

Guest Editorial: The Intersection of Corporate Law and Technology

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Over the past three decades, the rapid emergence of new technological developments such as (but not limited to) blockchain, artificial intelligence (AI), internet of things (IoT) has heralded the advent of the fourth industrial revolution, this time on a global scale. While we have all borne witness to the ways in which technological developments become seamlessly integrated into our daily lives, they have also had a monumental impact on the corporate world, often in less immediately visible ways. As well as benefitting from the efficiencies and opportunities presented, many businesses find themselves grappling with the challenges and implications arising from technological advances on their operations, and this was felt more acutely during the Covid 19 pandemic. New technological enhancements, including the development of new financial products and services and new business models raise questions about the adequacy of existing legal frameworks at a national and an international level.

These questions must be addressed if the transformative potential for digital economies and ways of conducting business is to be realised. Relevant questions include how can digital economies be supported by law in a sustainable manner? How can corporate social responsibility best be fostered in high-tech firms? Who should be liable in circumstances where traditional ways of carrying out business have been deliberately avoided?

The papers collected in this special edition are based on the contributors' papers presented at the conference on the Intersection of Corporate Law and Technology. In other words, the proceedings of the Inaugural Conference form the basis of this issue of the Nottingham Insolvency and Business Law e-Journal (NIBLeJ).

The Annual Conference on The Intersection of Corporate Law and Technology was organised on behalf of the Centre for Business and Insolvency Law, Nottingham Law School and Nottingham Trent University. It took place online on 17-18 June 2021 and was supported by Nottingham Law School. The purpose of this conference was to provide a global platform for experts in the field of corporate law and technology to present and discuss their research, foster a networking, international collaboration and knowledge-exchange mechanism amongst academics, students, practitioners, and businesses globally. The conference attracted a wide range of delegates including academics specialising in corporate law and technology and legal practitioners representing diverse legal systems. The quality and originality of the papers presented were exceptional and the dialogue between the participants was inclusive and insightful.

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As an editor of this special issue, I strongly believe that the papers submitted for this issue are likely to become a pivotal reference in academic literature owing to their coverage of corporate law and technology and contemporary topics and arising therein. Papers of this issue provide insight into not only the legal, theoretical and policy aspects of the crossroad of new technologies with corporate law but also the effective role of new technologies in shaping more sustainable industries in the future.

As an editor of this issue, I would like to thank all conference speakers, conference participants and the contributors of this volume for their hard work in submitting their distinguished research papers. I am also grateful to the co-directors of Centre for Business Insolvency Law, Professor Rebecca Parry, and Professor Jingchen Zhao for giving me the opportunity to undertake the guest editorial role in this special edition. Finally, I also would like to thank my co-conference organiser Dr Alex Kastrinou for taking the responsibility for sourcing, engaging and briefing academics and practitioners at the conference on Intersection of Corporate Law and Technology.

An Introduction to the Contribution to this Volume

The present volume consists of three parts. **Part I** illustrates how current laws can support the digital economy. **Part II** focuses on the corporate social responsibility of firms in the digital economy. **Part III** covers the use of technology and sustainability.

I. Assessing how current laws can support the digital economy

1. Rebecca Parry - Building a legal framework to facilitate the transformative potential of digital economies

Professor Parry's paper concerns the development of a legal framework to support the sustainability of the digital economy and how this can aid developing countries, particularly focusing on the role of companies. Whilst attention is often paid to technical infrastructure, as well as data protection and privacy laws, a suitable legal environment requires suitable company laws and insolvency laws. This paper explores this underexamined aspect.

Rebecca Parry has been a Professor of Law at Nottingham Trent University in the UK since 2007. Her main research interests lie in the area of insolvency law and, in particular, international, and comparative insolvency law with a focus on the UK, the USA, the EU, India and China. Her recent work has concerned the overlooked potential for insolvencies in the digital economy sector and how the public impact of such insolvencies may effectively be controlled.

2. Akrum el Menshawy - Mapping existing risks and obstacles to legal redress within unpermissioned blockchain technology

Akrum el Menshawy's paper examines liability issues in relation to unpermissioned blockchain technology. According to the author unpermissioned blockchain is a distributed ledger to which any participant can contribute data and no participant can restrict transactions, with the validity of transactions depending on consensus, rather than any traditional intermediary. The paper notes that these technologies do not conform to existing legal hierarchical structures so that traditional fault-based

approaches to liability, in contract or tort, may not be easily compatible, and it may be difficult to determine fault. The author's paper briefly identifies the potential for harm; discuss who may be liable in given situations; and examine obstacles to redress for harm under English Law.

