

#### LEGAL INNOVATION

Legal Innovation explores the impact of technology on the legal profession and societal change. Reflecting contributions from an international group of experts, the volume provides a comprehensive overview of the challenges and opportunities facing the legal profession today. With a particular focus on artificial intelligence, the book covers a wide range of topics, from dispute resolution and corporate governance to financial services and regulatory oversight. The conversational style of the chapters makes the content accessible while still maintaining academic rigour. This book is an essential read for policymakers, academics, lawyers, entrepreneurs, regulators and students who are interested in legal innovation and its impact on the legal profession as well as anyone interested in the intersection of law and technology. This title is also available as Open Access on Cambridge Core.

Felix Steffek is Professor of Law at the University of Cambridge, Senior Member of Newnham College and Global Distinguished Professor of Law at the University of Notre Dame. He serves as Director of the Centre for Corporate and Commercial Law and holds a J. M. Keynes Fellowship in Financial Economics.

Mihoko Sumida holds a Research Professorship at Hitotsubashi University. Her work focuses on private law theory and the position of citizens in a changing society. Together with Shunsuke Kudo she has published the book *Social Life with Robots* (2018), which unpacks the legal challenges posed by technology.



## Legal Innovation

# CONVERSATIONS ABOUT TECHNOLOGY, THE LEGAL PROFESSION AND SOCIETAL CHANGE

Edited by

### FELIX STEFFEK

University of Cambridge

### MIHOKO SUMIDA

Hitotsubashi University







Shaftesbury Road, Cambridge CB2 8EA, United Kingdom
One Liberty Plaza, 20th Floor, New York, NY 10006, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India
103 Penang Road, #05-06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org Information on this title: www.cambridge.org/9781009427357

DOI: 10.1017/9781009427371

© Cambridge University Press & Assessment 2025

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, with the exception of the Creative Commons version the link for which is provided below, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

An online version of this work is published at doi.org/10.1017/9781009427371 under a Creative Commons Open Access license CC-BY-NC-ND 4.0 which permits re-use, distribution and reproduction in any medium for non-commercial purposes providing appropriate credit to the original work is given. You may not distribute derivative works without permission. To view a copy of this license, visit https://creativecommons.org/licenses/by-nc-nd/4.0

When citing this work, please include a reference to the DOI 10.1017/9781009427371

First published 2025

A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data NAMES: Steffek, Felix, editor. | Sumida, Mihoko, editor.

TITLE: Legal innovation: conversations about technology, the legal profession, and societal change / edited by Felix Steffek, University of Cambridge; Mihoko Sumida, Hitotsubashi University.

DESCRIPTION: Cambridge, United Kingdom; New York, NY: Cambridge

University Press, 2024. | Includes index.

IDENTIFIERS: LCCN 2024022102 (print) | LCCN 2024022103 (ebook) | ISBN 9781009427357 (hardback) | ISBN 9781009427357 (paperback) | ISBN 9781009427371 (epub)

SUBJECTS: LCSH: Technology and law. | Technology and law-Japan. | Artificial intelligence-Law and legislation | Practice of law-Technological innovation. | Practice of law-Social aspects.

CLASSIFICATION: LCC K487:T4 L441 2024 (print) | LCC K487:T4 (ebook) | DDC 340.028–dc23/eng/20240527

LC record available at https://lccn.loc.gov/2024022102 LC ebook record available at https://lccn.loc.gov/2024022103

ISBN 978-1-009-42735-7 Hardback

Cambridge University Press & Assessment has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.



