

Perspectives in Law, Business and Innovation

Marcelo Corrales  
Mark Fenwick  
Nikolaus Forgó *Editors*

# Robotics, AI and the Future of Law



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# **Perspectives in Law, Business and Innovation**

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Over the last three decades, interconnected processes of globalization and rapid technological change—particularly, the emergence of networked technologies—have profoundly disrupted traditional models of business organization. This economic transformation has created multiple new opportunities for the emergence of alternate business forms, and disruptive innovation has become one of the major driving forces in the contemporary economy. Moreover, in the context of globalization, the innovation space increasingly takes on a global character. The main stakeholders—innovators, entrepreneurs and investors—now have an unprecedented degree of mobility in pursuing economic opportunities wherever they arise. As such, frictionless movement of goods, workers, services, and capital is becoming the “new normal”.

This new economic and social reality has created multiple regulatory challenges for policymakers as they struggle to come to terms with the rapid pace of these social and economic changes. Moreover, these challenges impact across multiple fields of both public and private law. Nevertheless, existing approaches within legal science often struggle to deal with innovation and its effects.

Paralleling this shift in the economy, we can, therefore, see a similar process of disruption occurring within contemporary academia, as traditional approaches and disciplinary boundaries—both within and between disciplines—are being re-configured. Conventional notions of legal science are becoming increasingly obsolete or, at least, there is a need to develop alternative perspectives on the various regulatory challenges that are currently being created by the new innovation-driven global economy.

The aim of this series is to provide a forum for the publication of cutting-edge research in the fields of innovation and the law from a Japanese and Asian perspective. The series will cut across the traditional sub-disciplines of legal studies but will be tied together by a focus on contemporary developments in an innovation-driven economy and will deepen our understanding of the various regulatory responses to these economic and social changes.

The series editor and editorial board carefully assess each book proposal and sample chapters in terms of their relevance to law, business, and innovative technological change. Each proposal is evaluated on the basis of its academic value and distinctive contribution to the fast-moving debate in these fields.

More information about this series at <http://www.springer.com/series/15440>

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Editors

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# Preface

This volume is part of the book series: *Perspectives in Law, Business and Innovation*. The aim of this series is to provide a forum for the publication of cutting-edge research in the fields of innovation and the law from a Japanese and Asian perspective. The series aims to cut across the traditional sub-disciplines of legal studies, but is tied together by a focus on deepening our understanding of the various regulatory responses to technological, economic, and social change.

This volume constitutes the result of a joint cooperative effort drawing on the extensive global network of three academic institutions: The Center of Innovation and Research, part of the Universidad Politécnica y Artística del Paraguay (Asunción, Paraguay); the Department of Innovation and Digitalization in Law, part of the University of Vienna (Vienna, Austria); and the Graduate School of Law, part of Kyushu University (Fukuoka, Japan). Contributors to this book—including business and legal scholars and practitioners from Europe, East Asia, and the Americas—attempt to provide some of the latest thinking and assessment of current regulations with regard to robotics and emerging AI technologies.

The main target audience of the book comprises two different groups. The first group belongs to the legal community—particularly, legal scholars, law students, and practitioners—in the field of technology law who are interested in an up-to-date legal analysis of current trends. The second group are experts in the fields of AI, cloud computing, and robotics—including, service and infrastructure providers, IT managers, chief executive officers (CEOs), chief information officers (CIOs), and software developers—who are interested in, and influenced by, some of the shortcomings and benefits of the current legal issues under scrutiny in this work.

The editors would like to thank the editor-in-chief of this book series, Prof. Toshiyuki Kono, for opening the doors to this project and for his support. The editors are also indebted to the authors and co-authors of each chapter for their hard

work, patience, and cooperation throughout the whole process from the initial concept to the final manuscript. Finally, the editors are grateful to the Springer staff for their support and efforts in ensuring final publication.

Asunción, Paraguay  
Fukuoka, Japan  
Vienna, Austria

Marcelo Corrales  
Mark Fenwick  
Nikolaus Forgó

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## Robotics, AI and the Future of Law

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Artificial intelligence and robotics are transforming the legal profession. In particular, technological advances in fields ranging from machine learning to more advanced robots, including sensors, virtual realities, algorithms, bots, drones, self-driving cars, and more sophisticated “human-like” robots are creating new and previously unimagined challenges for regulators. These advances also give rise to new opportunities for legal professionals to make efficiency gains in the delivery of legal services. With the exponential growth of such technologies, radical disruption seems likely to accelerate in the near future.

This collection brings together a series of contributions by leading scholars in the newly emerging field of artificial intelligence, robotics, and the law. The aim of the book is to enrich legal debates on the social meaning and impact of this type of technology.

The distinctive feature of the contributions presented in this edition is that they address the impact of these technological developments in a number of different fields of law and from the perspective of diverse jurisdictions. Moreover, the authors utilize insights from multiple related disciplines, in particular social theory and philosophy, in order to better understand and address the legal challenges created by AI. Therefore, the book will contribute to interdisciplinary debates on disruptive new AI technologies and the law.

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