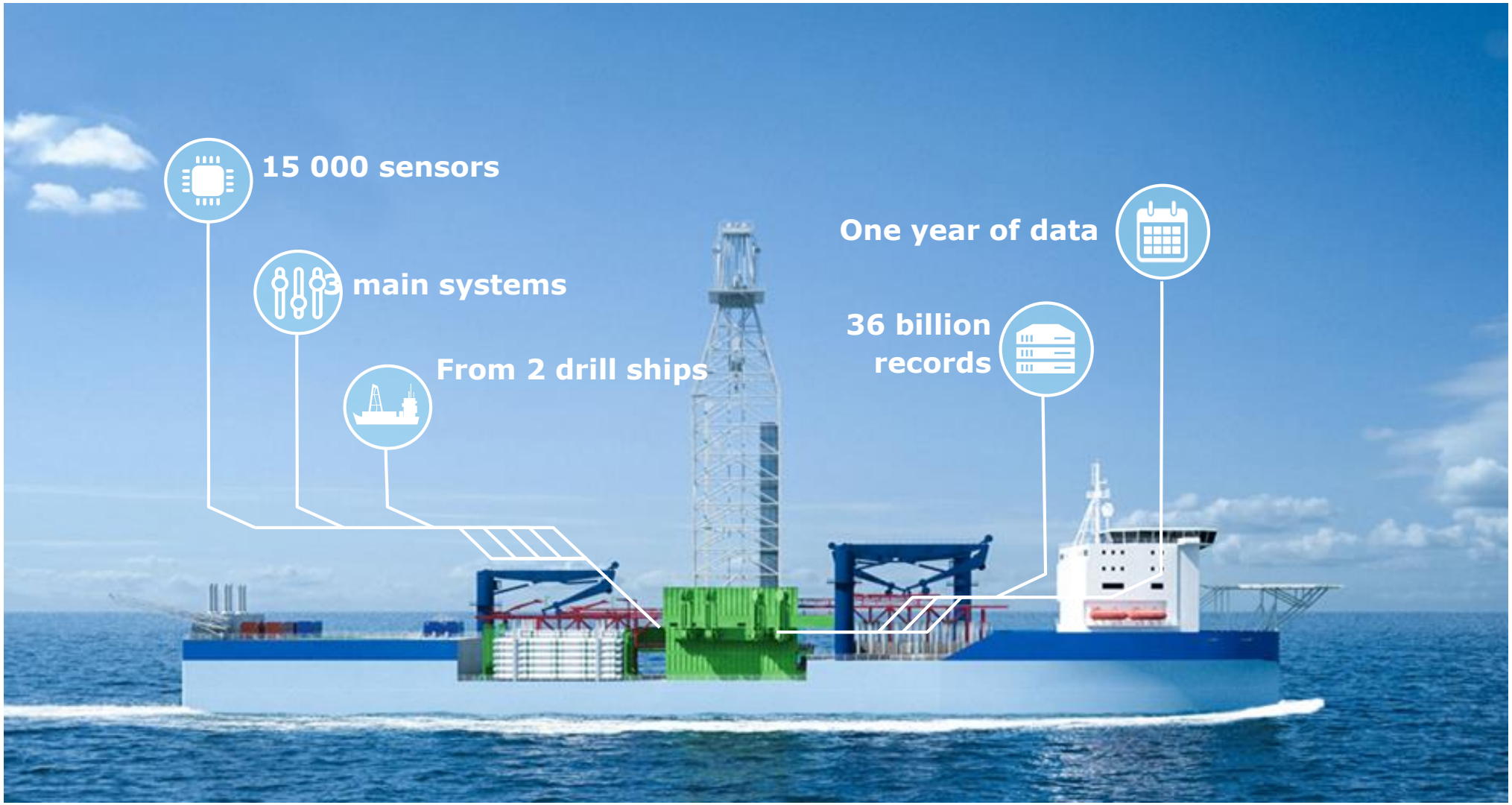


- **Platform & Cloud development**

Picture courtesy of Phys.org & Rolls_Royce


TRUST
IN DATA QUALITY

With big data, comes big data quality issues



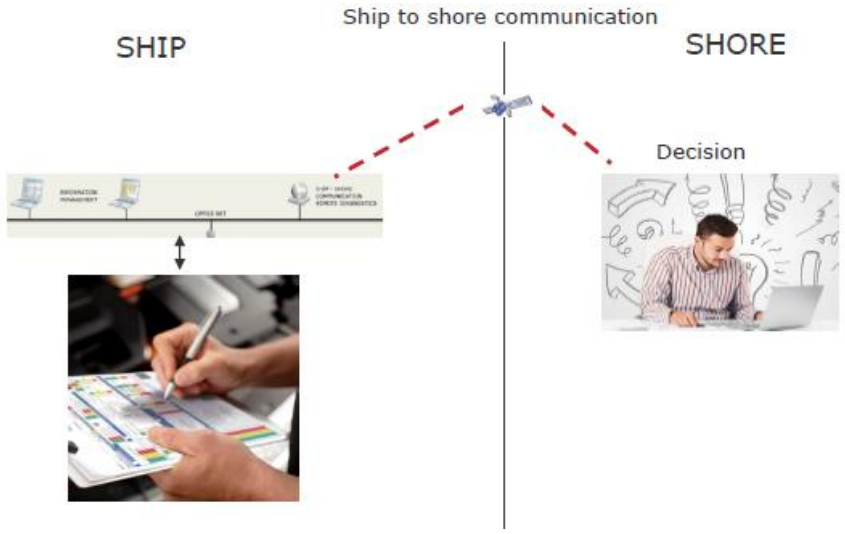
As data is becoming an asset, data quality issues are arising

