

What Every Law Student Should Know About Digitalization. Building a Digital Mindset for Future Lawyers

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Abstract

In recent years, Danish employers have increasingly demanded lawyers who have insight into and understanding of the digital agenda. Often, however, the employers have not been particularly clear about what they are looking for, and therefore it has been difficult for the Danish universities to equip students with the skills and competences that an increasingly digitised labour market is looking for. Based on discussions and interviews as well as observations of other professions' desires, the author designed a course for the law programme, aiming at placing the first pieces of a legal digital mindset for the lawyers of the future. In the paper, the aim and pedagogy of the course and the gains that the approach so far seems to have given, is elaborated.

Keywords

Digitised Labour Market, Legal Digital Mindset, Education, Pedagogy

1. Introduction

In recent years, Danish legal employers have increasingly asked for lawyers who have insight into and understanding of the digital agenda. This is not special for the legal branch, but a common request from most branches hiring from, among others, higher education. But even though Denmark is usually categorized as one of the most digitized countries in the world, many employers are often not particularly clear about what they are looking for, ie, what they define as insight into and understanding of the digital agenda. This is also the case for legal employers which makes it difficult for the Danish universities

educating lawyers to equip the students with some of the skills and competences that the legal labour market is looking for.

Based on discussions and interviews with legal employers as well as observations of other professions' definitions of digital skills and competences, a colleague and I designed a course for the law programme at Aarhus University to lay down the first bricks of the students' legal digital mindset. The course ran for the first time in the autumn of 2022 and in the following, I will sketch the idea behind the course, the course lay-out, the teaching activities, and the students' evaluation of their new insights reached through the course. Doing this, the development of the course will probably seem much more straight-forward and rational than it was during the year it took us to find the right angle and set-up. Of course, as everybody developing courses within higher education knows, the process is never that straight-forward, especially not when you run a course for the first time. But following the course, I have become more and more convinced that we have found a concept which can function as a legal education's first step in building a digital mindset of the future lawyers. Hoping to inspire colleagues at other legal educations, I therefore want to use this possibility to share our ideas, set-up, and experiences.

To begin with, I will introduce the frame for legal educations and the legal labour market in Denmark, including a short introduction to the highly digitized public and private sector. This is done to provide the major context for the course and the decisions on what subjects to be covered and to what degree they should be covered.

Following this, in part 2, I will discuss the main problem in designing the course, ie, identifying what the legal employers specifically are asking for. I will also reveal how we came to think about a digital mindset and broader competences instead of more hardcore IT skills, which is, I think, the often-misunderstood solution chosen when we as teachers and educations are asked to deliver some solutions to the requested digital skills and competences.

In part 3, I will introduce the main idea in Paul Leonardi and Tsedal Neeley's book *The Digital Mindset* from 2022,¹ which gave us the frame for developing a teaching model for the course, and how I supplemented it with a legal 'leg' to make it a professional legal digital mindset.

In part 4, I will give an insight into the teaching activities and the pedagogical choices made and connect the activities to the model for a legal digital mindset introduced in part 3.

And finally in part 5, I will shortly go through the students' evaluation of the course and judge to what degree we succeeded.

1 Paul Leonardi and Tsedal Neeley, *The Digital Mindset. What it really takes to thrive in the age of data, algorithms, and AI* (Harvard Business Review Press 2022). It is Leonardi and Neeley's aim to help business managers transform their businesses to the digitized world, but the principal points, I think, can be used in every process aiming at digital transformation.

2. The Danish context

As indicated above, the classic mono-professional legal education in Denmark takes place at some of the public funded universities. There are eight universities in Denmark, each one with their individual academic, regional and historical profile. While some of them are mono-professional universities centred on IT, technical sciences, or business, four of the five academically broader and geographically spread universities offer a law-degree. Although the universities' main campuses are located in the capital and the largest cities of the country, the universities are present with both research and education across the entire country due to local campuses.² These years, this de-centralising organisation are to some degree strengthened as the former Danish government pushed the universities and other higher educational institutions to develop further educations in some of their minor campuses in order to offer more educations at a local level.³ Thus, four of the five broad universities offer a full classic education in law, ie an undergraduate, a graduate and a doctoral programme.⁴ From autumn 2023, one of the universities will also offer a legal education in the country's fifth-largest city due to the political initiative to go as local as possible.⁵

The geographically de-centralised structure of the legal educations in Denmark gives the universities the opportunity to be in contact not only with central organisations representing the profession and larger employers, but also with lawyers from both major and minor law firms, companies, and lawyers from different divisions of the public sector. In general, this should give the universities the possibility to get a broader picture of the development of the labour market and what the employers are asking for across the country.

