

Shipping Strategy

With roughly three-quarters of the earth's surface covered with water, it is needless to say that shipping plays a major role in world trade. In fact, it is one of the most international industries, and has an impact on each and every one of us every day. Ships transport the food we eat, the clothes we wear, the cars we drive, the materials used to build our homes, and the fuel that heats them. Yet traditional shipping companies – ones that combine various aspects of shipping under one organizational roof – are on the decline. They are gradually being replaced by new, more specialized companies with more strategic clarity and managerial focus. In *Shipping Strategy*, Peter Lorange draws on his extensive experience in the shipping industry to show how companies can adapt to the fast-moving and volatile world of maritime business by devising strategies for future success, including specialization and innovation.

PETER LORANGE is the Kristian Gerhard Jebsen Professor of International Shipping at IMD in Lausanne, Switzerland. He retired in 2008 after fifteen years as President of IMD, is a former president of the Norwegian School of Management BI and, before this, was affiliated with the Wharton School, University of Pennsylvania, and The Sloan School of Management, Massachusetts Institute of Technology. Professor Lorange is the former owner of a Norwegian shipping company and is also a board member of several shipping firms. He has written or edited 15 books and some 110 articles on the topics of global strategic management, strategic planning, and entrepreneurship for growth. His most recent book is *Thought Leadership Meets Business* (Cambridge, 2008).

Cambridge University Press
978-0-521-76149-9 - Shipping Strategy: Innovating for Success
H. C. Mult and Peter Lorange
Frontmatter
[More information](#)

Shipping Strategy

Innovating for Success

DR. DR. H. C. MULT. PETER LORANGE

*Kristian Gerhard Jebsen Professor of International Shipping
Former President, IMD*



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press
978-0-521-76149-9 - Shipping Strategy: Innovating for Success
H. C. Mult and Peter Lorange
Frontmatter
[More information](#)

CAMBRIDGE UNIVERSITY PRESS
Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore,
São Paulo, Delhi

Cambridge University Press
The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press,
New York

www.cambridge.org
Information on this title: www.cambridge.org/9780521761499

© Peter Lorange 2009

This publication is in copyright. Subject to statutory exception
and to the provisions of relevant collective licensing agreements,
no reproduction of any part may take place without
the written permission of Cambridge University Press.

First published 2009

Printed in the United Kingdom at the University Press, Cambridge

A catalogue record for this publication is available from the British Library

ISBN 978-0-521-76149-9 hardback

Cambridge University Press has no responsibility for
the persistence or accuracy of URLs for external or
third-party Internet websites referred to in this publication,
and does not guarantee that any content on such
websites is, or will remain, accurate or appropriate.

Cambridge University Press
978-0-521-76149-9 - Shipping Strategy: Innovating for Success
H. C. Mult and Peter Lorange
Frontmatter
[More information](#)

In memory of Kristian Gerhard Jebsen, 1927–2004.

Contents

List of figures	<i>page</i> ix
Foreword	xiii
Acknowledgements	xix
Part I World shipping: the context	1
1 Drivers of change in the shipping industry	3
2 Major shipping markets	15
3 Shipping freight rates	31
4 Shipping industry clusters	62
Part II Strategic archetypes in shipping	77
5 Specialized strategies	79
6 Owning steel	112
7 Using steel	142
8 Operating steel	170
9 Innovating around steel	175
Part III The firm's portfolio strategy	185
10 Portfolio management	187
11 Risk and revenue management	215

viii CONTENTS

Part IV In conclusion	233
12 Two unique issues in shipping – family and governance	235
13 In the end ... a question of management capabilities	248
Epilogue	260
References	262
Index	266

