

# Law in the Digital Era - Perspectives from IP Law, Contract Law & IT Law

*Dele Raheem\**

Dele Raheem, participated in a conference on “**Law in the Digital Era - Perspectives from IP Law, Contract Law and IT Law**” at the University of Lapland from 10th – 12th December, 2017.

## Introduction

Digitalization and digital technologies are increasingly driving towards revolutionary changes in the innovation system, affecting industries, universities and public institutions. Big data, 3D printing, software and AI technologies are pushing corporations towards adapting or newly creating business models to cope with the digital disruption. The problem is certainly not only technological or economic but also legal. Indeed, the regulatory framework needs to be shaped in such way that it provides with a fertile and healthy soil for these technological innovations to grow. The conference brought together experts from the academia, industry, as well as policy makers in a joint effort to raise awareness and propose solutions to

some of the key legal disruptions that digitalization is causing in the fields of intellectual property law, contract law and ICT law. The conference was organized by Rosa Maria Ballardini, Lecturer in IP law, University of Lapland, Soili Nysten-Haarala, Professor of Commercial Law, University of Lapland and Rauno Korhonen, Professor of Legal Informatics, University of Lapland. In setting the tone for the conference proceedings, the welcome speech was delivered by the Rector of the University of Lapland, Mauri Ylä-Kotola. He remarked that evidence is part of data, and stressed that there is a difference between information and data. Furthermore, he highlighted that iconological interpretation can be considered as a model in law.

## Conference proceedings

There were nine topics delivered during the conference at the Esko and Asko hall, University of Lapland. The first topic was “Data Sharing, Data Caring & Data Hugging in the Health & Life Sciences: What’s law got to do with it?” delivered by **Timo Minssen**, Professor of Biotechnology Law, University of Copenhagen, Denmark. He stressed that the European Union (EU) according to Carlos Moedas, (EU Commissioner for Research, Science & Innovation) has a goal to create an European Open Science

---

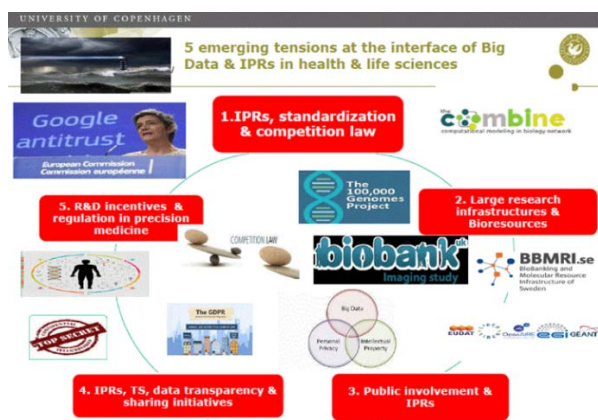
\* Arctic Centre, University of Lapland, Rovaniemi. Email: [braheem@ulapland.fi](mailto:braheem@ulapland.fi).

Cloud to make science more efficient and productive and let millions of researchers share & analyze research data in a trusted environment across technologies, disciplines and borders. This is part of delivering on the digital single market, building the European data economy. In May 2017, the Economist in an article on regulating the internet giants reported that “*The world’s most valuable resource is no longer oil, but data: The data economy demands a new approach to antitrust rule*”.

**Timo Minssen** further emphasized that big data in the health and life sciences are open data and they are open for innovation. Important questions are on whether data that is free, survives and catalyses on all levels, the quality of the data (smart data/polluted data). FAIR principles (findable, accessible, interoperable, re-usable). Beneath the shadows of openness hyperbole: some considerations, confusion IPRs & “sui generis” rights in AI and Big data. The role of artificial intelligence (AI) and blockchain technology in the future.

He summarized the results of paradigm shift in overlapping challenges to include the interplay of the following nine criteria: a) IPRs with new policies and business strategies will require further studies; b) the urgent need to modernize traditional IP system due to law, business and technology changes; c) the clashes and tensions at the interface of BIG Data/AI, IPRs and competition law on health & life science frontiers; d) recalibration of substantial and procedural IP rules including their governance; e) smart and fair data, the need for cross (Atlantic)-fertilization, studies and alignment of strategies; f) the sustainability of Big Data/Smart Data; g) privacy, competition, regulation of services, sharing tools and data quality; h) public support for legislation crucial (erosion of gate-keeper barriers; i) education, communication, sufficient transparency and diverse (open) innovation standards as the main keys.

