

21st Century Tanker Operations

Tanker Operator Conference Hamburg 2014

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- The complex and changing tanker industry
 - How we got here-5 Phases
 - Regulations
 - Customer base
- Complexity
 - What is Complexity?
 - Why worry about it?
 - Influences and Choices
 - Complexity at the sharp end
- 21st century tanker operations
 - Resilient or brittle
 - The resilient tanker operator
 - The human contribution-hero or hazard

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**Our complex and changing
industry**

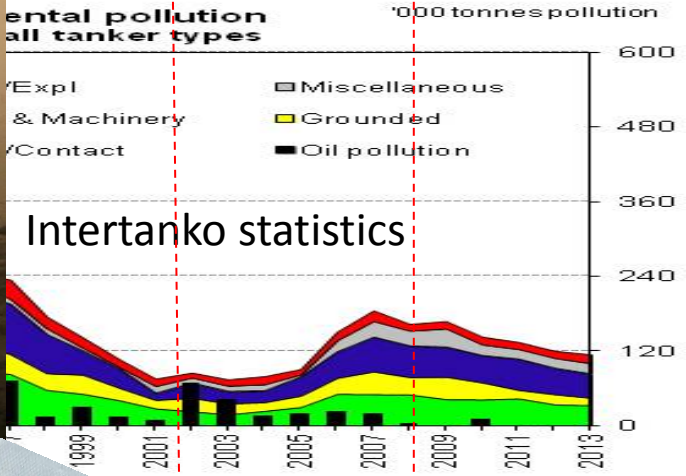
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40 Years ..Five Phases

Phase 1

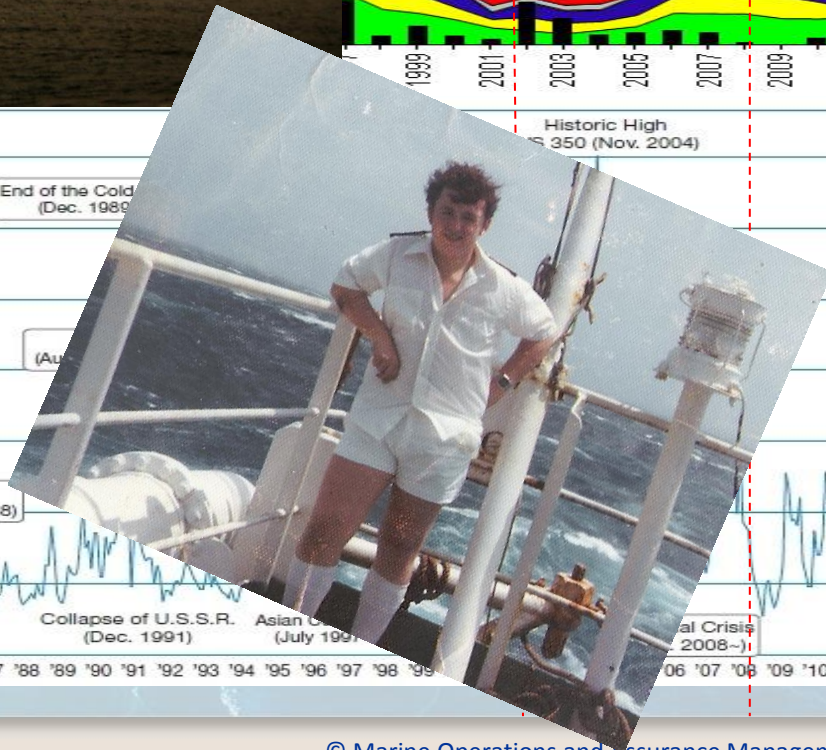
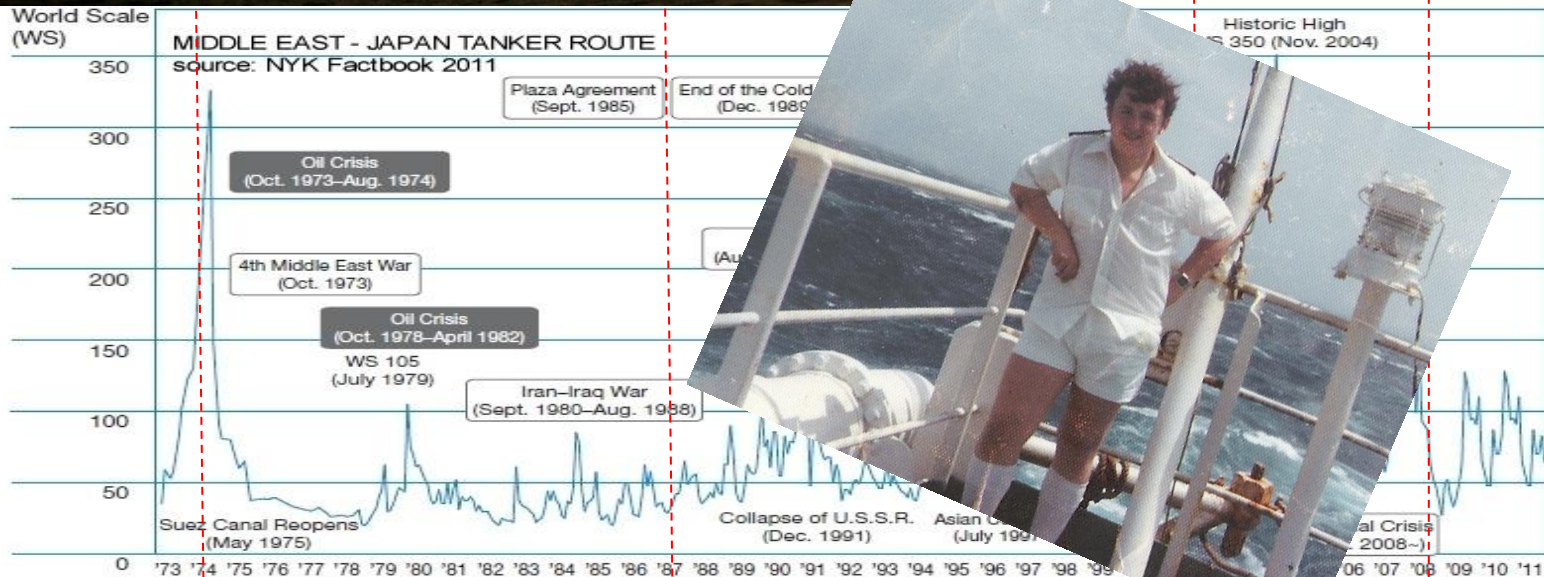