Cambridge University Press & Assessment 978-1-009-42735-7 — Legal Innovation Edited by Felix Steffek , Mihoko Sumida Frontmatter <a href="More Information">More Information</a>

### Contents

List of Figures	page vii
List of Contributors	ix
Foreword	xiii
Kazuhiko Yamamoto	
Preface	xvii
Conversation 1 Why Innovate? Technological, Economic and	
Societal Change from a Japanese Perspective	1
Hiroto Koda, Mihoko Sumida and Felix Steffek	
Conversation 2 Dispute Resolution Transformed by Technology	32
Felix Steffek, Masato Fujita, Keisuke Takeshita, Hiroaki Yamada,	
Kazuhiko Yamamoto and Mihoko Sumida	
Conversation 3 The Entrepreneur's Perspective on Innovation	64
Ludwig Bull, Wojtek Buczynski, Holli Sargeant, Yuya Ishihara,	
Ryutaro Ohara, Felix Steffek and Mihoko Sumida	
Conversation 4 What Can We Learn from the Okawa Elementary	
School Tsunami Litigation?	88
Masahiro Saito, Kazuhiro Yoshioka, Mikiharu Noma, Felix Steffek and	1
Mihoko Sumida	
Conversation 5 Corporate Governance in the Age of	
Artificial Intelligence	119
Takuya Izumi, Souichirou Kozuka, Kiyotaka Sasaki, Felix Steffek	,
and Mihoko Sumida	



VI Contents	
Conversation 6 Innovation in Financial Services and Supervision Norichika Ikeda, Akira Nozaki, Kiyotaka Sasaki, Felix Steffek and Mihoko Sumida	146
Conversation 7 Artificial Intelligence and Legal Services Mari Sako, Masakazu Iwakura, Felix Steffek and Mihoko Sumida	171
Conversation 8 Will Digitalisation Help the Five Billion People without Meaningful Access to Justice?  Maaike de Langen, Takashi Kikkawa, Philip Scholz, Tatyana Teplova, Ignacio Tirado, Anna Veneziano, Felix Steffek and Mihoko Sumida	199
Epilogue: What Is Legal Innovation? Felix Steffek and Mihoko Sumida	235
Index	241



### Figures

1.1	Digital society and capital markets	þage з
1.2	Major issues in Japan	5
1.3	Declining birth rate and ageing population in Japan	6
1.4	Population pyramid: rapid ageing in Japan	6
1.5	Wage difference	8
1.6	Japanese corporations today: market cap comparison	9
1.7	Big change in industry structure after collapse of 'bubble economy'	10
1.8	Price-to-book value ratio comparison: Japanese banks	11
1.9	Venture capital environment: comparison with China and the	
	United States	12
1.10	Start-up company fundraising	13
1.11	Building a venture ecosystem to support innovation	14
1.12	Venture capital investment and entrepreneurship	15
1.13	Innovation cycle of industry-academia collaboration	18
2.1	Lawyers vs Case Crunch technology	34
2.2	Artificial intelligence at work	39
2.3	AI prediction precision and dispute resolution	40
2.4	The robot lawyers are here – and they're winning	42
2.5	AI use cases for courts and parties	43
2.6	Bias	46
3.1	Network of relationships and interests	73
3.2	Regulatory themes	76
5.1	Two types of corporate seals	127
5.2	Ideal approaches to AI governance	134
7.1	Three effects of AI on lawyers' work	174
7.2	AI-enabled legal service delivery pipeline	175
7.3	Opportunities to work in MDTs, by organisation	177
7.4	Usage of AI-assisted legal technology, by organisation	177



viii List of Figures

7.5	Usage of AI-assisted legal technology in MDTs, by organisation	178
7.6	Four business models in legal services	181
7.7	Founders' social networks	184
7.8	Speed of scaling up	184
7.9	Lawyers in law firms prefer lawyers with programming skills	
	over technicians	187
7.10	Possible legal career paths	188
8.1	Digitalisation of civil court procedures in Japan	207
8.2	Digitalisation of the justice sector in Japan	209
8.3	Access to justice as an enabler for creating prosperity and	
	sustainable development	212
8.4	Justiciable problems are highly prevalent	212
8.5	The most vulnerable to legal problems – Australia Law Legal	
	Needs Survey	213
8.6	Legal problems affect certain disadvantaged groups more severely	214
8.7	Share of justiciable problems for which action has been initiated in	
	justice institutions	214
8.8	Good country practices	216
8.9	Justice for growth and inclusion: towards people- and business-	
	centred justice systems	217
3.10	Taskforce on Justice: Pathfinders for Peaceful, Fair and	
	Inclusive Society	220
8.11	Reports by Pathfinders on Justice in the pandemic	221
8.12	Introduction to UNIDROIT	225
3.12	UNIDROIT instruments	226



### Contributors

**Wojtek Buczynski** is a PhD student at the University of Cambridge and a financial technology, regulation and governance consultant.