The second speaker was **Aleksandr Savelyev**, Associate Professor, Higher School of Economics, Moscow. His title of his presentation was “What is Smart Contract?” He defined smart contract as either a piece of code, which automates performance of some obligations by the parties or a self-sufficient binding agreement existing in the form of computer code. He also stressed that it may also be both. Examples are crowdfunding agreement, agreement of mutual insurance. He explained that the features of smart contracts are: i) Digital,



©Timo Minssen, 2017

ii) Contractual terms are embedded in the software code, iii) it is conditional nature i.e (“if X, then Y”), iv) it is self-sufficient, self-enforced, blockchain enabled and v) irrevocable in multiple instances.

The third speaker was **Taina Pihlajarinne**, Professor of Copyright Law, University of Helsinki. The title of her presentation was “Linking and copyright: a problem solvable by using concepts of technical-functional nature?” She questioned how the Court of Justice of the European Union (CJEU)’s recent practice on linking as an act of communication to the public has succeeded in taking account the diversity of legitimate interests? What kind of lesson can be derived from this analysis when considering the nature of basic concepts of copyright (such as communication to the public) in general? The basic copyright concepts might have a tendency to underline the detailed assessment of nature of actions as such. These concepts do not encourage to weighing and balancing of interests. In ideal situations, exclusive rights could be re-formulated. For instance, a flexible formulation stressing the legitimate interests behind the protection and consequences of utilization of the protected object for these interests? She further stresses that there are some controversial area in the basic concepts that are based on international conventions. She concluded that these may not be realistic at this moment.

The fourth speaker was **Christopher Kuner**, Professor of law and co-chair of the Brussels Privacy Hub at the Vrije Universiteit Brussel (VUB) in Brussels. His presentation was on “Reform of EU data protection law: opportunities and challenges for technological innovation”. He joined the conference through skype. According to him, the law of the European Union has influenced the development of the Internet outside the EU’s borders. The details of this influence are too complex, for example from an internet-related area, there are questions about data protection and privacy law. He mentioned some current developing issues: for example, companies are aligning their privacy practices with the new EU General Data Protection Regulation (GDPR) that will come into force on 25 May 2018. As one news story puts it, global technology giants ‘are racing to store their data on the Continent as new laws and privacy concerns drive investment decisions’. Independent data protection authorities (DPAs) of the EU Member States (such as ones in Germany and Spain) have investigated whether parties in third countries comply with EU law with regard to data transferred from the EU. Judgments of the Court of Justice of the EU have led to international controversy, such as the Court’s 2014 Google Spain judgment in which it found that EU data protection law granted individuals a right to suppress search engine results in certain

situations, even though the servers on which the search engine operated were based in California. The EU asserts its regulatory power with regard to the Internet consciously and deliberately. This means that it seeks to have its own legal standards apply outside its borders, and asserts its regulatory authority towards activities in third countries that affect its interests and those of EU individuals. The global reach of EU law influences activity in almost every area relevant to the Internet, including not only data protection but also e-commerce, electronic contracting, Internet governance, and many others.

The fifth speaker was **Päivi Korpisaari**, Professor in Communication Law, University of Helsinki. The title of her presentation was "Freedom of Expression and Criminal Liability in Social Media". She stressed that criminal and civil legal liability rules are the same regardless of the technology that has been used for publishing the message. She mentioned about the regulation in the Finnish constitution to include the right to receive information and the freedom of expression. The administrator of websites are not responsible of illegal content, exceptions e.g. ethnic agitation, distribution of depictions of violence, distributing sexually offensive pictures especially from children.

The sixth speaker was **Tuomas Pöysti**, Docent in Administrative law, Chancellor of Justice. His presentation was on "Trust in the Era of Digital Administration and Platforms". He described the digital age as a silent revolution which will also bring about the change of an era and the law. He emphasized the value of trust in the rule of law. The main points from his talk were focused on the following: from Weberian bureaucracy to platforms, networks and ecosystems; an age of distributed and autonomic & intelligent systems; an age of partnership with intelligent machines and systems; a contextual realism and rule of law in a system of constitutional governance - the relevance and efficiency of the fundamental principles of law?; the efficiency of rights that are embedded in the working environment and in the legal/judicial and administrative practice; f) law which can be followed in practice; the art of the realization of idea of justice in specific practical contexts that was inspired by Alf Ross; a contextual realism is needed in the realization of the idea of justice; efficiency of rights and legal certainty contributes to general trust; how supreme guardians of law contributes to coherence and efficiency of rights; rights by design and accountability are foundations of trust; new types of national legislation on information processing are needed; and how the future will be geared towards information law.

