Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.



Declaration Confirming Content of Digital Version of Thesis

I confirm that the content of the digital version of this thesis

"The role of global logistics companies in disaster relief efforts:

Title: An investigation into benefits, challenges and critical success factors of cross-sector collaborations"

is the final amended version following the examination process and is identical to this hard bound paper copy.

Have you published articles/material from your thesis?	Yes No		
If yes, have you received copyright permission from the third party to include this published material in your thesis which will be placed in the Library's electronic repository?			
Student's Name: Jan Maether			
Student's Signature:			
Date:			

The role of global logistics companies in disaster relief efforts: An investigation into benefits, challenges and critical success factors of cross-sector collaborations

A thesis presented in partial fulfilment of the requirements for the degree of Master of Logistics and Supply Chain Management

at Massey University, Albany,

New Zealand.

Jan Maether

2010

Abstract

The purpose of this thesis is to explore the benefits and opportunities, as well as the challenges and risks cross-sector collaborations in humanitarian aid and disaster relief generate. The study also points out the major critical success factors that commercial logistics companies and humanitarian aid organisations require in order to build efficient partnerships. Additionally, guiding recommendations that support the development of successful collaborative efforts are presented.

The study is based on an extensive literature review discussing the complexities of humanitarian aid logistics and reveals the differences between commercial and disaster relief supply chains. Different types of corporate-humanitarian collaborations and cross-learning potential are highlighted. The literature review also deals with the possibility of establishing partnerships within the framework of corporate social responsibility (CSR). A questionnaire investigates the respondents' point of view about the strengths, opportunities, and risks of cross-sector collaborations as well as requirements for successful partnerships. Case studies are also included in this thesis in order to discuss strengths and weaknesses and to pinpoint lessons learned from model partnerships.

Research finds that corporate-humanitarian collaborations, when successfully established, provide their partners with mutual benefits such as knowledge transfer, sharing of resources and best practices. Also, the improvement of a company's public image and awareness can be achieved. Humanitarian aid organisations profit from the building of capacity in between disasters, including staff training and the provision of readily accessible resources from the partnering company. The findings also demonstrate that such collaborations are expected to show a moderate development in the future but need to be built on clear partnership agreements determining the scope of involvement as well as each partner's goals and objectives.

Research is solely based on collaborations between commercial logistics companies and humanitarian aid agencies focusing on relief operations after sudden-onset natural disasters (e.g. earthquakes). Further research is needed especially in the field of risk assessment and risk management of collaborations, the influence of such partnerships on employees' overall performance, as well as the development of specific key performance indicators (KPIs).

This thesis provides logistics companies and humanitarian relief professionals as well as researchers and readers interested in this particular topic, an overview of the current state of development of cross-sector collaborations. Furthermore, the main critical success factors the logistics industry and the humanitarian aid sector believe are necessary to establish successful partnerships are highlighted.

Acknowledgements

It is a pleasure to express my sincere gratitude to the people who made this thesis possible.

I would like to express my sincere gratitude to everyone who supported and inspired me during the several months in which this thesis lasted and provided me with new ideas and novel insights.

I especially would like to thank my supervisor Jersey Seipel for his guidance during my final year at Massey University. He rendered excellent assistance, provided useful advice and information, and stimulating suggestions. His consistent energy and enthusiasm motivated and inspired me and his encouragement and interest in my topic assisted me in all stages of writing up my Master Thesis. He was always accessible and willing to help me with my research.

I also would like to express my gratitude to Alan Win. I was delighted to interact with him through attending his logistics lectures and having him as a cosupervisor. His longstanding experience in logistics and broad network makes him to an invaluable person to ask for advice. I am grateful for his constructive comments and important support throughout the two years of my masters programme.

A special thank-you goes to Dr. Norman E. Marr who offered much advice and insight throughout my studies at Massey University and in particular his support and guidance from the initial to the final level of my thesis.

The generous support from Bruce Pohlman is greatly appreciated. The creation of the webpage for my research project would not have been possible without his effort, knowledge, and patience.

My sincere thanks also go to the many experts of the humanitarian aid and commercial logistics sector for completing the questionnaire and providing me insights and up to date information.

