





# Sustainable Cost Cutting

DNV Management Advisory Middle East

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# What is on the menu today?

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- Introduction to cost cutting
- Saving fuel through energy management
- Maintenance and Procurement
- Mgt & measurement of change

# Objectives for this seminar is to share DNV points of view on safe and sustainable cost cutting

## OBJECTIVES

Present DNV points of view and discuss cost cutting initiatives that will

- reduce long term cost and
- improve company capabilities

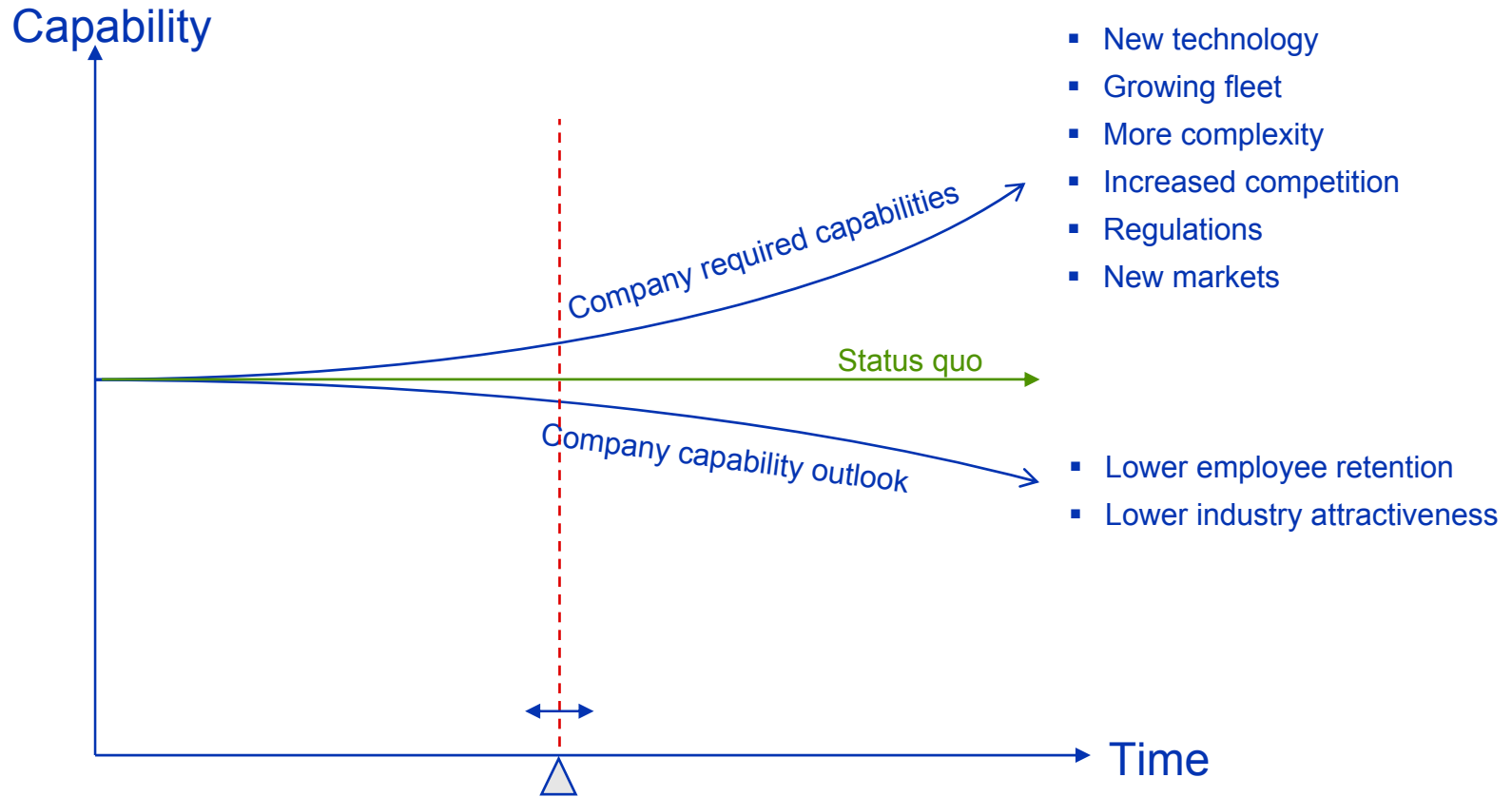
## KEY ELEMENTS

The key elements that will be focused on in the seminar are:

- OPEX
- Voyage Costs

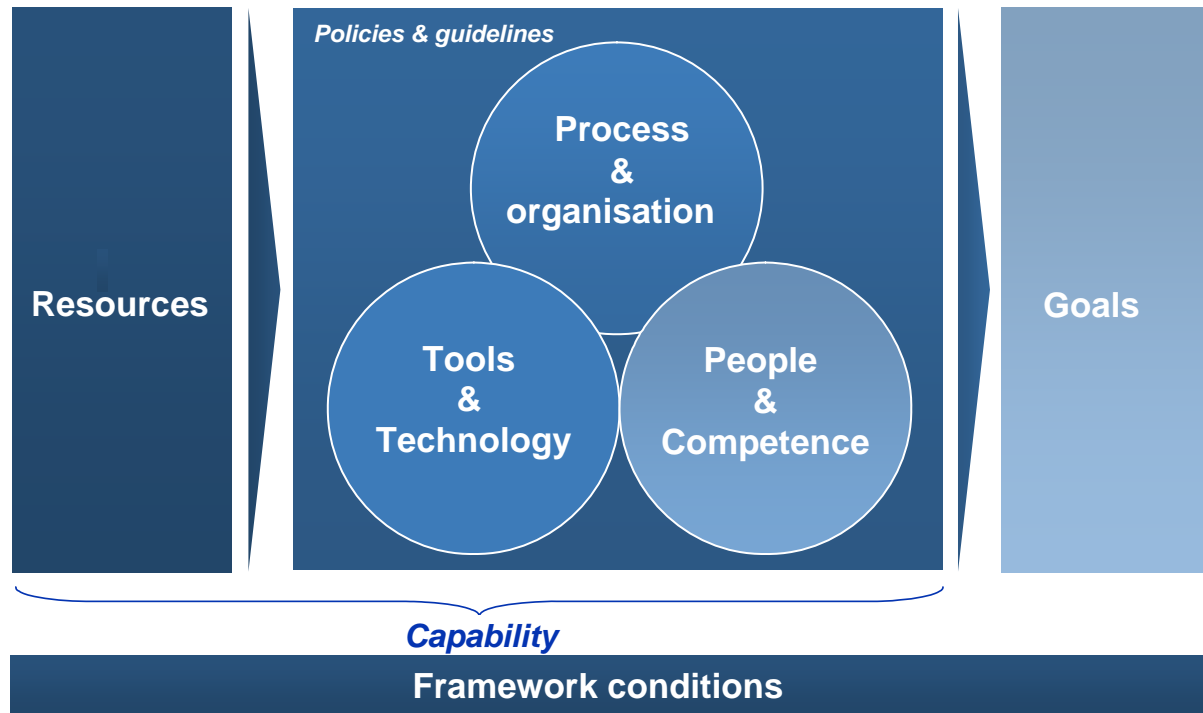
NOTE: Initiatives for reducing CAPEX and or increasing revenue will not be covered in detail.

# A CEO illustrated the challenge with a capability GAP as a key driver for rapidly increase of cost



By addressing improvement of capabilities, the company closed the gap

# The key to sustainable cost cutting is the ability to strengthen organisational capabilities



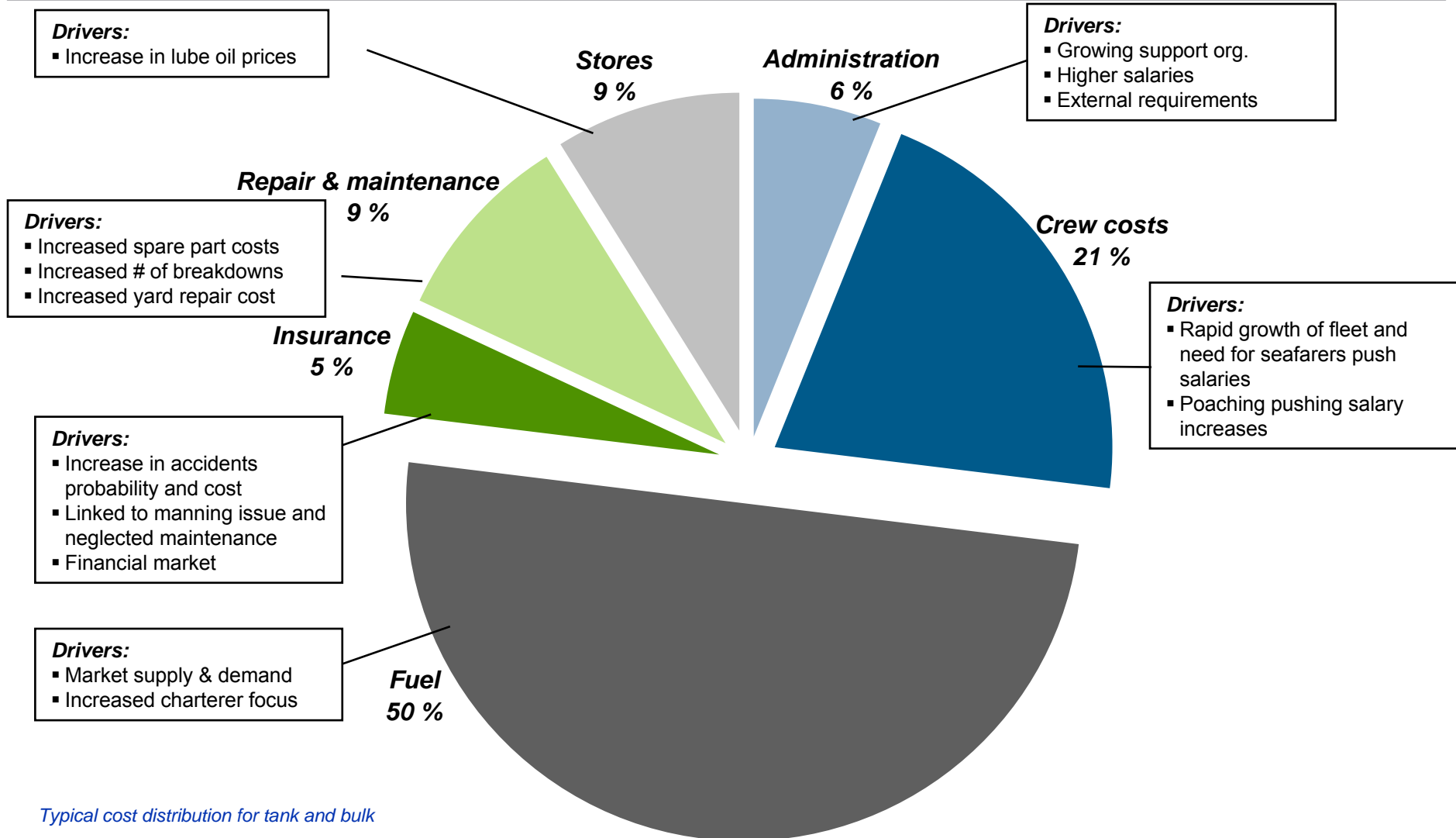
**Capability = Capacity + Ability**

# Sustainable cost cutting - key messages

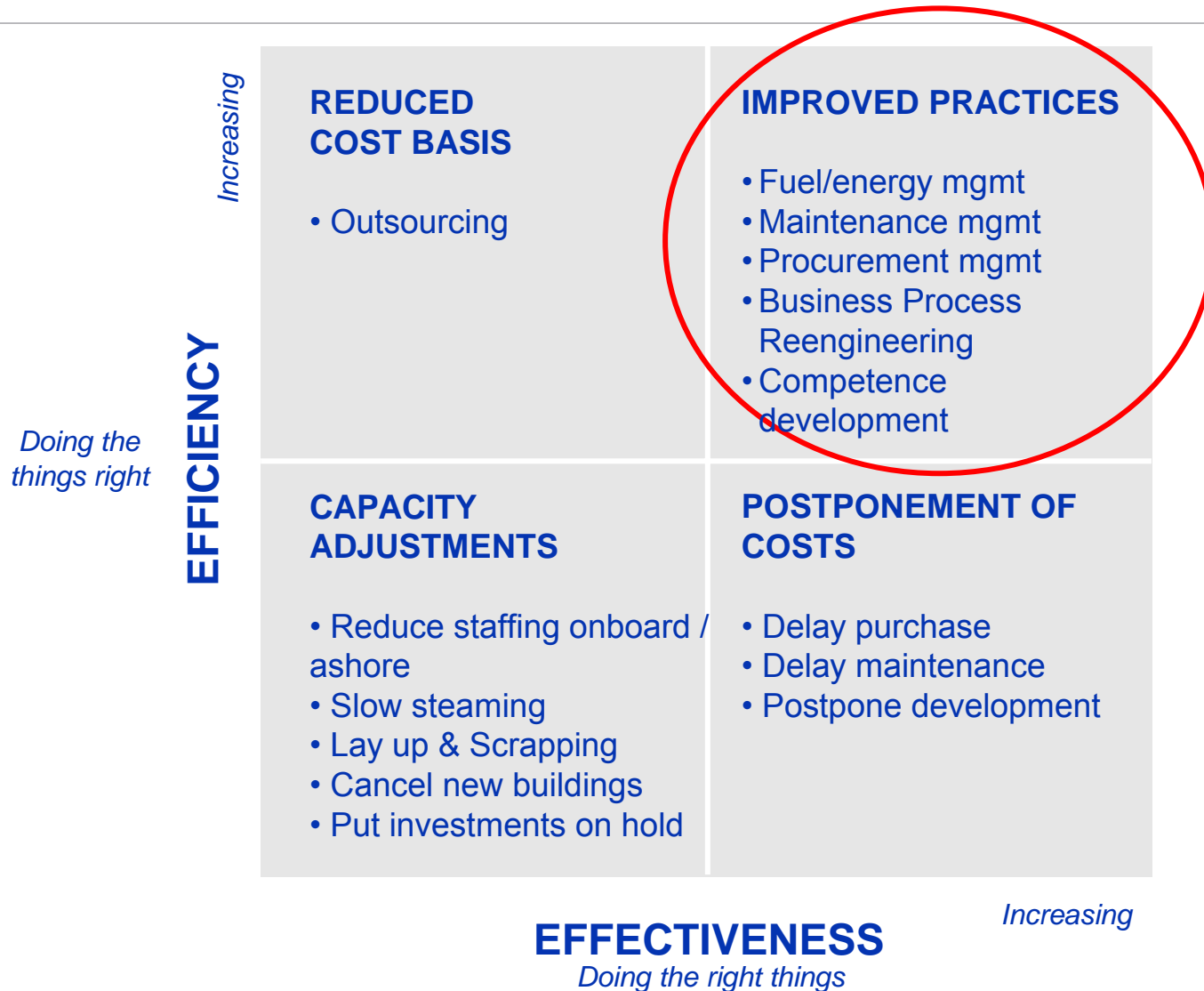
A 3D rendering of a silver scale, a yellow measuring tape, and a silver dial gauge on a white textured surface. The scale is on the left, the measuring tape is in the middle, and the dial gauge is in the foreground. The dial gauge has a red needle pointing to approximately 285 on a scale from 0 to 300.

