River Publishers Series in Security and Digital Forensics

GDPR and Cyber Security for Business Information Systems

ANTONI GOBEO
CONNOR FOWLER
WILLIAM J. BUCHANAN

River Publishers

GDPR and Cyber Security for Business Information Systems

RIVER PUBLISHERS SERIES IN SECURITY AND DIGITAL FORENSICS

Series Editors:

WILLIAM J. BUCHANAN
Edinburgh Napier University, UK

ANAND R. PRASAD
NEC, Japan

Indexing: all books published in this series are submitted to the Web of Science Book Citation Index (BkCI), to CrossRef and to Google Scholar.

The "River Publishers Series in Security and Digital Forensics" is a series of comprehensive academic and professional books which focus on the theory and applications of Cyber Security, including Data Security, Mobile and Network Security, Cryptography and Digital Forensics. Topics in Prevention and Threat Management are also included in the scope of the book series, as are general business Standards in this domain.

Books published in the series include research monographs, edited volumes, handbooks and textbooks. The books provide professionals, researchers, educators, and advanced students in the field with an invaluable insight into the latest research and developments.

Topics covered in the series include, but are by no means restricted to the following:

- Cyber Security
- Digital Forensics
- Cryptography
- Blockchain
- IoT Security
- Network Security
- Mobile Security
- Data and App Security
- Threat Management
- Standardization
- Privacy
- Software Security
- Hardware Security

For a list of other books in this series, visit www.riverpublishers.com

GDPR and Cyber Security for Business Information Systems

Antoni Gobeo
Edinburgh Napier University, UK

Connor Fowler
Edinburgh Napier University, UK

William J. Buchanan
Edinburgh Napier University, UK

River Publishers

Published, sold and distributed by:
River Publishers
Alsbjergvej 10
9260 Gistrup
Denmark

River Publishers
Lange Geer 44
2611 PW Delft
The Netherlands

Tel.: +45369953197
www.riverpublishers.com

ISBN: 978-87-93609-13-6 (Hardback)
978-87-93609-12-9 (Ebook)

Contents

PART THREE: IMPLEMENTATION

GDPR and Cyber Security for Business Information Systems

The General Data Protection Regulation is one of the most stringent, regulations regarding Data Protection to be passed into law by the European Union. Fundamentally, it aims to protect the Rights and Freedoms of all the individuals included under its terms; ultimately the privacy and security of all our personal data. This requirement for protection extends globally, to all organisations, public and private, wherever personal data is held, processed, or transmitted within the EU.

Cyber Security is at the core of data protection and there is a heavy emphasis on the application of encryption and state of the art technology within the articles of the GDPR. This is considered to be a primary method in achieving compliance with the law. Understanding the overall use and scope of Cyber Security principles and tools allows for greater efficiency and more cost effective management of Information systems.

GDPR and Cyber Security for Business Information Systems is designed to present specific and practical information on the key areas of compliance with the GDPR relevant to Business Information Systems in a global context.

Key areas covered include:

- Principles and Rights within the GDPR
- Information Security
- Data Protection by Design and Default
- Policies and Procedures
- Encryption Methods
- Incident Response and Management
- Data Breaches

ISBN 978-87-93609-13-6
9 788793 609136

River Publishers