The financial support of Massey University, New Zealand is gratefully

acknowledged.

I also wish to thank my friends for their help with revising the English and

layout of my manuscript. Thank you for your detailed reviews, advice, and

constructive criticism, as well as for being such great friends and spending part of

your free time for such an "appealing" task. Thank you also for helping me

getting through the difficult times, for all your emotional support, entertainment,

companionship, and caring.

Finally and most importantly, I wish to thank my parents Rolf and Dagmar

and my sister Nadja for motivating and supporting me as well as for their

perpetual encouragement and tolerance they provided me throughout my life and

especially within these two years.

Auckland, 29.10.2010

Jan Maether

Table of Contents

Page

1.		APTER ONE: INTRODUCTION – BACKGROUND, AIMS D OBJECTIVES	
1.1	Intro	oduction	1
1.2	Log	istics, supply chain management, and cross-sector collaboratio	ns2
1.2	2.1	Role of logistics in business	2
1.2	2.2	Development of supply chain management (SCM)	3
1.2	2.3	Importance of supply chain management (SCM) in humanitar	
		projects	
1.2	2.4	Introduction to cross-sector collaborations	·7
1.3	Bac	kground of this study	8
1.4	Res	search aims and objectives	9
1.4	4.1	Aims	9
1.4	4.2	Objectives	10
1.4	4.3	Research questions	10
1.5	Lim	itation of this study	11
1.6	Res	search structure	11
2.	СН	APTER TWO: LITERATURE REVIEW	13
2.1	Intro	oduction	13
2.2	Hur	nanitarianism	13
2.2	2.1	The three guiding principles	13
2.2	2.2	Humanitarian space	15
2.3	Disa	aster relief logistics	17
2.3	3.1	Fundamentals and challenges	17
2.3	3.2	Humanitarian relief supply chains versus commercial supply of	chains
			22
	2.3.	2.1 Humanitarian relief network	22

	2.3.2.2	Stakeholder management and funding constraints	25
	2.3.2.3	Complexity and transparency of disaster relief operations	27
2.4		ector collaborations	
2.4	l.1 Int	troduction	30
2.4	l.2 Ty	pes of collaborations	32
2.4	l.3 Be	enefits	35
	2.4.3.1	Corporate image and identity	36
	2.4.3.2		
2.4	l.4 Cl	nallenges and risks	40
2.4	l.5 Cr	ritical success factors for cross-sector collaborations	47
2.5	Conclus	sion	51
3.	CHAP	TER THREE: METHODOLOGY	54
3.1	Introduc	ction	54
3.2		ch design	
3.2		eductive versus inductive research approach	
3.2	2.2 Qı	uantitative and qualitative methods	56
3.3	Method	of data collection	57
3.3	3.1 Qı	uestionnaire	57
	3.3.1.1	Advantages and disadvantages	58
	3.3.1.2	Types of questions	59
	3.3.1.3	Sample	61
3.3	3.2 De	esk research	63
	3.3.2.1	Advantages and disadvantages	64
	3.3.2.2	Systematic review process	64
3.4	Analysis	s of primary data	66
3.5	Credibil	ity and reliability	68
3.6	Ethical	considerations	69
4.	CHAP	TER FOUR: FINDINGS AND ANALYSIS	71
4.1	Introduc	ction	71