The number of active Danish university educated lawyers has sextupled during the last century from 3,363 in 1928 to 19,659 in 2017.⁶ The number increased particularly during the formative years of the Danish welfare state following World War II as lawyers made up major part of the academic employees in the growing public administration. Since then, other professions have slowly

2 Universities Denmark, 'Universities Denmark' <<https://dkuni.dk/?lang=en>> accessed 21 April 2023.

3 Ministry of Higher Education and Research, *Tættere på - Flere uddannelser og stærke lokalsamfund* <<https://ufm.dk/publikationer/2021/filer/taettere-pa-flere-uddannelser-og-staerke-lokalsamfund.pdf>> accessed 21 April 2023.

4 Ministry of Education, 'Uddannelsesguiden: Jura' <<https://www.ug.dk/uddannelser/bachelorogkandidatuddannelser/bacheloruddannelser/samfundsvidenskabeligebacheloruddannelser/forvaltningmv/jura>> accessed 21 April 2023.

5 Ministry of Higher Education and Research (n. 3), 14.

6 Ole Hammerslev, 'At studere juridiske eliter' <<https://www.sdu.dk/da>>, 3-4, and The Ministry of Employment, 'Svar på spørgsmål til Folketingets Uddannelses- og Forskningsudvalg 5.10.2017' <<https://www.ft.dk/samling/20161/almdel/ufu/spm/181/svar/1431436/1799086/index.htm>> accessed 22 April 2023.

gained in and taken over the lawyers' domain in the public administration, but still, lawyers make up approximately one-third of the academic workforce in the public sector. Numbers from the last century show a steady development with approximately 30% of the educated lawyers working in the public administration while approximately 30% are working as lawyers in private law firms. The rest, ie, approximately 40% and slightly increasing since the 1980s, has found other domains for their expertise, eg, as in-house lawyers at major business companies, accountancy firms etc.⁷

In Denmark, the title 'jurist' is not a protected title as it is only referring to a person giving legal advice, but usually it is only used by and for people educated in law from a university. No matter whether you are a professional judge or lawyer, an in-house jurist or public servant, lawyers in Denmark are not educationally specialised in one or another legal field. All legal university educations in Denmark are generalist educations as laid down by the national Educational Act.⁸ While tasks as in-house lawyers at major business companies or accountancy firms may also be handled by university educated Masters of Science in Business Administration and Commercial Law (cand.merc.jur.) – an education combining business economics and administration with commercial law dating back to the business schools of the 1980s⁹ – or others, the tasks as lawyers and judges can only be handled by the jurists having obtained a five-year degree in law from a Danish university (cand.jur.). Hence, according to the Danish Administration of Justice Act, the classic cand.jur. degree is needed in order to gain the right to appear before the court or become a judge in court.¹⁰ From time to time, it has been discussed if Masters of Science in Business Administration and Commercial Law should be allowed to practice as barristers and solicitors, but in fall 2021 this was once again rejected by the Ministry of Justice, apparently due to a lack of sufficient specialised knowledge of law.¹¹ It

7 Hammerslev (n. 6), 6.

8 Ministry of Higher Education and Research, 'Bekendtgørelse om universitetsuddannelser tilrettelagt på heltid' App.1: 3.1 <<https://www.retsinformation.dk/eli/lta/2020/20>> accessed 22 April 2023.

9 Copenhagen Business School, 'En uddannelsessucces fylder 30' (2014) <<https://www.cbs.dk/presen/nyheder/uddannelsessucces-fylder-30>> accessed 22 April 2023.

10 Ministry of Justice, 'Bekendtgørelse af lov om rettens pleje' § 42, stk. 3 (concerning judges), and § 119, stk. 3 (concerning lawyers) <<https://www.retsinformation.dk/eli/lta/2021/1835#idabd7a4b3-43d2-477e-9e29-06e6df4105ea>> accessed 21 April 2023. See also 'The European Union, 'European Justice: Denmark' <<https://e-justice.europa.eu>> accessed 22 April 2023. To be allowed to act as a lawyer before court, ie, as barrister and solicitor, the theoretically educated classic jurist (cand.jur.) must also pass a test approved by the Minister of Justice. This consists in a three-year long practical training at a law firm, a practical test of how to handle legal cases and processes, and a theoretical test of the task and ethics of a lawyer, cf Ministry of Justice (n. 8), para 119.