Ludwig Bull is CEO and Founder of CourtCorrect Ltd.

Maaike de Langen is Programme Director for Justice for All with the Pathfinders for Peaceful, Just and Inclusive Societies at the NYU Centre on International Cooperation.

Masato Fujita is Counsellor at the Civil Affairs Bureau of the Japanese Ministry of Justice.

**Norichika Ikeda** was Project Professor at the Graduate School of Public Policy of the University of Tokyo.

Yuya Ishihara is AI Consultant at Xspear Consulting.

Masakazu Iwakura is Visiting Professor at Hitotsubashi University and Senior Partner at TMI Associates.

**Takuya Izumi** is Information Policy Planning and Coordination Officer in the Information Economy Division at the Commerce and Information Policy Bureau of the Japanese Ministry of Economy, Trade and Industry.

**Takashi Kikkawa** is Head of the Secretariat of the Minister's Department in the Japanese Ministry of Justice.

Hiroto Koda is Visiting Professor at the Graduate School of Business Administration of Hitotsubashi University, Professor at the Graduate School of Management of Kyoto University, Professor in the Business Management Course of SBI Graduate School and President of the Innovation Intelligence Research Institute.



List of Contributors

Х

**Souichirou Kozuka** is Professor of Law at the Faculty of Law of Gakushuin University.

**Mikiharu Noma** is Professor at the Graduate School of Business Administration of Hitotsubashi University.

**Akira Nozaki** is Director of the Fintech Office in the Strategy Development Division of the Japanese Financial Services Agency.

Ryutaro Ohara is Attorney at Law at Nakamura, Tsunoda & Matsumoto.

Masahiro Saito is Attorney at Law at Yotsuuya-no-Mori.

Mari Sako is Professor of Management Studies at the Saïd Business School of the University of Oxford.

Holli Sargeant is a PhD student at the Faculty of Law of the University of Cambridge.

**Kiyotaka Sasaki** is Visiting Professor at the Graduate School of Business Administration of Hitotsubashi University and former Director General at the Policy Bureau of the Japanese Financial Services Agency.

**Philip Scholz** is Head of the Division 'Legal Tech and Access to Justice' at the German Federal Ministry of Justice.

**Felix Steffek** is Professor of Law at the Faculty of Law of the University of Cambridge, Senior Member of Newnham College and Global Distinguished Professor of Law at the University of Notre Dame Law School.

**Mihoko Sumida** is Professor of Law at the Graduate School of Law of Hitotsubashi University.

**Keisuke Takeshita** is Professor of Law at the Graduate School of Law of Hitotsubashi University.

**Tatyana Teplova** is Head of Division for Policy Coherence on SDGs and Senior Counsellor for Gender, Justice and Inclusiveness at the OECD.

**Ignacio Tirado** is Secretary General of UNIDROIT, the International Institute for the Unification of Private Law, and Professor at the Faculty of Law of the Autonomous University of Madrid.

**Anna Veneziano** is Deputy Secretary General of UNIDROIT, the International Institute for the Unification of Private Law, and Professor of Comparative Law at the Faculty of Law of the University of Teramo.



List of Contributors

хi

**Hiroaki Yamada** is Assistant Professor at the School of Computing of the Tokyo Institute of Technology.

**Kazuhiko Yamamoto** is Professor of Law at the Graduate School of Law of Hitotsubashi University.

Kazuhiro Yoshioka is Attorney at Law at Kazuhiro Yoshioka Law Firm.