Phase 2

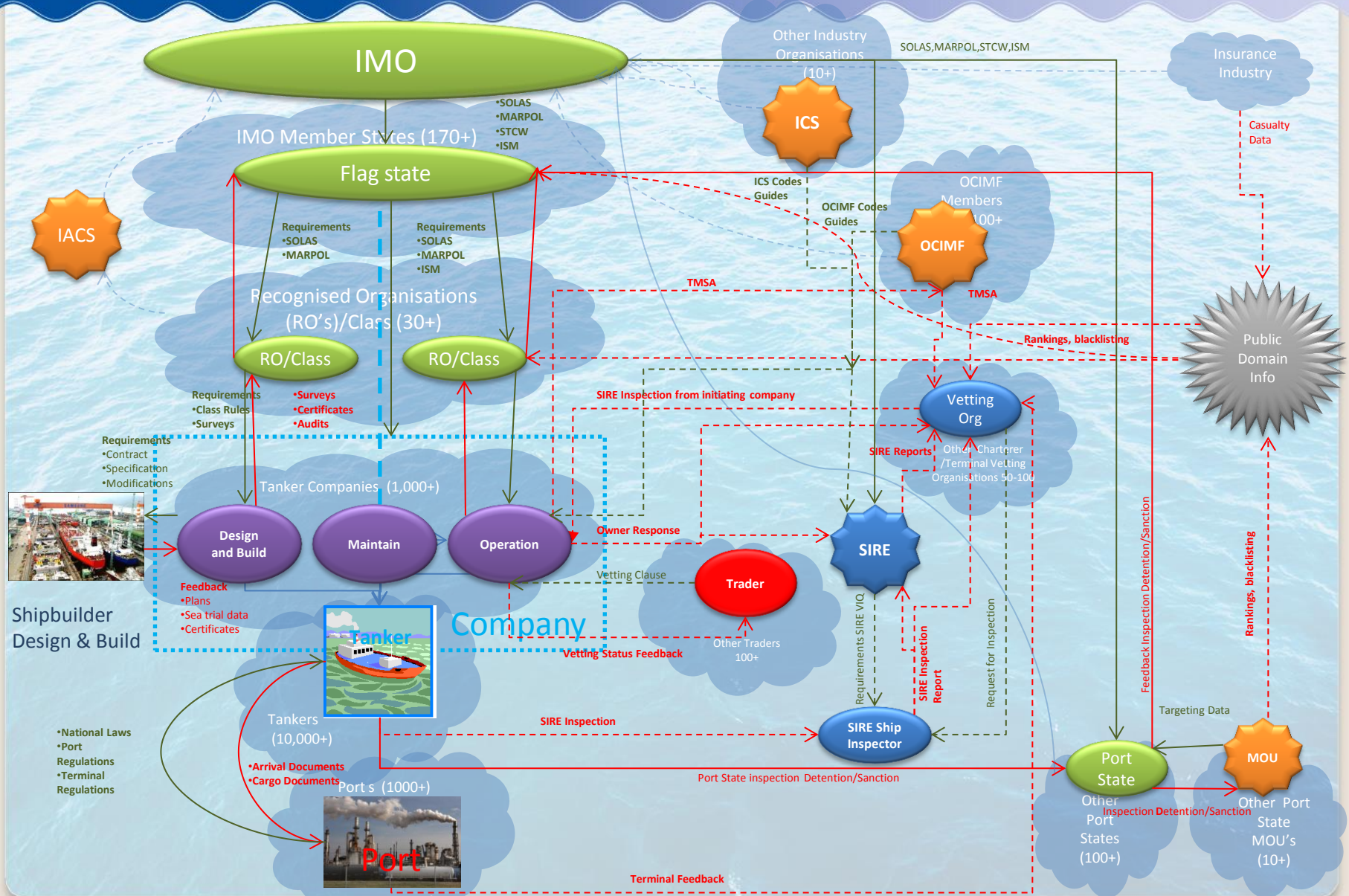


Phase 4

Phase 5



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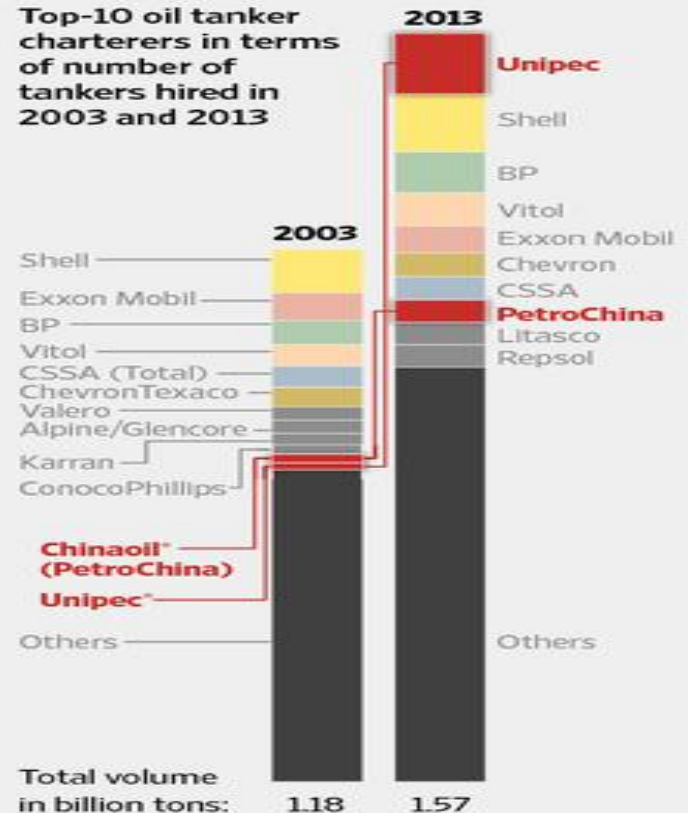


Source of
data Forbes

Tanker Traffic

Chinese companies have become among the largest players in the oil market over the past decade.

