

Proactive and Responsible Legal Approaches to Digitalisation – Legal Challenges and Theories

PhD course 22-23 October 2018

Many countries are about to digitise their legal systems. The aim of such a strategy is to both digitise and simplify civil and administrative proceedings in order to create a more accessible legal system, a system that can work faster and that will hopefully provide for public services that are more effective and better customer solutions. In December 2016, the Danish Agency for Digitalisation published guidelines on how to ensure that legislation is based on the eGovernance Strategy 2016-2020 that includes guidelines made by the Danish Ministry for Justice in Annex 2 on how to ensure respect for the principles of public law in the design of law. ‘A Solid ICT Foundation. Strategy for ICT Management in Central Government’ was presented by the Government in 2017 with the objectives e.g. to ensure an efficient and responsible management of ICT systems by employers with the relevant competences and skills. The same year the Government published the ‘Open Government Partnership. National Action Plan 2017-2019’ as part of the Danish involvement in the international initiative on such partnerships. The court system is also using ICT to make it possible to submit civil and administrative case procedural documents, such as divorce petitions, payment dispute documents, permit dispute documents etc., in a digital form. Many business managers – including the managers of law firms – are currently looking at how to adapt their organizations and workforce to the benefits of the growth in technological capacities. Artificial intelligence, robots and digitisation have an immense influence on business. Companies can be formed online, and they may be dissolved by declaration online. Shareholders can attend the annual general meeting by electronic means. The increased application of digital means in companies’ life cycle “from cradle to grave” may potentially constitute a practical as well as a legal challenge, as existing company and capital market law provisions are not always geared to this digital revolution. An example is the shareholders’ ability to exercise their shareholder rights on a cross-border basis, and neither national nor supra-national legislation should act as an obstacle to shareholders’ basic rights.

Digital capabilities are therefore most relevant to PhD-students at law departments. As the ICT-designed decision-making systems are based on generalizations in respect to the interpretation of the sources, and the factual digitalized situations could change the legal thinking in the future. It is important to deal with both the benefits and the new dimensions of digital risk – such as cybercrime and data loss. Established legal concepts based on “the rule of law” do not always align nicely with the development, and it is one of the tasks for legal scholars to discover such conflicts.

Regulatory challenges

Digitalisation changes the conditions for the future of legal scholars. It is highly relevant for the legal faculties to take part in the discussion on how legislation is now changing as a consequence of the Danish Government’s ambition of making the law ready for digitalisation. CEN/METALex is one of the genetic open standards for legislative documents and is specifically designed to facilitate the maintenance of decision support software. It offers provisions for the purposes of presentation, description of the relations between legislative documents, search and filtering on meaningful levels of details, and version management as well as file exchange and search engines. Many industries are subject to cross-border issues spanning from tax evasion, money laundering, data protection, information disclosure, and marketing and sales rules – many of which are complicated by digitalisation. How to regulate the new digital players by legislation if there are hardly any borders of relevance for their market?

Will legislation in the future become more flexible when the legislators realize that the technological developments are taking place at a much more rapid pace than at which they normally legislate?

Among the future challenges are the use of big data and digitalised maps with binding effects etc. in a legislation that replaces the former concrete assessment with very technical terms and conditions that most lawyers cannot handle, and the general acceptance of standardization of terms in the licences. Are there law and order problems related to legislations characterized by use of general binding norms and maps without discretionary competences for the authorities?

The digitalisation of the public administration:

The Danish legislation imposes the mandatory use of specific digital self-systems by citizens and companies when they communicate with the public administration, and the authorities are using 'Decision Support Systems' that normally guide citizens through standard guidance texts. These systems may contribute to case officers' work, such as workflow, reminders, warnings, or checklists – and some of these systems are fully automated. Many decision-making processes are currently characterized by the use of standard formats, maps, an increased use of information exchanged between authorities, and standardized terms. The inadequate programming of the combined decision support and decision-making system led the Danish Parliamentary Ombudsman to publish some general critics and recommendations and to design general principles on the use of systematic procedure mapping and mandatory assessment of the potential impact of such a system. Based on such assessments, the results must be considered and used in the design of the ICT-systems. The PhD course will focus on these legal aspects. Protection of the children's personal data under the General Data Protection Regulation is another issue that will be covered by this course.