Figures

2.1 Price of oil per barrel	<i>page</i> 17
2.2 Very large crude carrier (VLCC) earnings vs. oil price	17
3.1 Bulk freight rates	32
3.2 Panamax bulk carrier earnings	32
3.3 Suezmax tanker earnings	33
3.4 Chinese iron ore imports by source, 1997–2007	34
3.5 Port delays	38
3.6 Order book-to-fleet ratio (dry bulk, tanker, and fully cellular containership fleet)	39
3.7 Freight market behavior as a consequence of fleet employment rate	40
3.8 Capesize bulk carriers – expected freight market behavior	41
3.9 Major bull market every thirty years? Commodity cycles	45
3.10 Vessel earnings (Cape, VLCC, and 4,000 TEU – one-year time charter rate)	46
3.11 Rate of growth of trade (measured in tonne/mile or TEU/mile terms)	47
3.12 Gross freight earnings by vessel type, 1960–80	50
3.13 Typical shipping market freight rate development	51
3.14 Abnormal shipping market freight rate developments	52
4.1 Share of revenues invested in R&D compared with level of innovativeness in five national maritime industries	66
4.2 Personnel mobility within the Dutch maritime cluster	67
4.3 The relationship between preferences for keeping headquarters in the home country and satisfaction with public policy	68
4.4 Maritime clusters (European Union)	69

X LIST OF FIGURES

4.5	Global market capitalization	72
5.1	Conceptual model for shipping strategies	81
5.2	Four archetypes of specialist firms	85
5.3	The specialist movement within the shipping industry	87
5.4	Owning steel, using steel, operating steel, innovating around steel	90
6.1	Container supply/demand balance	119
6.2	Crude tanker supply/demand balance	119
6.3	Segmentation of ship types	121
6.4	Shipbuilding activities in Germany	122
6.5	Ships on order per country (of control)	122
6.6	Container ships in existence by country of ownership, 2006	123
6.7	Shipyards capacity by country	123
6.8	Major yards: capacity growth – ships delivered	125
6.9	Newbuilding prices	126
6.10	Matching demand and supply	128
6.11	Top twenty liner companies – new orders at March 10, 2008	130
6.12	Market share (%) of the five largest container ship lines	133
6.13	New ships on order as % of existing fleet (including ships chartered in)	134
7.1	In/out and long/short strategies (various market assumptions)	144
7.2	Buy/sell/place second-hand ships and newbuilding orders	144
7.3	DFDS overall strategy	166
7.4	DFDS ownership share per ship type (%)	167
8.1	Proportional distribution of operating costs for bulk carriers	171
8.2	Proportional distribution of operating costs for tankers	172
9.1	Slow steaming: vessel power vs. speed	179
9.2	CO ₂ emissions per unit load for various types of transportation (comparison by transport mode)	180
10.1	Peter Georgiopoulos' sphere of shipping companies	189

LIST OF FIGURES xi

10.2 Risk/return tradeoffs in shipping (based on time charter rates for the period 1980–2002)	192
10.3 Risk/return tradeoffs in shipping (based on time charter rates for the period 2003–2007)	193
10.4 Portfolio, owning ships/infrastructure firms – Seaspan example	196
10.5 Seaspan’s stakeholder-based portfolio strategy	197
10.6 Portfolio – using ships – Clarkson Shipping Hedge Fund example	199
10.7 Growth vs. yield in the public market since 2002	200
10.8 Portfolio – innovating around steel – Marsoft example	201
10.9 Portfolio shipping firm – owning, using, operating, innovating	202
10.10 Container terminals business model	210
10.11 From customer relations niche specialist to infrastructure low-cost specialist	213
12.1 Public vs. private company ownership	236
12.2 Family business vs. publicly traded firms – two different systems	237

Foreword

With roughly three-quarters of the earth's surface covered in water, it is needless to say that shipping plays a major role in world trade. In fact, it is one of the most international industries, and it has an impact on each and every one of us every day. Ships transport the food we eat, the clothes we wear, the cars we drive, the materials used to build our homes, and the fuel that heats them. Nowadays, however, shipping is largely out of sight and out of mind. Shipping facilities are usually beyond city limits, fenced in and unapproachable. Outsiders are not meant to go there, so most of us have no idea what goes on. But in my view, managers in a broad variety of mature industries can learn a lot from understanding and tracking developments in the shipping industry.

The general image of shipping is one of permanence and predictability as ships ply traditional routes with their cargoes, linking industries and consumers. But in reality the industry has experienced extraordinary changes over the last few years. The global landscape is shifting, with emerging nations driving global demand, and, until recently, the industry had been enjoying an unprecedented period of sustained profitability and increased investor interest. Many new fortunes were made – and lost – during these exceptional times. With its heavy exposure to global market mechanisms, the shipping industry is both unique and fascinating, attracting some of the world's most risk-taking and charismatic entrepreneurs and fortune-builders.

