Digital Rights Management: Concepts, Methodologies, Tools, and Applications

Information Resources Management Association (IRMA)

With the continuing growth of the digital media, digital rights management is essential to control the unauthorized distribution or use of digital files typically used by hardware manufacturers, publishers, and copyright holders.

Digital Rights Management: Concepts, Methodologies, Tools, and Applications is a comprehensive volume of recent case studies, theories, research on digital rights management and its place in the world today. Its widespread research fields and areas of expertise serve as a reference source for practitioners and academics alike.

Topics Covered:
- Copyright
- Digital Content
- Digital Rights Management
- Electronic Media
- Information Ethics
- Interdisciplinary Technologies
- Library Science
- Knowledge Management

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

Information Resources Management Association (IRMA) is a research-based professional organization dedicated to advancing the concepts and practices of information resources management in modern organizations. IRMA’s primary purpose is to promote the understanding, development and practice of managing information resources as key enterprise assets among IRM/IT professionals. IRMA brings together researchers, practitioners, academicians, and policy makers in information technology management from over 50 countries.
Section 1: Fundamental Concepts and Theories

Chapter 1
Legal Protection of the Web Page
Mula Davide (European University of Rome, Italy)

Chapter 2
Intellectual Property Systems in Software
Rejas-Muslera Ricardo (University of Alcalá, Spain)

Chapter 3
Legal Ontologies in ICT and Law
Abramowicz Witold (Poznan University of Economics, Poland)

Chapter 4
Security in Service Oriented Architectures:
Kayem Anne V.D.M. (German Research Center for Artificial Intelligence (DFKI GmbH), Germany)

Chapter 5
Digital Preservation Challenges, Infrastructures and Evaluations
Gazetta David (Science and Technology Facilities Council, UK)

Chapter 6
DRM Protection Technologies
Hackbarth Gary (Northern Kentucky University, USA)

Chapter 7
Copyright and Digital Libraries:
Geiger Christophe (University of Strasbourg, France2)

Chapter 8
Law, Architecture, Gameplay, and Marketing!
Wasilko Peter J. (The Institute for End User Computing, Inc., USA)

Section 2: Development and Design Methodologies

Chapter 9
EduPAGs:
Amorim Josel A. (Universidade Estadual de Campinas, Brazil)
Miskulin Rosana G. S. (Universidade Estadual Paulista “Júlio de Mesquita Filho”, Brazil)
Miskulin Mauro S. (Universidade Estadual de Campinas, Brazil)

Chapter 10
Hardware Implementations of Image/Video Watermarking Algorithms
Idris Fayez M. (German-Jordanian University, Jordan)

Chapter 11
Management, Monitoring and QoS in Multi-cell Centralized WFLANs
Cacace Filippo (Università Campus Bio-Medico di Roma, Italy)
Iannello Giulio (Università Campus Bio-Medico di Roma, Italy)
Vollero Luca (Università Campus Bio-Medico di Roma, Italy)

Chapter 12
Ontology-Based Authorization Model for XML, Data in Distributed Systems
Jain Amit (University of South Carolina, USA)
Farkas Csilla (University of South Carolina, USA)

Chapter 13
Geometric Distortions-Invariant Digital Watermarking Using Sub-Image-Invariant Feature Transform and Discrete Orthogonal Image Moments
Ahmad Shiraz (Pakistan Atomic Energy Commission, Pakistan)
Lu zhe-Ming (Zhejiang University, P. R. China)

Chapter 14
Copyright and Ethical Issues in Emerging Models for the Digital Media Reporting of Sports News in Australia
Wyburn Mary (University of Sydney, Australia)

Chapter 15
An Access Control Framework for IFPS-BPEL Processes
Paci Federica (Università degli Studi di Trento, Italy)
Bertino Elisa (CS Department and ECE School, CERIAS, Purdue University, USA)
Crampton Jason (Royal Holloway, University of London, UK)

Chapter 16
Unraveling Intellectual Property in a Specialist Social Networking Site
Humphreys Sal (University of Adelaide, Australia)

Chapter 17
Medium Access Protocols for Cooperative Collision Avoidance in Vehicular Ad-Hoc Networks
Hassan Md. Imral (Swinburne University of Technology, Australia)
Vu Hai L. (Swinburne University of Technology, Australia)
Sakurai Taka (University of Melbourne, Australia)