Criminal law:

As artificial intelligence systems become more interconnected in our daily lives and are used in a growing number of critical infrastructure roles, they will take up an increasing proportion of the cyber-attack surface area. The Danish Government's cyber and information security strategy, that covers the period 2018-2020, is designed to take care of the challenges Denmark faces as one of the most digitised countries in the world. The implementation of ICT in everyday life implies a change in the way crimes are combated. The growth of the information society is accompanied by new and serious threats. Attacks against information infrastructure and Internet services have already taken place. Online fraud and hacking attacks are just some examples of computer-related crimes that are committed on a large scale every day. The legal, technical and institutional challenges posed by the issue of cybersecurity are global and far-reaching.

Contract and business law:

Digitalization is one of the catchwords used to define the changes to business models, productive processes and work organization after the application of IT. It forces enterprises to reassess their business models to engage and retain customers who are increasingly shaped by the digital world. The digitalisation of construction enables businesses to leapfrog to the latest proven methods of 3D printing and the internet of things (IoT) at a breaking speed. The law firms use digital marketing, e-commerce-approaches, computer protocols that facilitate the design of contracts and other digital facilities. Focusing on the implications of digitalization for contractual relations, it may be provisionally defined as encompassing operations and processes brokered, organized or performed within digital platforms or by means of digital devices. In this perspective, digitalization cuts across different forms of contract relations (standard and non-standard), and it has consequences on the issues covered by contracts, including issues related to the organization of services (in-house performance and ICT-based relations) and productive processes (material and immaterial). On the one hand, digital tools can be conceived as a means to establish more horizontal and cooperative relationships within organizations and to provide "smart" workers and relations between companies as well as between the public and the private sector with greater flexibility in the definition of their roles, while providing better opportunities to match their capacity with the demand for quality, compatibility etc. from any physical or

geographical boundary. On the other hand, digitalization represents a challenge for the common theoretical categories of contractual relations as well as the material conditions of the parties signing the contracts. All of the developments mentioned above have major repercussions on the normative and regulatory patterns of contractual relations.

Digital workplaces with consequences for the employers and the companies:

There are several challenges related to the employment sector and digitalisation. Firstly, certain forms of work in the “gig-economy”, such as crowd working and work-on-demand, pose the problem of an uncertain employment status and thus uncertain employment rights and protection. This is because the theoretical apparatus of labour law comes under strain with regard to the classification of such new forms of employment that apparently lack clear linkage with the traditional parameters of salaried employment. In this respect, several proposals have been put forward, ranging from the identification of a new category of employment to the interpretative adaptation of existing categories. Secondly, as the employment relation and the regulatory mechanisms thereof are central to the Danish welfare society, the digitised work development poses questions to the attained societal balances between the freedom to conduct business on the one hand and the economic and social security for employees on the other hand. Thirdly, in the broader perspective, the new digital business strategies include workers as “digital galley slaves”, casting light on the creeping processes of commodification of work and casualization of employment. These models and rhetorics mirror the approach to employer-employee relations from the mid- to late-1800s, and thus in itself pose questions of a socio-legal character. Thus, digitisation in the employment sector requires investigation of existing regulatory and policy tools, including job classification, personal data protection, the reach of employee surveillance, working time arrangements and training.

The companies must also be proactive to the new digital workplace by creating a basis for their re-interpreting of their corporate culture under the new conditions. Companies that will succeed under the new conditions are those that ensure their productivity and position on the market by their adaptation to the new digital methods – including digital experiences with cognitive technologies that create new jobs and redesign the job-conditions for their employers.