### Foreword

#### Kazuhiko Yamamoto

This book is a compilation of the lectures and discussions on legal innovation held at Hitotsubashi University in the year 2021. All contributions were updated in 2022 (with some additions in 2023) and further texts were added. The lectures were not limited to the Faculty of Law but were open to students of other faculties. They were conducted online due to the COVID-19 pandemic. The lectures were part of a joint research project titled 'Legal Systems and Artificial Intelligence' between Hitotsubashi University in Tokyo and the University of Cambridge. Given the nature of this collaboration, the project also involved many lecturers from other countries, particularly the United Kingdom. The results of this project are reflected in this lecture series.

In the words of Professor Mihoko Sumida, who is one of the outstanding organisers of this lecture series as well as the aforementioned joint research project and who demonstrates exceptional conceptual abilities, 'We want to tell the students, who will be the next generation, exactly how the world of "law" is changing, and we want to give them the opportunity to think about and explore the concept of "legal innovation" together, at a stage when the concept has not yet been properly established.' It is strongly intended to prevent students and readers from turning into 'great white sharks that have been washed up on the beach'. Even organisms that have been optimised for survival in a certain environment become helpless when the existing environment is completely changed. Accordingly, even though it is important to study law based on the current environment in depth, what is more important is to equip students with the ability to cope with any change in the environment. This awareness of the problem must have made Professor Sumida work hard to realise this lecture series.

With this in mind, the methodology of the lectures and the book was to expose students and readers directly to a variety of issues. Although many of these issues are based on new technologies (digitalisation, artificial intelligence, etc.), as Conversation 4 ('What Can We Learn from the Okawa Elementary School



xiv Foreword

Tsunami Litigation?') clearly shows, legal innovation is not necessarily limited to technology in the narrow sense. Rather, legal innovation also includes the creation of new legal interpretations. In a sense, the book rejects the systematisation of legal innovation and confronts readers with the practice of various 'live' innovations, expecting them to develop their imagination and creativity. The question-and-answer sessions with the students reflected in the chapters, in which we see their bewilderment but also their joy at being confronted with new 'knowledge', are testimony to the success of this lecture series.

The contents of this book are, as mentioned earlier, extremely diverse. They include dispute resolution (Conversation 2), corporate governance (Conversation 5), law enforcement and financial regulation (Conversation 6), and the transformation of law firms (Conversation 7). The chapters provide a kind of 'battlefield diary' of the debaters who are at the forefront of their respective fields and who are trying to achieve innovation in the face of major environmental changes, particularly digitalisation. The readers will feel a sense of worry that they are becoming 'great white sharks' but also a sense of excitement at being on the frontline of innovation. The specific findings from Japan and the United Kingdom are useful, but what is more important is the methodology used by each of the commentators to confront the issues. Naturally, the methodologies vary from one commentator to another (e.g. in Conversation 5, Professor Sumida expresses some discomfort with the idea of 'functional equivalence' presented by Professor Kozuka). This, however, is not surprising, and the lack of a common methodology is in itself a characteristic of innovation. The reader has no choice but to develop their own methodology, with this book by their side.

Needless to say, the lectures on which this book is based are aimed at students, but the book itself is an essential read not only for students but also for anyone involved in 'law' in the broadest sense. Lawyers, judges, corporate lawyers, government officials and alternative dispute resolution (ADR) and other legal advisors stand to benefit from this book. They should first read the chapters on topics relevant to them and then expand their interests to include other areas that the book discusses. Additionally, we would like to encourage people in the sciences, such as data scientists, to pick up a copy of this book. We hope that many of them will enter the new professions discussed in Conversation 3 or become legal engineers who will support new law firms, as elaborated in Conversation 7.

Lastly, the part of the book that made the greatest impression on me was where, in Conversation 5, Mr Takuya Izumi of the Ministry of Economy, Trade and Industry (who also has a science background), quotes Heisenberg as reported by Professor Iwao Nakatani of Hitotsubashi University as follows:

[O]nly those revolutions in science will prove fruitful and beneficial whose instigators try to change as little as possible and limit themselves to the solution of a particular and clearly defined problem. Any attempt to make a clean sweep of everything or to change things quite arbitrarily leads to utter confusion.