1. Sustainable cost cutting requires a structured approach
2. Sustainable cost cutting must focus on controlling the cost drivers
3. The critical success factor is strengthening core company capabilities, thus using the “opportunity” to improve the competitive edge

# Situation & Challenges - the total costs are dominated by the fuel costs and crew costs and they are not likely to drop

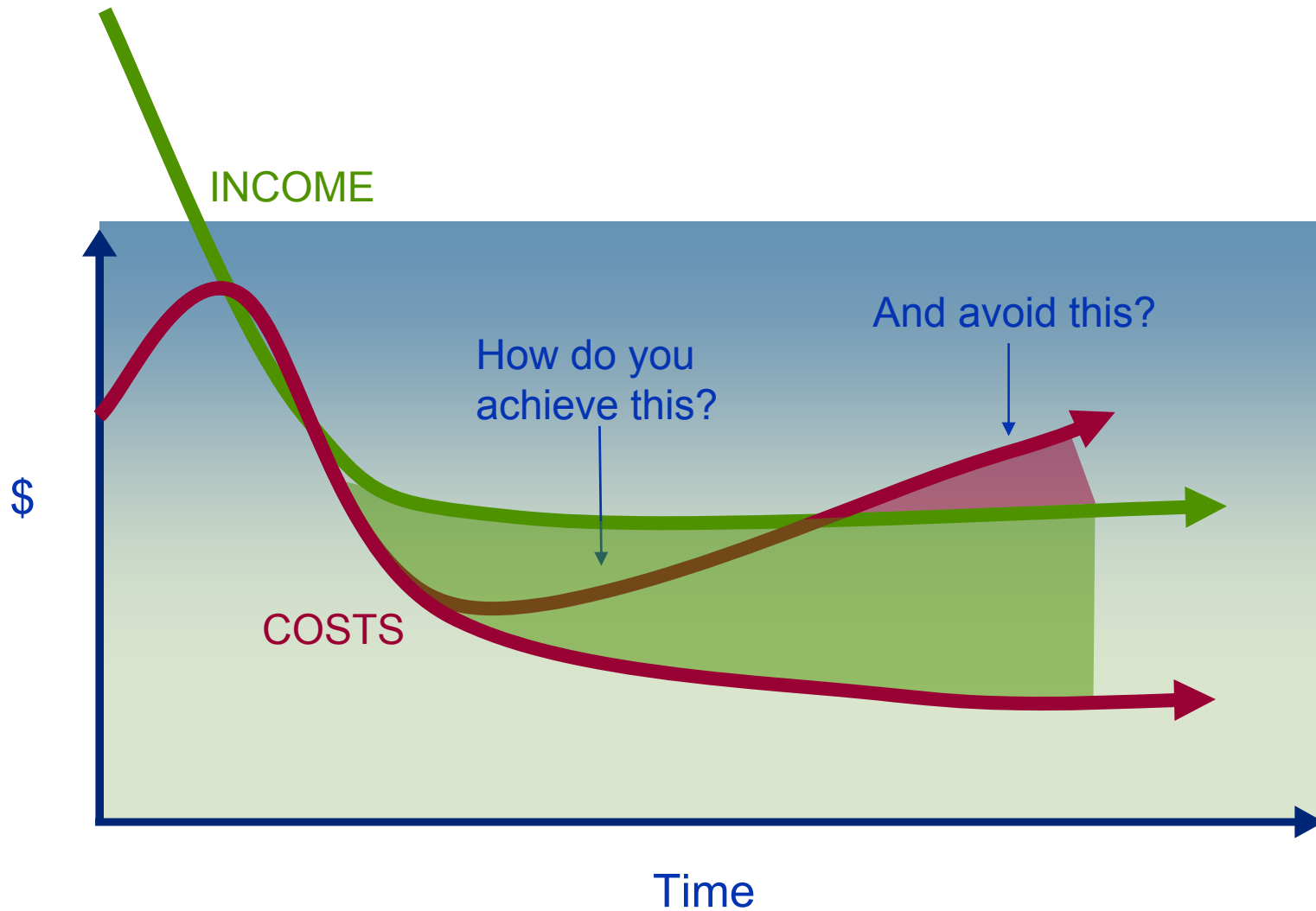


# Common pitfalls in cost cutting projects – Various initiatives are being undertaken by ship owners & operators

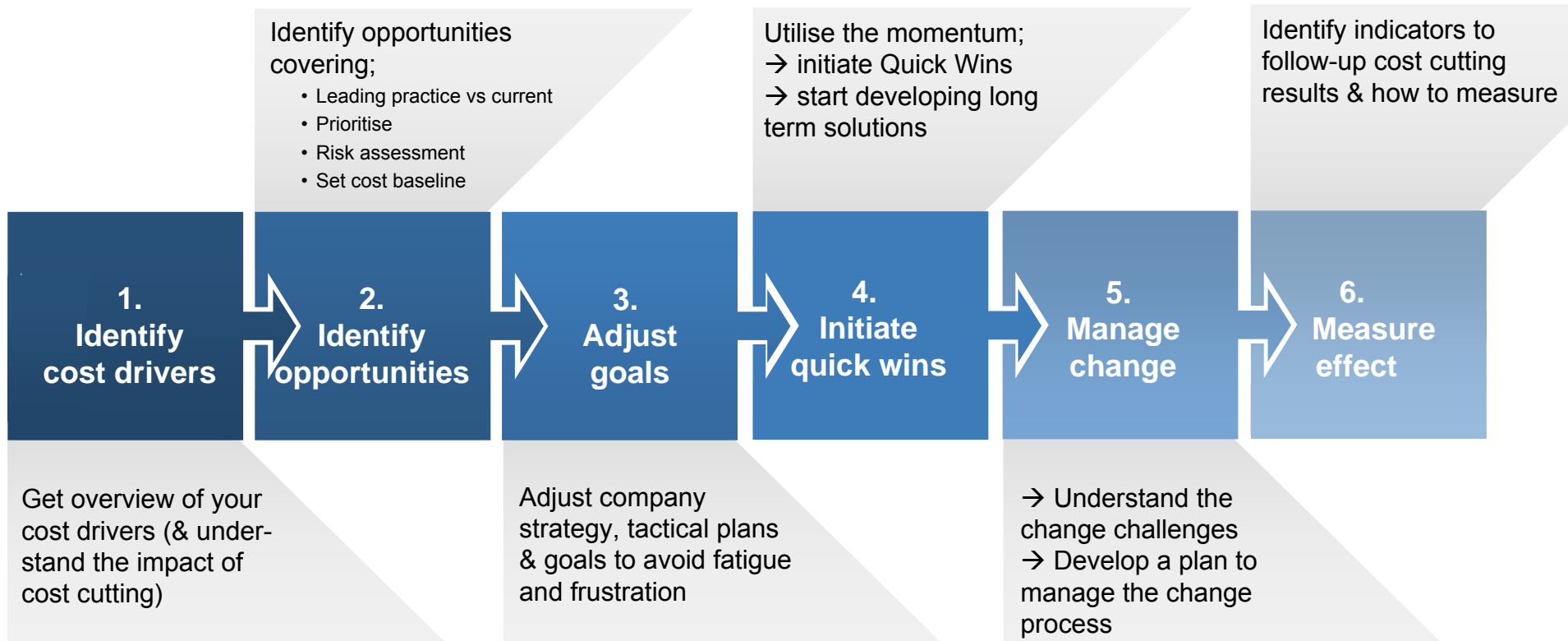


# Common pitfalls in cost cutting projects

## What do we mean by cost cutting?

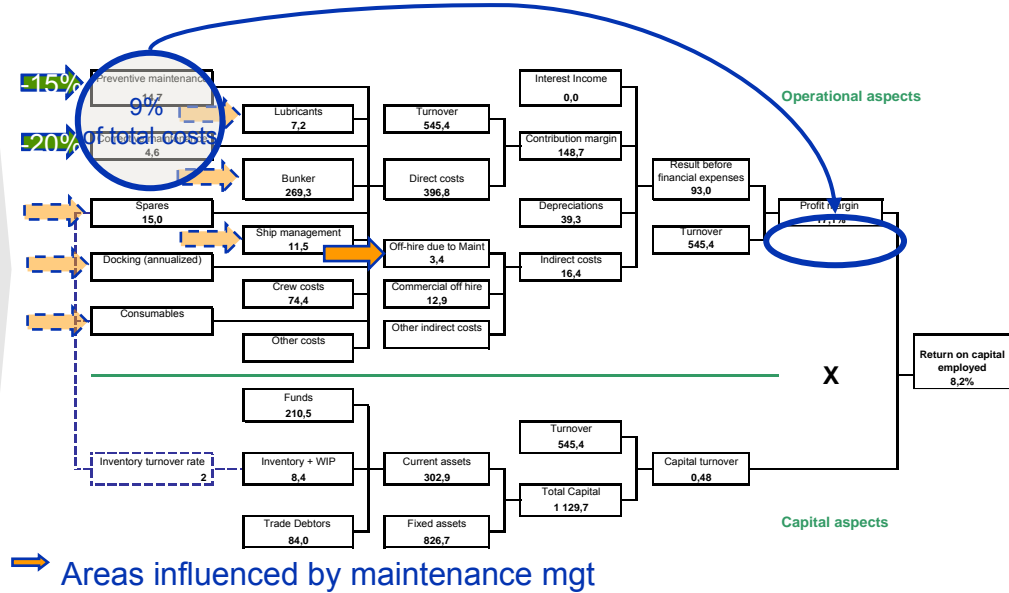
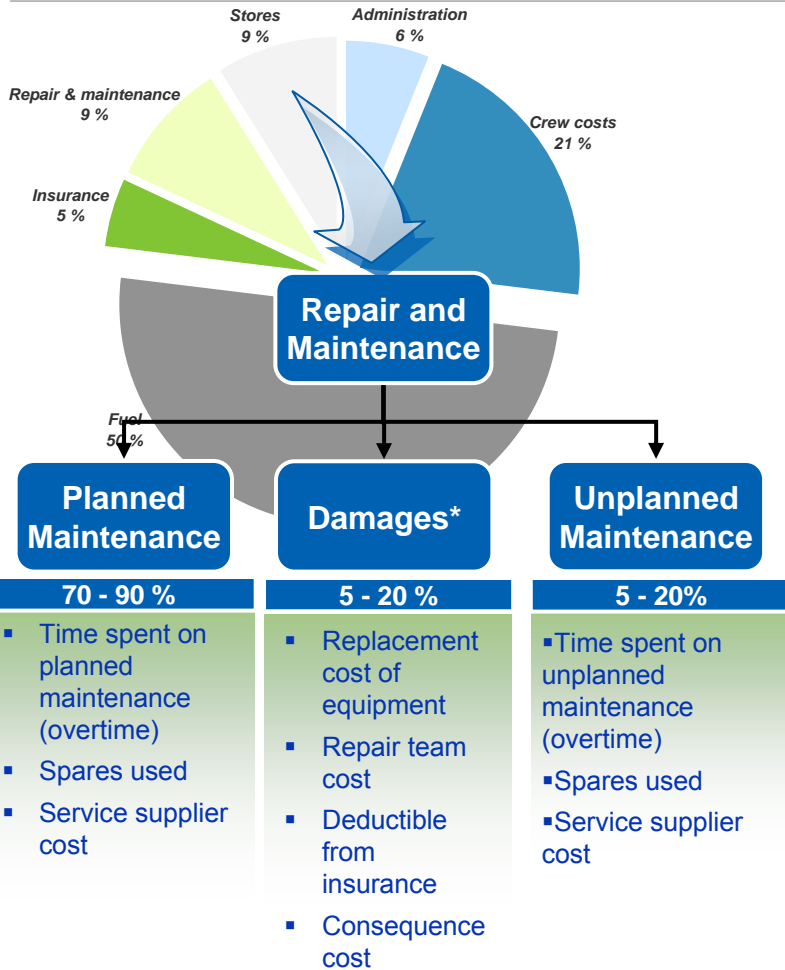
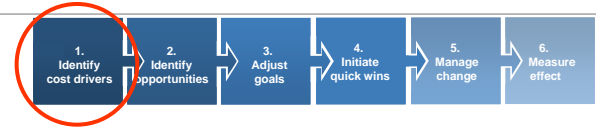


# How do you obtain sustainable cost cutting in shipping companies?



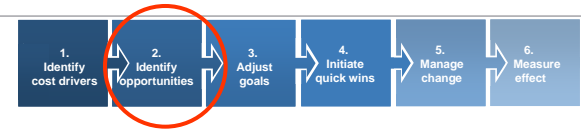
Cook book “How to create a competitive edge through cost cutting”

# Step 1 Identify your cost drivers



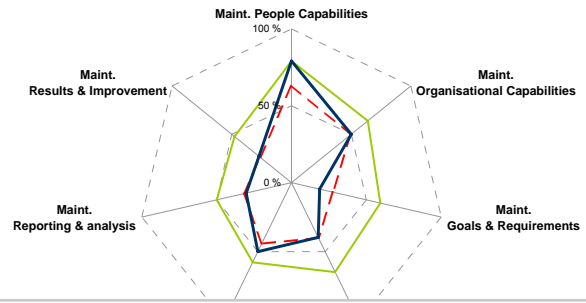
Break down the overall cost aspects and create hypothesis of main drivers and analyse how addressing the costs drivers will affect profitability