4.2	Que	stio	nnaire results	71
4.:	2.1	Pa	rticipants	71
4.2.2 Ov		Ov	rerall perception of cross-sector collaborations	73
			ganisational characteristics	
4.:	2.4	Ch	aracteristics of cross-sector collaborations in disaster relief	f and
		hu	manitarian aid	85
4.:	2.5	Ov	verview of the main characteristics important to successful	
		СО	rporate-humanitarian collaborations	87
4.:	2.6	Po	ssible key barriers for cross-sector collaborations	91
4.	2.7	Fa	ctors that influence cross-sector collaborations	94
4.3	Con	clud	ling critical success factors (CSF) for cross-sector collabora	ations-
				98
5.	СП	۸рт	ER FIVE: MODEL PARTNERSHIPS IN HUMANITAR	DIANI
J.	_		PERATIONS	
	AID	UF	ERATIONS	103
5.1	Intro	duc	tion	103
5.2	The	coll	aboration between TNT and the WFP	103
5.:	2.1	Co	mpany overview: TNT	103
5.:	2.2	Or	ganisation overview: The WFP	106
5.:	2.3	Th	e collaboration between TNT and the WFP: A model partner	ership
				110
	5.2.3	3.1	Deciding on a motive	111
	5.2.3	3.2	Establishing the collaboration	114
	5.2.3	3.3	The four initiatives	115
	5.2.3	3.4	Benefits	119
	5.2.3	3.5	Lessons learned	121
5.3	The	coll	aboration between DHL and the UN	124
5.	3.1	Сс	mpany overview: DHL	124
5.	3.2	Or	ganisation overview: The UN	128
5.	3.3	Th	e collaboration between DHL and the UN: A model partner	ship
				131
	5.3.3	3.1	Motivation for the partnership	131
	531	3 2	NHI Disaster Response Teams	132

	5.3.3.3	The partnership as a corporate social responsibility	y (CSR)
		project	139
	5.3.3.4	Partnership goals and benefits	140
5.4	Conclu	sion	142
6.	СНАР	TER SIX: CONCLUSION	145
6.1	Introdu	ction	145
6.2	Summa	ary of the thesis	145
6.2	2.1 B	ackground and motivation for this study	145
6.2.2 Research objectives and research approach		146	
6.2	2.3 R	esearch findings	146
6.3	Recom	mendations for practice	148
6.4	Discus	sion and further research	151
DEEE	DENCE	c	151

List of Figures

Ρ	а	g	е

FIGURE 1.1: THE SUPPLY CHAIN FLOWS DISTINGUISHED BETWEEN HUMANITARIAN
AID AND COMMERCIAL LOGISTICS OPERATIONS (ADAPTED FROM
TOMASINI AND VAN WASSENHOVE, 2009)6
FIGURE 2.1: HUMANITARIAN SPACE AND HUMANITARIAN PRINCIPLES (ADAPTED FROM
Tomasini & Van Wassenhove, 2009) 16
FIGURE 2.2: DISASTER CATEGORIES (ADAPTED FROM BERISTAIN, 1999; VAN
Wassenhove, 2006; Maon, Lindgreen & Vanhamme, 2009) 18
FIGURE 2.3: HUMANITARIAN RELIEF CHAIN STRUCTURE (DAVIS & LAMBERT, 2002) 23
FIGURE 2.4: SWOT MATRIX OF CORPORATE-HUMANITARIAN COLLABORATIONS 47
FIGURE 2.5: BEST PRACTICES FOR CORPORATE-HUMANITARIAN COLLABORATIONS
(ADAPTED FROM VAN WASSENHOVE, TOMASINI & STAPELTON, 2008)
51
FIGURE 4.1: JOB POSITIONS OF COMMERCIAL LOGISTICS EMPLOYEES AND
HUMANITARIAN AID WORKERS72
FIGURE4.2: PERCEPTION OF AND INVOLVEMENT IN CROSS-SECTOR
COLLABORATIONS OF COMMERCIAL LOGISTICS COMPANIES AND
HUMANITARIAN AID ORGANISATIONS74
FIGURE 4.3: OVERVIEW OF BENEFITS COMMERCIAL LOGISTICS COMPANIES AND
HUMANITARIAN AID ORGANISATIONS PROVIDE THEIR PARTNER75
FIGURE 4.4: FORECASTED DEVELOPMENT OF CORPORATE-HUMANITARIAN
COLLABORATIONS IN THE FUTURE76
FIGURE 4.5: CHARACTERISTICS MOST IMPORTANT TO LEAST IMPORTANT IN
CHOOSING A HUMANITARIAN AID ORGANISATION77
FIGURE 4.6: CHARACTERISTICS MOST IMPORTANT TO LEAST IMPORTANT IN
CHOOSING A COMMERCIAL LOGISTICS PROVIDER78
FIGURE 4.7: REQUIREMENTS THAT RESPONDENTS VIEW COMMERCIAL LOGISTICS
PROVIDERS AS NEEDING TO FULFIL80
FIGURE 4.8: REQUIREMENTS THAT RESPONDENTS VIEW HUMANITARIAN AID
ORGANISATIONS AS NEEDING TO FULFIL82
FIGURE 4.9: FACTORS AN "OPTIMAL" PARTNER WOULD REQUIRE84
FIGURE 4.10: RESPONDENTS' LEVEL OF AGREEMENT OR DISAGREEMENT WITH
HYPOTHESES RELATED TO CORPORATE-HUMANITARIAN
COLLABORATIONS (COMMERCIAL LOGISTICS INDUSTRY)85

