



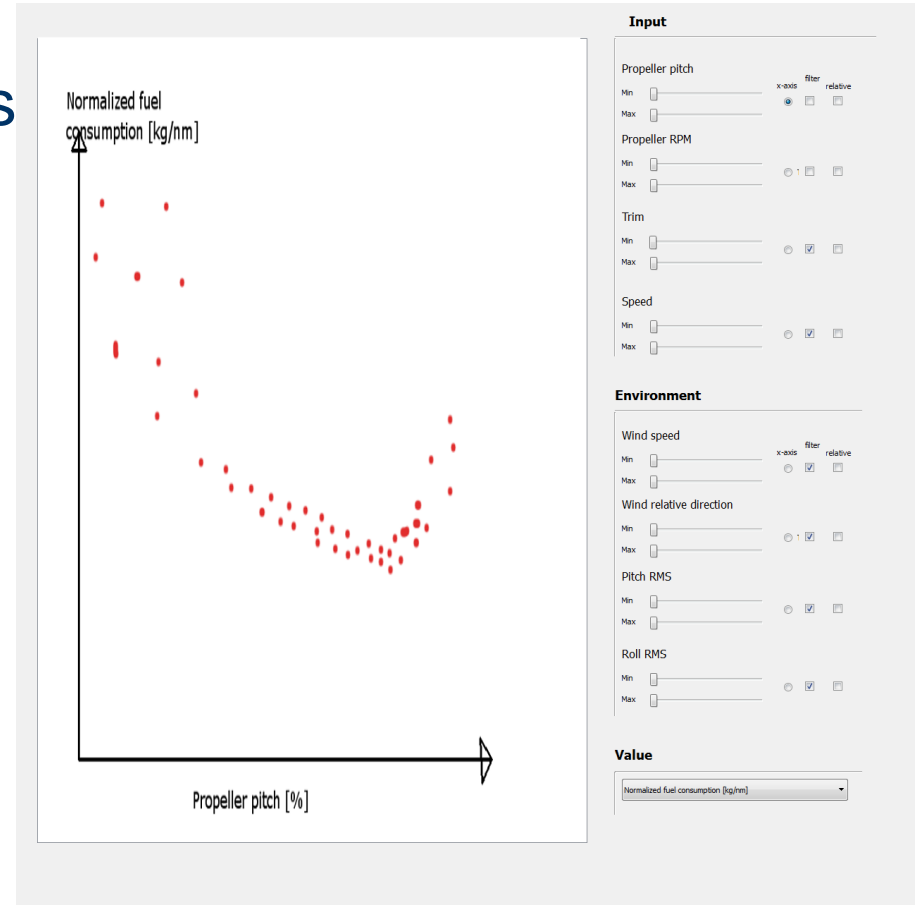
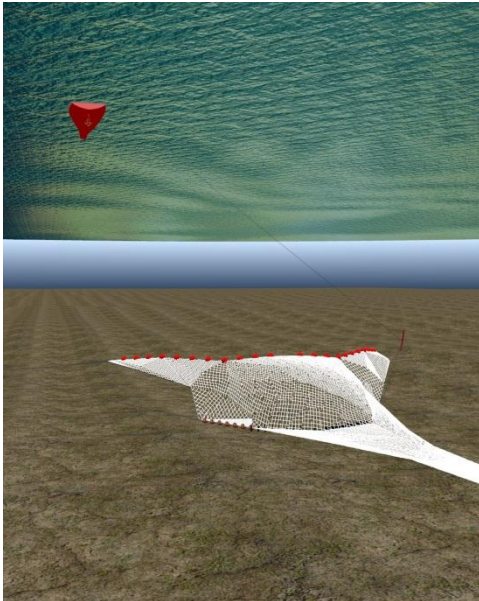
# **Future Fishing Vessel Technologies**

## **Session 4 - Decision Support**

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SINTEF Fisheries and Aquaculture  
June 6-7, Sicily