Top-10 oil tanker charterers in terms of number of tankers hired in 2003 and 2013



Total volume in billion tons: 118 157

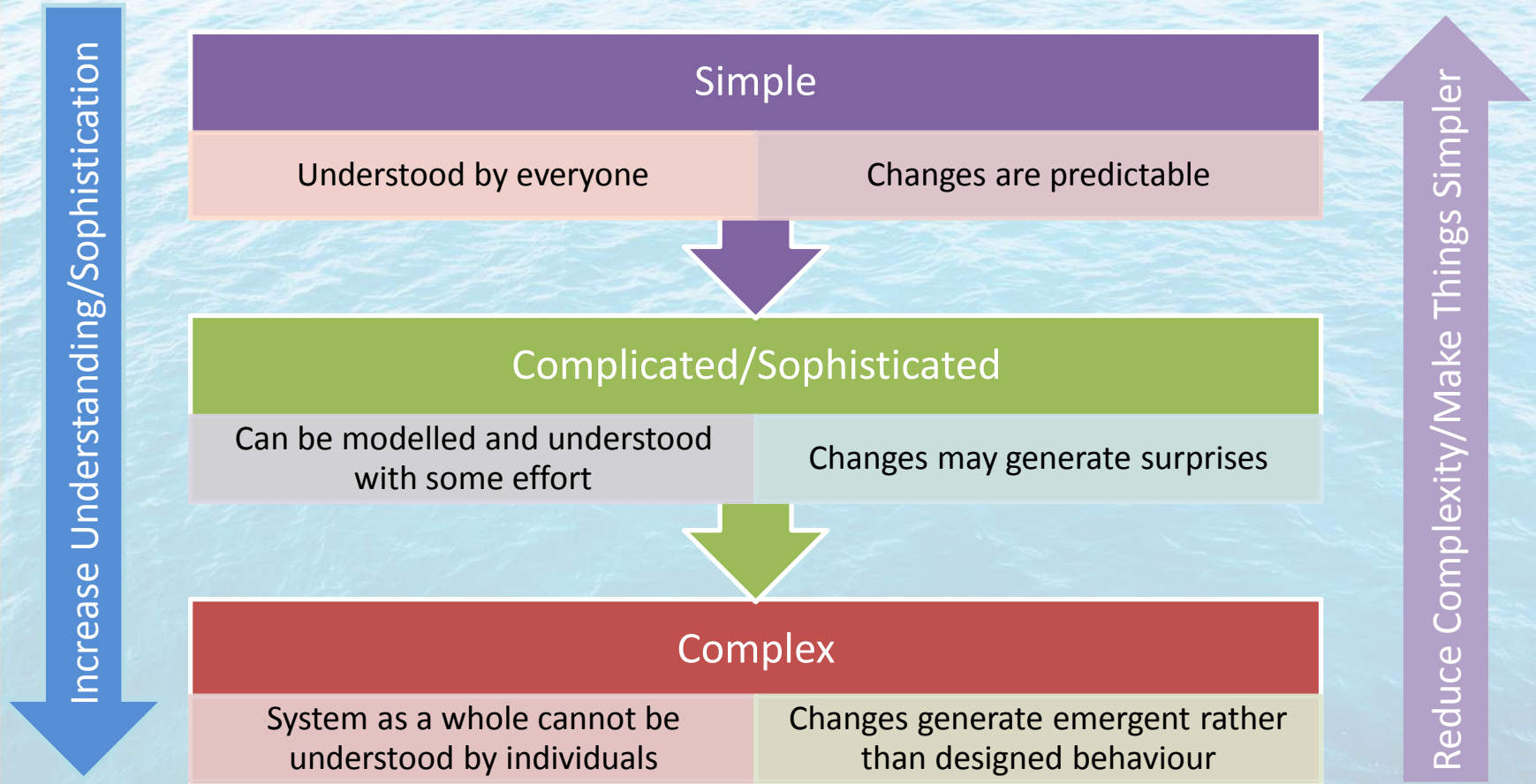
* Chinaoil and Unipet weren't top-10 charterers in 2003.

Source: Poten & Partners
The Wall Street Journal

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Complexity

What is complexity?



