



# The Data & Consultancy Imperative

Why fleet performance culture cannot be purchased

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# The Product-Centric Trap



## The Assumption

Companies invest heavily in performance monitoring systems and analytics platforms, assuming:

"Buy → Install → Get Results"

## The Reality

Products gather dust, dashboards go unused, KPIs are ignored.

No one cares enough to act on the data.

**The Missing Element: No one cares enough to act on the data**

# Why Products Alone Fail

## Capabilities, Not Commitment

Products provide tools and features, but they cannot generate the will to use them consistently.

## Dashboards ≠ Decisions

Dashboards show problems clearly but don't convince people to care about solving them.

## Training ≠ Transformation

Training manuals don't create lasting behavioral change across organizations.

**Core Insight: If vessel owners and operators don't care about efficiency, no product will make them.**

# The Performance Framework



All three must work together. Products only address Data — Consultancy is the catalyst for Culture.

PART I

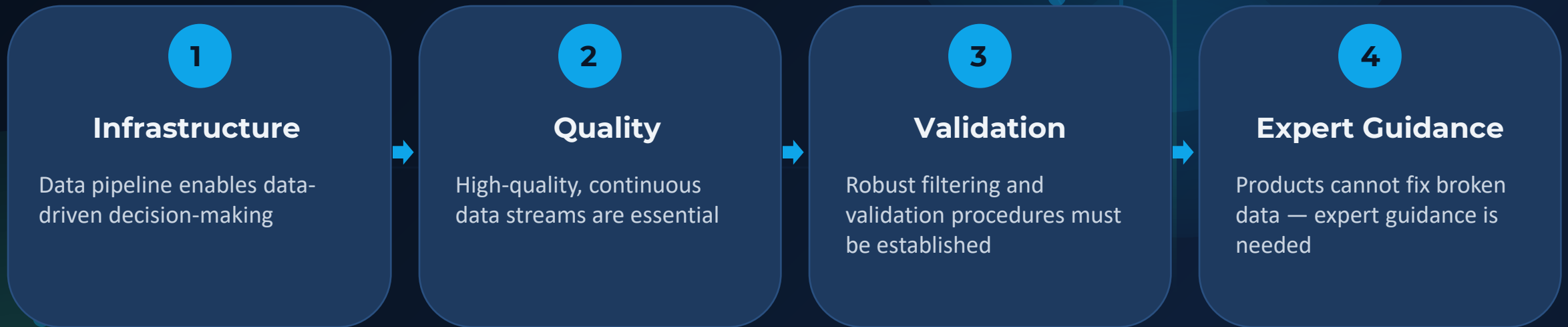
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# The Data Foundation

Building robust data pipelines and understanding fleet performance methodologies

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# Robust Data Pipelines: The Foundation



*"Take care of your data so they take care of you. Otherwise: Garbage in — Garbage out"*

# Fleet Performance Methodologies

## Classic Approach

ISO 19030 Standard

- Clear & transparent results
- Robust, standardized procedure
- Trusted and validated for many years
- Applicable to almost every situation

## Modern Approach

Big Data & AI / Machine Learning

- Advanced analytics & more variables
- Extreme automation & time-saving
- Route optimization capabilities
- Exponentially evolving technology

**Both approaches require expert guidance to implement effectively**

# Classic Approach: ISO 19030

## Paint Specification

Elaborate as much as possible to calculate optimal predictions for speed, water temperature, and voyage patterns

## Follow Specifications

Adhere strictly to the antifouling paint manufacturer's guidelines and application requirements

## Speed Management

Slow steaming increases fouling rate — maintain minimum speed levels per paint specification

## Environmental Awareness

Avoid idle periods near shore in hot, shallow waters. Inspect regularly and act on findings

## Cost Efficiency

Frequent short high-speed trips provide little value compared to expenditures — plan wisely

## Standardized Results

ISO 19030 delivers clear, transparent, and reproducible performance metrics trusted industry-wide

Best practices for optimum hull & propeller performance

# Modern Approach: Machine Learning

## Creating ML Models

State-of-the-art algorithms (ANN, XGBoost, etc.) have enormous potential for performance applications.

