

Regina M. Neubauer

## **Business Models in the Area of Logistics**

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In dieser Schriftenreihe werden aktuelle Forschungsergebnisse aus dem Bereich Unternehmensführung präsentiert. Die einzelnen Beiträge spiegeln die wissenschaftliche Ausrichtung der HHL in Forschung und Lehre wider. Sie zeichnen sich vor allem durch eine ganzheitliche, integrative Perspektive aus und sind durch den Anspruch geprägt, Theorie und Praxis zu verbinden sowie in besonderem Maße internationale Aspekte einzubeziehen.

Regina M. Neubauer

# **Business Models in the Area of Logistics**

In Search of Hidden Champions,  
their Business Principles and  
Common Industry Misperceptions

With a foreword by Professor Ludo Van der Heyden, PhD



**RESEARCH**

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## Foreword

It has been more than ten years now that the concept of ‘4PL’ (Fourth Party Logistics) in both theory and practice was introduced and proposed as *the* business model and promise in logistics. By 4PL one thinks of one external logistics provider being responsible for the total supply chain activities of a business customer. This is also referred to as the ‘Total Integration Promise’. Discussions between supporters and opponents have been numerous and have remained inconclusive.

This is where Dr. Regina M. Neubauer makes her contribution: ‘4PL’ or ‘Total Integration’ has appeal and has been much discussed, but not to the extent and depth that she has studied so in her dissertation. She holds that insufficient investigation has led to the lack of conclusion of this debate. Hers is the first grounded research on the topic, and the results are most interesting.

A second contribution that Dr. Regina M. Neubauer makes is the search in this sector for so-called “Hidden Champions”, a term made famous more than two decades ago by Hermann Simon. Her dissertation sheds light on how relatively smaller operators can be Hidden Champions, and survive the competition with the giants that dominate the industry.

In terms of data, Dr. Regina M. Neubauer has examined European logistics service providers, including both small- and medium-sized enterprises, as well as large size enterprises (LSEs), of which there is a much smaller number. The latter do not form the core of her study, as their offer is more of a commodity type and they certainly do not fall in the ‘Hidden Champion’ category. Based on this research, Dr. Regina M. Neubauer is able to formulate and substantiate an original hypothesis as to how Total Integration might work.

Total Integration, if it is to work, would require a ‘new breed’ of actors that would not themselves run operations which the LSEs aim for. These new breeds would thus avoid the conflict of interest that LSEs face by trying to both deliver and oversee a customer’s logistical operations (a conflict that can only lead to sub-optimal logistics provision for the customer). This conclusion thus hypothesizes the emergence of a ‘new breed’ of

logistics actors exclusively focused on orchestrating the various actors engaged in a company's logistical network (both internal and external), and also designing the optimal system for their corporate customers.

The dissertation also makes a contribution in identifying the business principles that characterize the Hidden Champions: i) niche sovereignty by a practice of gradual conquest and establishment of the niche; ii) choice for independence (and limited network ties) in order to be able to 'defend and attack' niche leadership in the face of customer opportunities and threats from other players, and consequently continuous improvement and innovation; iii) focus on longer-term sustainability in relations so as to gain and maintain the customers' trust, that then becomes one of the key competitive assets of Hidden Champions and also the basis for superior service delivery and performance. Finally, it is clear that Hidden Champions are better at exploring collaboration with their customers which involves role complementarities; LSEs on the contrary try to minimize collaboration to their advantage (generating trust and risk problems for the customer).

The remaining question at the end of the dissertation then is whether some Hidden Champions or even non-Hidden Champions might transform themselves into this new breed of logistics 'orchestrators' that would resemble a kind of flexible 'my-SAP' player who has the total view on a company's logistical network. This question provides useful input for further research.

Prof. Ludo Van der Heyden, INSEAD

## **Acknowledgements**

This dissertation was inspired through practical experience in the area of logistics. I was very motivated to contribute something of value to such a lively industry, which has been subject to long-lasting changes during the past decade, while growing in importance for every economy. During this period, the industry was also characterized by strong mergers and acquisition activities which focused public interest on large size enterprises, while small- and medium-sized companies were neglected. As the latter companies can be considered the backbone of an economy, I focus my attention onto this class.