# Step 2 - Carry out gap analysis and capability assessment

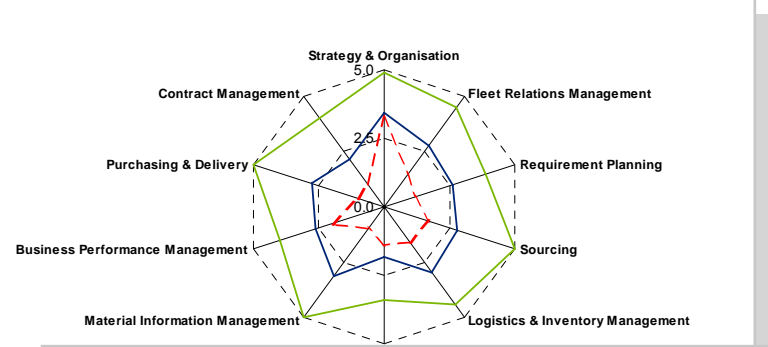


In order to know where to focus and prioritise, current practice and standards needs to be established

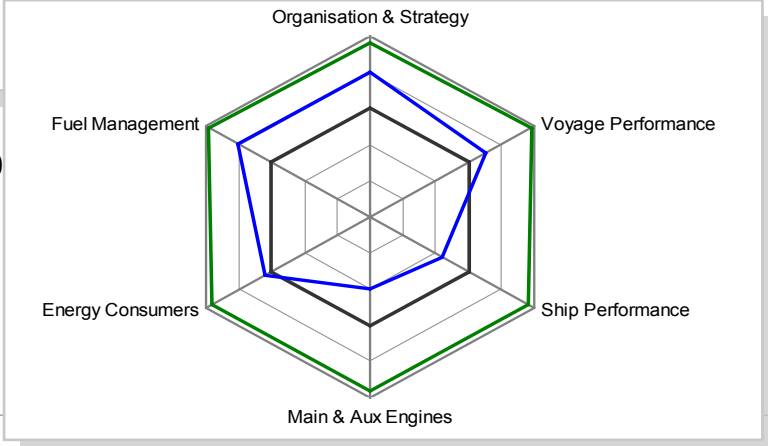
Maintenance



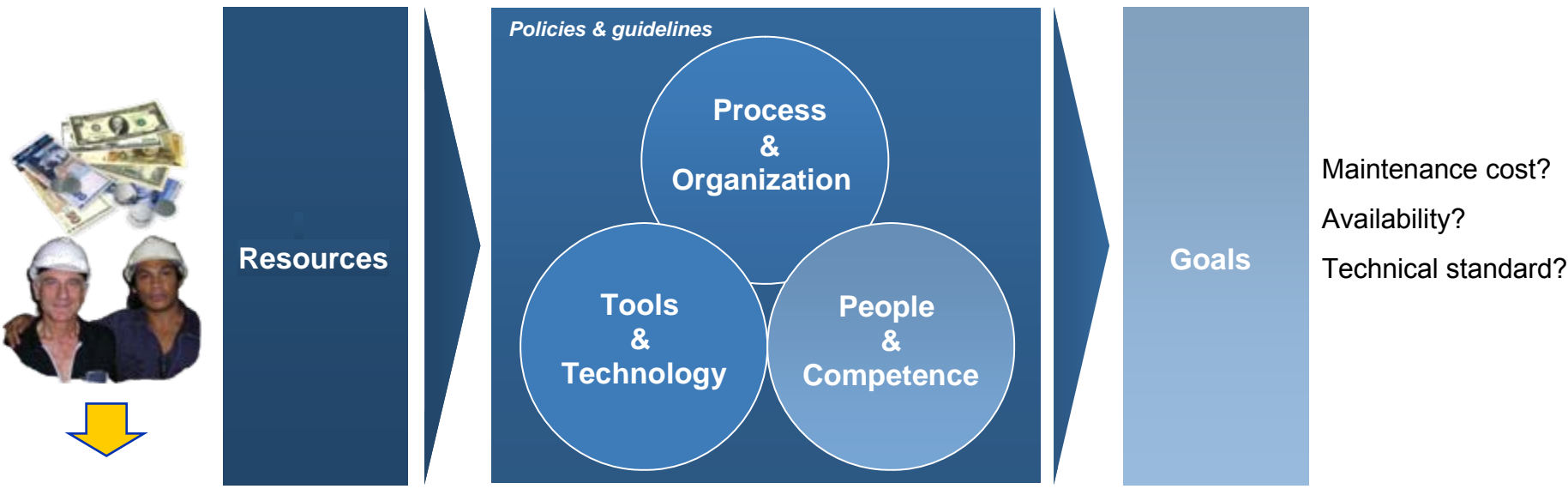
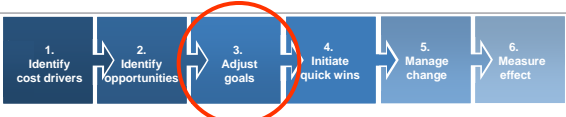
Procurement



Fuel management

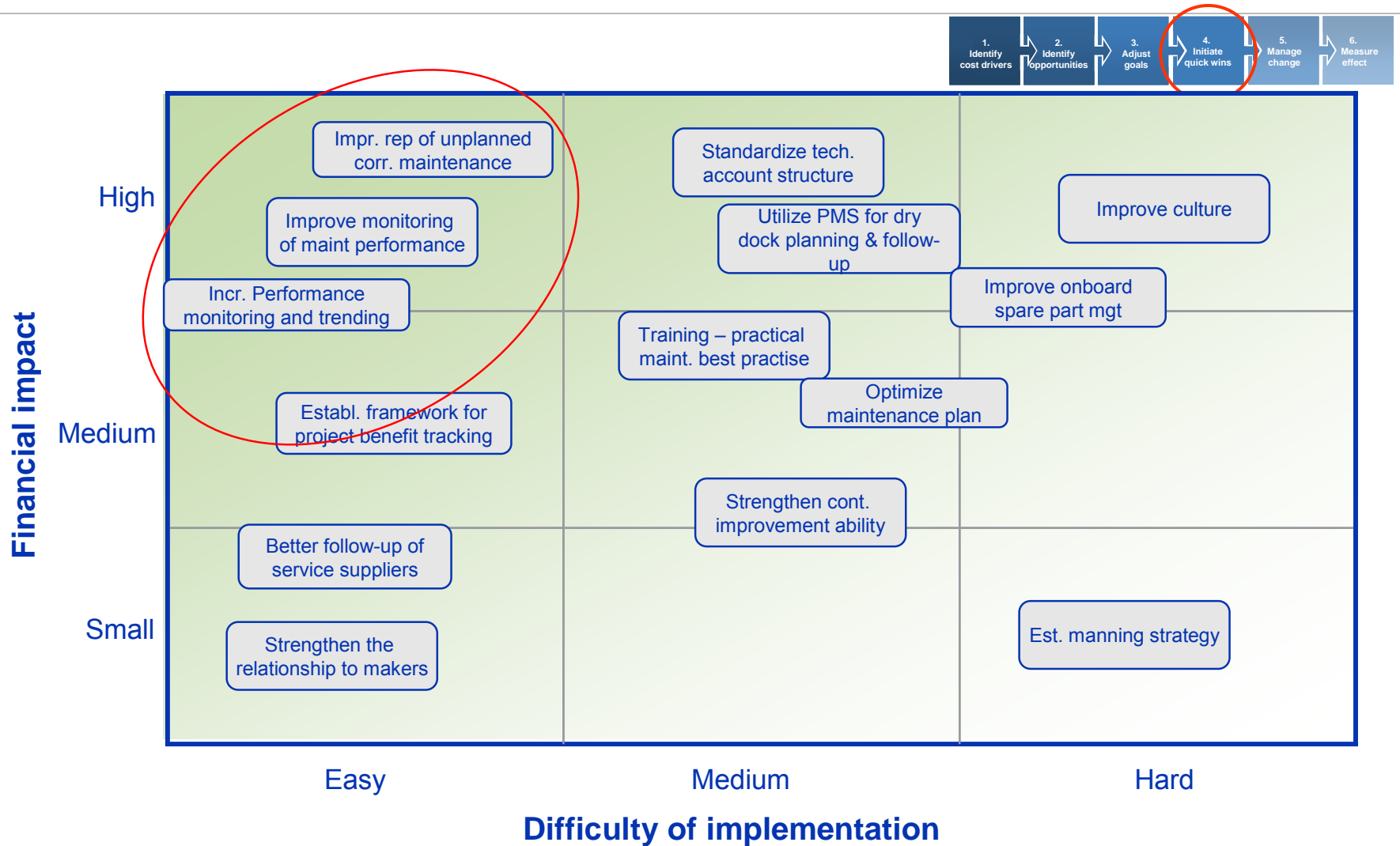


# Step 3 - Adjust company strategy, tactical plans and expectations in order to avoid fatigue and frustration



When reducing the resources into the maintenance management process, the process has to be made more efficient or the expected output needs to be adjusted

# Step 4 – Establish improvement portfolio and Initiate quick win program



# Key observations

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1. Few succeeds with sustainable cost cutting
2. Significant improvements contribution to bottom line can be achieved
3. Cost cutting should focus on
  - Effectiveness – doing thing smarter
  - Addressing the total cost bases, when identifying key improvement areas
  - Set up a project covering all the different initiatives
4. The critical success factor is strengthening company capabilities, thus improving the competitive edge

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# Being smarter on energy consumption will reduce fuel costs and emissions to air

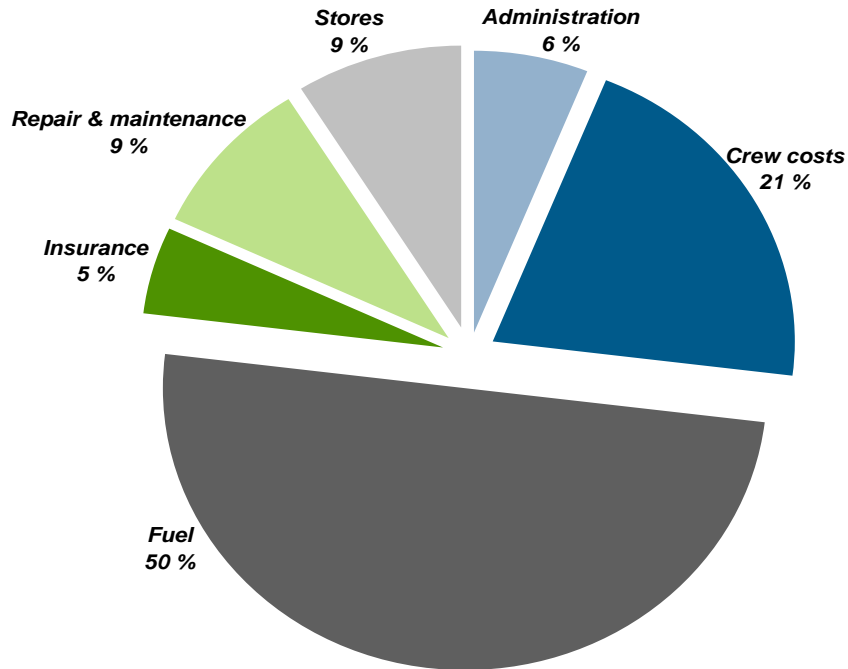


**On the international agenda!**

"This could be the biggest game changer" - Loh Wai Kiew, CEO Shell Marine Products

- Shipping is responsible for greenhouse emissions of around 1 billion tonnes of CO<sub>2</sub> per year – 3,3% of total emissions
- Improving fuel efficiency have positive effect on
  - Green house emissions
  - Fuel costs

# Fuel cost is the largest cost element for shipping companies.....

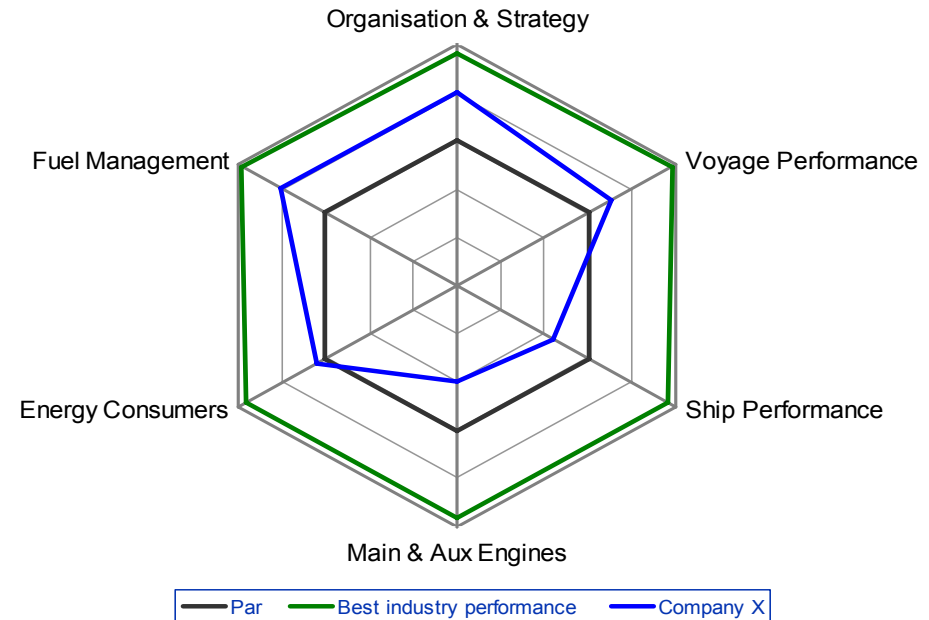
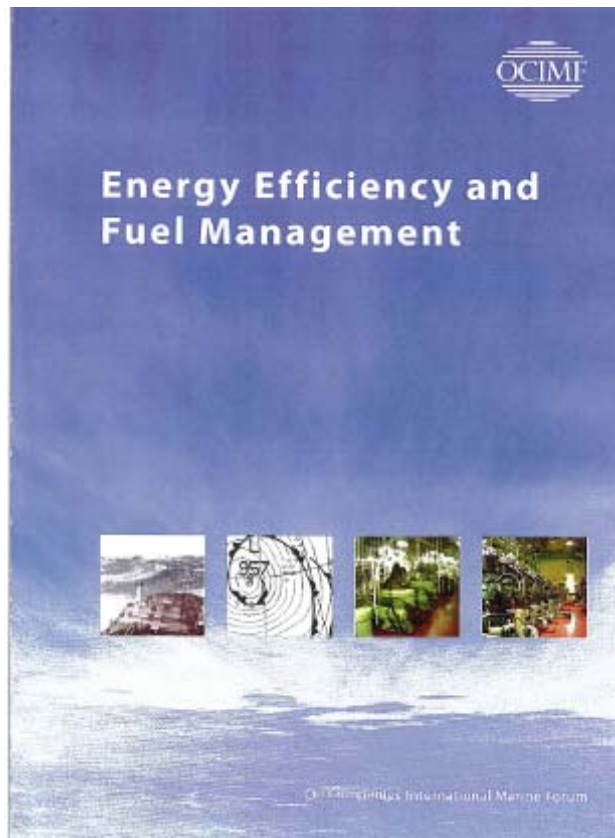


- Energy efficiency and behaviour changes can give cost savings of 5 – 15%
- Many areas influence the fuel cost
- Systematic and dedicated effort is needed to realise the saving potential

*Typical cost picture for tank and bulk*

...and have to be addressed in a cost cutting setting.