But critical principles must be followed:

- **Don't just throw data into algorithms**
- **Human experience is absolutely essential**
- **Variables must be carefully engineered**

## Forecasting & Validation

Real condition targets must be set for model testing. Deployment requires rigorous validation:

- Models that defy physics are not usable
- Voyage prediction provides the big picture and incentive
- Route optimization becomes possible
- Extreme automation and time-saving upon deployment

**Technology is a powerful weapon — but only in the hands of skilled consultants and engaged crews**

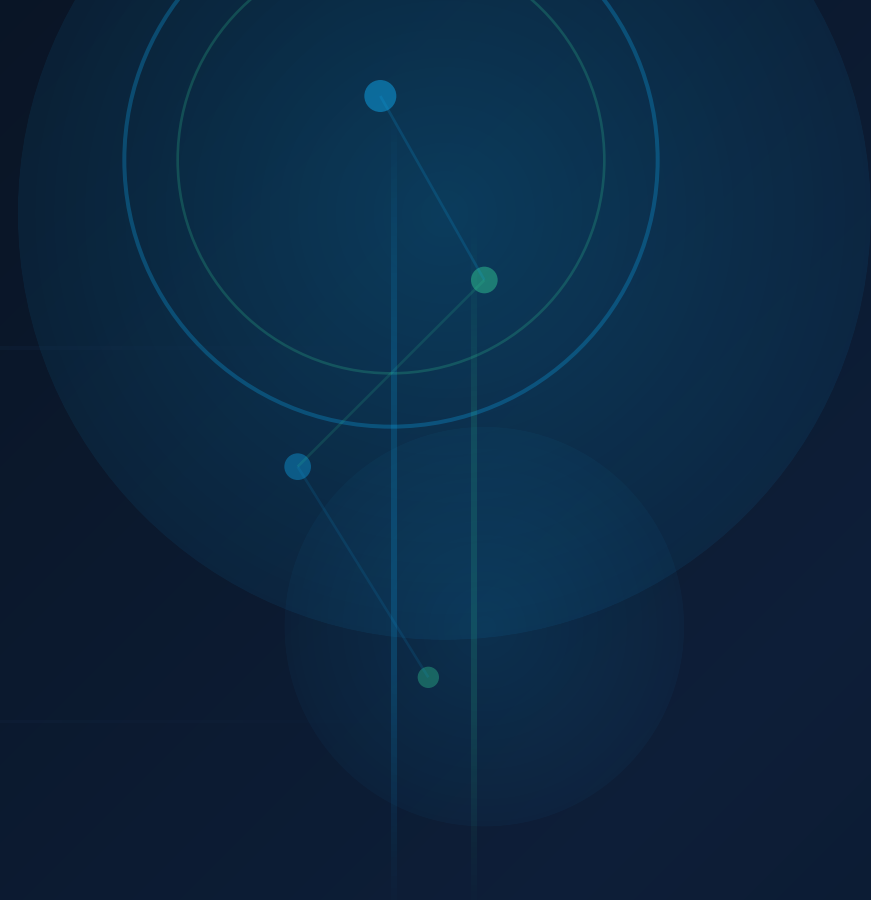
PART II

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# The Human Factor

Why consultancy is the catalyst for lasting culture change

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# The Consultancy Imperative

## 1. Translate Insights

Expert consultancy translates data findings into practical operational procedures

## 2. Engage Continuously

Sustained engagement builds trust in methodologies and demonstrates ROI over time

## 3. Establish Protocols

Help companies create sustainable efficiency protocols with accountability frameworks

## 4. Validate Financially

Strong financial validation maintains stakeholder commitment and momentum beyond deployment

**Consultancy = The Catalyst Between Data and Culture**

# Breaking Barriers & Building Culture

## The Barriers

- Changing cultural mindset is an arduous task
- "Traditional" ship-owners are difficult to convince
- Complex models must be explained in plain words
- Initial skepticism is normal — owners have seen "solutions" before

## The Path Forward

- Make benefits clear throughout a lasting time interval
- Build trust through experiments and comparisons
- Always keep a strong financial incentive among stakeholders
- Transparency is the key to adoption

**The goal: Make efficiency a reflex, not a requirement — products provide tools, but culture requires consultancy**

# Getting the Crew's Support

## Don't

- 1 Add unnecessary workload
- 2 Give tasks without explanation
- 3 Suppose they know everything

## Do

- 1 Remove workload as much as possible
- 2 Work with them, explaining every new task
- 3 Provide seminars and training

# Real-World Crew Support Examples

## Route Optimization

Using models to continuously optimize the vessel's route with the latest weather updates.

This requires the crew to:

- Trust the model's recommendations
- Provide feedback on route feasibility
- Report real conditions vs. predictions

## Auxiliary Engines

Introducing a data-driven threshold for starting the second generator, replacing subjective decisions by each chief engineer.

The crew must:

- Accept new thresholds based on data
- Report any operational constraints
- Validate savings through comparison

**Without crew support, most data-driven actions are in vain**

# Key Takeaways

- 1 Robust data pipelines are the foundation — decisions collapse without reliable information
- 2 Products provide tools, but consultancy creates culture — buying software doesn't change behavior
- 3 Expert guidance establishes procedures — consultants translate capabilities into operations
- 4 Time and engagement persuade stakeholders — culture change requires sustained partnership
- 5 Crew support is essential — without it, most data-driven actions are in vain

**Blue Autonomy bridges the gap between data and culture — delivering the consultancy that turns tools into results.**



# Thank You!

Questions?

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