FIGURE 4.11: I	RESPONDENTS' LEVEL OF AGREEMENT OR DISAGREEMENT WITH	
	HYPOTHESES RELATED TO CORPORATE-HUMANITARIAN	
	COLLABORATIONS (HUMANITARIAN AID SECTOR)8	6
FIGURE 4.12:	RESPONDENTS' RATING OF CHARACTERISTICS IMPORTANT TO	
I	CORPORATE-HUMANITARIAN COLLABORATIONS (COMMERCIAL	
	LOGISTICS INDUSTRY)8	8
FIGURE 4.13:	RESPONDENTS' RATING OF CHARACTERISTICS IMPORTANT TO	
1	CORPORATE-HUMANITARIAN COLLABORATIONS (HUMANITARIAN AID	
	SECTOR)9	0
FIGURE 4.14: I	RESPONDENTS' RATING OF THE STRENGTH OF KEY BARRIERS TO	
	CORPORATE-HUMANITARIAN COLLABORATIONS (COMMERCIAL	
	LOGISTICS INDUSTRY)9	1
FIGURE 4.15: I	RESPONDENT'S RATING OF THE STRENGTH OF KEY BARRIERS TO	
1	CORPORATE-HUMANITARIAN COLLABORATIONS (HUMANITARIAN AID	
	SECTOR)9	3
FIGURE 4.16: I	RESPONDENTS' RATING OF THE LEVEL OF ASSISTANCE OF	
I	CHARACTERISTICS FOR CORPORATE-HUMANITARIAN COLLABORATION	S
	(COMMERCIAL LOGISTICS INDUSTRY)9	5
FIGURE 4.17: I	RESPONDENTS' RATING OF THE LEVEL OF ASSISTANCE OF	
1	CHARACTERISTICS FOR CORPORATE-HUMANITARIAN COLLABORATION	S
	(HUMANITARIAN AID SECTOR)9	7
FIGURE 4.18: (CRITICAL SUCCESS FACTORS FOR CORPORATE-HUMANITARIAN	
	COLLABORATIONS 10	1
FIGURE 5.1: T	HE GLOBAL NETWORK OF DHL DISASTER RESPONSE TEAMS	
(,	ADAPTED FROM WLG, 2008) 13	3
FIGURE 5.2: D	ISASTER RESPONSE TEAMS: ACTIVATION PROCESS (DHL, N.D.) 13	4
FIGURE 5.3: D	HL DISASTER RESPONSE TEAM: SCOPE OF ACTIVITIES (DHL, 2010B))
		_

