

# Royal HaskoningDHV Digital

## Digital consultancy and software solutions

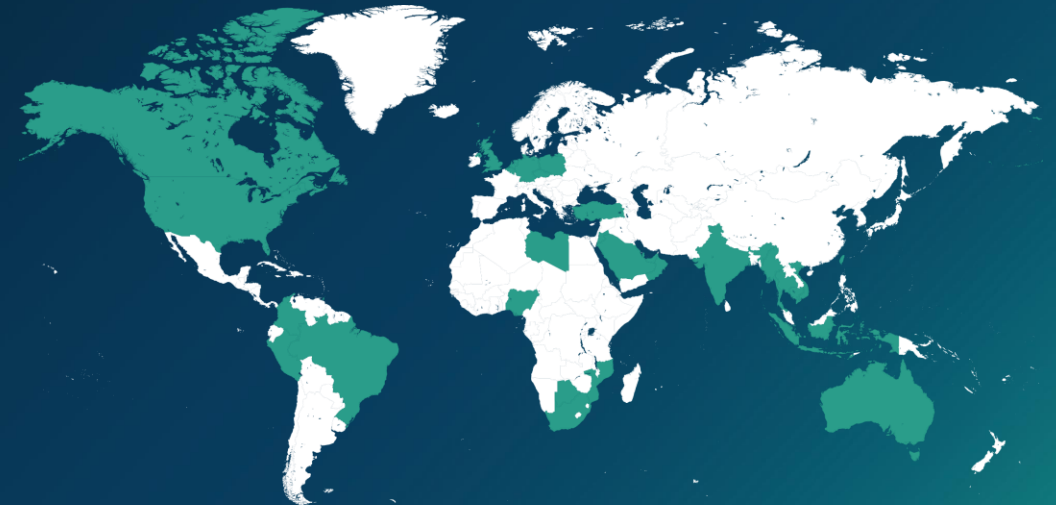
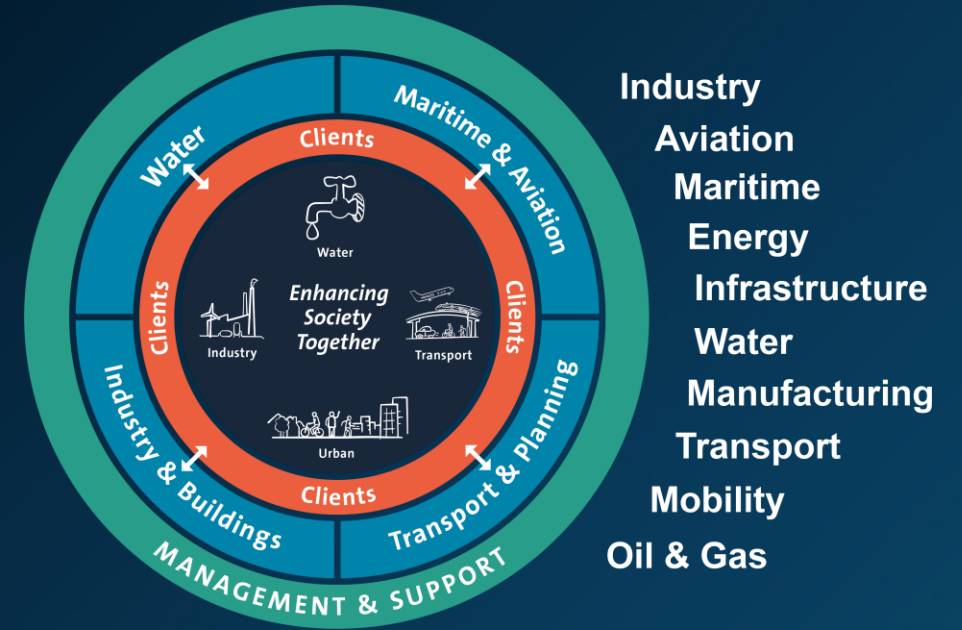
Date: 20-04-2021

Name: Fionna Heuff

# Introducing Royal HaskoningDHV

## Our company profile

- 140 years of experience
- Engineering, consultancy and (digital) technology firm
- 6,000 colleagues, over 140 countries
- €637 million operation income in 2019