These changes have been accompanied by a dramatic increase in the ship freight derivatives business, so-called forward freight agreements (FFA) trading. It is estimated that the volume of FFA trading for dry bulk shipping from mid-2007 to mid-2008 might be at virtually the same level as physical trading in ships. Derivatives trading has become critical in several of the business segments in shipping, almost

xiv FOREWORD

notably in the dry bulk segment but also in tankers. The container shipping segment, on the other hand, has not so far become subject to derivatives trading.

Over the last few years, there has been a strong influx of capital, largely from sources that were previously not generally available to this industry, such as general investors, asset management funds, and bank financiers. Coupled with this, there has been an equally strong influx of new professional talent, many with very different backgrounds from those traditionally found in shipping. At the same time, experience and shipping judgment still count. Additionally, hedge funds and financial brokers showed increasing interest in shipping derivatives following the rise in freight rates caused by economic growth in China and elsewhere. To sum up, this is an exceptional time for the shipping industry.

As a result, the level of shipbuilding was at a record high with tonnage output rising fast. Many foresaw an oversupply of shipping capacity in the near future, or even another industry depression, perhaps similar in magnitude to that of the 1980s. However, the financial crisis in 2007–8 has created new shortages of capital and widespread uncertainty about the future of the economy. What can we learn today from the way shipping markets have behaved in the past? How deep will the dip be, and how long will it last? And, perhaps most importantly, how can shipping companies respond proactively to the vast array of challenges they are now facing?

For companies that aspire to be global winners, specialization may be the answer. This seems to be the case for most, if not all, mature industries. Perhaps the major insight of this book is the call for strategic clarity, by distinguishing between four primary archetypes – owning steel, using steel, operating steel, and innovating around steel – that is, between owning ships, chartering ships, trading in the markets, ship operations, and innovations related to the technical as well as commercial aspects of shipping. I shall discuss the critical success factors behind the strategies for each of these archetypes. My claim is that the hour of integrated shipping companies is

largely past and that the future trend is toward firms that are decomposing the value chain and focusing on one aspect, or possibly two, through autonomous units. The result is less complexity, less coordination, less bureaucracy, and more strategic clarity and managerial focus. Still, there will be a need for an overall portfolio strategy, and the management of overall risk to the shipping corporation is becoming more important than ever – all of which I will discuss in this book.

I sold my own shipping company, S. Ugelstad A/S, in January 2007. While I benefited from the strong market by obtaining a satisfactory price for my company, the major rationale for selling was that I began to feel increasingly uncomfortable attempting to combine various aspects of shipping under one organizational roof. With varying degrees of success, I tried to combine owning, chartering, and innovating. As the sole owner – and the one ultimately responsible – it became an increasingly complex situation for me to handle, so I sold the firm. However, my interest in shipping – broadly speaking – remains the same. I am engaged in various investments, many involving holding ownership stakes in ships. By freeing myself from direct company ownership, I have been able to diversify my holdings rather than being caught up in the increasingly tangled reins of an integrated shipping company.

So, who is this book for? The target reader is clear – the sophisticated shipping industry practitioner. There is a lot of sophistication among most shipping industry executives today. Accordingly, this book attempts to develop the most relevant critical success factors for the shipping business in general, as well as for the various key shipping strategies that can be identified. For each strategy, I shall attempt to identify the most relevant drivers, including the most pressing implementation challenges, critical risk/return considerations, and performance measures. I shall also indicate ways of benchmarking a specific category vis-à-vis other industries, past history, etc. There are a number of unique challenges that will make this book valuable to savvy shipping executives:

xvi FOREWORD

- I see a specialization trend within the shipping industry into more clearly focused businesses, namely:
 - owning steel/ships
 - using steel/ships – chartering/trading ships
 - operating steel/ships
 - innovation around steel/ships.¹

This book deals with how to develop effective strategies around each of these focused businesses. It concentrates on the main shipping business segments – tankers, bulk carriers, and container ships – and less on specialty ships, including ro-ro/ropax ships, ferries, cruise/passenger ships, and others. This is an intentional choice, to maintain a reasonable focus.

