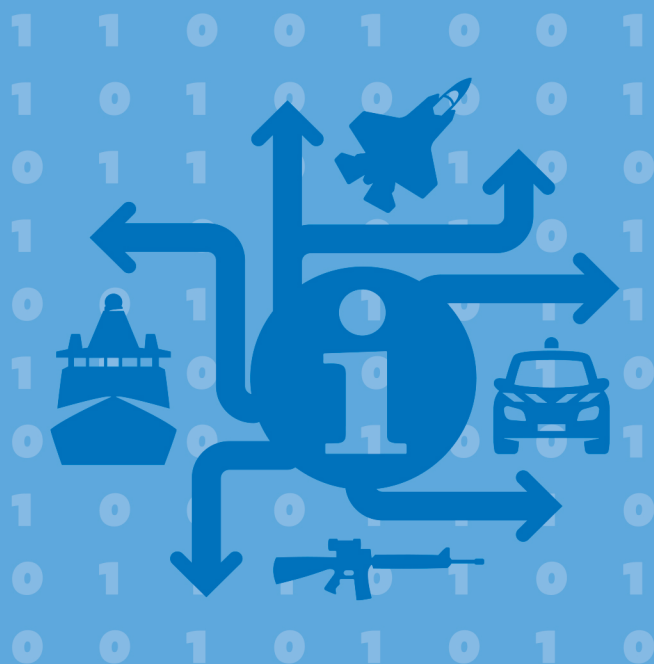


Towards a Data-Driven Military

A Multidisciplinary Perspective



Edited by

PETER B.M.J. PIJERS | MARK VOSKUIJL | ROBERT J.M. BEERES

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Peter B.M.J. Pijpers, Mark Voskuil, Robert J.M. Beeres

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Table of Contents

List of Figures	9
List of Tables	11
Foreword by the Dean of the Faculty, Prof. Dr. Patrick Oonincx	13
Towards a data-driven military – an introduction <i>Peter B.M.J. Pijpers, Mark Voskuil & Robert J.M. Beeres</i>	15
PART I. Data-Driven Organisation	23
Chapter 1. Digitalisation, organising and organisational choice: Exploring the challenges of digital transformation using five applied sociotechnical lenses <i>Eric-Hans Kramer & Guido van Os</i>	25
Chapter 2. Data analytics in human resource management: Benefits and challenges <i>Tessa op den Buijs</i>	51
Chapter 3. Data-driven maintenance of military systems: Potential and challenges <i>Tiedo Tinga, Axel Homborg & Chris Rijdsdijk</i>	73
Chapter 4. Federated learning for enabling cooperation between the Royal Netherlands Navy and external parties in developing predictive maintenance <i>Anna C. Vriend, Wieger W. Tiddens & Relinde P.M.J. Jurrius</i>	97
Chapter 5. Information- and data-driven organisations from promise to practice? Reflecting on maturity dynamics in a defence sustainment organisation <i>Gert Schijvenaars, André J. Hoogstrate, Ton van Kampen, Gerold de Gooijer & Paul C. van Fenema</i>	121

PART II. Data Driven Support to Decision Making	143
Chapter 6. The effect of big data and AI on forecasting in defence and military applications	145
<i>André J. Hoogstrate</i>	
Chapter 7. Military helicopter flight mission planning using data science and operations research	161
<i>Roy Lindelauf, Herman Monsuur & Mark Voskuil</i>	
Chapter 8. Applying GTSP-algorithms in maritime patrolling missions that require mutual support	183
<i>Martijn van Ee, Geraldo de Lima Filho & Herman Monsuur</i>	
Chapter 9. From data to effective actions: Providing actionable information for detect and avoid	203
<i>Erik Theunissen</i>	
Chapter 10. Battling information overload in military intelligence & security organisations	221
<i>Tess Horlings, Roy Lindelauf & Sebastiaan Rietjens</i>	
PART III. Data Driven Operations	237
Chapter 11. A conceptual investigation of the trade-off between privacy and algorithmic performance	239
<i>Job Timmermans & Roy Lindelauf</i>	
Chapter 12. Information manoeuvre and the Netherlands armed forces: Legal challenges ahead	261
<i>Paul A.L. Ducheine, Peter B.M.J. Pijpers & Eric H. Pouw</i>	
Chapter 13. The use of biometrics in military operations abroad and the right to private life	283
<i>Marten Zwanenburg & Steven van de Put</i>	
Chapter 14. 2020 Nagorno-Karabakh War: A case of triple D: Diplomacy, Drones and Deception	303
<i>Peter de Werd, Michiel de Jong & Han Bouwmeester</i>	