Chapter 18
A Unified Approach towards Multimedia Watermarking
Al-Haj Ali (Princess Sumaya University for Technology, Jordan)
Mohammad Ahmad (Princess Sumaya University for Technology, Jordan)
Ahou El-Seoud Samir (Princess Sumaya University for Technology, Jordan)
Manasrah Taqa (The University of Jordan, Jordan)
Rajab Lama (The University of Jordan, Jordan)
Al-Khateib Tahari (The University of Jordan, Jordan)

Chapter 19
Data Hiding Scheme Based on Singular Value Decomposition
Pomponia Victor (University of Torino, Italy)
Cavagnino Davide (University of Torino, Italy)
Basso Alessandro (University of Torino, Italy)
Vernone Annamaria (University of Torino, Italy)

Section 3: Tools and Technologies

Chapter 20
Advancement on Damage-Less Watermark Extraction Using Non-Linear Feature Extraction Scheme Trained on Frequency Domain
Naoe Kousuke (Keio University, Japan)
Takufuji Yoshiyasu (Keio University, Japan)

Chapter 21
Improving the Information Security of Collaborative Web Portals via Fine-Grained Role-Based Access Control
Demurjian S. (University of Connecticut, USA)
Ren H. (University of Connecticut, USA)
Berhe S. (University of Connecticut, USA)
Devineni M. (Serebrum Cooperation, USA)
Vegad Sushil (Serebrum Cooperation, USA)
Polinoni K. (Serebrum Cooperation, USA)

Chapter 22
Explaining P2P in New Media Distribution
Mansukhani Marcus (Nanyang Technological University, Singapore)
Ye He (Nanyang Technological University, Singapore)
Zhuoran Ma (Nanyang Technological University, Singapore)

Chapter 23
Massively Threaded Digital Forensics Tools
Marziale Lodovico (University of New Orleans, USA)
Davara Elena (Davara & Davara Law, Spain)

Chapter 1
Copyright and Ethical Issues in Emerging Models for the Digital Media Reporting of Sports News in Australia
Wyburn Mary (University of Sydney, Australia)

Chapter 15
An Access Control Framework for IFPS-BPEL Processes
Paci Federica (Università degli Studi di Trento, Italy)
Bertino Elisa (CS Department and ECE School, CERIAS, Purdue University, USA)
Crampton Jason (Royal Holloway, University of London, UK)

Chapter 16
Unraveling Intellectual Property in a Specialist Social Networking Site
Humphreys Sal (University of Adelaide, Australia)

Chapter 17
Medium Access Protocols for Cooperative Collision Avoidance in Vehicular Ad-Hoc Networks
Hassan Md. Imral (Swinburne University of Technology, Australia)
Vu Hai L. (Swinburne University of Technology, Australia)
Sakurai Taka (University of Melbourne, Australia)

Chapter 18
A Unified Approach towards Multimedia Watermarking
Al-Haj Ali (Princess Sumaya University for Technology, Jordan)
Mohammad Ahmad (Princess Sumaya University for Technology, Jordan)
Ahou El-Seoud Samir (Princess Sumaya University for Technology, Jordan)
Manasrah Taqa (The University of Jordan, Jordan)
Rajab Lama (The University of Jordan, Jordan)
Al-Khateib Tahari (The University of Jordan, Jordan)

Chapter 19
Data Hiding Scheme Based on Singular Value Decomposition
Pomponia Victor (University of Torino, Italy)
Cavagnino Davide (University of Torino, Italy)
Basso Alessandro (University of Torino, Italy)
Vernone Annamaria (University of Torino, Italy)

Section 3: Tools and Technologies

Chapter 20
Advancement on Damage-Less Watermark Extraction Using Non-Linear Feature Extraction Scheme Trained on Frequency Domain
Naoe Kousuke (Keio University, Japan)
Takufuji Yoshiyasu (Keio University, Japan)

Chapter 21
Improving the Information Security of Collaborative Web Portals via Fine-Grained Role-Based Access Control
Demurjian S. (University of Connecticut, USA)
Ren H. (University of Connecticut, USA)
Berhe S. (University of Connecticut, USA)
Devineni M. (Serebrum Cooperation, USA)
Vegad Sushil (Serebrum Cooperation, USA)
Polinoni K. (Serebrum Cooperation, USA)

Chapter 22
Explaining P2P in New Media Distribution
Mansukhani Marcus (Nanyang Technological University, Singapore)
Ye He (Nanyang Technological University, Singapore)
Zhuoran Ma (Nanyang Technological University, Singapore)