11 Copenhagen Economics, 'Competition and regulation of the legal Sector in Denmark' <<https://www.copenhageneconomics.com/dyn/resources/Publication/>

is possible for the *cand.merc.jur.s* to get the right to appear before the court if they supplement their education with a two years programme of law, but no doubt, the question whether they can act as barristers and solicitors following their degree will arise again within a few years as the major law firms are now increasingly hiring also *cand.merc.jur.s*. It seems that the firms do so both because of a lack of classic lawyers and because people with a combination of law and business administration usually understands business better, including the business need for digitalization. This, of course, in the long run puts pressure on the mono-professional classic lawyers and their monopoly.

While approximately 30%, ie, 7000 of the classic lawyers are working within the public sector, the same number work as lawyers, including in-house lawyers with the right to represent their firm in court.¹² The vast majority of lawyers used to be organized in small to medium-size firms, but during the last decade, two handful of domestic firms offering full legal services have become more and more dominating in the Danish legal market. This is the firms now hiring also Masters of Science in Business Administration and Commercial Law, working on expanding their understanding of and services within business in a broader sense, often including developing digital services both to in-house processes and for their customers as self-run services. It is important, though, to stress that none of the two legal-orientated educations have mandatory courses focusing on digitalization for the time-being, but at some of the educations, such courses are underway, while other educations still offer them as optional courses as part of the individual student curriculum.¹³

The existing lack of the development of digital skills and competences as a mandatory element in Danish law-programmes may come as a surprise as Denmark is ranked one of the most digitized countries in the world.¹⁴ Denmark has a well-functioning digital infrastructure, both when it comes to high-speed internet connections throughout the country and digital access to all public services. According to the Danish Ministry of Culture, in 2019 99% of the Danish households had access to the internet by either a mobile phone or a computer (ie, a laptop, desktop or iPad device), including 93% of the citizens aged 71 or older. Almost all Danes, namely 91%, use the internet daily and another 6% on a weekly basis, which makes the internet one of the most used platforms for

publicationPDF/7/287/1430739706/competition-and-regulation-of-the-legal-sector-in-denmark.pdf> accessed 22 April 2023.

12 The Danish Bar and Law Society, 'The Danish Bar and Law Society' <<https://www.advokatsamfundet.dk/english/about-us/>> and The European Union, 'European Justice: Denmark' <<https://e-justice.europa.eu>> accessed 22 April 2023.

13 The education in law at University of Copenhagen offers more optional courses, and from 2025, the bachelor in law at the University of Southern Denmark will contain the first mandatory course on fundamental digital skills.

14 European Commission, 'The Digital Economy and Society Index (DESI) 2022' <<https://digital-strategy.ec.europa.eu/en/policies/desi>> accessed 22 April 2023.

information and contact among the Danes.¹⁵ Most public services are reached through the gateway 'borger.dk', that is 'citizen.dk'.¹⁶ This is supplemented by specialised websites for tax, a mailbox where the individual citizen receives all relevant public communication etc.¹⁷ The Danish Parliament has also decided that the public administration must digitize as much of the administration as possible every time a new law has been passed by the Parliament.¹⁸

The Network Readiness Index, which measures and ranks countries globally on the digitization of their economies, yearly positions Denmark as one of the most future-ready societies.¹⁹ The ICT sector is one of the fastest growing sectors in Danish economy and has strong attention and support from the Danish government, which at the beginning of 2021 took the initiative to establish a political-strategical partnership between the public and private sectors in order to ensure that Denmark would proceed its digital development.²⁰ With the prevalence of ICT use and the government's wish to continue the development of making Denmark a hub for innovative multimedia technology, it must be expected that the need for digital skills and competences will only grow in the coming years, including lawyers' understanding of how digital tools function and affect the public sector as well as private business.

This goes hand in hand with the development within the Danish court system which has also embraced the new digital possibilities. Nowadays, it is possible to file a lawsuit and record summons, defences, and other pleadings, or to record appeals and requests for reopening of cases etc. via a digital portal,²¹ just as digital registration of a deed was implemented at the Land Registration

15 Ministry of Culture, 'Internetbrug og enheder 2020' <<https://mediernesudvikling.kum.dk/2020/internetbrug-og-enheder/>> accessed 22 April 2023.