Epilogue	333
Chapter 15. War by numbers: A “technocratic hubristic fable”? <i>Henk de Jong & Floribert Baudet</i>	335
 About the editors	 357
About the authors	359

List of Figures

Fig. 3.1.	Example of an autonomous control loop.	75
Fig. 3.2.	Example of an autonomous control loop extended with fault control.	76
Fig. 3.3.	Model to mature in data driven maintenance.	77
Fig. 3.4.	Classification of data driven maintenance.	78
Fig. 3.5.	Scatter plot of quality nonconformities versus usage intensity given two operating regimes.	83
Fig. 3.6.	Deterioration behaviour of the coating for various repair options (left) and optimal actions proposed by the model (right).	85
Fig. 3.7.	Variation of the speed of a vehicle as registered by the control system.	86
Fig. 3.8.	Estimated energy and peak power at consecutive brake activations.	87
Fig. 3.9.	Evolution of four independent measurements of the sea water temperature surrounding a vessel.	87
Fig. 3.10.	Corrosion mass loss prediction after 5 months (left) and after 15 months (right).	92
Fig. 4.1.	An example of a warning table generated by the LSTM model shows the number of anomalies generated within blocks of six hours of generators 3, 4, 5 and 6 of FFPV Stornes.	99
Fig. 4.2.	Central ML model (left) and Federated Learning model (right).	100
Fig. 4.3.	The designed Flower framework architecture.	105
Fig. 4.4.	Possibilities for attackers in the FL process.	107
Fig. 4.5.	Linear Regression results for FL with two clients.	110
Fig. 4.6.	Graph with status parameters per day of FFPV Stornes (note: dimensionless status lines are overlapping).	111
Fig. 4.7.	Warning table with the detected anomalies in the data from Figure 4.6. Units as given in Table 4.3: fuel oil consumption in [l/h], engine speed in [rpm], power in [kW].	111
Fig. 4.8.	Sensor data generators 3, 4, 5 and 6 from FFPV Stornes.	112
Fig. 4.9.	Evaluation parameters LSTM-model 1 versus 2 rounds of FL.	113
Fig. 4.10.	Comparison of data traffic central ML versus FL with 1 and 2 rounds.	114
Fig. 5.1.	Clarifying intelligence and data-driven concepts across communities.	124
Fig. 5.2.	Different maturity levels based on Buitelaar (2018).	127
Fig. 5.3.	Maturity assessment of the NL MoD sustainment organisation by the authors based on Buitelaar's (2018) assessment model.	133

Fig. 7.1.	A taxonomy of offensive air operation mission types according to Marine Corps Doctrinal Publication 3-23 Offensive Air Support.	162
Fig. 7.2.	Proposed future helicopter mission planning process based on multi-level optimization.	164
Fig. 7.3.	Example elements of a military mission.	165
Fig. 7.4.	Example manoeuvre.	168
Fig. 7.5.	Multi-level optimization approach.	176
Fig. 8.1.	An instance and feasible solution of 2TSP-MS.	188
Fig. 8.2.	Illustration of reduction from 2TSP-MS to GTSP, where vertex XY corresponds to configuration (x, y) .	190
Fig. 8.3.	Illustration of result of reduction from GTSP to GTSP without overlapping node sets, where vertex XY^x corresponds to $(x, y)^x$.	192
Fig. 8.4.	Instance with mutual support gap 2.	194
Fig. 8.5.	Solution 2TSP-MS. Here, drone 2 waits at point 6, while drone 2 flies from point 5 to point 4.	194
Fig. 8.6.	Solution 2TSP.	195
Fig. 8.7.	Instance, with $R = 5$, showing that it might not be possible to move from any permutation of $\{A, B, C\}$ to any permutation of $\{D, E, F\}$ in the fastest way while guaranteeing mutual support.	196
Fig. 9.1.	Data acquisition, data processing, action selection and action execution in a feedback control-loop intended to ensure that the state of the system under control meets the defined goals.	205
Fig. 9.2.	OODA depiction of the supervisory control with the possibility to intervene.	205
Fig. 9.3.	Simulation environment used for the evaluation of the intercept guidance concept in March 2022.	211
Fig. 10.1.	Information overload as an inverted U-curve.	223
Fig. 10.2.	The potential improvement of decision accuracy.	230
Fig. 11.1.	Mapping of two moral values.	241
Fig. 11.2.	A conceptual plot of different technical solutions to the value dilemma.	245
Fig. 11.3.	A conceptual plot of different value thresholds.	248
Fig. 12.1.	Information Environment and Cyberspace. Permission granted by Jelle van Haaster.	263
Fig. 12.2.	Information Manoeuvre Conceptualised.	264
Fig. 14.1.	Armenia and Azerbaijan (line of control prior to the 2020 war). Maps by kind permission of the NLD Inst of Military History.	310
Fig. 14.2.	Nagorno-Karabakh Conflict Zone (line of control prior to the 2020 war).	311
Fig. 14.3.	Cease-Fire Agreement of November 9, 2020.	314