Chapter 23
Massively Threaded Digital Forensics Tools
Marziale Lodovico (University of New Orleans, USA)
Davara Elena (Davara & Davara Law, Spain)

Chapter 1
Copyright and Ethical Issues in Emerging Models for the Digital Media Reporting of Sports News in Australia
Wyburn Mary (University of Sydney, Australia)

Chapter 15
An Access Control Framework for IFPS-BPEL Processes
Paci Federica (Università degli Studi di Trento, Italy)
Bertino Elisa (CS Department and ECE School, CERIAS, Purdue University, USA)
Crampton Jason (Royal Holloway, University of London, UK)

Chapter 16
Unraveling Intellectual Property in a Specialist Social Networking Site
Humphreys Sal (University of Adelaide, Australia)

Chapter 17
Medium Access Protocols for Cooperative Collision Avoidance in Vehicular Ad-Hoc Networks
Hassan Md. Imral (Swinburne University of Technology, Australia)
Vu Hai L. (Swinburne University of Technology, Australia)
Sakurai Taka (University of Melbourne, Australia)

Chapter 18
A Unified Approach towards Multimedia Watermarking
Al-Haj Ali (Princess Sumaya University for Technology, Jordan)
Mohammad Ahmad (Princess Sumaya University for Technology, Jordan)
Ahou El-Seoud Samir (Princess Sumaya University for Technology, Jordan)
Manasrah Taqa (The University of Jordan, Jordan)
Rajab Lama (The University of Jordan, Jordan)
Al-Khateib Tahari (The University of Jordan, Jordan)

Chapter 19
Data Hiding Scheme Based on Singular Value Decomposition
Pomponia Victor (University of Torino, Italy)
Cavagnino Davide (University of Torino, Italy)
Basso Alessandro (University of Torino, Italy)
Vernone Annamaria (University of Torino, Italy)

Section 3: Tools and Technologies

Chapter 20
Advancement on Damage-Less Watermark Extraction Using Non-Linear Feature Extraction Scheme Trained on Frequency Domain
Naoe Kousuke (Keio University, Japan)
Takufuji Yoshiyasu (Keio University, Japan)
Chapter 24
Code Adaptation for Wireless Multimedia Streaming
Yeh Ping-Cheng (National Taiwan University, Taiwan)
HsiehHung-Yun (National Taiwan University, Taiwan)
Wu Zhung-Han (National Taiwan University, Taiwan)
Lee Yen-Chi (National Taiwan University, Taiwan)
Chiang Chun-Cheng (National Taiwan University, Taiwan)
Ou Antonio (National Taiwan University, Taiwan)

Chapter 25
Spread Spectrum Watermarking:
Matiy Santi P. (Bengal Engineering and Science University, India)

Chapter 26
DNS-based
Ibrohimovna Malohat (Delft University of Technology, The Netherlands)
Heemstra de Groot Sonia (Twente Institute of Wireless and Mobile Communications, The Netherlands & Delft University of Technology, The Netherlands)

Chapter 27
Delay Constrained Admission Control and Scheduling Policy for IEEE 802.11e HCCA Method
Deng Der-Jan (National Changhua University of Education, Taiwan)
Huang Yu-Cheng (Department of Engineering Science, National Cheng Kung University, Taiwan)
Chen Hisiao-Hua (Department of Engineering Science, National Cheng Kung University, Taiwan)

Chapter 28
Deterrent Text Document Privacy with Text Watermarking
Mishra Rakesh Kumar (Feroze Gandhi Institute of Engineering and Technology, India)

Chapter 29
QoS and Energy Saving Routing and MAC Mechanisms for Wireless Networks
Gkamas Vasileios (University of Patras, Greece)
Kokkinos Panagiotis (University of Patras, Greece)
Varvarigos Emmanuel (University of Patras, Greece)

Chapter 30
Two Spatial Watermarking Techniques for Digital Images
Bardescu Dumitra Dan (University of Craiova, Romania)
Stănescu Liana (University of Craiova, Romania)
Mihăescu Marian Cristian (University of Craiova, Romania)

Section 4: Utilization and Application

Chapter 31
Research on Open Innovation in China:
Naixiao Zhu (Jinan University, China)
Chunhua Huang (Jinan University, China)

Chapter 32
Internet-Based Protect in European Policymaking:
Breindl Yana (Université Libre de Bruxelles, Belgium)