# OCIMF is promoting new TMSA requirements addressing Energy Efficiency and Fuel Management



From the introduction :

“...management guidance with the aim of encouraging companies to introduce CO2 reducing practises...”

The TMSA requirements has been incorporated in DNV energy efficiency an fuel management benchmarking model

# The challenge is not to list areas that influence fuel cost, but to identify and prioritise the most efficient initiatives for your company

## Voyage Performance

- Fleet planning, route and ship allocation
- Chartering/contracts
- Voyage planning
- Speed Management
- Weather routing & sea current
- Port/harbour operations



## Main propulsion and AUX engines

- Main boiler efficiency
- Main turbine efficiency
- TG efficiency and utilisation
- Main Engine efficiency
- Aux Engines efficiency & utilisation
- Aux boilers efficiency and utilisation



## Ship Performance

- Hull condition
- Propeller condition
- Autopilot & rudder
- Hull Appendages & tech. mod.



## Consumers

- Cargo Operations
- Insulation and energy losses
- Thruster operations
- Ventilation, HVAC, lights
- Water productions
- Incinerating



## Fuel Management (HFO)

- Pre-bunkering
- During bunkering
- Post-bunkering

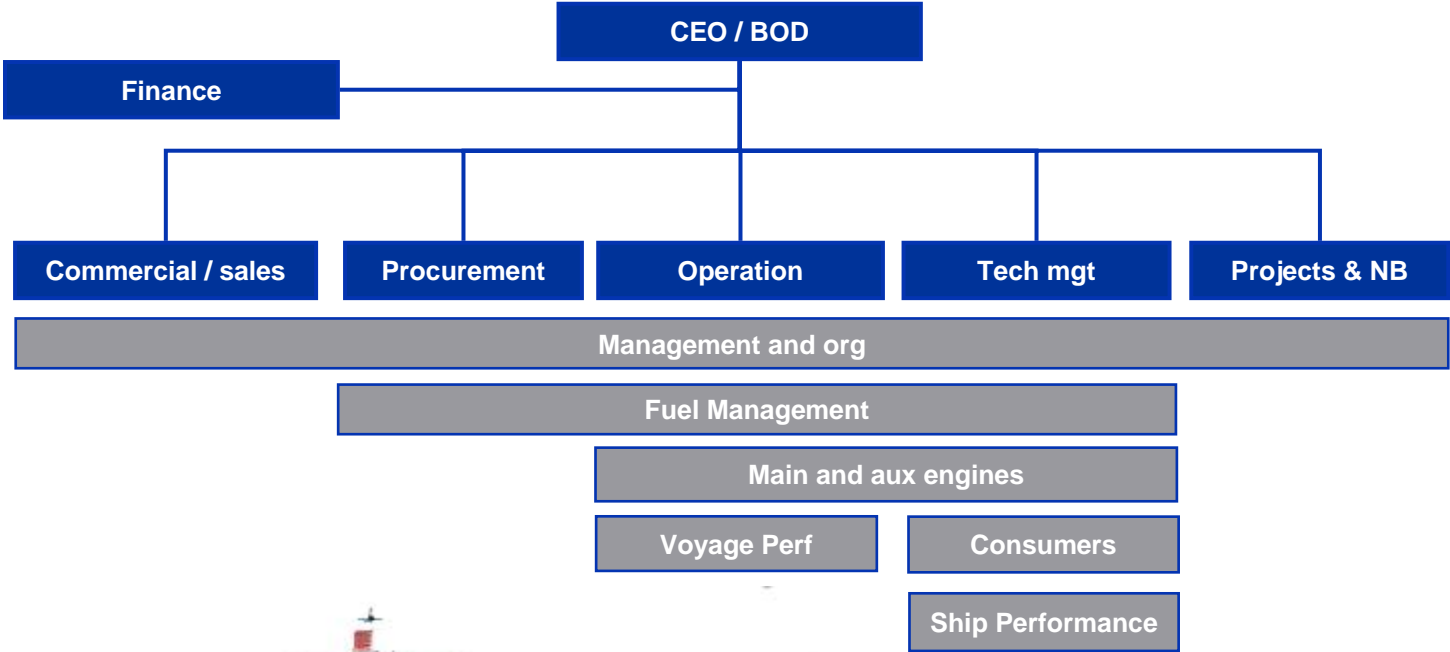


## Management and organisation

- Strategy and tactical plans
- Performance Management
- Competence and training
- Culture and awareness
- Environment and CSR
- Life-cycle perspective



# Energy Management requires cross departmental cooperation



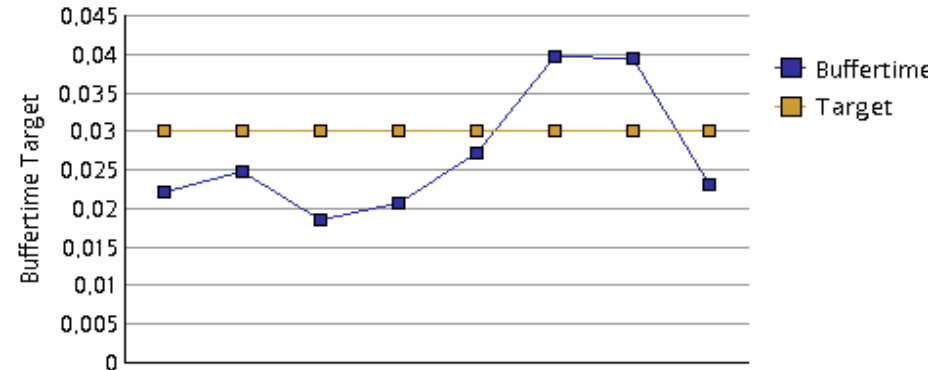
Paradox - nobody is fully accountable for fuel consumption either on-board or on-shore

# “You get what you measure” – energy efficiency requires measuring and analysis

## Overall fleet performance

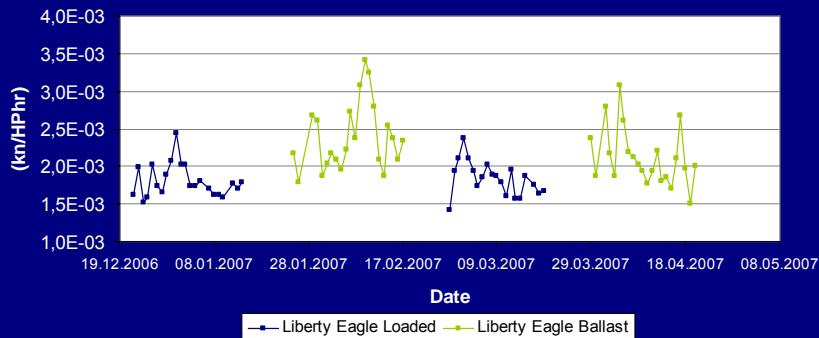
2,8%	●	2,5%	●	0,380	●
1,5%	●	1,9%	●	0,453	●
0,2%	●	2,1%	●	0,457	●
4,4%	●	2,7%	●	0,380	●
4,5%	●	4,0%	●	0,401	●
5,4%	●	3,9%	●	0,416	●
1,7%	●	2,3%	●	0,360	●

## Vessel speed mgt



## Hull & propeller

### Hull & Propeller Propulsion Efficiency Indicator



## Engine performance

Main Engine assessment		Test Date	31.12.2007	Warning levels	Result	
<b>Engine balance (compared to average)</b>						
P <sub>max</sub>	Maximum combustion pressure	5	7	%	3,4 %	
P <sub>comp</sub>	Compression pressure	4	5	%	5,1 %	
FPI	Fuel Pump Indicator	5	10	%	3,2 %	
T <sub>exh</sub>	Exhaust gas temperature	7	9	%	5,6 %	
<b>Engine efficiency (compared to new building sea trial)</b>						
P <sub>max</sub>	Corrected comb. press. drop compared to engine ref.	5	10	%	20,4 %	
P <sub>comp</sub>	Corrected compression pressure drop compared to engine ref.	5	15	%	13,8 %	
T <sub>exh</sub>	Corrected exhaust gas temp. increase compared to engine ref.	10	15	%	13,8 %	
ΔT <sub>TC</sub>	Turbo charger differential temp decrease compared to ref.	15	20	%	26,7 %	
	Engine thermal load - MCR achievable		100	%	100 %	
ΔP <sub>scav</sub>	Scavenging air cooler air side fouling (mm H <sub>2</sub> O)		280	mm	120	
<b>Engine overload</b>						
a_P <sub>max</sub>	Angle of maximum pressure less than 11,5 or greater than 16°	11,5	16	deg	0,0	
P <sub>ignition</sub>	Max pressure rise more than manufacturer's recommendation		30	bar	21	
<b>Fuel oil consumption (compared to NB sea trial)</b>						
t/d	FO consumption increase to reference per day @ NCR	[+4,31 (t/d)]	0	0	%	3,8 %

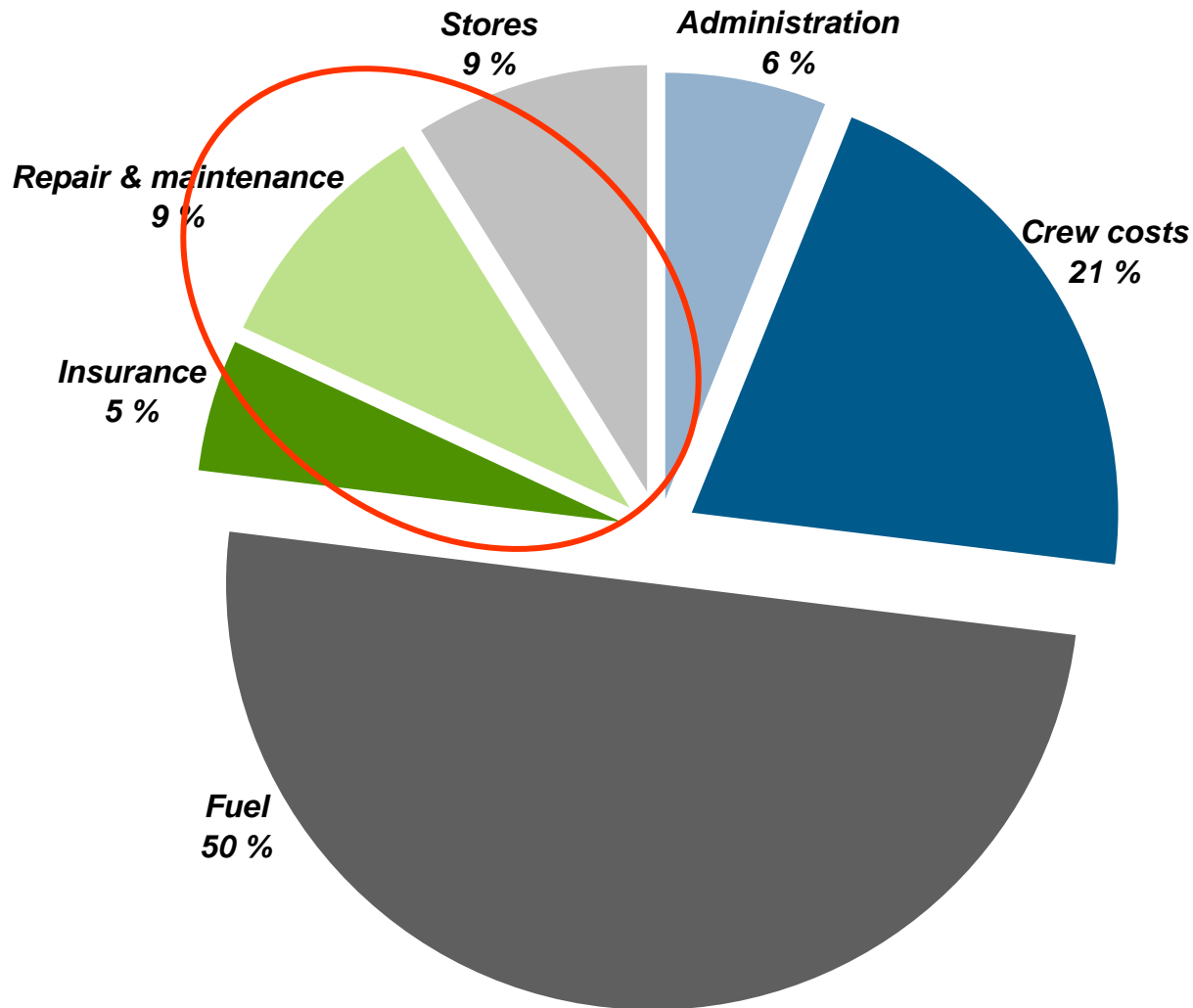
Energy efficiency are typically defined as specific energy consumption