List of Tables

Table 1.1.	Five applied sociotechnical lenses	30
Table 1.2.	Henderson and Clark's types of innovation vs sociotechnical innovation	37
Table 3.1.	Overview of case studies and associated data types, maturity levels and decision types (ST = short term, LT = long term)	82
Table 4.1.	Overview characteristics FL frameworks	103
Table 4.2.	Criteria for choosing the FL framework	104
Table 4.3.	Used sensor data of FFPV Stornes	109
Table 5.1.	Maturity stages related to the data dimension of Buitelaar's (2018) model (modified)	128
Table 5.2.	NL MoD Defensievisie 2035: envisioned organisational properties and guiding principles	129
Table 6.1.	Notional Intelligence scale, after Launchbury	148
Table 6.2.	Several forecasting methods grouped by the characterisation derived in the text	150
Table 6.3.	The effect of Big Data on Artificial Intelligence, after Deshpande and Kumar	152
Table 6.4.	Order of effects of big data on the DARPA levels of ability to process information	152
Table 6.5.	The relative order of the effect of BD and AI on forecasting methods in the three different categories	153
Table 7.1.	Numerical methods to solve the trajectory optimisation problem	169
Table 7.2.	Classification of helicopter models used for trajectory optimisation (extension of classification by Padfield)	169
Table 7.3.	Survey of trajectory optimisation studies for helicopter applications	172
Table 7.4.	Search games classification	174
Table 12.1.	Readiness & Deployment matrix for International Deployment	267

Foreword by the Dean of the Faculty, Prof. Dr. Patrick Oonincx

Every year the Faculty of Military Sciences at the Netherlands Defence Academy publishes the Netherlands Annual Review of Military Sciences. This year marks the starting point on a somewhat different approach. As of this year the series will address themes within society and the Ministry of Defence in particular from a multidisciplinary scientific point of view with contributions from all departments of our faculty.

This year we have chosen to study the use of data in the military, one of the key-stones in the Defence Vision 2035. The current importance of data in the military cannot be overstated. Good intelligence in the Ukraine-Russian war will provide an advantageous position and satellite communications is available at places where regular means of communications are absent.

As a mathematician this topic reminds me of Alan Turing, one of the founding fathers of modern numerical mathematics and artificial intelligence (AI). Already in 1935 Turing described the contours of an abstract computing machine using a moving scanner to read and write symbols. During World War II he acted as a leading cryptanalyst at Bletchley Park improving issues of machine intelligence. Amongst others this led to development of an electromechanical machine called The Bombe for enciphering the German Enigma code. While this is a classical and early example of data in the military, nowadays data science and AI give rise to many new capabilities that need to be explored scientifically to properly understand their capabilities. This volume is a starting point on that scientific journey. Where Turing made the first steps into the world of data science, we embrace the topic and take it to a new level in the military with several studies, from technological fields including autonomous systems, to the fields of military management and war studies including addressing topical legal challenges related to the use of data.

The editors and authors were really challenged this year, but they succeeded in writing a volume that gives many answers to issues in relation to the topic of a data-driven military. I wish you interesting hours of reading the volume and do not hesitate to contact us for a deeper dive into any of the studies after reading about them.