My first thanks go to my thesis advisor, Professor Ludo Van der Heyden of INSEAD. I thank him not only for the many inspiring discussions in Fontainebleau, Brussels and Leipzig, and his scientific support for the thesis document in hand, but also for his persistence and encouragement on my ‘journey to the final destination’. Professor Van der Heyden’s comprehensive knowledge and broad practical experience, and, last but not least, his charisma have been of great value. I would also like to thank Professor Stefan Spinler of WHU for his willingness to act as a second reader.

Thanks are due to all the many practitioners, who supplied deep insights into their companies and sacrificed many hours in company visits, interviews and the supply of information. I particularly value their readiness to disclose company data as small- and medium-sized logistics companies are usually rather restrained in this regard.

I am especially indebted to my parents, who supported me throughout my ‘journey’. I dedicate this dissertation to them. Finally, I thank Wilhelm Claßen for his affectionate care and understanding.

Regina M. Neubauer

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**List of abbreviations**

1PL	First Party Logistics
2PL	Second Party Logistics
3PL	Third Party Logistics
3.5PL	Third.Five Party Logistics
4PL	Fourth Party Logistics
5PL	Fifth Party Logistics
ABV	All-embracing-Based View
AG	Aktiengesellschaft (German terminology for a public limited liability corporation)
AG & Co. KG	Aktiengesellschaft & Compagnie Kommanditgesellschaft (German terminology for a limited partnership whose liable partner is a public limited company)
AMR	Advanced Manufacturing Research
A/S	Aktieselskab (Danish terminology for a public limited liability corporation)
ASA	Allmennaksjeselskap (Norwegian stock company)
ATL	Arbeitsgruppe fuer Technologien der Logistik-Dienstleistungswirtschaft (workgroup for technologies in the logistics services industry)
B2C	Business-to-Consumer
BAG	Bundesamt fuer Gueterverkehr
BLG	Bremer Lagerhaus Gesellschaft
BMPS	Business Model Performance Scoring
BMW	Bayerische Motoren Werke
BMWi	Bundesministerium fuer Wirtschaft und Technologie
bn	Billion
bp	business principle in micro dimension
BP	Business Principle in macro dimension
B.V.	Besloten Vennootschap (Dutch terminology for a limited liability company)
BVL	Bundesvereinigung Logistik
C	Chapter
CA	California
CAGR	Compound Annual Growth Rate
CD	Compact Disc
CEO	Chief Executive Officer
CEP	Courier, Express, Parcel
CHF	Swiss Franc
CIS	Corporate Information Solutions
CO <sub>2</sub>	Carbon Dioxide
CRM	Customer Relationship Management
CSCMP	Council of Supply Chain Management Professionals
DB	Deutsche Bahn
D.C.	District of Columbia
DHL	Dalsey (Adrian) – Hillblom (Larry) – Lynn (Robert)

	(company letters according to family names of its founders)
DKK	Danish Krone (currency of Denmark, including the autonomous provinces of Greenland (Danskínut koruuni) and the Faroe Islands (Donsk króna))
DM	Deutsche Mark (currency in Germany before introduction of the Euro)
DMG	Deckel Maho Gildemeister
Dr.	Doctor
DSV	De Sammensluttede Vognmaend
DVV	Deutscher Verkehrs-Verlag
DVZ	Deutsche Verkehrs-Zeitung
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
ECR	Efficient Customer/Consumer Response
ed.	Editor
EDI	Electronic Data Interchange
EES	Equipment Electronic Systems
e.g.	exempli gratia, for example
ERP	Enterprise Resource Planning
et al.	and other people or things (Latin et alii/alía)
et seq.	et sequens (and the following one)
et seqq.	et sequentes (and the/those following)
etc.	et cetera ('and so forth')
EU	European Union
EU 17	European Union of 17 Member States
EU 27	European Union of 27 Member States
EUR	Euro
fig.	figure
FM (Logistic)	Faure Machet (Founders' last names)
FTE	Full-Time Equivalent
FTL	Full Truck Load
GCI	Global Commerce Initiative
GDP	Gross Domestic Product
GEFCO	George E. Failing Company
GmbH	Gesellschaft mit beschraenkter Haftung (German terminology for a company with limited liability)
GmbH & Co. KG	Gesellschaft mit beschraenkter Haftung & Compagnie Kommanditgesellschaft
GmbH & Co. KG a.A., KG	Gesellschaft mit beschraenkter Haftung & Compagnie Kommanditgesellschaft auf Aktien, Kommanditgesellschaft
GmbH & Co. OHG	Gesellschaft mit beschraenkter Haftung & Compagnie Offene Handelsgesellschaft
GPS	Global Positioning System
h	Micro hypothesis
H	Macro hypothesis
HBS	Harvard Business School