- At the same time, the new reality is the development of effective overall portfolio strategies, with particular emphasis on managing overall exposure to risk. This book covers approaches to these challenges.
- Financial understanding is becoming more and more of a must. But what does competent financial management entail?
- Derivatives trading – FFA contracts – in shipping is increasingly prominent – certainly when it comes to the dry bulk markets, but also for tankers. This means that a new set of trading-related capabilities is needed.
- Underlying all of this is a keen understanding of the market mechanisms in shipping. Growth in demand, i.e., in world trade, is the key driver for this but the supply side is important too. How can we better understand the growth outlook? When shipowners put up too many new buildings, supply will outstrip demand and rates will fall. How can we learn from key developments in markets in the past?
- The shipping industry is becoming more and more professional. But what does this professionalism involve? What are the key agenda items for today's successful shipping executives?

¹ I do not use the term “steel” literally to indicate ships built solely from steel. I include ships, notably fast ferries, cruise liners, and so on, that are built from composite materials and aluminum.

When considering key success factors, we must make a distinction between commodity shipping and specialty shipping. For the former, low costs are critical and the financial aspect – to enjoy the lowest possible capital cost – is increasingly important. It is essential to understand the basic shipping markets well enough to be able to decide on appropriate “in/out” and “long/short” decisions. In contrast, the customer is the focal point in specialty shipping, which is a customer-based business. To succeed, you need to understand your client.

Another critical question is how fast a specialty shipping business niche will evolve into merely another commodity business. Imitation is inevitable and barriers to new entrants typically low. How effective is each particular shipping market then?

I should state at this point that I have possibly not been entirely objective when it comes to discussions drawing on Marsoft or Seaspan as examples: I am a board member and outside director of both of these companies. However, to my best ability, I have tried to be objective and balanced.

At the time of completion of this manuscript in mid-2008, the shipping markets had been experiencing an unprecedented period of growth – over an equally unprecedented period of time – almost five great years! There were, however, clouds on the horizon. Newbuilding orders, relative to existing fleets, were growing rapidly and financing was becoming more difficult to obtain. During the latter part of 2008, the shipping markets did indeed collapse. The fall was more dramatic – faster and deeper – than anything ever experienced in the past. The shipping industry was perhaps in a deeper crisis than ever before in its history.

So, what can a book on shipping strategy offer during these difficult times, particularly when the book was essentially written during the earlier period of extreme optimism? While I have made some adjustments to the text, the book’s production schedule would not allow for an extensive rewrite. However, it is important to note that this should not diminish the book’s value. The basic “messages” remain more valid today than ever.

xviii FOREWORD

- Pursue highly focused business strategies for shipping companies, with heavier emphasis on understanding the relevant underlying critical success factors within each specific shipping business segment.
- Be cognizant of the need to manage overall risk through a more robust, overall corporate portfolio strategy.
- The level of the professionalism of management practice within the shipping industry can certainly be further advanced. Paradoxically, times of crises tend to enhance such managerial breakthroughs. I hope that the book might have a positive impact on this as well.

All in all, my sense is that this book is timelier than ever. I have also added a brief epilogue, which further reflects on the unprecedented changes that have recently had an impact on the shipping industry. An open-minded, flexible view is now called for.

Peter Lorange
Kristian Gerhard Jebsen Professor of International Shipping
Lausanne, March 2009

Acknowledgements

A large number of individuals have discussed emerging issues in shipping with me – all of whom I thank sincerely here: M. Adland, P. Aury, C. Bardjis, S. Chu, P. Curtis, P.L. Eckbo, P. Engeset, O. Espeland, R. Francis, K. Hazel, C. Hennig, J. Howat, E.W. Jakobsen, T. Janholt, O. Jessel, B.T. Larsen, W. L'Orange, K. Low, K. Møgstad, P. Monsen, G. Porter, O. Rosendahl, J. Schoolkate, P. Shaerf, I. Skaug, A. Sterling, N. Su, Aa. Svendsen, G. Wang, E. van Weering, A. Vizilbash, several anonymous referees, and many others. E. Ferrari and A. Polzer typed the manuscript. B. Lennox did an outstanding job of editing the text, which was finalized for publication by S. Simmons of the Cambridge Editorial Partnership. I am highly indebted to all. Approximately 95 percent of this book is entirely new material. Approximately 5 percent is taken from my previous book *Shipping Company Strategies: Global Management under Turbulent Conditions*, Elsevier, Oxford, 2005. The overall responsibility for the content and messages of this book remains with me.

Peter Lorange