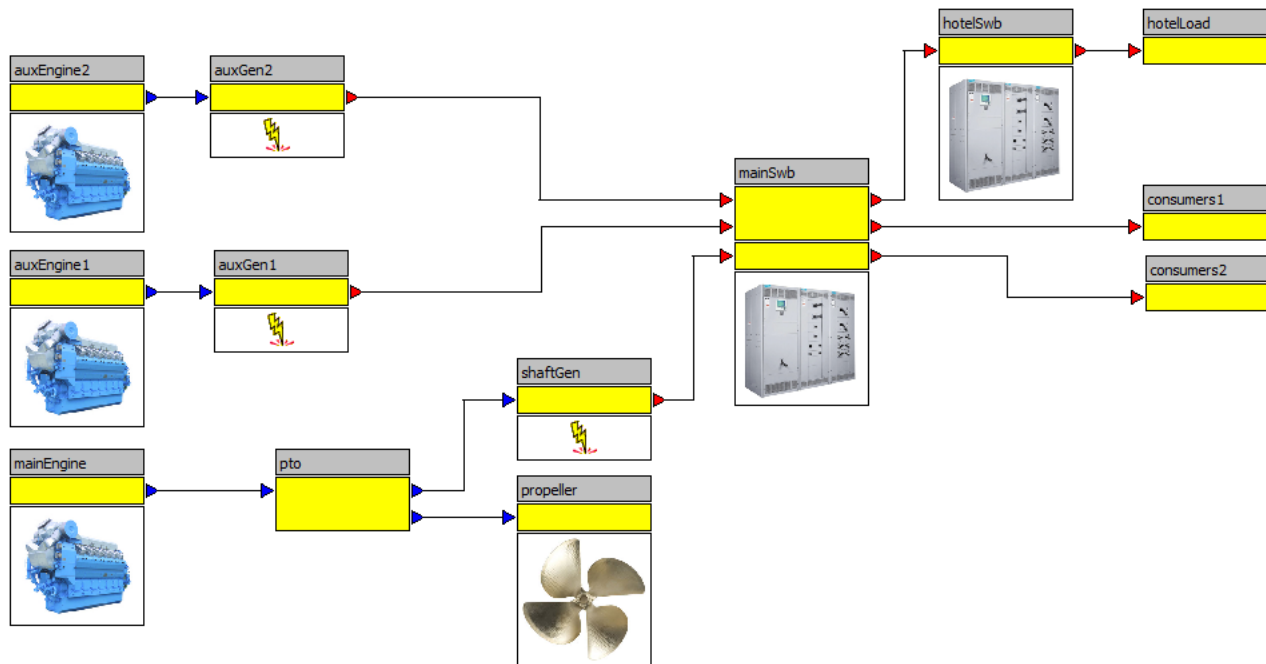
# Outline

- Types of decisions
- Basis for improved decisions
- Specific challenges
- Specific possibilities