HEC	Faculté des Hautes Etudes Commerciales
HR	Human Resources
HUB	Haupt-Umschlagbetrieb (Place where traffic is exchanged across several modes of transport)
i.e.	id est, it is
IfM Bonn	Institut fuer Mittelstandsforschung Bonn (Institute for SME-Research, Bonn/Germany)
IFRS	International Financial Reporting Standards
IKB	Industriekreditbank (IKB Deutsche Industriebank)
IL	Illinois
Inc.	Incorporated
IPL	Integrationsplattform Logistik (Integration Platform Logistics)
ISP	International Specialty Products
IT	Information Technology
Jr.	Junior
JV	Joint Venture
KGaA	Kommanditgesellschaft auf Aktien
KMU	Kleine und Mittlere Unternehmen (small- and medium-sized enterprises)
KN	Kuehne + Nagel
LCL	Less than Container Load
LGI	Logistics Group International
LLP	Lead Logistics Provider
LSE	Large Size Enterprise
LSP	Logistics Service Provider
Ltd.	Limited
m	Misperception in micro dimension
M	Misperception in macro dimension
m.	Million
MA	Massachusetts
mbH	mit beschraenkter Haftung (German terminology for limited liability)
MBV	Market-Based View
MI	Michigan
MIT	Massachusetts Institute of Technology
Mr	Mister
n.a.	not available, not applicable
N.A.	No Author
NBV	Network-Based View
NJ	New Jersey
N.L.	No Location
No.	Number
N.V.	Naamloze Vennootschap (Dutch terminology for a public limited liability corporation)
N.Y.	No Year
NY	New York

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OEM	Original Equipment Manufacturer
p.	page
PA	Pennsylvania
plc	public limited company
pp.	pages
RBV	Resource-Based View
R&D	Research & Development
RFID	Radio Frequency Identification
ROA	Return on Assets
RoW	Rest of World
RWE	Rheinisch-Westfaelisches Elektrizitaetswerk
S.A.	Société Anonyme
SAP	Systemanalyse und Programmentwicklung (System Analysis and Program Development)
SCC	Supply Chain Council
SCM	Supply Chain Management
SCOR	Supply Chain Operations Reference
SME	Small- and Medium-sized Enterprise
S.p.A.	Società per Azioni (Italian terminology for a limited share company)
SPL	Seminar fuer Planung und Logistik (University of Cologne)
TML	Tailormade Logistics
TMS	Transport Management System
TNT	Thomas Nationwide Transport
TU	Technische Universitaet (Technical University)
TUL	Transport, Umschlag, Lagerung (Transportation, Transshipment, Warehousing)
TX	Texas
UK	United Kingdom
UML	Unified Modeling Language
UPS	United Parcel Service
US	United States
USD	United States Dollar
VAS	Value-Added Services
Vol.	Volume
VW	Volkswagen
XPL	eXtended Party Logistics
WestLB	Westdeutsche Landesbank
WMS	Warehouse Management Solution
WWW	World Wide Web
XPL	eXtended Party Logistics
ZLU	Zentrum fuer Logistik und Unternehmensplanung