Chapter 33
The Hellenic Framework for Computer Program Copyright Protection Following the Implementation of the Relative European Union Directives:
Alexandropoulou-Egyptiadou Eugenia (University of Macedonia, Greece)

Chapter 34
Practical Experiences and Design Considerations on Medium Access Control Protocols for Wireless Sensor Networks
Ansarjari Junaid (RWTH Aachen University, Germany)
Zheng Xi (RWTH Aachen University, Germany)
Mihóten Perri (RWTH Aachen University, Germany)

Chapter 35
Computer Games and Intellectual Property Law:
Pina Pedro (ESTGOH - Polytechnic Institute of Coimbra, Portugal)

Chapter 36
Considering the Role of E-Government in Cyberterrorist Awareness and Prevention:
Miller J. Mitchell (University of Texas at San Antonio, USA)
Huggins George E. (University of Louisville, USA)
Lopez Kristina M. (University of Texas at San Antonio, USA)

Chapter 37
Assessing Empirical Relations of Music Piracy Behavior with Lifestyle and Internet Self-Efficacy of Taiwan's Web Users
Hsu Ti (Chinese Culture University, Taiwan)
Wong Weng (Chinese Culture University, Taiwan)
Wang Chien-Chih (Chinese Culture University, Taiwan)
Li Yeen Ni (Chinese Culture University, Taiwan)
Li-Pu Chiao (Chinese Culture University, Taiwan)
Tsai Min Chi (Chinese Culture University, Taiwan)
Tsai Yu Kai (Chinese Culture University, Taiwan)
Su Sheng Hong (Chinese Culture University, Taiwan)

Chapter 38
Facilitating Access to Indian Cultural Heritage:
Gaur Ramesh C. (Indira Gandhi National Centre for the Arts, India)

Chapter 39
Indonesian Legal Perspectives on Biotechnology and Intellectual Property Rights
Linay Theofrastus (Satya Wacana Christian University, Indonesia)
Pasuaningrum Dyah Hapsari (Satya Wacana Christian University, Indonesia)
Krisanto Yuki Adi (Satya Wacana Christian University, Indonesia)

Chapter 40
Biopharma Drugs Innovation in India and Foreign Investment and Technology Transfer in the Changed Patent Regime
Rashmi Rakh (University of Nice, France)

Chapter 41
The Project of the Ancient Spanish Cartography E-Library:
Chias P. (University of Alcalá, Spain)
Abad T. (University of Alcalá, Spain)
Rivera E. (University of Alcalá, Spain)

Chapter 42
Application of Error Control Coding for Multimedia Watermarking Technologies
Reaval Mehal S. (DA-IICT, India)

Section 5: Organizational and Social Implications

Chapter 43
Twistworthiness of Pervasive Healthcare Folders
Allard Tristan (University of Versailles, France)
Anicetus Nicolas (INRIA Rocquencourt, France)
Bouguenim Luc (INRIA Rocquencourt, France)
Pucheral Philippe (University of Versailles, France)
Thion Romuald (INRIA Grenoble, France)

Chapter 44
Fair Use, Copyright, and Academic Integrity in an Online Academic Environment
Holloway Kristine (California State University, USA)

Chapter 45
ELATWiki:
Hai-Jew Shalin (Kansas State University, USA)
McHaney Roger W. (Kansas State University, USA)

Chapter 46
College Students, Piracy, and Ethics:
Reiss Jeffrey (University of Central Florida, USA)
Cintrón Rosa (University of Central Florida, USA)

Chapter 47
An Evaluation of User Password Practice
Campbell John (University of Canberra, Australia)
Bryant Kay (University of Canberra, Australia)
Section 6: Managerial Impact

Chapter 53  
The Management System of Enterprises' Intellectual Property Rights:  
Xiaohui Tao (Jinan University, China)  
Yaohui Zhang (Jinan University, China)  
Yi Zhou (NineStar Technology Co., Ltd., China)

Chapter 54  
Trust Calculation and Management in P2P and Grid Systems:  
Konstantinos Karoulianos (Aristotle University of Thessaloniki, Greece)  
Karatzas Helen (Aristotle University of Thessaloniki, Greece)

Chapter 55  
Analyzing Software Piracy from Supply and Demand Factors:  
Charoensuksakongkol Peerayuth (Texas A&M International University, USA)  
Daniel Jose Luis (Texas A&M International University, USA)  
Sexton Shaun (Texas A&M International University, USA)  
Kock Ned (Texas A&M International University, USA)