# What is on the menu today?

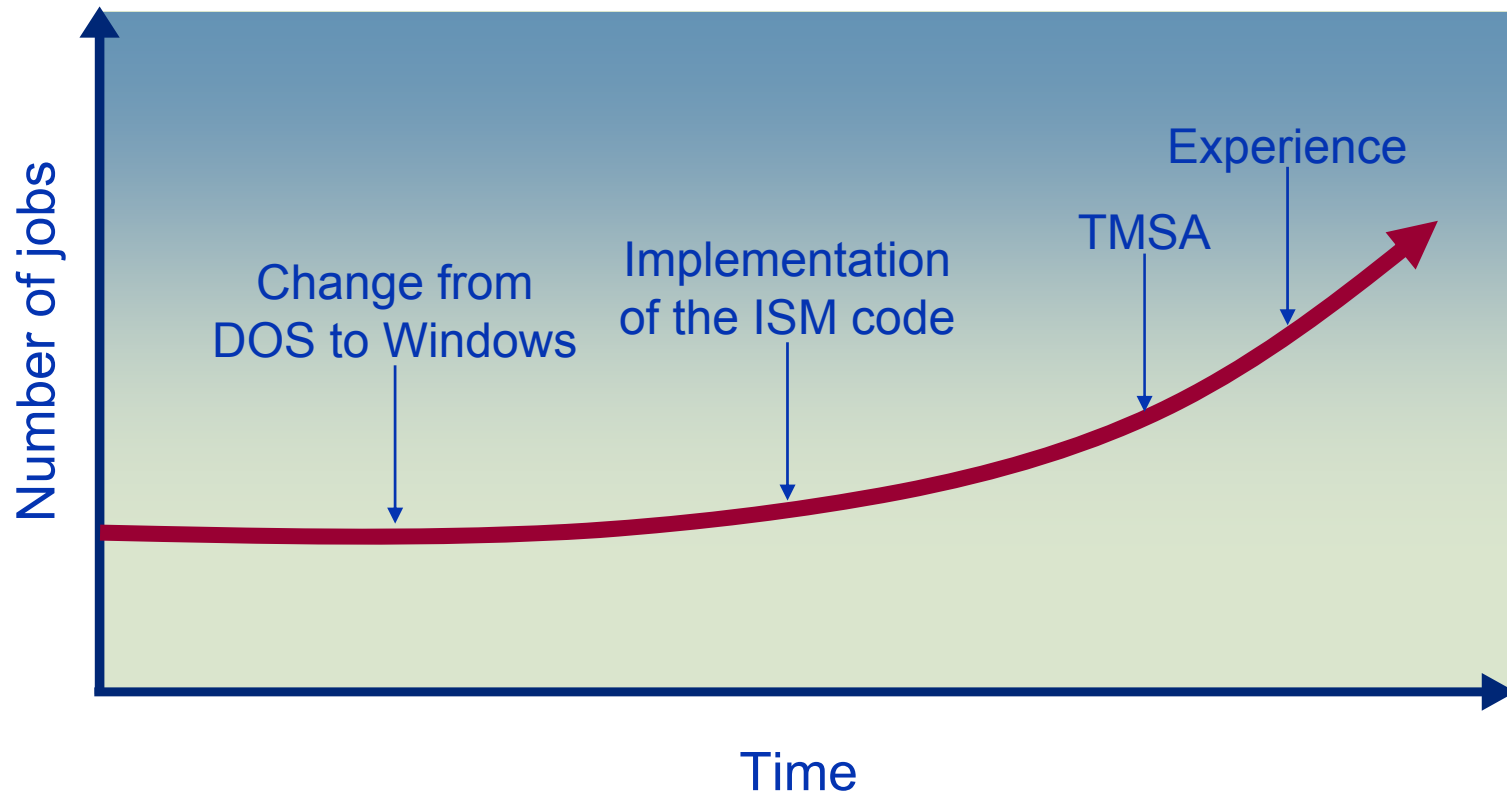
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- Introduction to cost cutting
- Saving fuel through energy management
- Maintenance and Procurement
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# Sustainable cost savings opportunities can be identified when you scrutinized your cost drivers



# Example Maintenance - Increasing requirement



New jobs are often inserted into the PMS, but not very often removed

# Example Maintenance – “Dry-cleaning” of the PMS database

## Results

- 50 % reduction of automation jobs
- 30-60 % reduction of all maintenance jobs
- Reduced risk of breakdown or off hire
- 10-20 % reduction of maintenance cost
- Enable fleet wide standardisation and continuous improvement

## Addressing

1. Technical hierarchy breakdown structure
2. Standardisation of jobs
3. Risk based maintenance
4. Condition based maintenance
5. Useful job attributes
6. Duplication and overlapping
7. Job descriptions

## Method

- Exporting database for selected vessel(s) from the PMS to a dry-cleaning tool
- Defining the standard technical hierarchy
- Defining the risk level and adopt the maintenance plan
- Introduce condition based maintenance where applicable
- Removing unnecessary jobs when duplicate or overlapping jobs

Dry-cleaning of the PMS database can unleash immediate effect and enables long term improvement

# Example Maintenance – Dry-cleaning of the PMS database

## 1 Standardisation of technical hierarchy breakdown structure

- The technical hierarchy breakdown structure is the skeleton of the planned maintenance system
- Focus on numbering structure and naming rules (SFI does not provide required detail level)
- Consequences of no standard and rules:

Vessel 1	Vessel 2	Vessel 3
631.001.001 Propeller	631.001.001 Propeller & Propeller Shaft	631.001.001 Propeller & Nut
631.003.002 Propeller Shaft	631.003.001 Propeller Shaft Coupling Bolt & Nut	631.003.001 Propeller Shaft
631.003.003 Shaft Coupling Bolt & Nut For Shafting	631.003.010 Shaft Coupling SKF	631.003.010 Shaft Coupling SKF
631.007.001 Intermediate Shaft	631.007.001 Intermediate Shaft	631.007.001 Intermediate Shaft
631.013.001 Intermediate Shaft Bearing No. 1	631.013.001 Intermediate Shaft Bearing No. 2	631.013.001 Intermediate Shaft Brg
631.013.002 Intermediate Shaft Bearing No. 2	631.013.002 Intermediate Shaft Bearing No. 1	
631.015.001 Fwd Stern Tube Seal	631.017.001 Fwd Stern Tube Bush	631.015.001 ST Bearings, Seal
631.015.002 Aft Stern Tube Seal	631.017.002 Aft Stern Tube Bush	
	631.021.001 Stern Tube Seal Aft	
	631.021.002 Stern Tube Seal Fwd	

Same number, but different naming

Different number and different naming

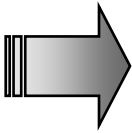
Same number, and same naming

Establishing a technical hierarchy is a prerequisite for database dry-cleaning and continuous improvement fleet wide

# Example Maintenance – Dry-cleaning of the PMS database

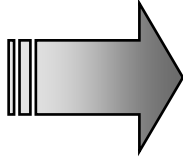
## 2 Standardisation of jobs

Strive for standardisation of jobs to reduce total number of different jobs



Reduce the total number of different jobs by 80-90 %

Do not include interval in the job descriptions



Allow continuous improvement on the intervals and use of same job with different interval

### Job title

Replace Thrust Bearing K90MC/MCE 48M  
 Renew Thrust Bearing Segments 48M  
 Check Thrust Bearing K90MC/MCE 8000H  
 Check Clearance In Thrust Bearing 8000H  
 Survey Holding Down Bolts and Chocks 60M  
 Retighten Hold Down/Stay Bolts 8000H  
 Retighten Hold Down/Stay Bolts 8000H  
 Retight.Hold Down/End Chock Bolts 8000H  
 Retightening Of Stay Bolts 8000H  
 Replace Aux Blower  
 Replacement Of Auxiliary Blower

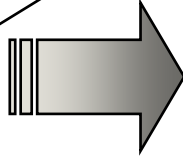
### Job code

BET0036  
 BET0506  
 BET0035  
 BET0505  
 BED0029  
 BED0023  
 BED0023  
 BED0030  
 BED0031  
 BLW0040  
 BLW0046

### Interval

48  
 48  
 8000  
 8000  
 60  
 8000  
 8000  
 8000  
 8000  
 0  
 0

Be smart and use to job code for categorisation of jobs



Proposal						Legend	
SS-	MOE	3	1	0	1	-ST	Full job code
SS-							Identification of ship specific job code (only for one off jobs)
	MOE						Indicates component type alternatively if class job (if so DNV is the component type)
		0					Description of type of activity (Overhaul = 01, Inspection = 02, Lubrication = 03, Functional test = 04 ...)
			1				Counter value, no logic
				0			Counter value, no logic
					1		Counter value, no logic
						-ST	Identification of <b>ST</b> andard job code (only for standard jobs)

# Example Maintenance – Dry-cleaning of the PMS database

## 3 Utilise the job attributes

### Attribute

- Job type (Yard, Internal, External)
- Preventive and corrective job
- Class related job (PMS/E0)
- Planning window
- Mandatory history

### Benefit

- Yard jobs can be used as input dry-dock specification
- Easy to get overview of external jobs that need special planning and follow up
- Overview of the corrective jobs enables monitoring and continuous improvement of the maintenance plan
- Identifications of class related jobs makes it easy to retrieve information during class surveys
- Utilising a planning windows enables easy planning as only relevant jobs appear due
- Focus the reporting on the critical jobs and ensure sufficient quality on the reporting

# Example Maintenance – Dry-cleaning of the PMS database

## 4 Define the level of details for the job descriptions

- Too much details will lead to excessive number of similar jobs in the system
- Explicit document or manual references can be given on the component level and not in the job description
- Use same layout and level of details
- Strive for standardisation on similar components and system for easy updating later

### **Basic rules for writing job descriptions:**

- Use simple language
  - the “common denominator” (E.g. instead of “ensure”, say “make sure”)
- Use language that you would use if you were talking to a colleague over a cup of coffee
  - This is referred to as “conversational style”
- Maintain time logic sequence
  - E.g. If you find cracks in the X ... do Y and Z
  - Use ACTIVE VERBS (action-based verds) (E.g. Any anomalies should trigger opening up of the bearing for further investigation. If you find anything unusual / out of the ordinary, open up the bearing for further investigation)
- Read your text as if you were the reader
  - Get in the reader’s head and make sure you have written an APPROPRIATE amount of detail
- Personalise your text – direct the text at the reader
  - use “you” when you can BUT don’t overuse it either
- Use short sentences
  - divide sentences into manageable quantities
- Put the important words as early as possible in the sentence
- Ask yourself control / quality assurance questions
  - can this text be in any way misunderstood by the reader? Check with your own colleagues too as a final quality control
- Don’t be afraid to oversimplify
- Check your thesaurus (synonym dictionary) for simple words
- Numbers 1 to 10 are written in full (one, two, three ...)
- Use commas for pauses in your sentences and to split your sentence into two distinct parts

# Example Maintenance – Dry-cleaning of the PMS database

## 5 Utilising risk based maintenance

Detailed analysis?

Detailed analysis!

		Risk matrix				
		Consequence				
		1 Slight	2 Minor	3 Medium	4 Major	5 Extreme
Frequency	5	More than 100 times per year 5	10	15	20	25
	4	10 to 100 per year 4	8	12	16	20
	3	1 to 10 per year 3	6	9	12	15
	2	Once per 1 to 10 years 2	4	6	8	10
	1	Less than once per 10 years 1	2	3	4	5
Consequence	Safety	First aid case / Case with no medical treatment	Minor temporary disability	Minor permanent disability	Single fatality, Severe permanent disability	Multiple fatalities
	Environment	Low impact with no lasting effect. Minimal area exposed.	Temporary or medium term impact. Minor effect to small area	Short or medium term impact on local area. Not affecting ecosystem	Medium long term impact with some impairment to ecosystem function. Widespread	Long term impact to ecosystem function. Widespread effects of sensitive areas
	Cost US\$	1 >X> 0 K\$	100 >X> 10 K\$	1 M\$ >X> 100 K\$	10 >X> 1 M\$	X > 10 M\$
	Vessel / Equipment	Insignificant damage to, Off hire less than one day	Superficial damage, Off hire more than one day	Moderate damage, Off hire more than one week	Major damage, Off hire more than two weeks	Very serious damage, Off hire more than 3 months, total loss
	Business					

Minimum surveillance

Risk based maintenance will focus the maintenance to the most critical systems and reduce the overall maintenance cost at the same time

# Example Maintenance success story – Complete vessel review

## Results from maintenance optimisation process

		Consequence				
		1 Slight	2 Minor	3 Medium	4 Major	5 Extreme
Frequency	5 More than 100 times per year	5	10	15	20	25
	4 10 to 100 per year	4	8	12	16	20
	3 1 to 10 per year	3	6	9	12	15
	2 Once per 1 to 10 years	2	4	6	8	10
	1 Less than once per 10 years	1	2	3	4	5

### Benefits

- Provides a tool for prioritization of maintenance
- Provides support in day to day operations and compliance of vetting/TMSA risk req.
- Provides input to critical spares assessment, spare parts management and corrective maintenance decisions.

### Results

- Fit for purpose maintenance plan assuring availability, requirement compliance and HSE factors, reduced maintenance scope by 50% → Substantial savings for client!