Akrum El Menshawy is a doctoral candidate at Nottingham Trent University researching the potential liabilities arising from faults within unpermissioned blockchain technology. This paper builds on this research.

II. Corporate social responsibility of firms in the digital economy

3. Gilberto Martins de Almeida, Pedro Borges de Carvalho - Fiduciary Responsibility and Legitimacy of Minority Shareholders' and Investors' Claims in Tech Giants

In their co-author paper, Almeida, and Carvalho question whether the contemporary tech corporation has attracted a new kind of affection *societatis*, one that involves not only its board and shareholders, but also its users and the general population and governments of the jurisdictions they affect? In their work, the authors propose a conceptualization of the *affectio societatis* doctrine that is more in tune with ESG (environmental, sustainability and governance) goals, organic building of corporate purpose, and transparency of algorithms with far-reaching social effect.

Gilberto Martins de Almeida is a Teacher of Computer Law and Internet Law at the Pontifical Catholic University of Rio de Janeiro (PUC-Rio); a visiting lecturer at other universities in Brazil and abroad; consultant to the United Nations; former consultant to the Council of Europe and to Mercosur; founder of the Instituto de Direito e Tecnologia –IDTEC; founding partner at Martins de Almeida –Advogados.

Pedro Borges de Carvalho is an Associate Researcher on Law & Technology at Instituto de Direito e Tecnologia –IDTEC.

4. Xiacong Liu - Applying stakeholder theory to analyse the feasibility and applicability of CSR in high-tech companies.

Liu's paper introduces the corporate social responsibility (CSR) related stakeholder analysis, focusing on high-tech companies' CSR practices and performances. The author's work also discusses eight different stakeholder aspects to analyse the interactions between high-tech companies and stakeholders when practising CSR activities. It contends that the stakeholder theory provides a new framework to think about organisational responsibility.

Xiacong Liu is a doctoral candidate at Nottingham Law Trent University. His PhD thesis mainly focuses on the board of ChiNext Market (the listings of which are of companies in high-tech and start-up industries) in Shenzhen Stock Exchange. His supervisors are Prof Jingchen Zhao and Prof Rebecca Parry.

III. Use of technology to enhance ways of doing business

5. Alexander Gurkov - Alignment of a traditional cooperative identity to the design of autonomous decentralised organisations

Gurkov's paper focuses on the legal aspects of implementing this tool in cooperative decision-making. More specifically, it analyses how this solution fits within the principles of a traditional cooperative identity established by the International Co-operative Alliance (ICA). His paper analyses the alignment of cooperative principles to the use of smart contracts in cooperative governance.

Dr. Alexander Gurkov is a Vice-Director of the International Business Law master program and post-doctoral researcher at the University of Helsinki and a qualified attorney in Saint-Petersburg, Russia. Alexander conducts research and teaches on alternative dispute resolution, with emphasis on international commercial arbitration. In the recent years, his research interests shifted to include cooperative regulations, data protection and securitisation of the token economy. He has written extensively on international arbitration and enforcement of arbitral awards in Russia. Prior to working in academia, Alexander practiced law at Egorov Puginsky Afanasiev & Partners law offices.

6. Att. Bedrettin Gürcan - Potential Implementation of the Blockchain Technology to by Non-Governmental Organizations and the Legal Framework of the Tokenization for Donations

Gürcan's paper argues legal definition of cryptocurrency defines cryptocurrencies as money, security, or goods. The author believes that underlying concept of token/coin plays a significant role in this definition. He goes further and argue that in the case of given representation right by tokenization, this token may be defined as security. Hence, besides KYC (Know your client) and AML (Anti-Money Laundering) compliance, a token provider should obey the security regulations too, which include mainly quite strict conditions. By security token, it is possible to give pre-emption rights or cast votes during the general assembly of the NGO.

Bedrettin Gürcan is a blockchain legal expert and founding partner of Gurcan Partners, which is an international law and consultancy firm located in Warsaw, Prague, Istanbul, Düsseldorf, Budapest, NYC, Tallinn, Kuwait, and Belgrade. He is a doctoral candidate at University of Szeged, Hungary, researching the legal framework of blockchain technology.