

University of Groningen

Coordination in planning and scheduling

Snoo, Cornelis de

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:

2011

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Snoo, C. D. (2011). *Coordination in planning and scheduling: an organizational and behavioral perspective*. University of Groningen, SOM research school.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Coordination in Planning and Scheduling

An Organizational and Behavioral Perspective

Cees de Snoo

Published by: University of Groningen
Groningen
The Netherlands

Printed by: Ipskamp Drukkers B.V.

ISBN: 978-90-367-4502-4 (printed version)
978-90-367-4501-7 (electronic version)

© 2011, C. de Snoo

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system of any nature, or transmitted in any form or by any means, electronic, mechanical, now known or hereafter invented, including photocopying or recording, without prior written permission of the author.

RIJKSUNIVERSITEIT GRONINGEN

Coordination in Planning and Scheduling

An Organizational and Behavioral Perspective

Proefschrift

ter verkrijging van het doctoraat in de
Economie en Bedrijfskunde
aan de Rijksuniversiteit Groningen
op gezag van de
Rector Magnificus, dr. F. Zwarts,
in het openbaar te verdedigen op
donderdag 13 januari 2011
om 14.45 uur

door

Cornelis de Snoo

geboren op 22 april 1981
te Harderwijk

Promotores: Prof. dr. ir. J.C. Wortmann
Prof. dr. ir. G.J.C. Gaalman

Copromotor: Dr. W.M.C. van Wezel

Beoordelingscommissie: Prof. dr. ir. J.C. Fransoo
Prof. dr. G. Grote
Prof. dr. H.B.M. Molleman

Contents

1.	INTRODUCTION	7
1.1	BEHAVIORAL OPERATIONS MANAGEMENT	7
1.2	TWO ILLUSTRATIONS	8
1.3	THE NARROW PERSPECTIVE WITHIN THE MAINSTREAM OF PLANNING THEORY	12
1.4	AN ORGANIZATIONAL PERSPECTIVE ON PLANNING	15
1.5	COORDINATION IN PLANNING	16
1.6	RESEARCH OBJECTIVES AND THESIS OUTLINE	18
1.7	RESEARCH METHODS	19
2.	THE USE OF SCHEDULING PERFORMANCE CRITERIA IN PRACTICE	23
2.1	INTRODUCTION	23
2.2	THEORETICAL BACKGROUND	24
2.3	STUDY 1: IDENTIFYING SCHEDULING PERFORMANCE CRITERIA	27
2.4	STUDY 2: IDENTIFYING THE LINK BETWEEN CONTEXT AND PERFORMANCE	39
2.5	CONCLUSIONS	47
3.	COORDINATION AND EVENT HANDLING.....	59
3.1	INTRODUCTION	59
3.2	THEORETICAL BACKGROUND	61
3.3	CASE STUDY	65
3.4	PROCEDURE FOR EVENT HANDLING	73
3.5	CONCLUSIONS AND FURTHER RESEARCH	80
4.	COORDINATION AND PHYSICAL VICINITY	83
4.1	INTRODUCTION	83
4.2	THEORETICAL BACKGROUND	85
4.3	METHODOLOGY AND CASE INTRODUCTION	89
4.4	RESULTS	93
4.5	DISCUSSION	101
4.6	CONCLUSION	105
5.	COORDINATION MODES AND TASK INTERDEPENDENCE.....	107
5.1	INTRODUCTION	107
5.2	THEORY DEVELOPMENT AND HYPOTHESES	109
5.3	DESIGN OF EXPERIMENT	113
5.4	ANALYSIS AND RESULTS	118
5.5	DISCUSSION	122

6.	GOAL SHARING AND INFORMATION TRANSPARENCY.....	127
6.1	INTRODUCTION	127
6.2	THEORETICAL BACKGROUND AND HYPOTHESES	129
6.3	EXPERIMENTAL DESIGN	133
6.4	ANALYSIS AND RESULTS	138
6.5	DISCUSSION	142
7.	DISCUSSION.....	147
7.1	SUMMARY OF MAIN FINDINGS	147
7.2	UNDERSTANDING THE NEEDS, POSSIBILITIES, AND PERFORMANCE OF COORDINATION	150
7.3	THEORETICAL IMPLICATIONS	153
7.4	PRACTICAL IMPLICATIONS	155
7.5	DIRECTIONS FOR FURTHER RESEARCH	156
7.6	CONCLUSION	157
	REFERENCES.....	158
	SAMENVATTING.....	168
	DANKWOORD.....	170