16 Ministry of Finance at <<https://www.borger.dk/#>> or <<https://lifeindenmark.borger.dk/>> accessed 22 April 2023. For an introduction to many of the systems, see <https://en.digst.dk/> accessed 27 April 2023.

17 See eg the Danish Customs and Tax Administration at <<https://www.skat.dk/>> accessed 22 April 2023.

18 Hanne Marie Motzfeldt, Jøren Ullits and Jørgen Kjellerup, *Fra forvaltningsjurist til udviklingsjurist – Introduktion til offentlig digitalisering* (DJØF Forlag 2020), 60-63. See also Agency for Digital Government, 'Digital-ready administration' <<https://en.digst.dk/>> and Regeringen, KI, Danske Regioner, 'Digitalisering, der løfter samfundet. Den fællesoffentlige digitaliseringsstrategi 2022-2025' <https://fm.dk/media/26022/digitalisering-der-loeften-samfundet-den-faellesoffentlige-digitaliseringsstrategi-2022-2025_web.pdf> accessed 21 April 2023.

19 The Network Readiness Index 2022, 'Denmark' <<https://networkreadinessindex.org/country/denmark/>> and <<https://networkreadinessindex.org/>> accessed 22 April 2023.

20 Ministry of Finance, 'Nyt digitaliseringspartnerskab skal bringe Danmark og danske virksomheder ud af coronakrisen og stærkere ind i fremtiden' (2021) <<https://fm.dk/nyheder/nyhedsarkiv/2021/marts/nyt-digitaliseringspartnerskab-skal-bringe-danmark-og-danske-virksomheder-ud-af-coronakrisen-og-staerkere-ind-i-fremtiden/>> accessed 22 April 2023.

21 The Courts of Denmark, 'A Closer Look at the Courts of Denmark', 18 <<https://domstol.dk/media/jqhg2psf/a-closer-look-at-the-courts-of-denmark.pdf>> accessed 22 April 2023.

Court half a decade ago.²² The administration of the Courts of Denmark has also published a new central database that gives all citizens free access to judgments delivered by the courts. This database contains judgments based on fixed principles of essentiality and it will continuously be updated with new rulings. Moreover, the database will contain historic rulings from civil and criminal cases of public interest.²³ At the same time, courts are increasingly embracing ICT through the introduction of videoconferencing, but it is introduced cautiously and only in certain matters.²⁴ The same wariness is so far also seen concerning the possible use of AI in the court system.²⁵ According to the international WJP Rule of Law Index, this well-considered development has placed Denmark as one of the legally most well-functioning states the last couple of years.²⁶

This development towards more and more digitized services is not only seen within the public sector, but also within the private sector.²⁷ This includes legal services. Thus, one of the major Danish law firms has established a legal tech division developing digital administration, management, and legal service tools for their customers, while other law firms focus on advising on standard digital systems and solutions.²⁸ Most of the law firms are also focusing on developing (or buying) digital tools to optimize their internal working processes.

3. The problem: designing a course on digital skills and

22 The Courts of Denmark, 'The Danish Judicial System' <<https://domstol.dk/om-os/english/the-danish-judicial-system/>>, <<https://domstol.dk/tinglysningstretten/>> and <<https://www.tinglysning.dk/tinglysning/landingpage/landingpage.xhtml>> accessed 22 April 2023.

23 The Courts of Denmark, 'A Closer Look at the Courts of Denmark', 18, concerning The Courts of Denmark, 'Domsdatabasen' <<https://domsdatabasen.dk/>> accessed 22 April 2023.

24 Ministry of Justice, 'Rigsadvokatmeddelelsen, Brug af videolink i retsmøder' <<https://www.retsinformation.dk/api/pdf/209129>> accessed 22 April 2023.

25 cf the comment by the director of the national board developing the courts' work (Domstolsstyrelsen) <<https://www.altinget.dk/artikel/domstolsstyrelsen-kunstig-intelligens-afsloerer-fordomme-mod-koen-og-hudfarve>> and the European Commission for the Efficiency of Justice (CEPEJ), 'European ethical Charter on the use of Artificial Intelligence in judicial systems and their environment' <<https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c>> accessed 21 April 2023.