### Function risk distribution

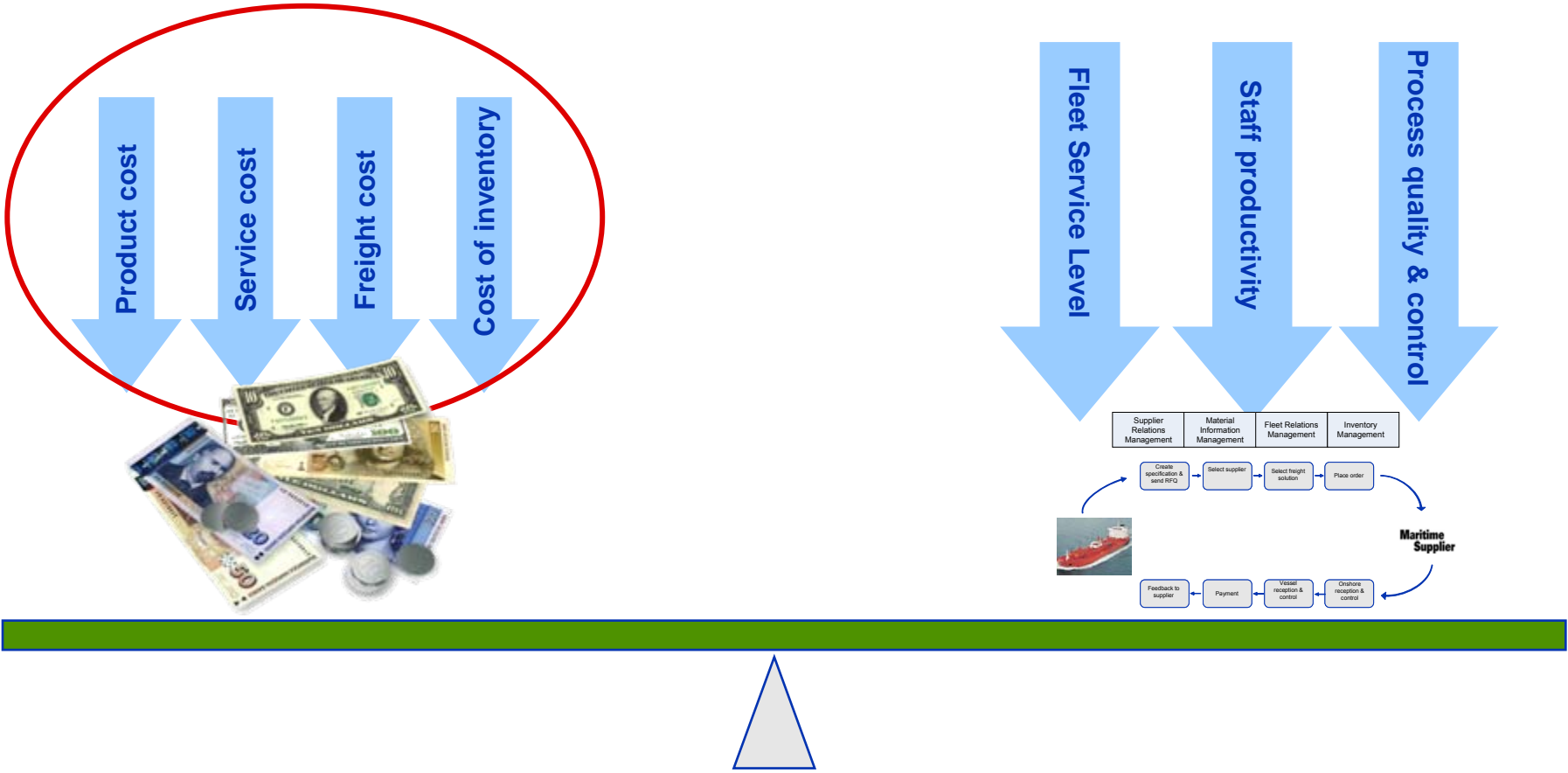
	Low	Medium	High
Safety risk	72%	23%	5%
Environmental risk	88%	11%	1%
Business risk	46%	52%	2%

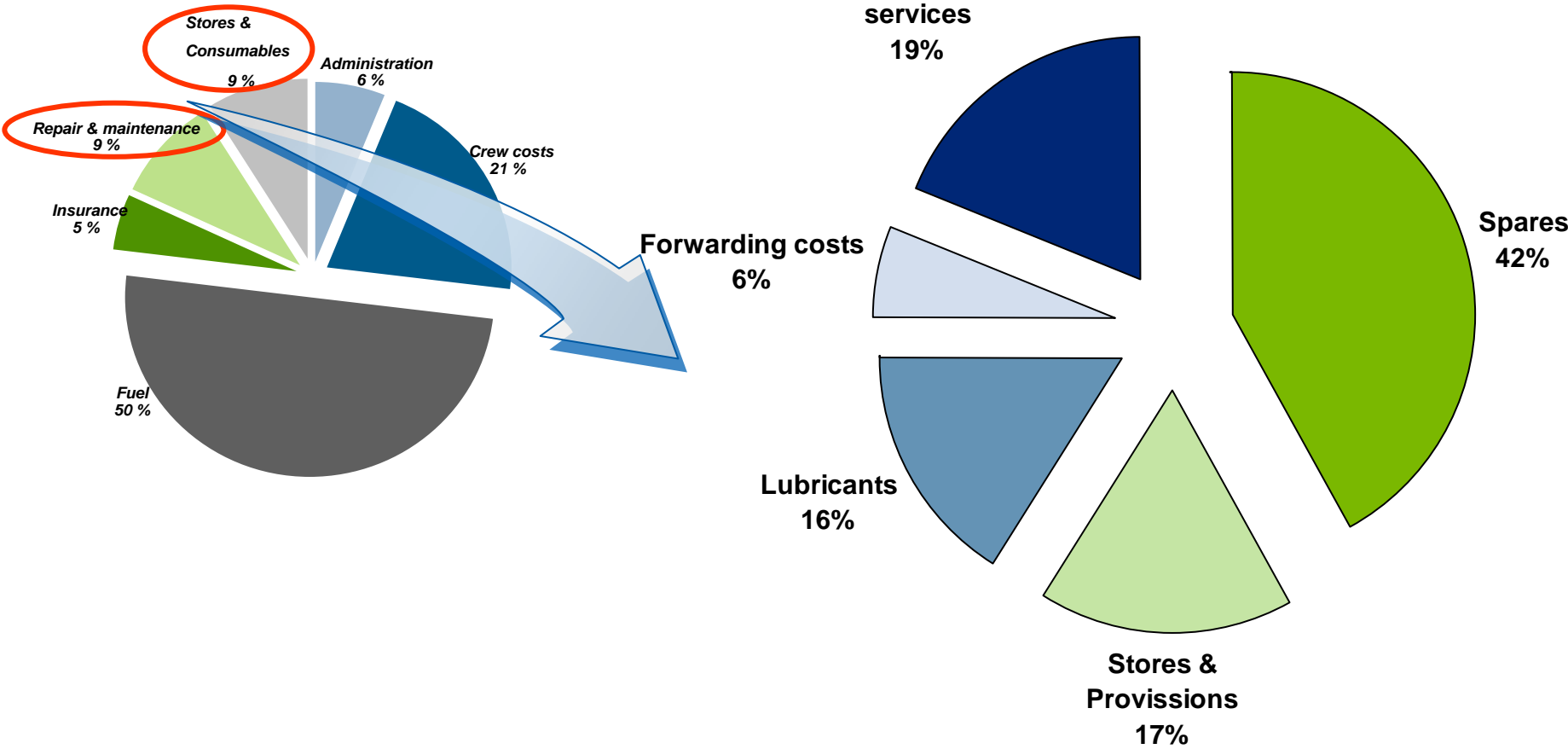
	120	30	10	1	0
Allowable downtime	8%	10%	9%	39%	34%

	Current (jobs/Year)	Recommended (jobs/Year)	Change
Vessel	8498	3929	-54%

# Approaching your procurement activities in a holistic manner will reduce your operations cost



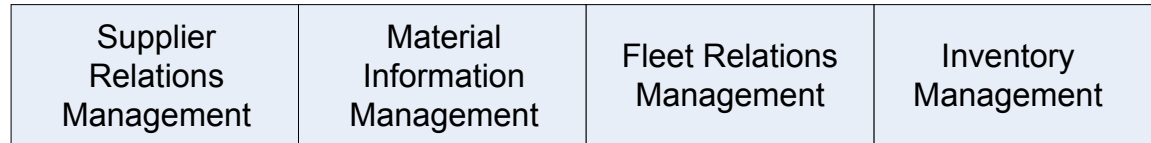
# Each company should get an overview of their spend amount for the main cost components



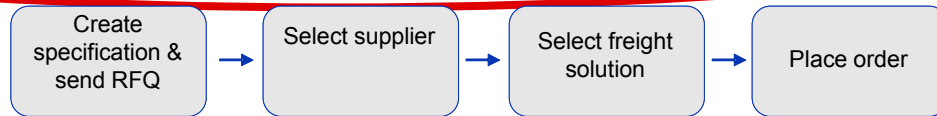
Costs should be broken down into main elements in order to get a clear overview and to enable measuring and benchmarking of costs across the fleet

# Core Process within maritime procurement

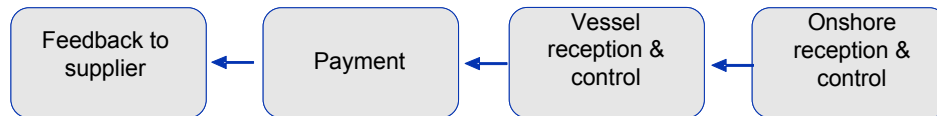
Strategic  
procurement  
processes



Transactional processes



**Maritime Supplier**



Most Shipping companies do not realize the impact of the strategic Procurement process on their bottom line

# Performance (KPIs) as compared to leading practice and industry average

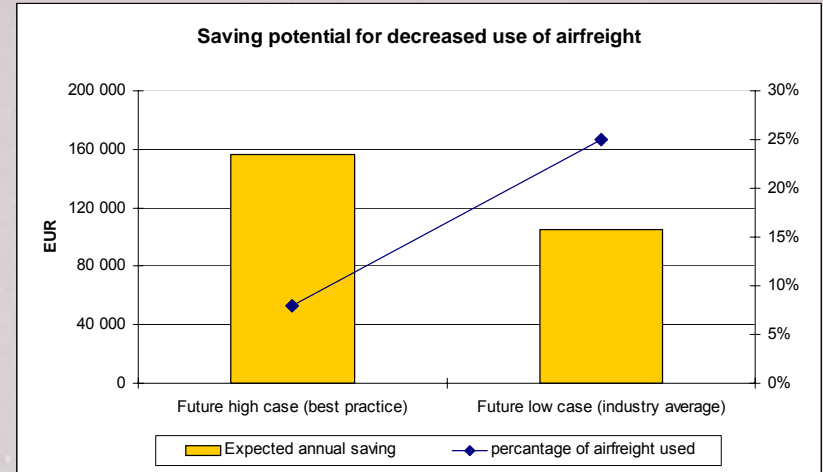
Performance Drivers	How they are measured	Company performance	Industry average	Leading Industry practice
Product Cost	Spend on contract	<15%	30-50%	> 70%
	Contract compliance	>95%	>95%	>95%
	% urgent order	>50%	10-20%	0-10%
Cost of freight and inventory	% airfreight shipment	>40%	20-30%	<10%
	Cycle time (PR to delivered onboard)	40-55	40-55 days	30-40 days
Staff Productivity	Cycle time (PR to PO issued)	8-14 days	8-14 days	<8 days
	No. of vessel per purchaser	>13 vessels	7-9 vessels	>13 vessels
Fleet service level	% on time delivery	50-70%	85-95%	>95%
	% of correct delivery	50-70%	81-95%	>95%

# Example 1 – Reducing the airfreight cost by improve planning

Ratio of airfreight shipments:		
Company	Industry average	Leading practice
>50%	20-30%	<10%

## Observations: *Too much money spent on airfreight*

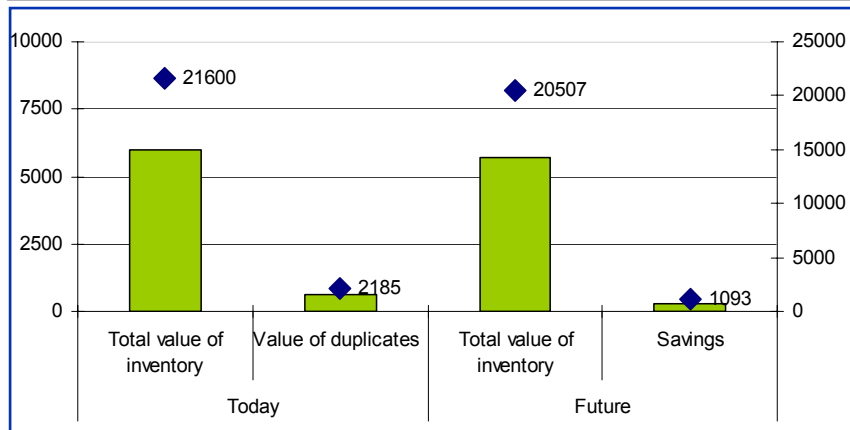
- Air freight is used above 50% of the time
- In general an airfreight solution is at least 20% more expensive than other solutions
- DHL is used as default for almost every freight



## Solution: *Better planning of need for spares*

- Segmenting of materials and planning of requirements enable increased consolidation and selection of optimal freight solutions
- Being clear on when and how to use “Urgent” or “Emergency” order function reduces need for air freight. Communicate misuse and illustrate the potential savings due to urgent orders

# Example 2 – Control material information to reduce onboard inventory



## 1. Reduce duplication of spares

Depending on how spares are being inserted in inventory system same type of spares might be inserted with different names conveying duplication of spares

## Spares connected to scrapped items

Spares connected to scrapped components not utilised

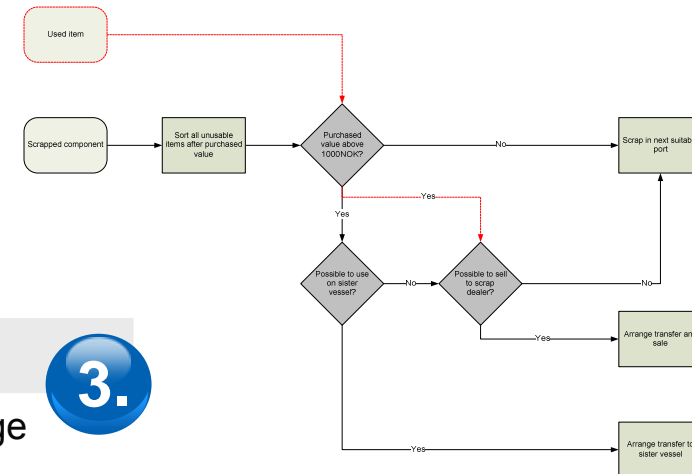
## 2.