The seventh speaker was **Olli Pitkänen**, from IPR University Center, Helsinki. His presentation was on “Artificial Intelligence (AI) and Intellectual property (IP): Challenges to the fundamentals of the Copyright System”. He questioned if the originality of AI and IP can be evaluated and how to evaluate their originality? Currently, most definitions of originality require a human author. Artificial Intelligence cannot be the author. In respect of neighboring rights, some good questions that need to be considered in relation to automatically created works are: a) should they be copyrightable, in the first place? If yes, who should get the copyright? Can AI be the developer, owner, user, or data provider? b) Both the results produced by an AI system and the most valuable parts of the system itself can arguably remain outside the copyrightable subject matter; c) risky to have yet another specific rule in the copyright regime; the concept of back to basics i.e why do we have a copyright system?; d) who should benefit from original works? In this regard, highlight and possibly revise the principles that are involved, with the goal of reducing detailed rules. He advised that lawmakers need to keep calm and not overreact to these developments.

The eighth speaker of the conference was **Seppo Kuula**, from Siili Solutions, Oulunsalo. His presentation was on “New Agile Business Models in IT

business”. He emphasized that digitalization has returned individual customer needs to the center of value creation. Based on service dominant logic (SDL), in the service economy neither product nor service creates value on its own. Value is co-created with the customer. In a service-driven world consumers and their behavior lead the way. Therefore, service systems are seen as the value creational configurations of people, technology, value propositions, and shared information. The digital age is accelerating innovations and shortening service life cycles. He further advised that a firm should always test alternative business models. Concept design and development are done in parallel; pilot customers use the service from the early drafts up to the launched versions. The process of trial and error even continues in production. Using co-creation to create successful services is the new legacy. Design thinking is focused on gaining an understanding of human experience and business targets, based on data. Value co-creation requires a change in the dominant business logic from ‘making, selling and serving’ to ‘listening, customizing and co-creating’. Lean service production focuses on providing value, eliminating waste, facilitating communication, and easing of technology and channel agnostic integration.

The ninth and last speaker of the conference was **Ari Koivumaa** from N-Lex, Rovaniemi. His presentation was on

“Agility from a public buyer's standpoint”. He centered his talk on “Police IT systems and new model for application development”. Traditionally, each IT system has been built around one principal or core technology. A shared centralized component and integration were added later, including user identification, document management, reporting etc. A shift from monolithic systems to component-based, service oriented architecture. For suppliers, higher requirements in regards to the ability to develop and test the functioning of centralized services which includes data protection, document management, information security, and contingency solutions. Deep and dedicated expertise in individual technology components are required. In order to move towards more agile methods will involve a shift from fixed-price projects built on waterfall model towards division of projects into smaller pieces by building one piece at a time while retaining control over the whole; framework agreements with selected suppliers on expert services in various core technologies – simplifying acquisition of expert resources for a specific job for a fixed period of time. In the police IT system, selected resources from different companies working iteratively under the guidance of the police's own project manager and applying gate model improved their efficiency.

## **Relevance to the food system**

Most business enterprises including food business operators will need to be aware of the important aspects of digital law. For example, an important key change is on how digitalization will affect food systems, given the prominent roles that AI, VR will play in the different sectors of food processing, packaging, labelling and distribution. The application of 3D printing in novel foods will also be interesting for both producers and consumers in the nearest future. Experts are warning that there could be adverse implications for some companies' intellectual property portfolios. The new regulations on novel foods, which defined as anything without a significant history of consumption in the EU before 15 May 1997, will come into force on 1 January 2018. Another key change is that authorizations will be generic, which implies that once a novel food is approved it will in most cases be authorized for anyone to market. This largely, will depend on what companies can do to protect their intellectual property. The new regulations certainly represent progress for traditional foods from third countries or for relatively simple products – exotic berries for example. However, manufacturers of innovative synthetic or fermented ingredients who got authorization under the old regulation after investing heavily in research will be disappointed that