Are vessels data smart?

- Vessels sailing today represent a vast untapped potential, however
  - New highly sensorised vessels and older tonnage in same fleet
  - Data management and analytics infrastructure often not harmonised
  - Manufacturers have different solutions
  - Lack of data management standards (ISO standards under development)

How to get started – Understand current situation

1. Mapping of assets
2. Understanding how you use the data today
3. Identify bottlenecks in the daily work for your key personnel, using data information
    1. Onboard
    2. Onshore



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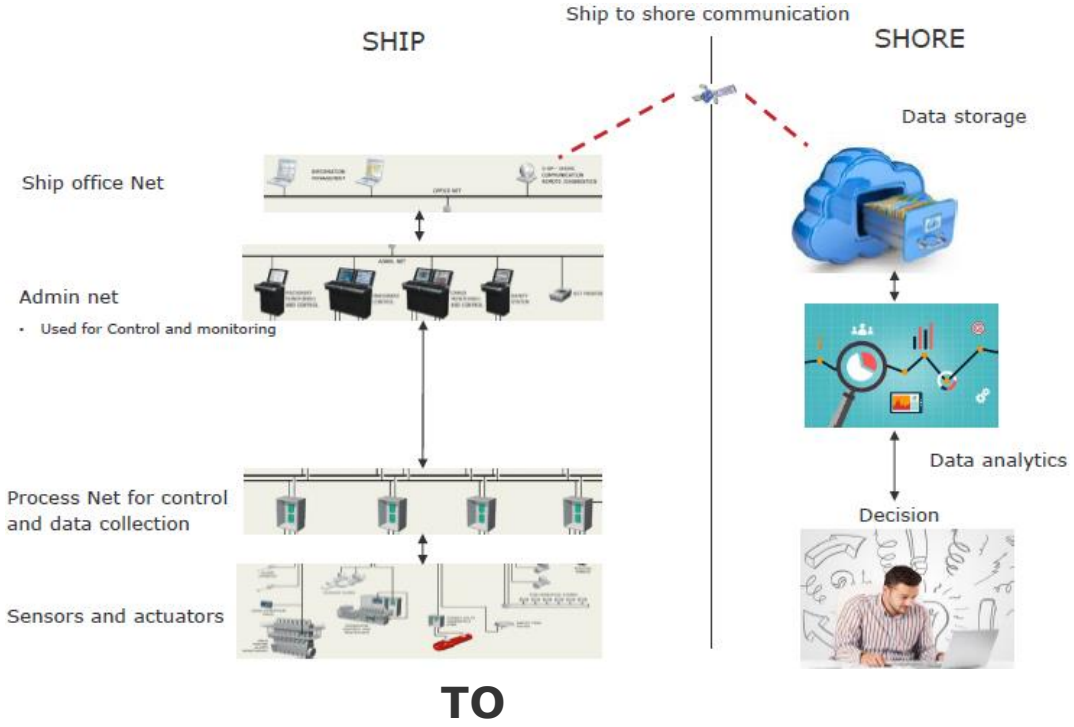
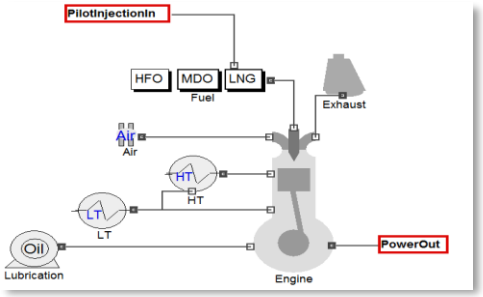


TO

Examples of where shipping already today are benefiting from digitalisation – and can achieve a lot more!

1. New building optimisation – using operational data and simulations for optimised vessel design and spare parts management
2. Operational support – Move equipment surveillance and administration from ship to shore allowing crew to focus on vessel operation.
3. Improved energy efficiency – Use operational data to continuously monitor and improve energy efficiency.
4. Maintenance management – By capturing equipment and performance data optimise maintenance to ensure reliability and minimise cost.



Operators starting to investigate digital solutions foresee substantial saving in OPEX and fuel costs

The next step – Autonomous ships

Picture courtesy of Kongsberg Maritime

www.dnvgl.com/shippingdata

Thank you !

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