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Complex organisations are :-

Higher risk

- Unpredictable and hard work to manage
- More unpredictable and unexplainable accidents and incident
- Confusing and de-motivating for the people within
- Brittle

Less profitable

- Lost opportunities and profitability
- Lack of agility
- Cost more to run

Conflicting Goals



Your priority is
safety, emissions,
greenhouse gas
piracy, security,
making money,
doing things
quicker, ballast
water, doing the
paperwork



Duplicate /Conflicting Requirements



You need to follow the
owners, charterers,
flag states, port states,
terminals rules and
the qa system,
chartering , accounts,
purchasing
department,
procedures

Communications



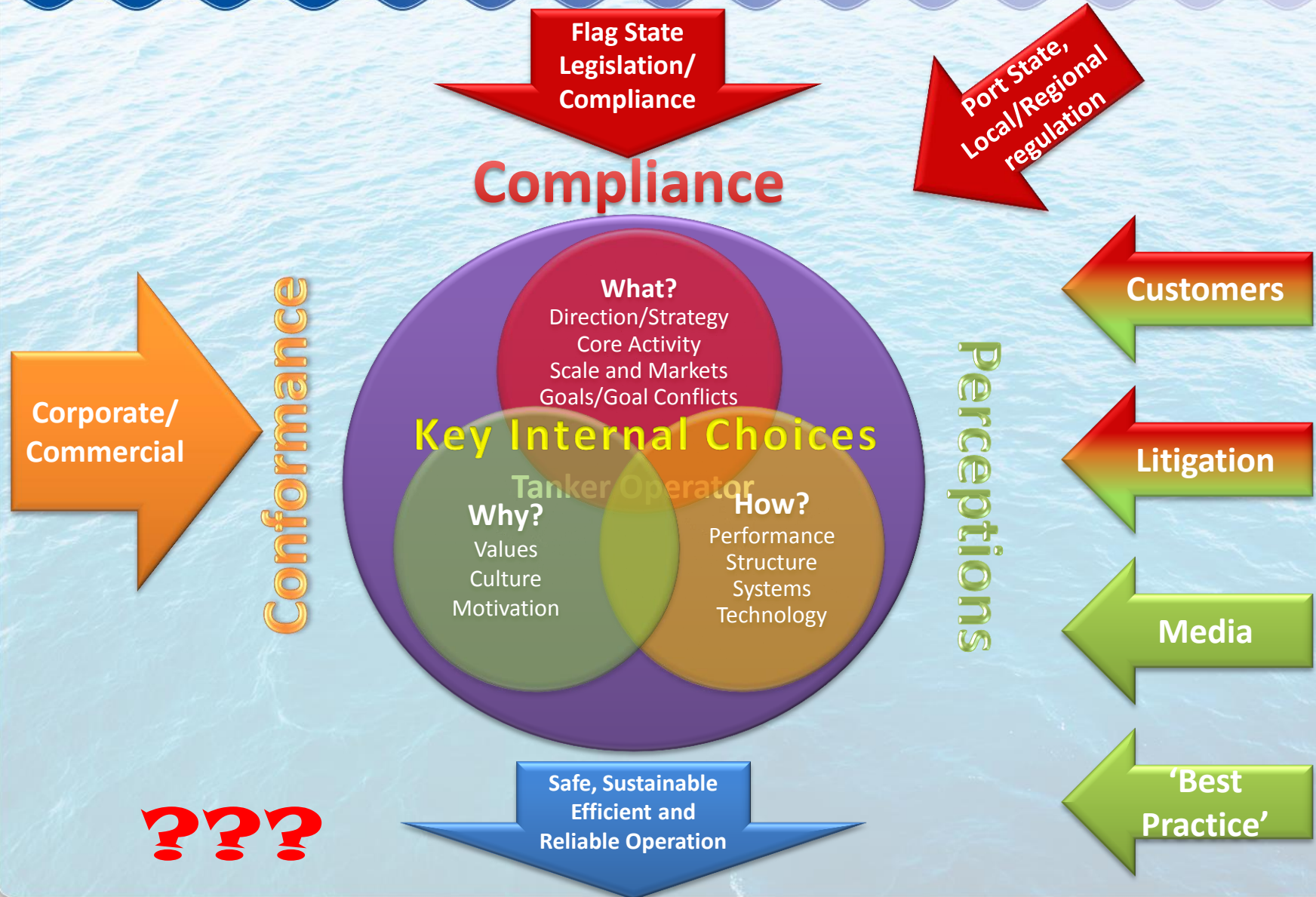
Budgets
Planned Maintenance
Spare Gear and Stores
Risk Assessments
Incident Reports
Near Misses
Port and Cargo Info

Systems



ISO9001
ISO14001
ISM
ISPS
SIRE/CDI
TMSA

moams Complexity-Influences & Choices



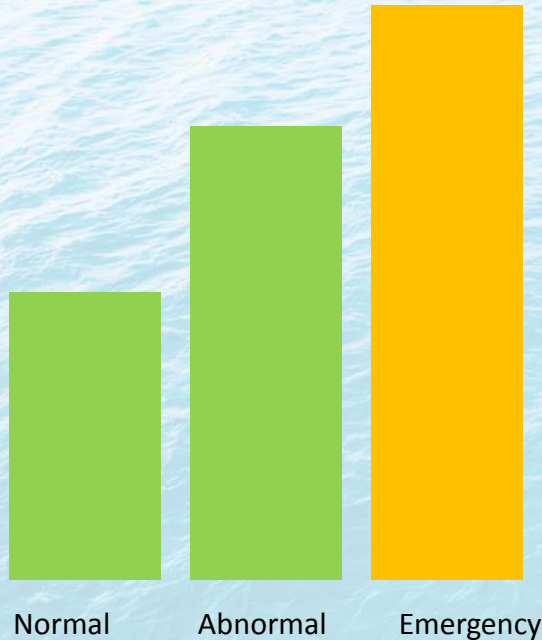
1. You need to put a very high value on simplicity
2. You must be determined to seek simplicity
3. You need to understand the matter very well
4. You need to design alternatives and possibilities
5. You need to challenge and discard existing elements
6. You need to be prepared to start over again
7. You need to use concepts
8. You may need to break things down into smaller units
9. You need to be prepared to trade off other values for simplicity
10. You need to know for whose sake the simplicity is being designed

