# Making Money in a tough market

# *"Effective Shipmanagement. Ways to improve operating costs minimize losses."*

S.Mavrelos Technical Director Capital Shipmanagement Corp

# **Objectives**

- Present ways for cost effectiveness / improvement in operating costs
- Provide practical examples for reducing costs
- Describe "loss control management principles to avoid and or minimize losses

Business strategies for tough markets is beyond the scope of this presentation

# **Trends and Challenges in Ship Management**

- Tough market
- Achieve competitiveness / Adding value
- Increase in operating costs
- Limitations on Crew Resources
- Safety and Environmental regulations

#### TO RESPOND TO CHALLENGES WE NEED TO "MANAGE".

### TO "MANAGE" WE REQUIRE RESOURCES.

#### To "MANAGE EFFECTIVELY" WE NEED:

- Qualified /Trained and Motivated People
- Manage the risks
- Develop and Implement Dynamic Performance strategies
- Provide Systems Procedures; IT; other infrastructure
- Measure Performance "Hands on"
- Manage Change
- Be "Adaptive" to changes

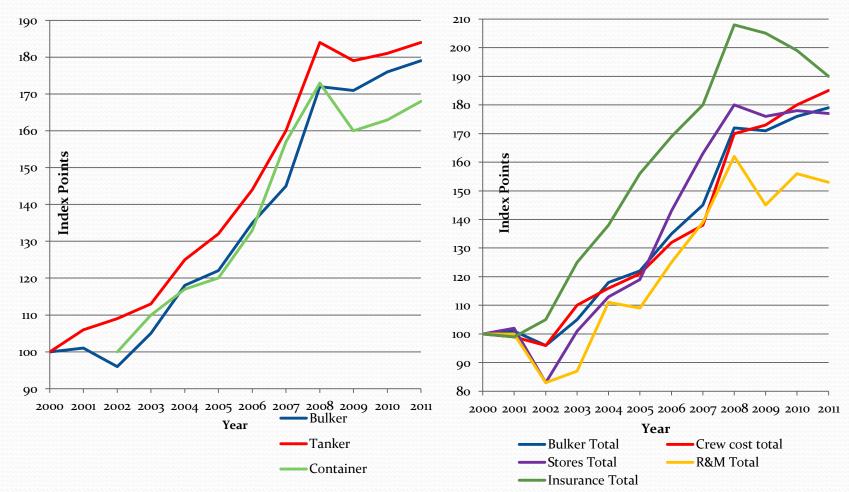
The "Evolution Theory" of Charles Darwin is apparently applicable to all

*'It is not the strongest of the species, nor the smartest of the species that survive, but those most adaptive to change'* 

# **Operating Costs**

Five main categories:

- Crew Total Cost
- Stores total
- Repairs and Maintenance Total
- Insurance Total
- Administration Total



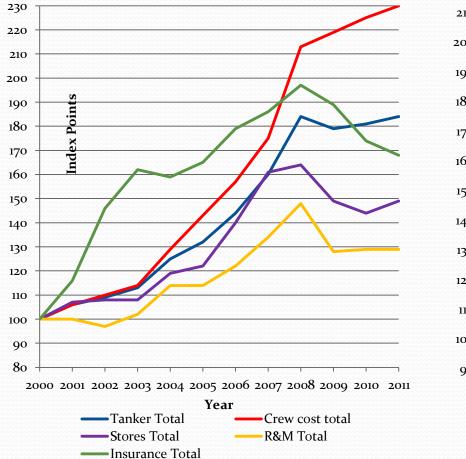
#### **OpCost Indices**

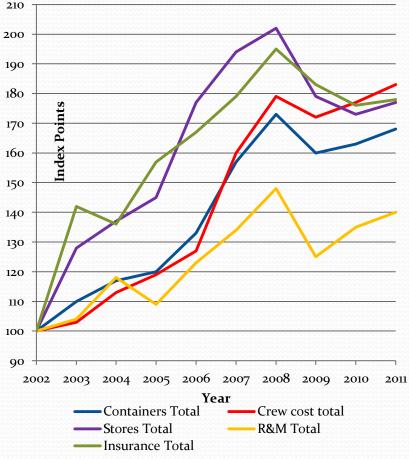
**OpCost bulker Indices** 

#### Source: Moore Stephens OpCost 2012

#### **OpCost Tanker Indices**

**OpCost Container Indices** 





#### Source: Moore Stephens OpCost 2012

# **Operating Costs may be improved by:**

- People
- Control measures for cost effectiveness
- Implementing "Loss control Management principles"
- Effective Planned maintenance (no short cuts)
- IT investment