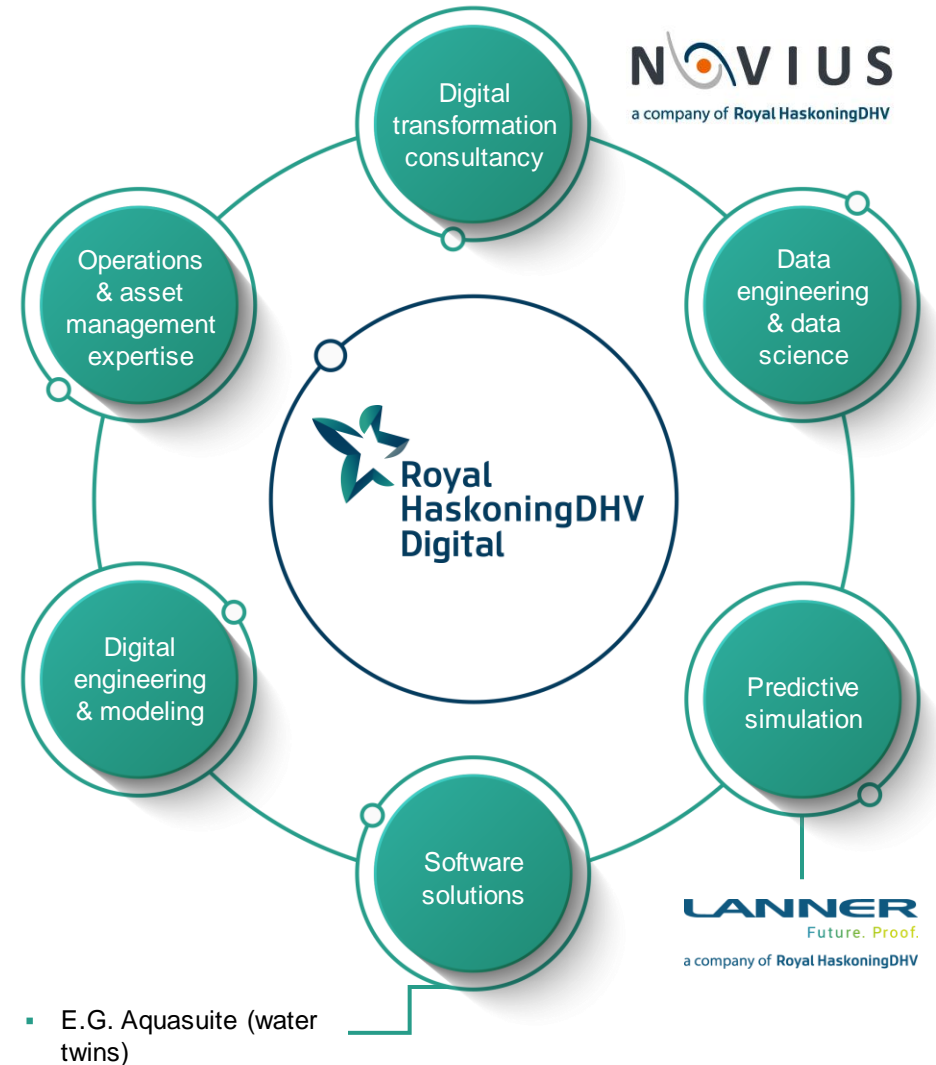




# Why Royal HaskoningDHV Digital?

Converging business, operations and IT

Real time decision making



# Our mission

**Harness the power of data to deliver the environments of tomorrow**

Rethink space

Operate in uncertain environments

Integrating the physical and digital world – endless possibilities

Improve quality of life



# Key markets



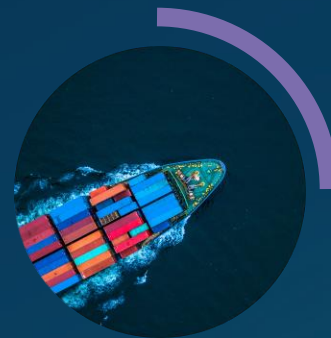
**Digital industry**



**Digital water**



**Digital urban spaces**



**Digital maritime**



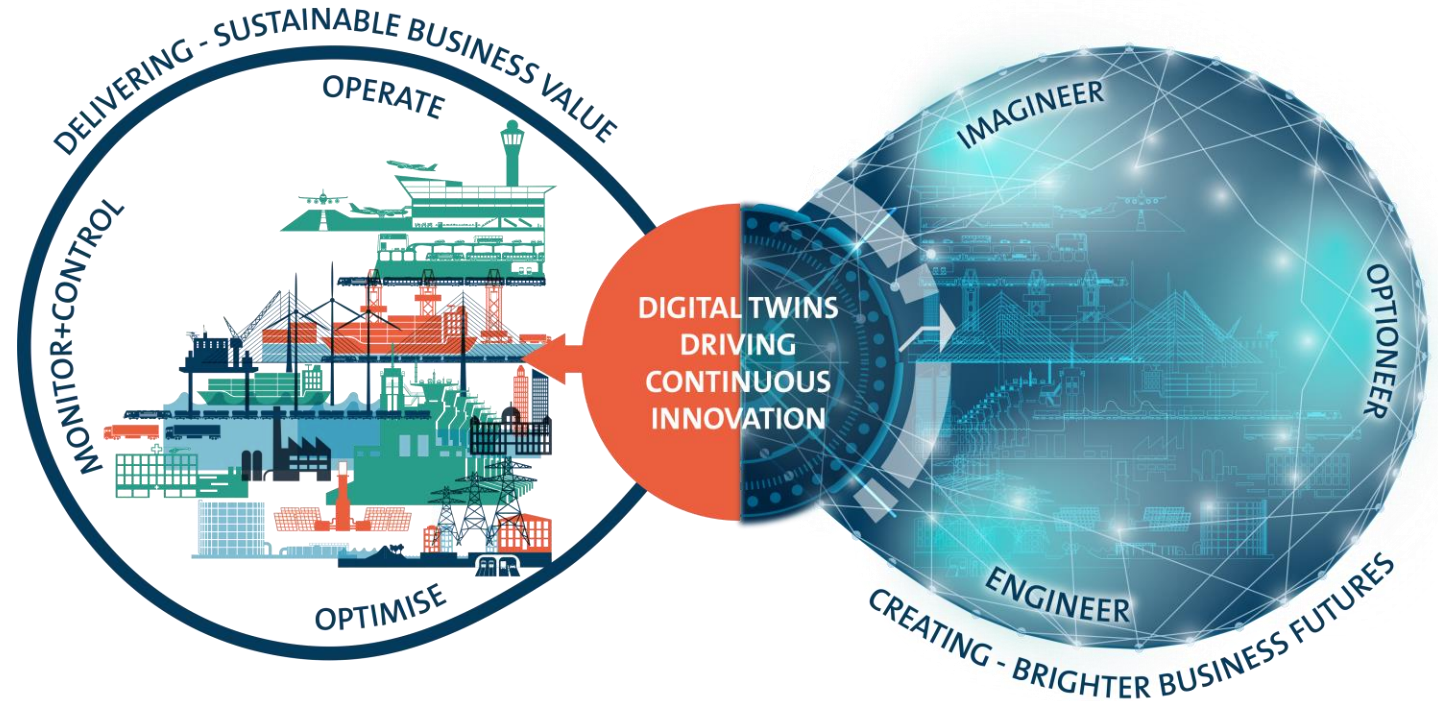
**Digital aviation**



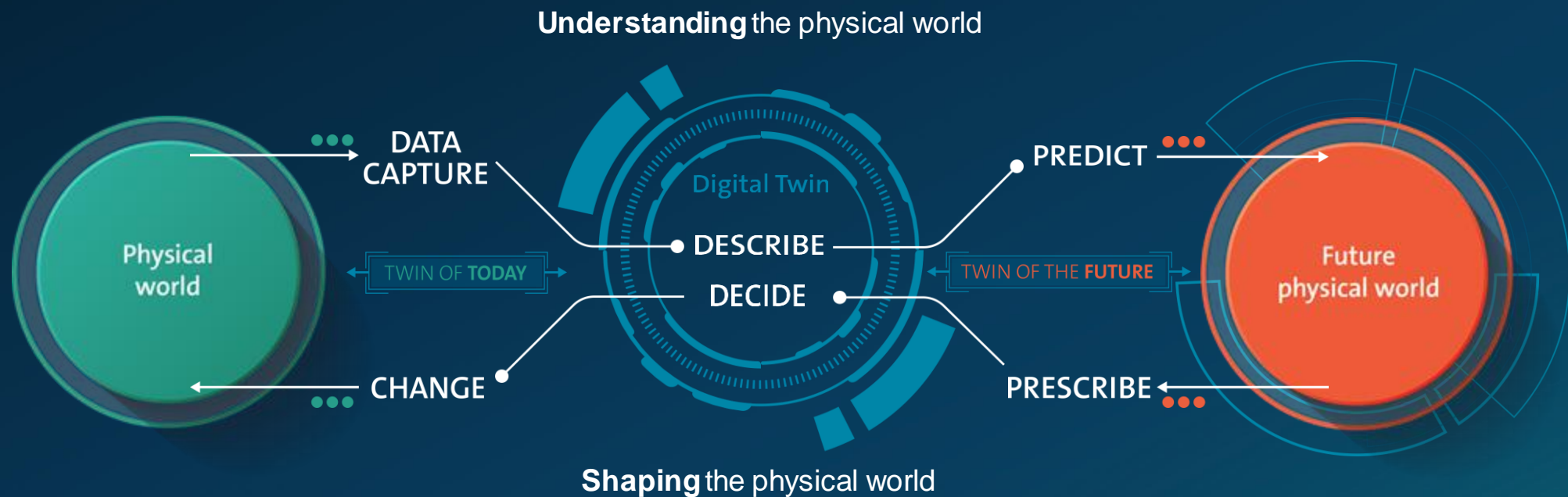
**Financials**

# Our vision: Connecting the physical and digital worlds

Accurate decision-making is key to driving sustainable business value, increasing resilience and improving performance.







### Predictive and prescriptive digital twins

Simulate potential future scenarios to make more informed decisions.

### Design simulation twin

Simulate scenarios as part of the design process for better end results.