From 'Simplicity' by Edward de Bono

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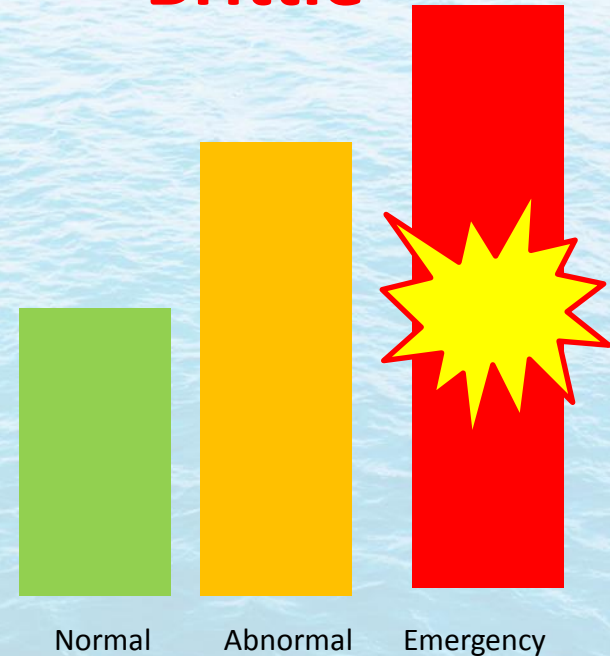
21st Century Tanker Operations

Resilient



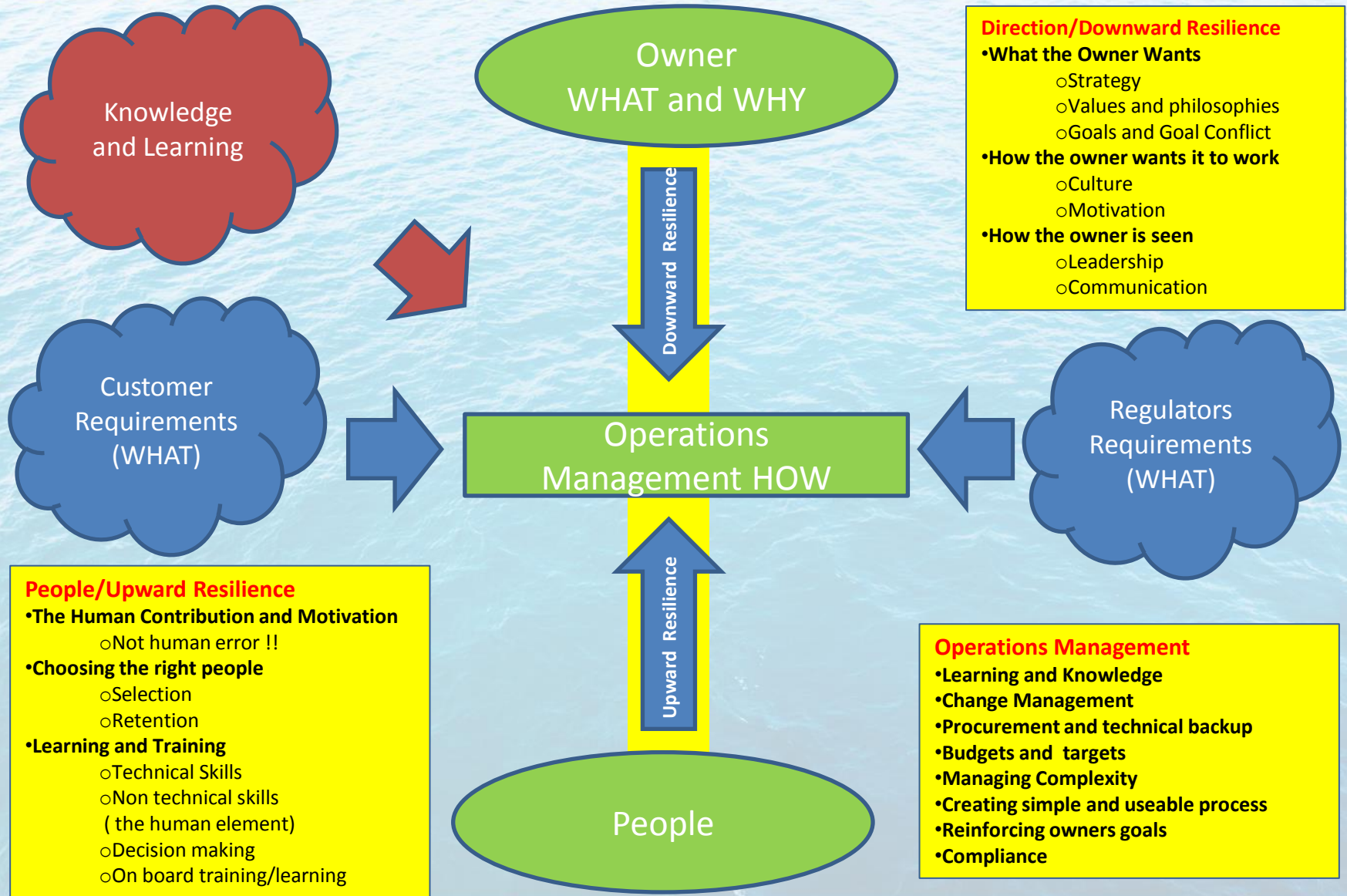
Resilient organisation will adapt from normal operation to abnormal operation and recover. In emergency will be able to adapt further to avoid catastrophe