# **Control Measures for Cost Effectiveness**

- Continuous evaluation of operating cost results. These should reflect accurately the context of measurement
- Benchmark against industry standards
- Systematic measurements of relative changes (variances) and not only, against yearly budgets
- Reviewing Company's processes for identifying improvement areas
- Implementing Changes (Process reengineering, work alterations etc)
- Re measure to reflect the achievement (measurement of outcome effects versus implemented courses of action)

# Improvement area (Spare parts)

Current	Areas of	Example and Ideas	Measure
situation	Improvement		Improvements
Large annual cost of Spare Parts	Operational Improvements Purchasing Effectiveness	<ul> <li>Review maintenance procedures prolong life</li> <li>Use Integrated IT systems for accounting / spare parts / PMS etc.</li> <li>Train / Motivate Human resources</li> <li>Rechecking Inventories</li> <li>Obtain more quotes.</li> <li>Built up business relationships with suppliers</li> <li>Increase business revenues for higher returns</li> <li>(Use maker's list if company is involved with NB to get guaranteed prices / discounts</li> </ul>	Performance measurements Use KPI's

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# Improvement area (Spare parts)

Current situation	Areas of Improvement	Example and Ideas	Measure Improvements
Large annual cost of Spare Parts	Technical issues	<ul> <li>Optimize spare parts specification</li> <li>Identify spare parts that can be used on more than one ship</li> <li>Experience feedback</li> <li>Selection of makers of machinery at the new building stage</li> </ul>	Performance measurements Use KPI's
	Supply Chain Optimization	• Optimize spare part supply and delivery to minimize delivery costs	

# Improvement area (Stores)

Current situation	Areas of Improvement	<b>Example and Ideas</b>	Measure Improvements
Large annual operating costs of Stores (Lub oil)	Operational Improvements	<ul> <li>Implement slow steaming</li> <li>Identify source of leakages take countermeasures to reduce or stop</li> <li>Experience feedback</li> </ul>	Performance measurements Use KPI's
	Purchasing Effectiveness	• Relationship with the suppliers (better value of money)	

# Improvement area (Stores)

Current situation	Areas of Improvement	Example and Ideas	Measure Improvements
Large annual operating costs of Stores (Lub oil)	Technical issues	<ul> <li>Review maintenance procedures. Are they adequate?</li> <li>Retrofit new technologies i.e. use pulse or spray lubrication</li> </ul>	Performance measurements Use KPI's
	Supply Chain Optimization	• Optimize port / delivery to save costs	

## **Improvement area** (Example Repairs & Maintenance)

Current situation	Areas of Improvement	Example and Ideas	Measure Improvements
Large annual operating costs of Repairs and Maintenance	Operational Improvements	<ul> <li>Train personnel both ashore and onboard</li> <li>Use PMS Establish failure trends</li> <li>Retrofitting new equipment</li> <li>Use Incident analysis techniques to identify root cause of damages</li> <li>Provide experience feedback</li> </ul>	Performance measurements Use KPI's

# Improvement area (Example Repairs & Maintenance)

Current	Areas of	Example and Ideas	Measure
situation	Improvement		Improvements
Large annual operating costs of Repairs and Maintenance	Purchasing Effectiveness Technical issues	<ul> <li>More quotes</li> <li>Built up business relationship with suppliers</li> <li>Use own "repair teams"</li> <li>Review maintenance procedures. Are they adequate?</li> <li>Extend overhauling periods?</li> <li>Providing guidance for problem solving without attending onboard</li> </ul>	Performance measurements Use KPI's

### **Improvement area** (Example Repairs & Maintenance)

Current situation	Areas of Improvement	Example and Ideas	Measure Improvements
Large annual operating costs of Repairs and Maintenance	Optimizing maintenance periods	<ul> <li>Maintain all equipment as appropriate during docking periods to avoid stoppages during vessel's trading</li> </ul>	Performance measurements Use KPI's

It should be remembered, however that:

- Severe cost cutting measures may have a severe impact in areas beyond financial statements
- The impact on those areas however, may not be readily apparent to the stake holders in the short term

## Loss Control Management

### The domino "cause – consequence" loss control model (ILCI)

Lack of	Basic Causes	Immediate	Undesired	Results /
Control		Causes	Events / Facts	Losses
Inadequate Management System or Non compliance	Personal Factors or Job Factors	Substandard acts or Substandard conditions	Accident or Incident	People Property Process Environment

