



ProMo Ships

Probabilistic Models for multi-axial assessment
of ships

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Ship Owners

CAPEX vs OPEX

CAPEX

- Driven by investments
 - Buy,
 - Overhaul,
 - Demolish
- 2-3 Events

OPEX

- Driven by use of the vessel
 - Maintain,
 - loading condition,
 - routing,
 - weather
- Monthly/Daily Events

To determine the best option we need to know the future!

Ship Builders

Past

Present

Future

Full service
builders

Service/
Knowledge
Integrators

Full
Service
Providers

Design for Production

Design for Performance

Design for ?

• Driven by

- Production Costs,
- Internal Capacity

• Driven by

- Contract agreements,
- Design Conditions,
- Adhoc Organisations

• Driven by

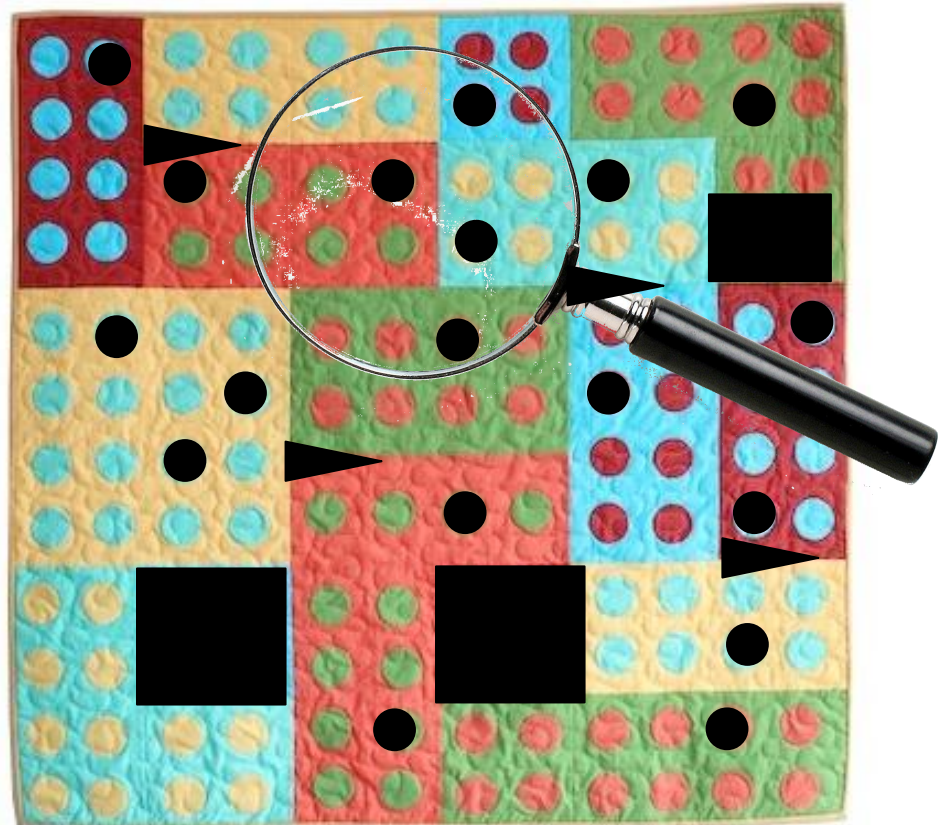
- Operational performance,
- Life time costs

To determine the best option we need to know the future!