List of Tables

	Page
TABLE 2.1: BARRIERS TO KNOWLEDGE TRANSFER (ADAPTED FROM SZULANSKI,	
2002; AND VAN WASSENHOVE, TOMASINI & STAPLETON, 2008)	43
TABLE 5.1: TNT COMPANY OVERVIEW: "EXPRESS" AND "MAIL" DIVISION (ADAPT	ED
FROM TNT ANNUAL REPORT 2009)	105
TABLE 5.2: OVERVIEW OF THE WORLD FOOD PROGRAMME'S PERFORMANCE IN	2008
(ADAPTED FROM WFP, 2009)	106
TABLE 5.3: PROJECT OVERVIEW "PRIVATE SECTOR FUNDRAISING AND AWAREN	IESS"
(ADAPTED FROM MOVING THE WORLD OFFICIAL HOMEPAGE, 2010)	116
TABLE 5.4: PROJECT OVERVIEW "ON-HAND SUPPORT" (ADAPTED FROM MOVING	3 THE
WORLD OFFICIAL HOMEPAGE, 2010)	117
TABLE 5.5: PROJECT OVERVIEW "KNOWLEDGE TRANSFER" (ADAPTED FROM MC	OVING
THE WORLD OFFICIAL HOMEPAGE, 2010)	118
TABLE 5.6: PARTNERSHIP OVERVIEW OF TNT AND THE WFP	124
TABLE 5.7: DHL "EXPRESS" DIVISION (ADAPTED FROM DHL ANNUAL REPORT 2	:009)
	125
TABLE 5.8: DHL "FREIGHT" AND DHL "GLOBAL FORWARDING" DIVISION (ADAPT	ΈD
FROM DHL ANNUAL REPORT 2009)	126
TABLE 5.9: DHL "SUPPLY CHAIN" DIVISION (ADAPTED FROM DHL ANNUAL REPO	ORT
2009)	127
TABLE 5.10: DHL "MAIL" DIVISION (ADAPTED FROM DHL ANNUAL REPORT 2009	9) 127
TABLE 5.11: DHL "MAIL" DIVISION: BUSINESS UNITS AND PRODUCTS (ADAPTED	
FROM DHL ANNUAL REPORT 2009)	128
TABLE 5.12: THE SIX ORGANS OF THE UNITED NATIONS (ADAPTED FROM UN	
OFFICIAL HOMEPAGE, 2010)	130
TABLE 5.13: LISTING OF MAJOR DEPLOYMENTS OF THE DRTS (ADAPTED FROM	N.
BATKIN, PERSONAL COMMUNICATION, MARCH 19, 2010)	138
TABLE 5.14: PARTNERSHIP OVERVIEW OF DHL AND THE UN	142

List of Abbreviations

% percent & and

€ Euro (Currency)

AET Airport Emergency Team **BCG Boston Consulting Group CEO** Chief Executive Officer

CEP Courier Express and Parcel Services

COMPAS Commodity Movement Processing and Analysis

System

CRM Cause Related Marketing **CSF** Critical Success Factor

CSR Corporate Social Responsibility

DHL Dalsey Hillblom Lynn DO **Development Operation DPWN** Deutsche Post World Net DRN Disaster Response Network **DRT** Disaster Response Team

exempli gratia e.g.

ECOSOC Economic and Social Council

EMOP Emergency Operation

et cetera etc.

EUR Euro (Currency)

FAO Food and Agriculture Organisation **GARD** Get Airports Ready for Disasters HIV Human immune-deficiency virus **HRN** Humanitarian Response Network

HtK Help the Kids

i.e. id est

International Court of Justice **ICJ**

ICRC International Committee of the Red Cross **ICT** Information and Communications Technology

IDP Internally displaced persons

IFAD International Fund for Agricultural Development

International Federation of Blue Shield **IFBS**

IFRC International Federation of Red Cross and Red

Crescent Societies

km Kilometre

km/h Kilometres per hour

kton Kiloton

LET Logistics Emergency Team

MA Medical Aid

MoU Memorandum of Understanding

MSF Médecins Sans Frontières

n.d. not dated

NGO Non-Government Organisation

p. page

per annum p.a.

PASW Predictive Analysis SoftWare

PRISM Public Relations in the Service of Mankind **PRRO** Protracted Relief and Recovery Operation

SCM Supply Chain Management

SO **Special Operation**

SPSS Statistical Package for the Social Sciences

SQL Structured Query Language

SWOT Strengths, Weaknesses, Opportunities, Threats

TEU Twenty-Foot Equivalent Unit TNT Thomas Nationwide Transport

TPG Texas Pacific Group

UCF United for the Children's Future

UCL University College London

UN **United Nations**

UN OCHA United Nations Office for the Coordination of

Humanitarian Affairs

UNDP United Nations Development Program

UNHCR United Nations High Commissioner for Refugees UNICEF United Nations International Children's Emergency

Fund

UPS United Parcel Service

US **United States**

US\$ United States Dollar (Currency)

World Economic Forum WEF **WFP** World Food Programme