# **Management System Standards**

- ISM
- TMSA
- ISO series and so on

	ISO 14001 : 2004		ISO 9001 : 2008	Oł	ISAS 18001 : 2007		ISM Code		TMSA
4	Environmental management system requirements	4	Quality management system	4	OH&S management system elements			Element 9: Element 10:	Safety Management Environmental Management
4.1	General requirements	4.1	General requirements	4.1	General requirements	1	General		
4.2	Environmental Policy	5.1 5.3 8.5.1	Management Commitment Quality Policy Continual Improvement	4.2	OH&S Policy	2	Safety and Environmental Protection Policy	Element 1:	Management, leadership and accountability
4.3	Planning	5.4	Planning	4.3	Planning				
4.3.1	Environmental aspects	5.2 7.2.1 7.2.2	Customer focus Determination of requirements related to the product Review of requirements related to the product		Hazard identification, risk assessment and determining controls			Element 7:	Management of change
4.3.2	Legal and other requirements	<u>5.2</u> 7.2.1	Customer focus Determination of requirements related to the product	4.3.2	Legal and other requirements				
4.3.3	Objectives, targets and programme(s)	5.4.1 5.4.2 8.5.1	Quality Objectives Quality Planning Planning for continual improvement	4.3.3	Objectives and programmes	1.2.2	Safety management objectives of the company		

4.5	Checking	8	Measurement, analysis and improvement	4.5	Checking and corrective action			Element 12:	Measurement, analysis and improvement
4.5.1	Monitoring and measurement	7.6	Control of measuring and monitoring devices	4.5.1	Performance measurement and monitoring	10	Maintenance of the ship and equipment	Element 4:	Reliability and maintenance standards
		8.1	General measurement analysis and improvement		-				
			Monitoring and measurement of processes						
		8.2.4	Monitoring and measurement of product Analysis of data						
4.5.2	Evaluation of compliance	8.2.3 8.2.4		4.5.2	Evaluation of compliance				
4.5.3	Nonconformity, corrective action and preventive action	8.3 8.4 8.5.2	Control of nonconforming product Analysis of data Corrective Action Preventive Action	4.5.3	Incident Investigation, Nonconformity, Corrective Action and Preventive Action	9	Reports and analysis of non-conformities, accidents and hazardous occurrences	Element 8:	Incident investigation and analysis
4.5.4 4.5.5	Control of records Internal audit		Control of records Internal Audit		Control of records Internal audit	12	Company verification,		
						12.1	review and evaluation Internal Safety Audits		
4.6	Management review	5.6	Management Review	4.6	Management review	12.2	Company review		

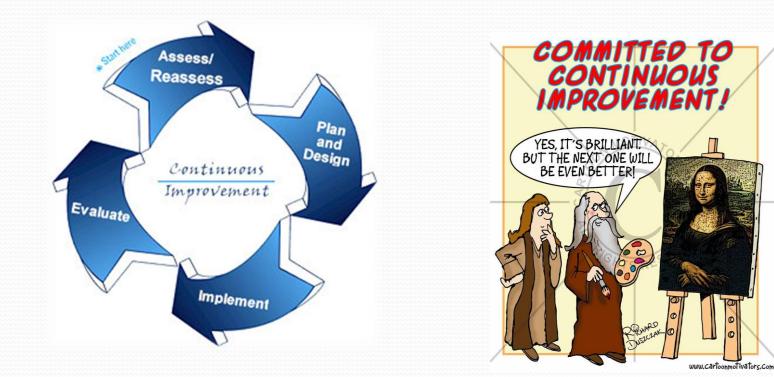
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4.4	Implementation and	7	Product Realization	4.4	Implementation and				
	operation				operation				
4.4.1	Resources, roles responsibility and	5.1	Management Commitment	4.4.1	Resources, Roles, Responsibility,	3	Company responsibilities and authority	Element 2:	Recruitment and management of
	authority	5.5.1	Responsibility and authority		Accountability and Authority				shore-based personnel
		5.5.2	Management representative	1	, lancing	4	Designated Person(s)		percention
				1		5	Master's responsibility and authority	Element 3:	Recruitment and management of
		6.1 6.3	Provision of resources Infrastusture			6	Resources and personnel		ships' personnel
	-								
1.4.2	Competence, training, and awareness	6.2.2	Competence, awareness and training	4.4.2	Competence, Training and Awareness	6.5	Training		
4.4.3	Communication	5. <u>5.3</u> 7.2.3	Internal Communication Customer Communication	4.4.3	Communication, Participation and Consultation				
1.4.4	Documentation	4.2.1	General Documentation requirements	4.4.4	Documentation	11	Documentation		
4.4.5	Control of documents	4.2.2	Quality Manual	4.4.5	Document and data control				
		4.2.3	Control of documents	1					
4.4.6	Operational Control	7.1	Planning of Product Realization	4.4.6	Operational Control	7	Development of plans for ship-board operations	Element 5:	Navigational safe
		7.2	Customer-related processes					Element 6:	Cargo, ballast and mooring operation
		7.3	Design and development	1					
		7.4	Purchasing	1					
		7.5	Production and service provision	1					
.4.7	Emergency preparedness and response	8.3	Control of nonconforming product	4.4.7	Emergency preparedness and response	8	Emergency preparedness	Element 11:	Emergency preparedness and contingency planning

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# **Continuous** Improvement



# **THANK YOU**