Brittle

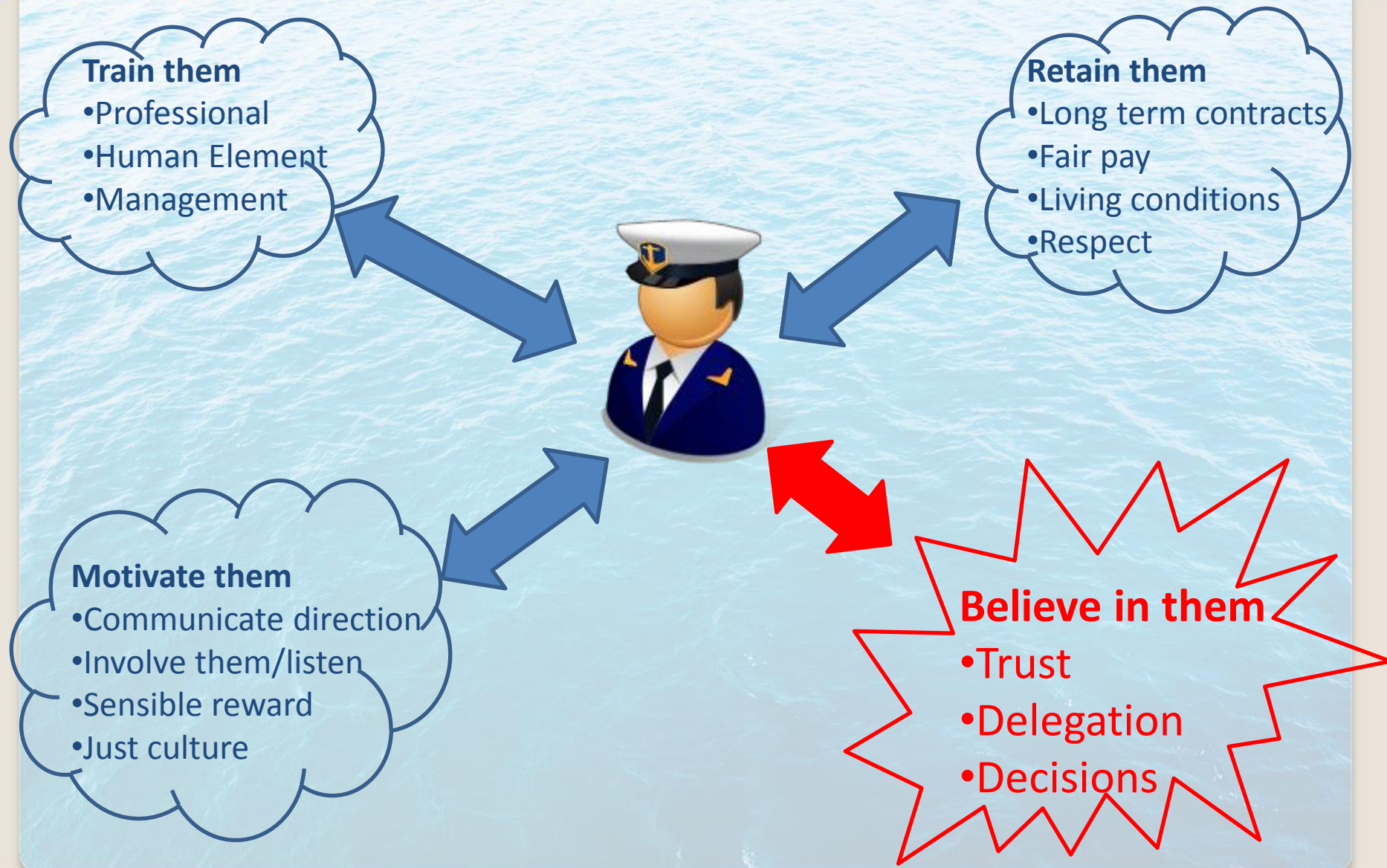


Brittle organisation will need all its resources to maintain normal operation leaving limited capacity to deal with the abnormal. Rule based mentality will be unable to cope with novel emergencies and will fail.