Chapter 56  
Pricing of Music and Music Piracy:  
Nhan Joho (Texas Christian University, USA)  
Garbagnati Alexandra (University of California Hastings College of Law, USA)

Chapter 57  
Collaborative Production, the Knowledge Commons and the Application of Open Content Licenses:  
Pang Natalie (Nanyang Technological University, Singapore)

Chapter 58  
The Protection of Digital Libraries as Databases:  
Synodinou Tatiana-Eleni (University of Cyprus, Cyprus)

Chapter 59  
Intellectual Property and Licensing Strategies in Open Collaborative Innovation:  
Bogers Marcel (University of Southern Denmark, Denmark)  
Beckers Rudi (Eindhoven University of Technology, The Netherlands)  
Granstrand Ove (Chalmers University of Technology, Sweden)

Chapter 60  
Patent Infringement Risk Analysis Using Rough Set Theory:  
Huang Chun-Che (National Chi Nan University, Taiwan)  
Tzu-Liang (Bill) Tseng (The University of Texas at El Paso, USA)  
Lin Hao-Syuan (National Chi Nan University, Taiwan)

Section 7: Critical Issues

Chapter 61  
Knowledge Worker Faire Compensation:  
Costa Gonçalo Jorge Moreira (De Montfort University, UK)

Chapter 62  
Digital Copyright Enforcement:  
Pina Pedro (Polytechnic Institute of Coimbra, Portugal)

Chapter 63  
The Effect of Business Characteristics on the Methods of Knowledge Protections:  
Bin Xu (National University of Singapore, Singapore)  
Chuan Tan Kay (National University of Singapore, Singapore)

Chapter 64  
Knowledge and Intellectual Property Rights:  
Ryan Geraldine (University College Cork, Ireland)  
Shinnick Edward (University College Cork, Ireland)

Chapter 65  
Ethical and Legal Issues Related to Information Communication Technology (ICT):  
Edewor Nelson (Delta State Polytechnic, Nigeria)

Chapter 66  
Legal Issues Facing Companies with Products in a Digital Format:  
Fichtner J. Royce (Drake University, USA)  
Simpson Lou Ann (Drake University, USA)

Chapter 67  
Between Scylla and Charybdis:  
Pina Pedro (Consultant, Portugal)

Chapter 68  
Ethical and Legal Issues in Teaching and Learning in Second Life in a Graduate Online Course:  
Talah R. S. (Kansas State University, USA)  
Botterbusch Hope R. (St. Petersburg College, USA)

Chapter 69  
The Trouble with Digital Copies:  
Pagallo Ugo (University of Turin, Italy)

Chapter 70  
Legal and Ethical Aspects of Teaching in Selected Social Virtual Worlds:  
Talah R. S. (Kansas State University, USA)  
Botterbusch Hope R. (Kansas State University, USA)

Chapter 71  
Biotechnological Patents and Morality:  
Kuanphoth Jakkrit (University of Wollongong, Australia)

Chapter 72  
Preservation of Cultural and Scientific Heritage by Means of Digital Libraries:  
Korres Stylianos (Athens Bar Association, Greece)  
Kokontaki Eva (Athens Bar Association, Greece)

Section 8: Emerging Trends

Chapter 73  
Information Agents, Social Web and Intellectual Property:  
Anguera de Sojo Áurea (Escuela Universitaria de Informática, Spain)  
Serradilla Francisco (Escuela Universitaria de Informática, Spain)

Chapter 74  
Review of the Virtual World Community:  
Azeharie Reza Y. (Nanyang Technological University, Singapore)

Chapter 75  
Challenges to Intellectual Property Rights from Information and Communication Technologies, Nanotechnologies and Microelectronics:  
Dróisach Ahmed (Al Akhawayn University, Morocco)  
Kadi Diouf (Al Akhawayn University, Morocco)
Order Your Copy Today!

Name: ____________________________________________
Organization: ______________________________________
Address: __________________________________________
City, State, Zip: _____________________________________
Country: ___________________________________________
Tel: ________________________________________________
Fax: ________________________________________________
E-mail: ____________________________________________

☐ Enclosed is check payable to IGI Global in US Dollars, drawn on a US-based bank
☐ Credit Card ☐ Mastercard ☐ Visa ☐ Am. Express

3 or 4 Digit Security Code: ____________________________
Name on Card: ______________________________________
Account #: _________________________________________
Expiration Date: ____________________________________