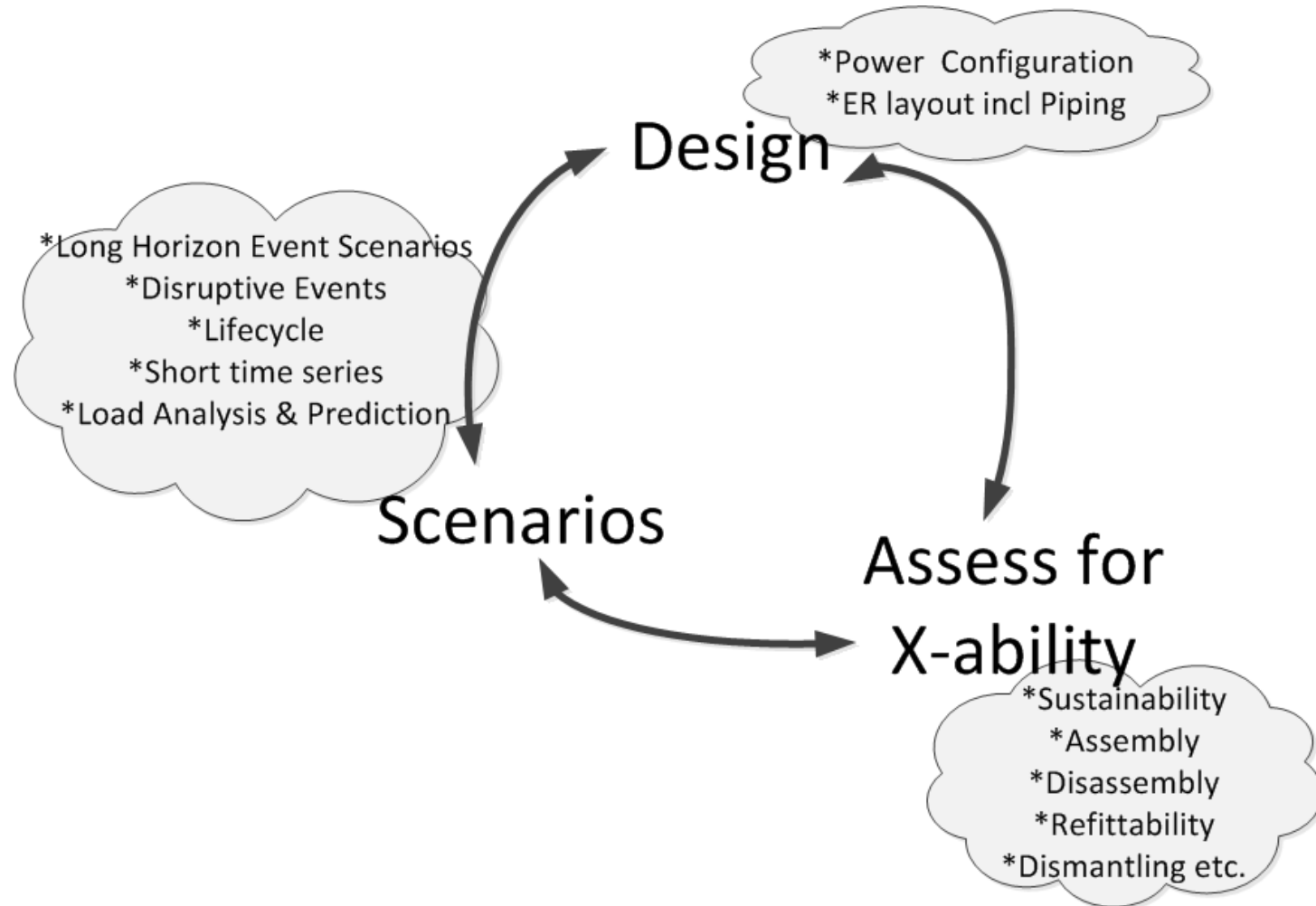
Finding the gaps

A lot has been done already:

- Routing/Weather,
 - Dynamic Machine performance,
 - Production data,
 - Ship Recycling Performance,
 - Automatic GA
 - Automatic Pipe Arrangement
 - And many more
- But no integral combination of tools and techniques exist.
- Furthermore...



Project approach



Summary

- Goal: Develop a unifying design methodology that will integrate ship design, production, operation, maintenance, and recycling using probabilistic models.
- This is achieved by:
 - Integration of multidisciplinary aspects in maritime technology
 - Development of new methodologies (to fill the gaps)
- This will allow the user to
 - Have insight in the risks
 - Have insight in the life time costs (build, maintain, demolish)
 - Improve the ship's life time performance

PROMO Ships

Thank you

