Information Technology and Law Series

Volume 39

Editor-in-Chief

Simone van der Hof, eLaw (Center for Law and Digital Technologies), Leiden University, Leiden, The Netherlands

Series Editors

Jef Ausloos, University of Amsterdam, Amsterdam, The Netherlands Stephan Dreyer, Leibniz-Institut für Medienforschung, Hamburg, Germany Gloria González Fuster, Law, Science, Technology & Society Studies (LSTS),

Vrije Universiteit Brussel (VUB), Brussels, Belgium

Inge Graef, University of Tilburg, Tilburg, The Netherlands

Aleksandra Kuczerawy, Centre for IT and IP, KU Leuven, Leuven, Belgium

Eva Lievens, Faculty of Law, Law & Technology, Ghent University, Ghent, Belgium

Aurelia Tamò-Larrieux, Faculty of Law, Criminal Sciences and Public Administration, University of Lausanne, Switzerland, Switzerland

The *Information Technology & Law Series* was an initiative of IT *e* R, the national programme for information Technology and Law, which was a research programme set up by the Dutch government and The Netherlands Organisation for Scientific Research (NWO) in The Hague. Since 1995 IT *e* R has published all of its research results in its own book series. In 2002 IT *e* R launched the present internationally orientated and English language *Information Technology & Law Series*. This well-established series deals with the implications of information technology for legal systems and institutions. Manuscripts and related correspondence can be sent to the Series' Editorial Office, which will also gladly provide more information concerning editorial standards and procedures.

Kostina Prifti · Esra Demir · Julia Krämer · Klaus Heine · Evert Stamhuis Editors

Digital Governance

Confronting the Challenges Posed by Artificial Intelligence





Editors
Kostina Prifti
Department of Law and Business
Erasmus School of Law
Rotterdam, The Netherlands

Julia Krämer Department of Law and Business Erasmus School of Law Rotterdam, The Netherlands

Evert Stamhuis Department of Law and Business Erasmus School of Law Rotterdam, The Netherlands Esra Demir
Department of Law and Business
Erasmus School of Law
Rotterdam. The Netherlands

Klaus Heine Department of Law and Business Erasmus School of Law Rotterdam, The Netherlands

ISSN 1570-2782 ISSN 2215-1966 (electronic) Information Technology and Law Series ISBN 978-94-6265-638-3 ISBN 978-94-6265-639-0 (eBook) https://doi.org/10.1007/978-94-6265-639-0

This work was supported by Dutch Ministry of Education, Culture and Research, and Erasmus Graduate School.

Published by T.M.C. ASSER PRESS, The Hague, The Netherlands www.asserpress.nl Produced and distributed for T.M.C. ASSER PRESS by Springer-Verlag Berlin Heidelberg

© T.M.C. ASSER PRESS and the author(s) 2024

Chapters 2, 6, 10, and 13 are licensed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/). For further details see license information in the chapters.

No part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission from the Publisher, with the exception of any material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work. The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

This T.M.C. ASSER PRESS imprint is published by the registered company Springer-Verlag GmbH, DE part of Springer Nature.

The registered company address is: Heidelberger Platz 3, 14197 Berlin, Germany

If disposing of this product, please recycle the paper.

Preface

In June 2023, Erasmus University Rotterdam played host to the inaugural conference on Law, AI, and Regulation (LAIR). 24 speakers from diverse institutions and disciplines tackled the challenges of regulating AI. Amidst the rich tapestry of discussions, a key insight emerged: the need for interconnected frameworks to navigate the complex landscape of AI regulation, a role which we believe the concept of 'Digital Governance' can discharge. It was this realisation that sparked the inspiration for this book.

Turning an idea into reality requires support, and we are indebted to many for their contribution along this journey. We extend our gratitude to the Sector plan for law 'Rebalancing of Public Interests in Private Relationships' funded by the Dutch Ministry of Education, Culture and Research, the Jean Monet Centre of Excellence Digital Governance, and the Erasmus Graduate School of Law for their financial and organisational support.

We express our appreciation to all those who played a role in the planning and successful implementation of the LAIR conference. Namely, we are thankful to Koen Swinnen, Monika Glavina, Enrique Santamaria Echeverria, Shu Li, Alberto Quintavalla, Martien Schaub, Maria Campo Comba, Cheng Bian, Adrianus van Heusden, Michal Stambulski, Irem Akin, Anke van den Boomen, Daco Groeneveld, and Eva Jacobse. A special appreciation goes to Gillian Hadfield and Eduard Fosch-Villaronga for their keynote contributions.

We would also like to thank our reviewers. Their contribution is hidden under the quality of each book chapter. Finally, heartfelt gratitude extends to all the contributors of this edited book. Your passion and collaboration made our role as editors significantly easier and more pleasant.

Rotterdam, The Netherlands

Kostina Prifti Esra Demir Julia Krämer Klaus Heine Evert Stamhuis

Contents

1	Esra Demir, Julia Krämer, Kostina Prifti, Klaus Heine, and Evert Stamhuis	1
Par	rt I Disruptive Effects of AI	
2	European Product Liability for AI-based Clinical Decision Support Systems Jan H. van Staalduinen	15
3	When the Kids Aren't Alright: The Use of Facial Recognition Technologies at School Giuseppe Mobilio	41
4	Emotional Artificial Intelligence: Introducing the Concept of 'Emotional Privacy'	65
5	Open Banking in the EU: A Consumer Dystopia or Utopia? Eugerta Muçi	89
6	Problematising User Control in the Context of Digital Identity Wallets and European Digital Identity Framework Sanna Wong-Toropainen	115
7	AI in the Workplace: Regulating Explainability and Consent in Algorithmic Management Sonia Bastigkeit Ericstam	137

viii Contents

Pa	rt II Designing Legal Solutions for Digital Governance	
8	AI Acts' Ripple Effect on Biometric Data: Harmonising or Fragmenting the Regulation of Biometric Data Bilgesu Sumer, Natalia Menéndez González, Abdullah Elbi, Catherine Jasserand, Jan Czarnocki, and Els J. Kindt	165
9	The Rule of Law for Artificial Intelligence in Public Administration: A System Safety Perspective Sem Nouws and Roel Dobbe	183
10	Towards Formalising AI Readiness of Standards Anna Schmitz, Rebekka Görge, Elena Haedecke, Marion Borowski, Adrian Seeliger, and Maximilian Poretschkin	209
11	Appropriating Legal AI Development: The Existential and Political Dynamics of Legal AI-Artifacts	233
12	Codes of Conduct in EU Digital Regulation and AI Policy: The Potential and Risks of Soft Law Tools Rachel Griffin	253
13	Rethinking Algorithmic Explainability Through the Lenses of Intellectual Property and Competition	273
14	The Digital Governance of Artificial Intelligence: Conclusive Remarks and Future Directions Julia Krämer, Kostina Prifti, Esra Demir, Klaus Heine, and Evert Stamhuis	297