The 22nd of October 2018

- 9:30-9:45: *‘Welcome and introduction to the overall issues of the first day’*
Lecturer: Ellen Margrethe Basse, Center of Legal Informatics, the Department of Law, Aarhus BSS, AU
- 9:45-10:30: *“Is it possible to adjust the legislation to the digital technologies without rule of law-problems? – what are the challenges?”*
Lecturer: Dag Wiese Schartum, Norwegian Research Center for Computers and Law, Department of Private Law, University of Oslo
- 10:45-11:30: *“Legal Methodology to be used in the Development of Digitalized Solutions”*,
Lecturer: Henrik Palmer Olsen, The Faculty of Law, Copenhagen University
- 11:30-12:15: *“Legal theories and methodologies challenged by the digitalisation of law”*,
Lecturer: Sten Schaumburg Müller, Department of Law, University of Southern Denmark
- 12:15-12:45 Plenum discussion related to the issues covered by the three first lecturers
- 12:45-13:30: Lunch
- 13:30-14:15: *“The Principle of Administrative Law by Design and the Requirement of Good Administrative Impact Assessment”*
Lecturer: Hanne Marie Motzfeldt, Center of Legal Informatics, the Department of Law, Aarhus BSS, AU
- 14:15-15:00 *“Data protection of the Children under the Regulation and the Danish Act on the Protection of Natural Persons”*
Lecturer: Caroline Adolphsen, the Department of Law, Aarhus BSS, AU
- 15:00-15:45 Coffee and plenum discussion related to the digitalisation and data protection under public law

- 15:45-16:30 *“Access to Justice under the Future Digitalised Public Administration”*,
Lecturer: Bettina Lemann Kristiansen, the Department of Law, Aarhus BSS, AU
- 16:30-17:15: *“Criminal Investigations and Confiscation in the Age of Digitalisation”*,
Lecturer: Nicolaj Sivan Holst, the Department of Law Department, Aarhus BSS,
AU
- 17:15-17:45: Plenum discussion related to the digitalisation and data protection by appeal
bodies and courts
- 18:00- Dinner

The 23rd of October 2018

- 08:30-9:15: *“Legal Risk Management and Evaluating Elements of a Method for Proactive
Legal Analyses, With a Particular Focus on Contracts”*

Lecturer: Tobias Mahler, Norwegian Research Center for Computers and Law,
Department of Private Law, University of Oslo
- 9:15-10:00: *“Contract Management in the Age of Digitalisation”*,

Lecturer: Réne Franz Henschel, Center of Legal Informatics, the Department of
Law, Aarhus BSS, AU
- 10:00-10:45: Coffee and plenum discussion on the impact of digitalisation on
- 10:45-11:15: *“The Impact of ICT on the Construction Law – with a focus on the use of 3D
building information model (BIM)”*,

Lecturer: Torsten Iversen, Center of Legal Informatics, the Department of Law,
Aarhus BSS, AU
- 11:15-11:30 Plenum discussion on the legal issues related to digital changes of the
construction industry

- 11:30-12:15: “*The Impact on of Digitalisation on the Traditional Business Models*”,
Lecturer: Mette Neville, the Department of Law, Aarhus BSS, AU
- 12:15-12:30: Plenum discussion on the legal issues related to
- 12:30-13:15: Lunch
- 13:15-14:00: “*Platform economies and its consequences on the employments sector – including the consequences on the Danish Model*”,

Lecturer: Natalie Videbæk Munkholm, Center of Legal Informatics, the Department of Law, Aarhus BSS, AU
- 14:00-14:15 Plenum discussion on
- 14:15-15:00: “*Reflection on the PhD-students’ papers*”,

Lecturer: Ellen Margrethe Basse, Center of Legal Informatics, the Department of Law, Aarhus BSS, AU
- 15:00-15:30 Coffee
- 15:30 -17:00: The PhD-students’ workshop and plenum discussion on the impact of digitalisation on their research projects