Foreword xv

As rightly captured by this quote, innovation is always based on the accumulated wisdom of our predecessors. Hence, traditional legal education in universities is extremely useful. At the same time, it is also important to pay attention to the finer points of practice, without which innovation is not possible. In this sense, the theme of Conversation 8, 'Will Digitalisation Help the Five Billion People without Meaningful Access to Justice?', is pertinent. This book will give all readers the opportunity to make such a contribution. This is why I recommend it to all those interested in the law and its innovation.



### Preface

This book is an experiment. It addresses the complex topic of legal innovation with a specific focus on technology, the legal profession and societal change. Particular consideration is given to artificial intelligence. The style of this book is, however, different from the typical form of academic publications. The chapters come in the form of conversations. Leading experts from ministries, international organisations, academia, legal practice, start-ups and regulators present their thoughts and comments and engage in discussions with a group of students. The topics dealt with remain challenging, but we hope that the style of presentation makes the book an accessible and entertaining read.

Why are we interested in legal innovation? Recent technological advances are transforming the way we use and experience law and the justice system. Artificial intelligence is used to predict the outcome of court proceedings and legal chatbots explain the law. However, it is not only technology impacting the law; law can also facilitate innovation and even effect it. We wanted to discuss this transformation with those making the law, advising clients and analysing current changes. Hence, we invited experts, mainly based in Japan and the United Kingdom, to offer their perspectives on legal innovation.

What topics does this book cover? The chapters investigate the motivation and conditions for legal innovation, the impact of technology on dispute resolution, corporate governance, financial services and regulatory oversight. The conversations also address the success factors and barriers for entrepreneurs and legal practitioners innovating the law. A final round table brings together policymakers for a discussion about the impact of technology on access to justice. Legal innovation is considered from a range of perspectives including not only legal considerations but also economic, environmental, social and justice viewpoints.

Why are we presenting this book in the form of conversations? All experts presented their views in a setting that involved comments and questions. The sessions took place in 2021, in the midst of the COVID-19 pandemic, via

xvii



xviii Preface

videoconferencing. Key presentations were followed by comments from other experts. Then, students of Hitotsubashi University, Tokyo, were invited to ask critical questions. When we looked at the transcripts of the eight sessions, we thought that there is a special value in the conversational form. It reveals how experts are searching for answers in a fast-moving field and the discussions bring out interesting contrasts and nuances.

How did the session transcripts become this book? We changed as little as necessary. Hence, the chapters are documents of conversations that took place at a certain time, in the first half of 2021. While the speakers reviewed the chapters, no rewriting took place. However, we have cleaned the language for a better reader experience. Selected figures and slides from the presentations are included, and a few footnotes referring to useful information have been added. The texts reflect the dynamic between speakers and students, and we hope that the conversational style reflects well the joint effort to explore legal innovation while giving room for different perspectives. As editors, we have added a concluding conversation to each chapter and a list of questions for further thought.

Finally, we would like to thank all speakers and students contributing to the conversations. They all shared their thoughts in an open atmosphere driven by curiosity. We had the best speakers we could hope for. We are also grateful to the outstanding translators of NHK Global Media Services, who made communication possible and provided us with the transcripts that became the starting point for this endeavour. This book is part of the UK Economic and Social Research Council (ESRC) and Japan Science and Technology Agency (JST) funded project on 'Legal Systems and Artificial Intelligence'. We also received generous financial support from the Graduate School of Law of Hitotsubashi University and Newnham College of the University of Cambridge. We would like to thank the team at Koubundou with whom we have published a prior version of this book in Japanese in 2022. Last, but not least, we are grateful to Matt Gallaway and Jadyn Fauconier-Herry of Cambridge University Press, who guided us expertly towards publication. Nikhil Purohit and Quentin Schäfer have provided excellent editorial assistance.