No of unusable items	3340
Average value per these items	47 USD
<b>Total value of spares onboard</b>	<b>375 000 USD</b>
<b>Total value of unusable spares</b>	<b>156 337 USD (42%)</b>

## Optimise processes

Define process to manage these aspects

## 3.



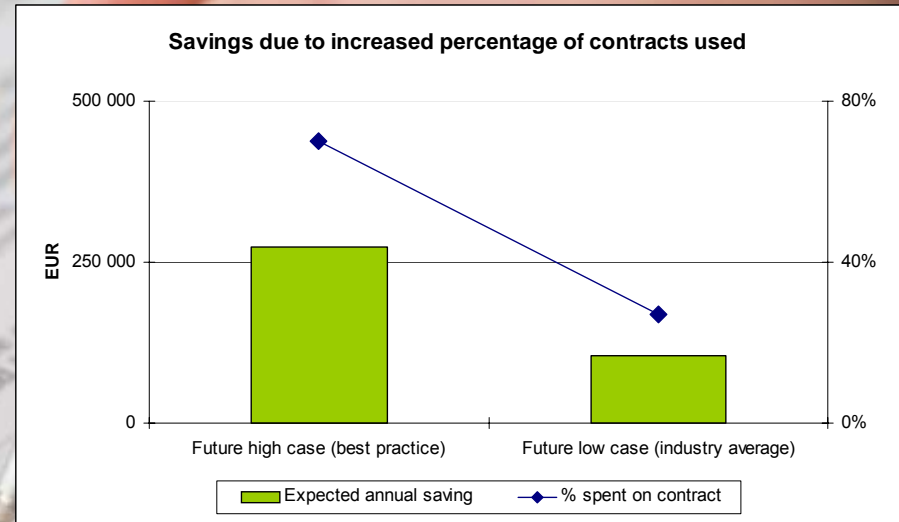
Knowing what is in the onboard inventory can save a lot of money in terms of reduced spare cost and inventory value

## Example 3 –Reducing the total spare cost by optimising contracts

Percentage of total purchase/spend on contract		
Company	Industry average	Leading practice
5%	30-50%	>70%

### Observations: *Insufficient use of contracts*


- Contracts are managed in hard copy
- 20 contracts in place but only 5 is used
- The other 15 are not utilised
- On average the contracts in place have a 10% discount compared with spot transactions



### Solutions: *Utilise existing contracts and place more items on contract*

- Make sure current contracts are being used
- Take control of existing contracts by monitoring and measuring contract performance
- Evaluate which items to have on contract based on money spent and importance (segmentation)
- Enter into contract with identified key suppliers to realise savings

# Going for the cheapest price is not always the best approach to attain sustainable cost savings



Evaluation of alternatives should use the Total Cost of Ownership (TCO) approach

Decisions should not be made by simply comparing the acquisition price.

There are other components that need to be considered such as:

Repair and Maintenance cost

Power consumption

Warranty

Availability of replacement parts

Expected lifespan

Residual/Resale Value

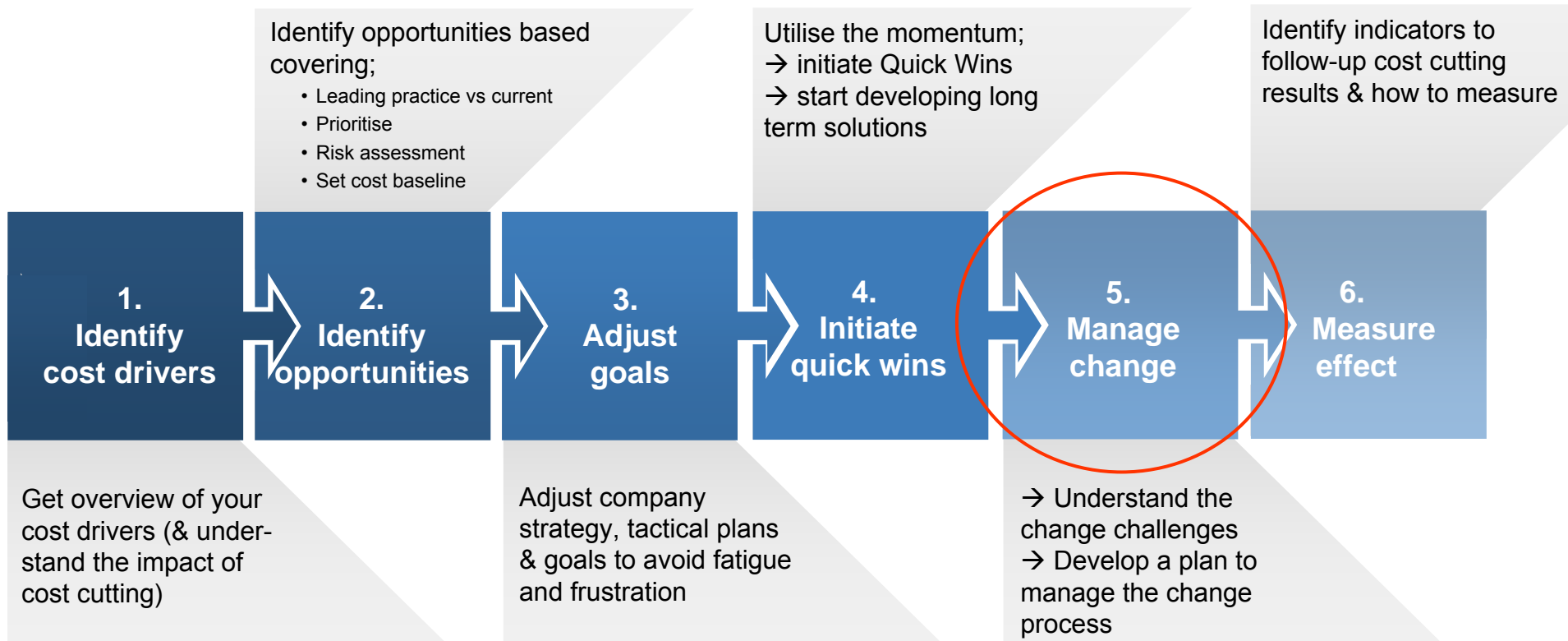
After-sales service (e.g. technical support)

# What is on the menu today?

---

- Introduction to cost cutting
- Saving fuel through energy management
- Maintenance and Procurement
- Mgt & measurement of change

# How do you obtain sustainable cost cutting in shipping companies?



Cook book “How to create a competitive edge through cost cutting”

# Why is change management in shipping so special?

## GLOBAL INDUSTRY

- Many cultures
- Many locations
- Many organisational entities & units involved

## COMPLEX INDUSTRY

- Mobile assets
- Operationally oriented
- Demanding clients
- Soft factors vs hard technical issues

## COMPETITIVE

- Cost focus
- Low margin

## HANDS ON & LEAN

- Operationally oriented
- Stretched on resources

## RISK DRIVEN

- Safety & compliance
- Offhire
- Volatility of markets

## What typically goes wrong when ship management companies change?

**“BOHICA”**

**“IT system drives the solutions”**

**“Lack of communication”**

**“It has always worked – why change it?”**

**“Change culture based on “enforcing” not “motivating””**

**“Resistance is underestimated”**

**“Lack of management attention and support”**

**“Taking the change too lightly – it will always be tougher than you think”**

**“Risks are not monitored and managed”**

**“Too many initiatives at the same time”**

**“Implementation by email”**

**“Implementation takes time & resources”**

**“Failing to measure progress”**

**“Change efforts comes on top of the day job”**

# What typically goes wrong when ship management companies change?

## 1) Reason for change not properly identified

“BOHICA”

“It has always worked – why change it?”

“IT system drives the solutions”

“Change culture based on “enforcing” not “motivating””

“Lack of communication”

## 2) Vision for the change process not formalized and communicated

Resistance is underestimated”

“Taking the change too lightly – it will always be tougher than you

## 3) Roles and responsibility in the transformation process not clearly defined

“Lack of management attention and support”

## 4) Communication with organisation insufficient

“Implementation by email”

“Risks are not monitored and managed”

## 5) Success of process not sufficiently measured & tracked

“Implementation takes time & resources”

ing to measure progress”

“Change efforts comes on top of the day job”

*Recipe for success: Change management as enabler*

Process blueprint should be identified at an early state to give the right control and process guidance

**Why do you need to change and when will it happen?**

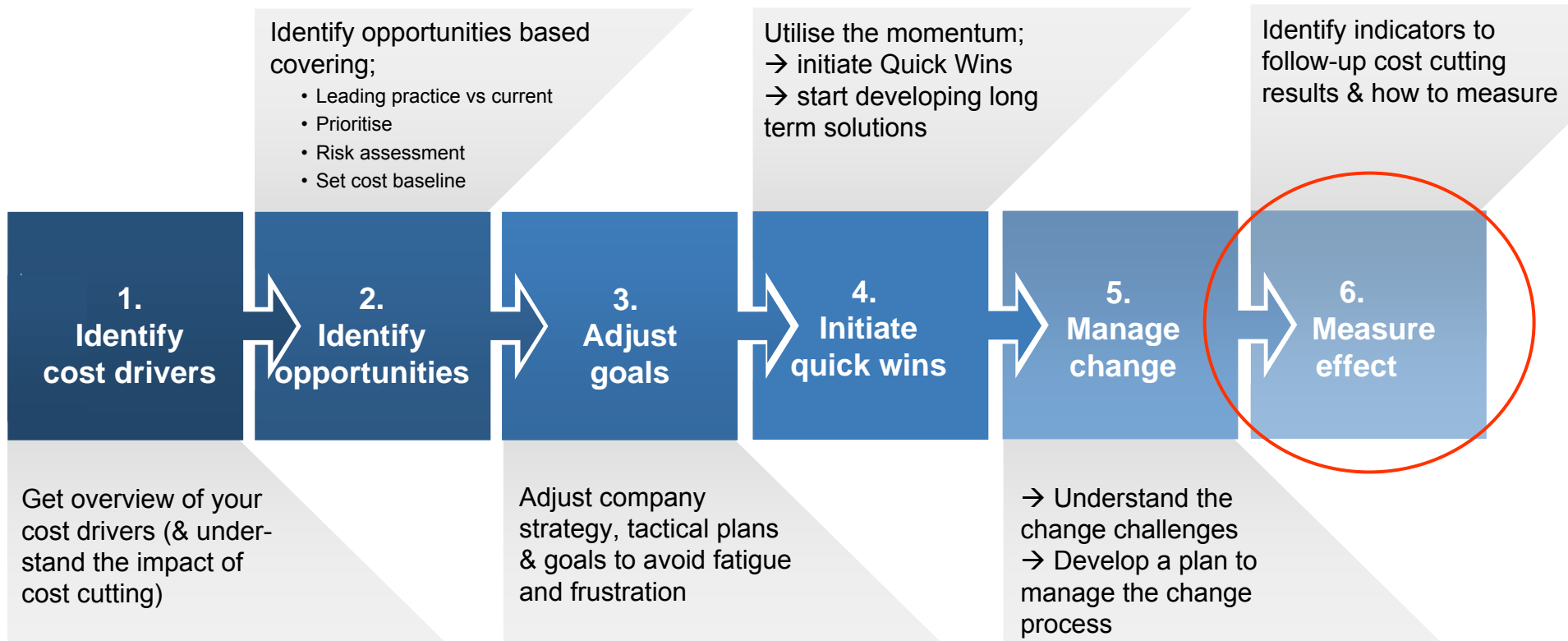
**What does success look like?**

**Who will manage and drive the changes?**

**Who needs to know what at what time in the process?**

**How do we measure progress, success and/or failure?**

# How do you obtain sustainable cost cutting in shipping companies?



Cook book “How to create a competitive edge through cost cutting”

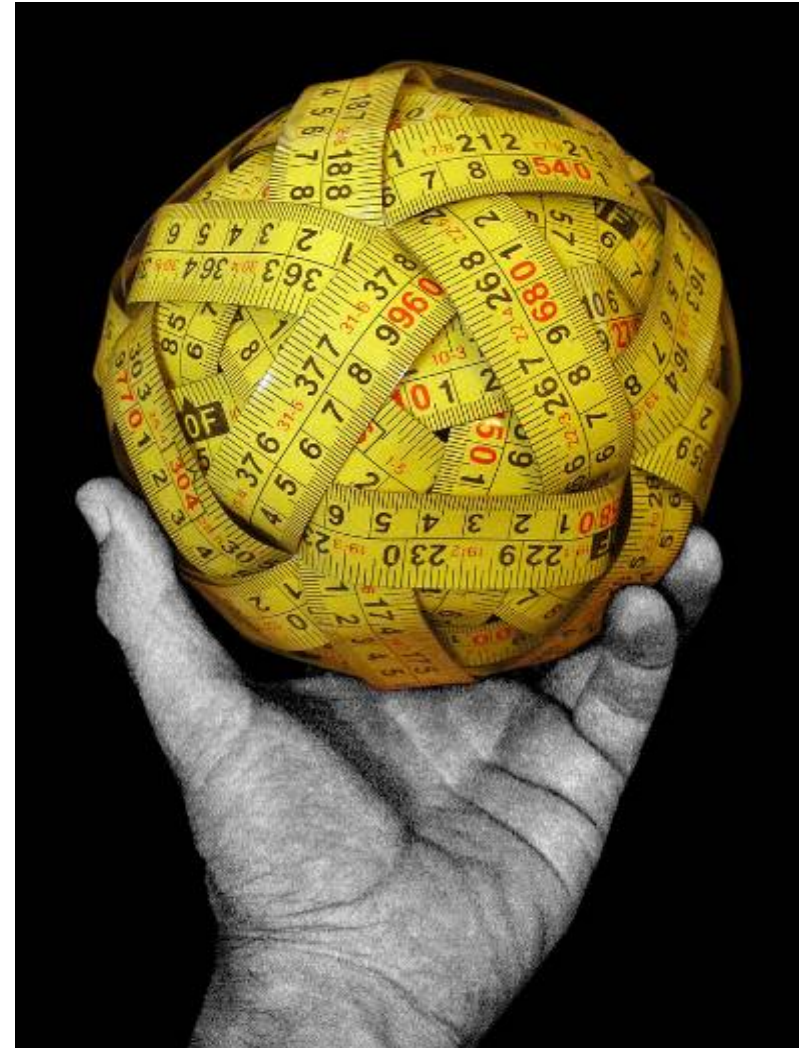
# What gets measured, gets done

- No action, without reaction
- A cost cutting initiative is a very specific action, with an expected reaction or output
- It is crucial to measure the reaction, in order to evaluate how successful our actions are

Are we meeting our targets?