Assignments for PhD students

Participation in the course requires that each PhD student prepare a paper – deadline 8 October 2018. The paper should be no more than 6 pages (a standard page includes 2,400 characters, including spaces). Your paper should include a presentation of your research project and the use of digitalisation in the legal service infrastructure. Please read (as your inspiration on how to make a legal research project related to digitalisation)

- 1) S. Gostojic, Z. Konjovic and B. Milosavljevic “Modelling MetaLex/CEN Compliant Legal Acts, is available at the Internet, see https://www.researchgate.net/publication/230984537_Modeling_MetaLexCEN_compliant_legal_act_s
- 2) pages 21-107 in the thesis of R.M. Peters “*The Law, the Map and the citizen. Designing a Legal Service Infrastructure Where Rules Make Sense Again*”, UvA-DARE (Digital Academic Repository), University of Amsterdam, 2016. The thesis is available at the Internet, see https://pure.uva.nl/ws/files/2722727/178347_Peters_Thesis_complete.pdf

In your answer of the relevance, please include the following questions:

- *is the ICT development affecting the legal situation of the actors that are covered by your research project?*
- *has the legislation that is the object of your research project been made ready for digitalisation? if the answer is yes – how are the legal design changed?*
- *does the digitalisation help providing better access and better informed citizens? and/or*
- *does the digitalisation constitute any challenges to the traditional legal handling of the legal interpretation of the law and the use of legal principles in the area covered by your research project?*

Other relevant materials – articles etc.:

Business Law

The Informal Company Law Expert Group (ICLEG): Report on digitalisation in company law, March 2016

http://ec.europa.eu/justice/civil/files/company-law/icleg-report-on-digitalisation-24-march-2016_en.pdf

BDI The Voice of German Industry: “Industrie 4.0 Legal challenges of digitalization. An input for the public debate”

https://www.noerr.com/~/_/media/Noerr/PressAndPublications/Brochures/studien/Legal-challenges-of%20digitalisation-Industrie-40.pdf

Concerning eGovernment and Data Protection of children

Milda Macenaite & Eleni Kosta (2017) “Consent for processing children’s personal data in the EU: following in US footsteps?”, *Information & Communications Technology Law*, 26:2, 146-197 available at the Internet, <https://www.tandfonline.com/doi/full/10.1080/13600834.2017.1321096>

The European Commission's communication on EU eGovernment Action Plan 2016-2020. Accelerating the digital transformation of government; COM(2016) 179 final of 19 April 2016

<https://ec.europa.eu/digital-single-market/en/news/communication-eu-egovernment-action-plan-2016-2020-accelerating-digital-transformation>

Judgment of the European Court of Justice in joined cases C-293/12 and C-594/12 *Digital Rights Ireland Ltd* – the preliminary ruling concerning the validity of Directive 2006/24/EC on the retention of data generated or processed in connection with the provision of public available electronic communication services or of public communications networks

Thomas Zwahr and Matthias Finger “Critical steps towards e-Governance: a case study analysis”
https://www.researchgate.net/publication/37423655_Critical_steps_towards_e-Governance_a_case_study_analysis

Thomas Zwahr, Matthias Finger and Philipp Mueller, “More than Digitalisation – The Transformative Potential of E-Governance: An Exploratory Case Study”
<https://www.computer.org/csdl/proceedings/hicss/2005/2268/05/22680127-abs.html>

Hanne Marie Motzfeldt (2017), “The Danish Principle of Administrative Law by Design”, in *European Public Law*, vol. 23, issue no. 4, pp. 739-754,

Cybercrime and the Charter of Fundamental Rights

The European Commission's Communication of 10 January 2017 on Exchanging Protecting Personal Data in a Globalised World; COM(2017) 7 final - http://europa.eu/rapid/press-release_IP-17-16_en.htm

The Convention on Cybercrime (Budapest Convention)

http://www.europarl.europa.eu/meetdocs/2014_2019/documents/libe/dv/7_conv_budapest_/7_conv_budapest_en.pdf