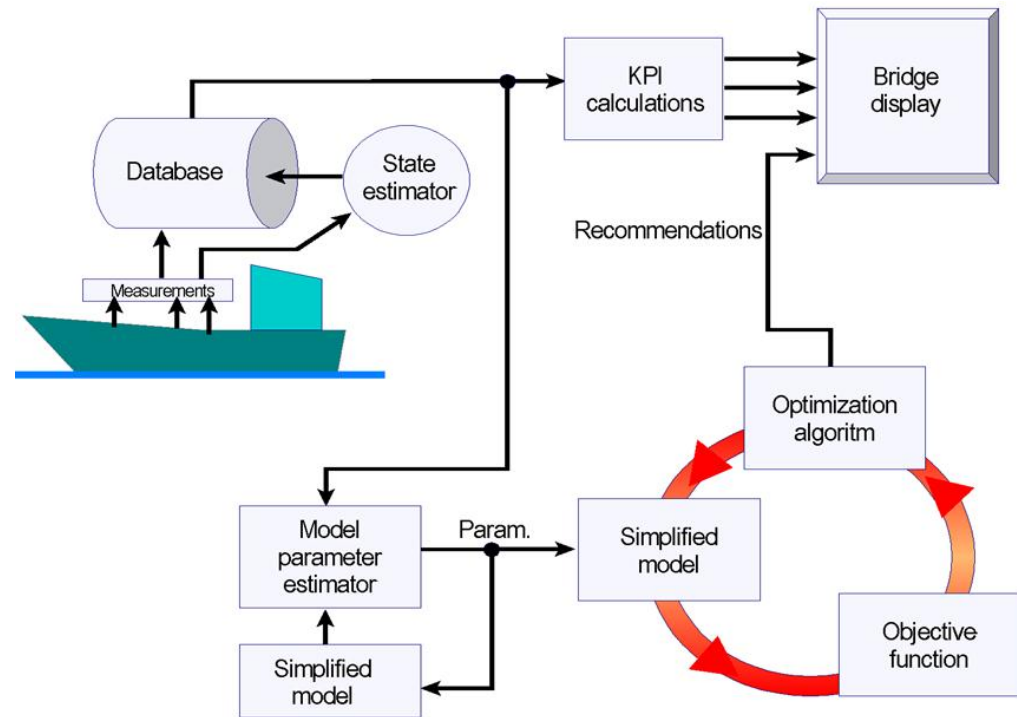
# Decisions – vessel design

- Hull and GA design
- Choice of components
- Expected operational profile



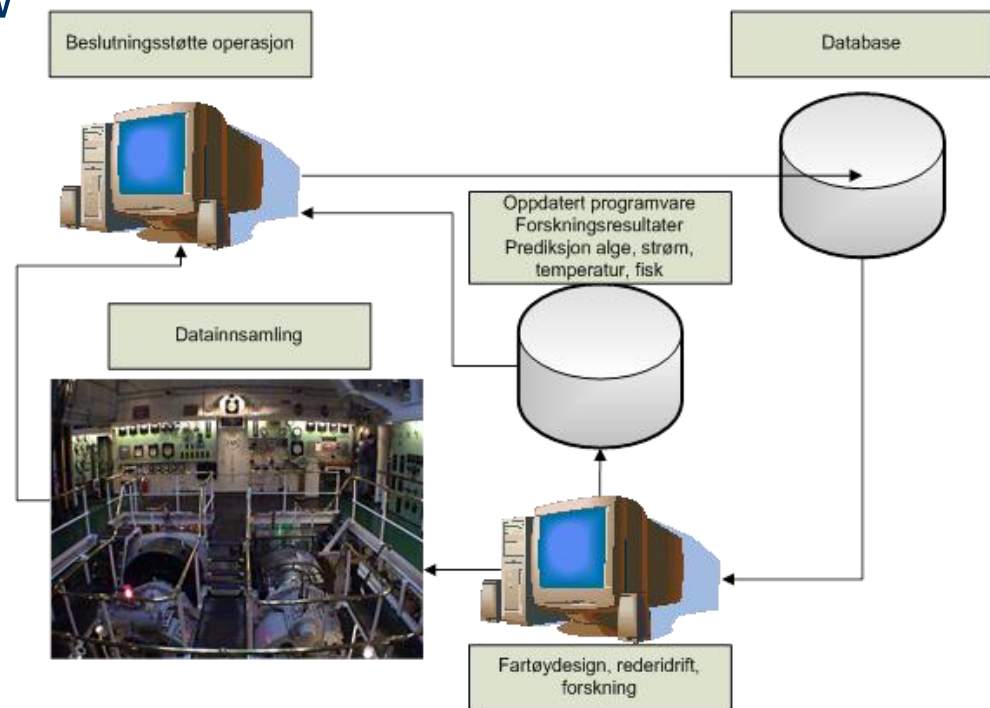
# Decisions – vessel operation

- **Strategic** (Fishing type, weather routing, timing delivery and catch)
- **Tactical** (Engines to run, propulsion type, fishing process)
- **Immediate** (Optimum trim, speed, propeller pitch, fishing process)



# Basis for improved decisions

- Past experience and knowledge
  - Learning, shared know-how
  - Training
- Current information
  - Improved real-time information
- Predictions
  - What-if tools (simulation)
  - Optimum solution tools



# Challenges

- Exchange of information and know-how
  - Operational experience and know-how
  - Design experience and know-how
  - Collected information
  
- Development of common tools hindered by variations in
  - Available measurements
  - Vessel design
  - Operation



# Possibilities

## ■ Generic vessel database

- Real time, statistical and static data
- Anyone can write or read

## ■ Operational tools

- Real-time information
- Comparing to statistical operation
- Optimization of operational parameters

## ■ Strategic operation tools

- Weather routing
- Delivery planning
- Catch planning

## ■ Design tools

- Expected operational profile
- Simulation of possible designs
- Optimization of possible design