No? What do we need to change?

Celebrate success!

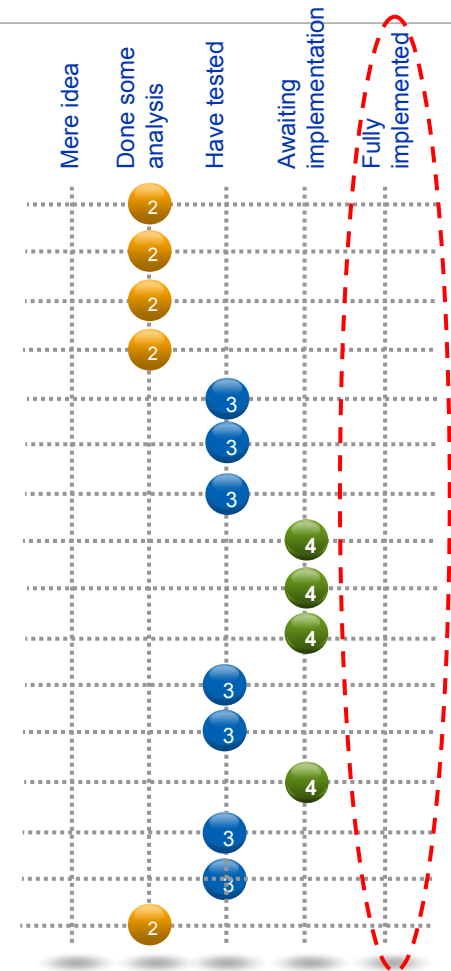


# Fuel reduction is common knowledge today – most companies have a long track record

Example

## Energy efficiency initiative

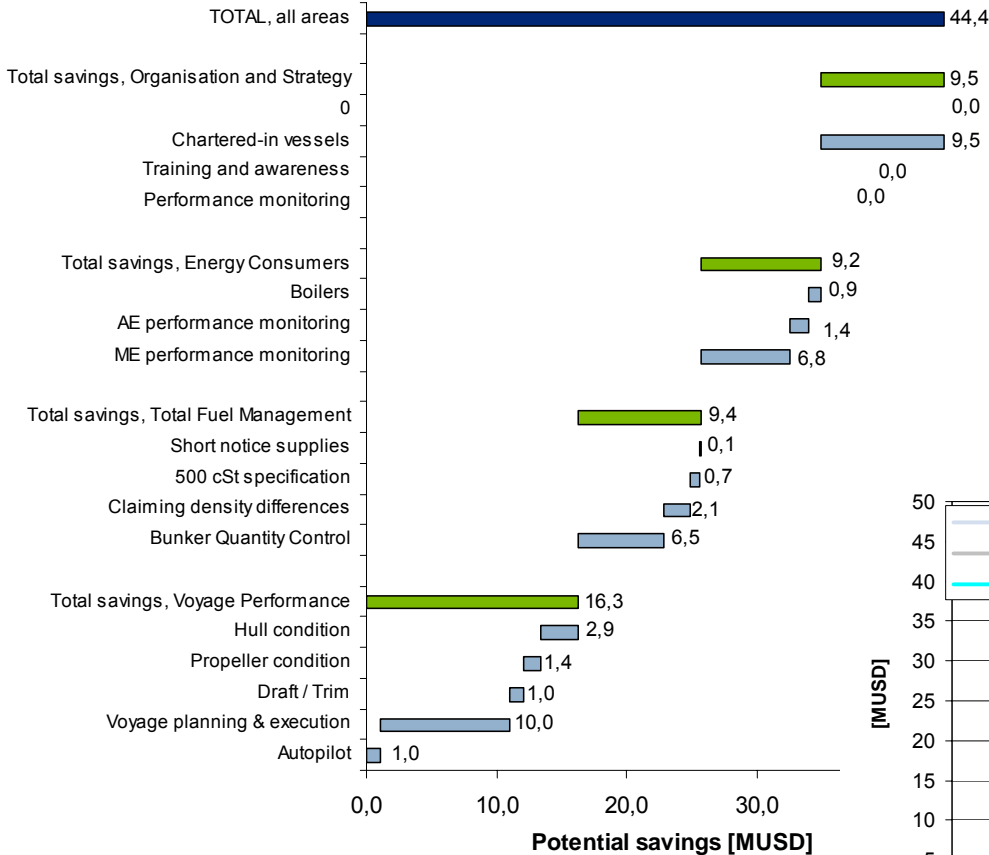
- Develop KPI structure for monitoring of vessel performance
- Establish database for vessel performance data
- Improve seafarer knowledge and competence to reduce fuel consumption
- Create procedures for optimal settings for trim and ballast
- Create procedures for optimal vessel speed in voyage planning
- Determine optimal antifouling system to be used
- Determine optimal hull cleaning programme
- Determine optimal propeller cleaning programme
- Implement WNI reporting on all vessels
- Include more time in voyage planning to allow for speed reduction
- Create procedures for engine, hull and propeller monitoring
- Ensure fully functional sensors and equipment for engine performance monitoring
- Install system for engine performance monitoring
- Optimisation of cylinder oil consumption
- Tune engines that have shown low performance figures
- Review NB specification to ensure required sensors are installed for performance monitoring



The real challenges occur when it comes to implementation and benefit tracking

# Benefit tracking is a key role of the cost cutting initiative

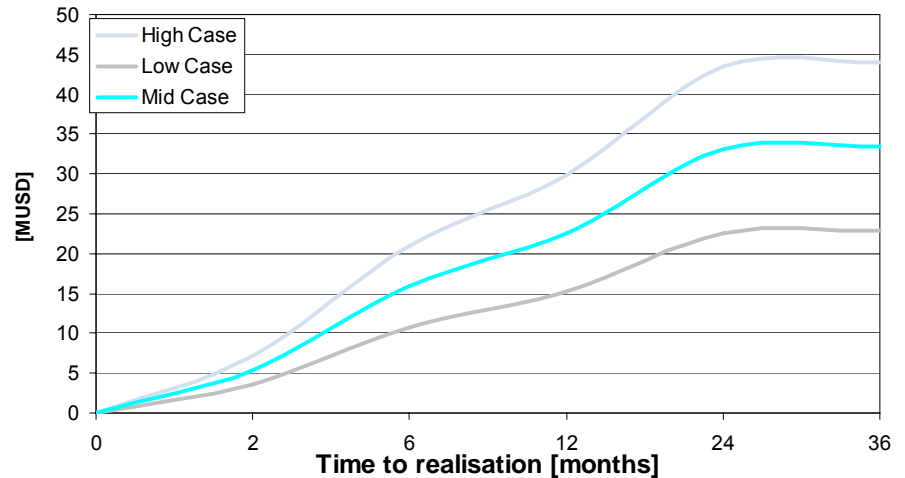
## High case - all areas



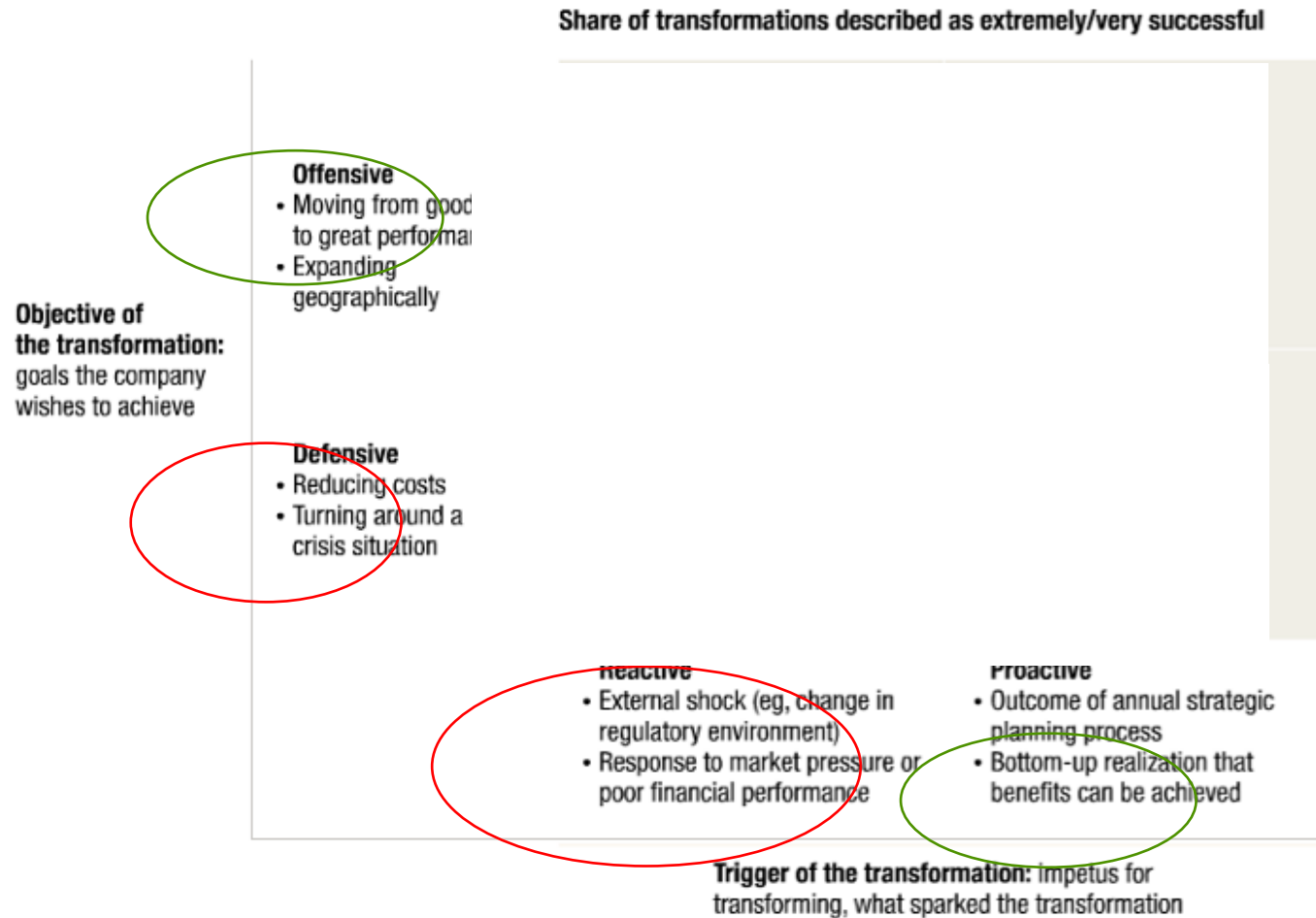
Setting targets..

..and following up

## Total savings - Time to realisation



# Cost cutting is not among the change projects that are the easiest to succeed with



Source: 2008 McKinsey global survey on performance transformation



Success is achieved by proactively strengthening capabilities as part of the cost cutting program

# Sustainable cost cutting - key messages



1. Sustainable cost cutting requires a structured approach
2. Sustainable cost cutting must focus on controlling the cost drivers
3. The critical success factor is strengthening core company capabilities, thus using the “opportunity” to improve the competitive edge

# DNV Advisory Services

Approach	Expertise
<ul style="list-style-type: none"><li>• Our projects are process driven</li><li>• The solutions are implemented in close cooperation with our clients</li><li>• Transfer of knowledge and competence is a key success factor</li><li>• Sharing industry best practice and benchmarking results with our clients is a central part of our model</li></ul>	
	<b>DNV Maritime Solutions</b> Management Consulting
	Technology Consulting
	

*From Boardroom to Engine Room...*

*...helping unlock our Clients' potential*

## Our goal is to make our clients winners

- We offer our clients advice on all aspects relevant to running a maritime business - from strategy and management related issues to technical and operational decisions and improvements
- We offer best practice implementation assistance

## Our contribution has a proven positive impact on

- Clients' bottom line
- Asset values
- Ability to maintain competitive advantages



# Industry best practises are used as basis for enhancing maritime & shipping capabilities

## SAFETY & RISK

- Operating vessels with world class in accident and incident levels

## COMMERCIAL OPERATIONS

- Maximizing yield and controlling cost
- Achieving optimal fleet utilization
- Achieving customer satisfaction

## CREWING

- Attracting, retaining and developing highly competent crew
- Doing structured competence development to client's standards

## MAINTENANCE

- Maintaining a fleet with high degree of reliability in operations and maintenance costs
- Maintaining the fleet technical standards at the appropriate levels

## STRATEGIC ADVISORY

- Decision making support
- Supply chain mgmt
- Maritime Cluster development

## FUEL EFFICIENCY

- Optimize fuel consumption

## DRY DOCKING

- Conducting dockings with a high degree of cost predictability

## NEW BUILDING

- Feasibility studies
- Developing innovative ship designs that support the business objectives

## BUSINESS PERFORMANCE MGT

- Proactive management capability
- Performance mgmt system

## PROCUREMENT

- Effectively managing vendors to minimize procurement costs and quality
  - Automated processes and vendor integration
  - Minimal ad-hoc purchase orders



# Focus areas for Management Advisory Middle East

## UAE-KSA-IRAN-KUWAIT-OMAN-QATAR-BAHRAIN

### Industry Segment

#### Govt. Entities



- **Maritime Transport Ministries**
- **Ports Authorities**
- **Navies & Coastguard**
- **Maritime Organisations**

#### Maritime & Energy



- **National Oil Companies**
- **Ship-owners / operators / managers**
- **Terminal Operators**
- **Others (eg Banks, Financial Inst.)**

### Service Portfolio

#### Strategy & Business Development

- Market & Feasibility Study
- Benchmarking & Strategy Development
- Organisation Capability Building

#### Operational Excellence

- Maintenance Optimization & Procurement
- Energy Management
- Process Improvement & IT Solutions

#### Safety, Security & Risk Management

- Safety, Security & Risk Assessment
- Tailor-made Safety & Security Solutions
- Project Risk and Due Diligence

#### Environmental Solutions

- Environmental Performance Mgmt
- Green Shipping & Green Port Solutions
- Cleaner energy & green supply chain

#### Competence Advisory

- Competence Management System
- Customized Training
- Competence Development

# Safeguarding life, property and the environment

[www.dnv.com](http://www.dnv.com)



MANAGING RISK **DNV**