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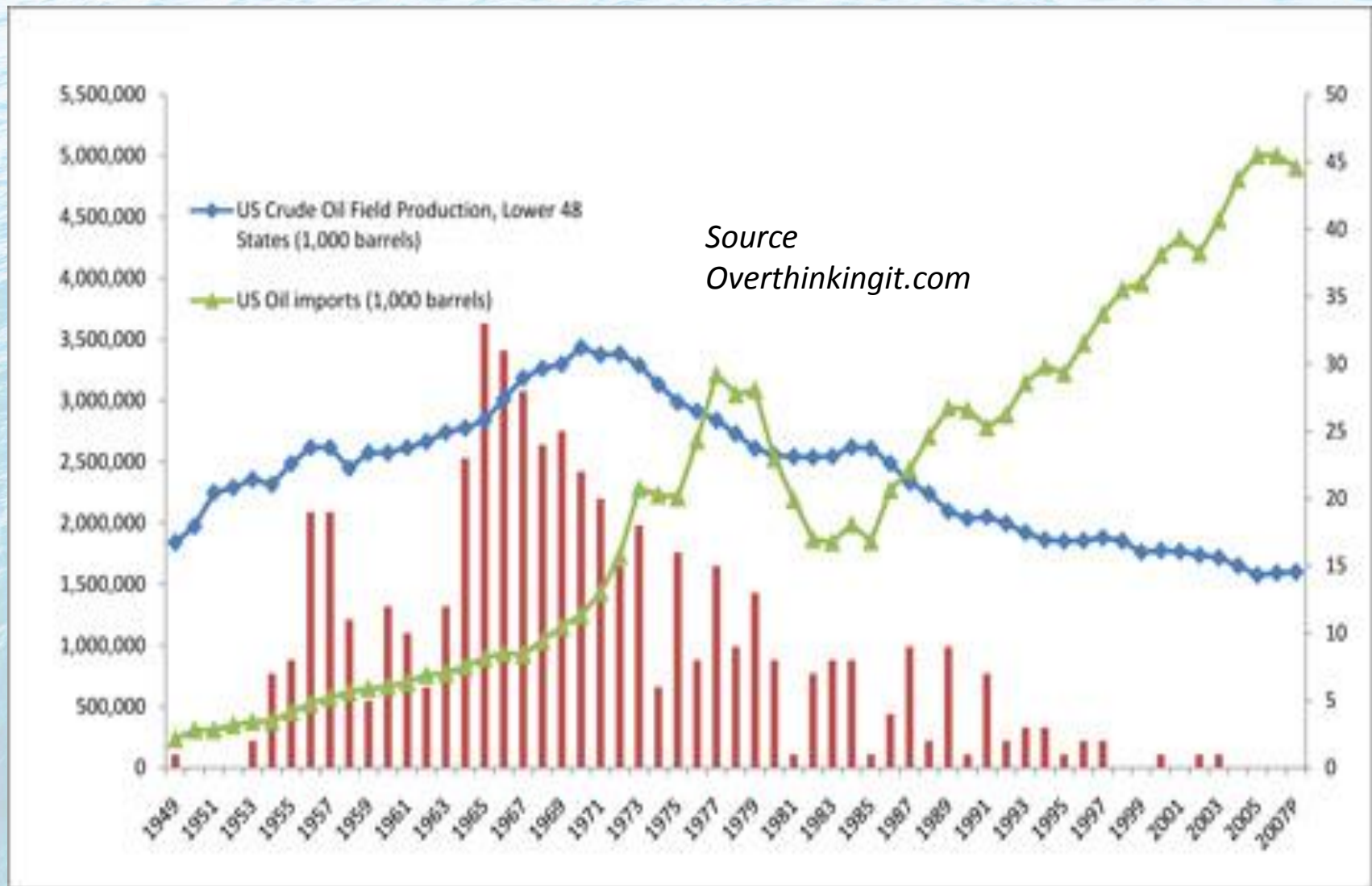
moams The front line-the last defence



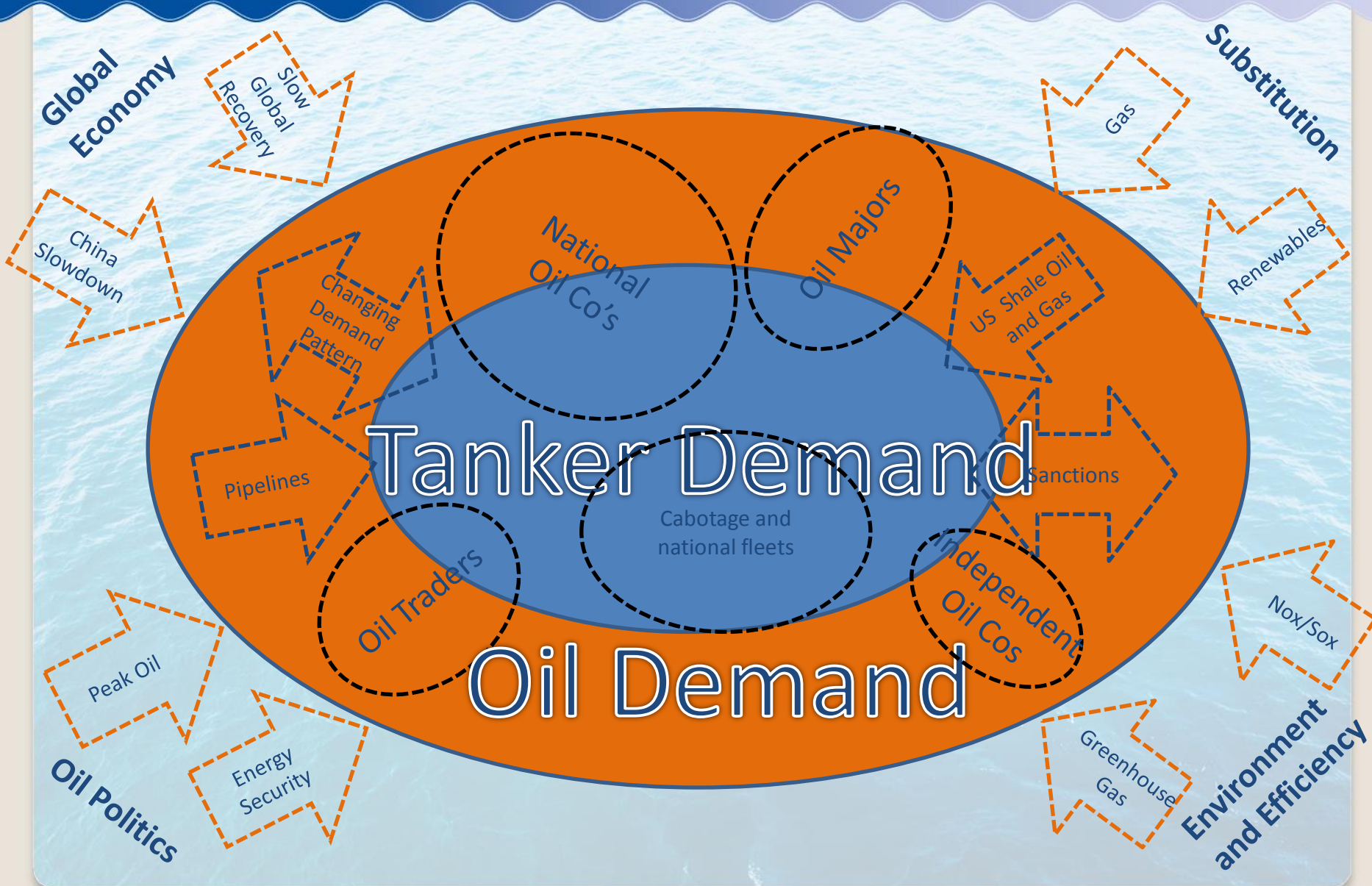
- The industry environment is becoming more complex
- Companies are becoming more complex
- Making the right choices reduces complexity
- You can make your company simpler
- You need to be honest with yourself that what you created has to change
- The 21st Century Tanker Operator needs to be agile and resilient
- Direction needs to be clear and people need to be skilled, trained and valued
- Operations job is to make things as simple as possible as possible for the front line
- The front line is the last line of defence