# Our digital capabilities

We offer industry-leading simulation, data analytics, data mining, software engineering and AI skills.

Everything you need to experiment and find new, innovative solutions to your challenges in a risk-free virtual environment.



## Data Science & AI

Solve your challenge with our statistical modelling, machine learning and domain expertise.



## Data Engineering

Design and build a bespoke data infrastructure – with the outcome in mind.



## Data Consulting

Bridge the needs of the business, and the possibilities of data science.



## Predictive Simulation

Test without risk, optimise designs, and predict the outcome of complex decisions.



# Optimising processes in every environment



**Asset  
management**



**Crowd & traffic  
management**



**Process  
optimisation**



**Water  
management**



**Energy  
optimisation**



**Climate  
resilience**



# EO in RHDHV Digital

**1: High resolution**

**2: Coarse Resolution**

**3: Integrated topics**

# EO in RHDHV Digital

## 1: High resolution

Can we detect object type x and see change over time.

### Quality

- Fast growing water plants, algae

### Quantity

- Water level

### Risks to water system

- Congestion, fishing jetties, flow speed, overgrowth, subsidence, sedimentation

### Risks to surrounding area

- Damage to flood defences
- Illegal buildings
- Subsidence

Beach / foreshore topography and bathymetry





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## 2: Coarse Resolution

Change over time of land cover and water availability trends.

### Location

- Where

### Type

- Pond, lake, well

### Quantity

- Level, content
- Count

### Variation

- Permanent vs temporary water bodies

### Risks

- Illegal activities within water body
- Sedimentation
- Flood hazards

## 3: Integrated topics

Water availability vs water demand

Drought vs floods

Salinisation of soil

Basin scale high resolution surface model

Basin scale high resolution topography



# Questions?

For more information, visit our website:  
[www.royalhaskoningdhv.com/digital](http://www.royalhaskoningdhv.com/digital)

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