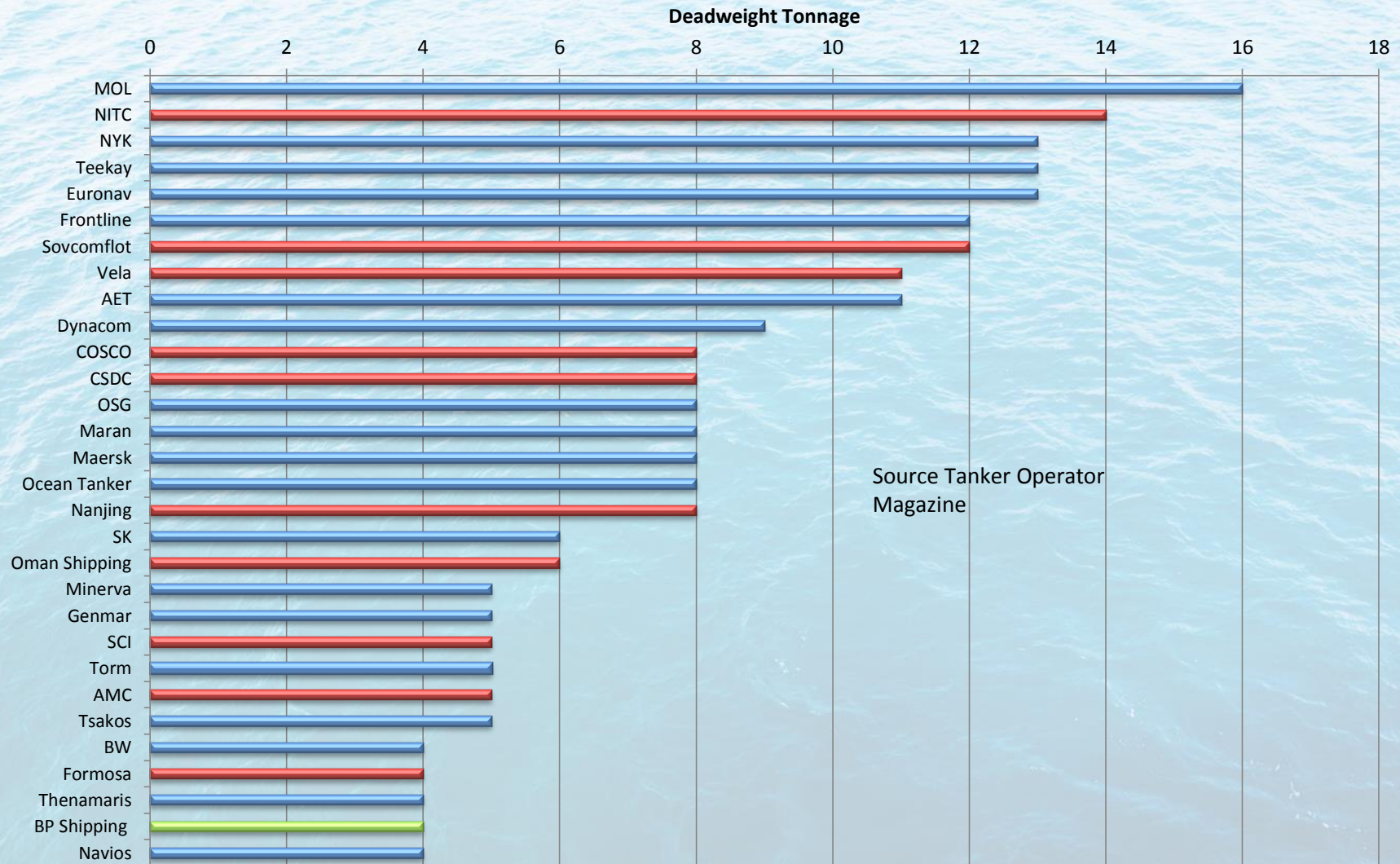
Questions Please ?

moams US oil production-the answer



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Consulting & Knowledge

Ship operations
Marine assurance
Management

Mini-books
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