26 World Justice Project, 'Rule of Law Index 2022' <<https://worldjusticeproject.org/rule-of-law-index/global>> accessed 22 April 2023. This is the case, even though there is a growing criticism of the expenses and the chances for winning if you are suing the government and public administration, cf DJØF, 'Borgernes retssikkerhed i sager mod det offentlige' <https://www.djoef.dk/-/media/documents/djoef/j/jurapanelets-undersogelser/jurapanel_unders-oe-gelse_a4_1021_borgernes_retssikkerhed_korr2.ashx> accessed 22 April 2023.

27 cf Ministry of Industri, Business and Financial Affairs, 'Redegørelse om Danmarks digitale vækst 2022' <<https://www.em.dk/>> accessed 22 April 2023.

28 See eg <<https://www.bechbruun.com/da/legaltech>> and <<https://www.horten.dk/specialer/it-ret-og-telekommunikation>> accessed 27 April 2023.

competences

Even though public as well as private legal employers are going more and more digital, both when it comes to their internal working processes and in the services offered to citizens and clients, it has been difficult to identify which digital skills and competences they in general are asking for from newly educated lawyers. For half a decade I have talked to employers and lawyers, and I have participated in different working groups and task forces trying to identify the digital skills and competences asked for in order to implement them in our educational activities. To my experience, it has been difficult for the legal employers to put words on what they are asking for specifically, probably because it is not always clear to them either as they, or we as a society, are in a continuously ongoing process when it comes to digitalization. It is not, that they have not tried to put some words on through, for example, the employer panels connected to every legal education, or working groups initiated by, among others, the Confederation of Danish Industry.²⁹ But usually, it has been formulated in broad terms which we at the legal educations have not been able to use as a starting point for specific learning activities, even though the good will has been there.

Hence, in 2020 several Danish universities founded the common project ‘The Digital Curriculum’ with the aim of identifying the skills and competences asked for within the social sciences and the humanities and thereafter develop the teachers’ skills needed to fulfil the requests.³⁰ At the same time, the Faculty of Law at the University of Copenhagen and the IT University of Copenhagen joined forces to develop a basic tech course for university (and especially law) teachers.³¹ Both projects were funded by the Danish Ministry of Higher Education and Science and thus placed the question of the teachers’ digital skills in the strategic educational agenda. As far as I know, none of these projects have been able to identify in detail what the legal employers are asking for, at least not in a way that can be transferred into specific teaching activities within an educational frame.

29 See eg the Confederation of Danish Industry, ‘Kompetencer til et digitalt erhvervsliv’ <https://www.danskindustri.dk/globalassets/tech-der-taller/digitale_kompetencer_pjece_2020-009.pdf/Download> and ‘Behov for digitale kompetencer hos samfundsvidenskabelige kandidater’ <<https://www.danskindustri.dk/arkiv/analyser/2022/4/behov-for-digitale-kompetencer-hos-samfundsvidenskabelige-kandidater/>> accessed 27 April 2023.

30 See The Digital Curriculum at <<https://digitalcurriculum.au.dk/>> accessed 27 April 2023.

31 IT University of Copenhagen, ‘Ny bevilling: Digitalt løft af undervisere skal opruste samfundet med it’ <<https://www.itu.dk/om-itu/presse/nyheder/2020/ny-bevilling-digitalt-loeft-af-undervisere-skal-opruste-samfundet-med-it>> accessed 27 April 2023. Parallel to this, the Faculty of Law founded the Copenhagen Legal Tech Lab, cf. <<https://jura.ku.dk/legaltechlab/>> accessed 27 April 2023. The Lab mainly focuses on research and knowledge share, especially on the technical development and its possible implications for law.

So, on the one hand it has been difficult for the legal employers to put words on what they are asking for without doing this in broad terms, and on the other hand it has been difficult for the educations to decipher what the employers are asking for. The main problem seems to be that the legal employers are not asking for the skills that we at the universities are used to provide, namely classic legal skills. Therefore, it has been and is difficult for the highly specialized legal university milieu to translate the words and the cases used by many of the employers into learning activities, because in the essence, the employers are not asking for typical legal skills when it comes to digitalization. Thus, for a highly specialized academic legal professor at a university, it is impossible to transfer the often broader and more business minded competences asked for into meaningful teaching activities in a legal course.

In short, as far as I can conclude from my talks with employers and reading of reports and contributions to the debate, the skills asked for by the Danish legal employers can be summed up in a couple of handfuls of broader, not very specified – and not very classic legal – competences.

The most specific or detailed input has come and still comes from the public employers, probably due to the sector's volume and the fundamental digitalization of its services based on a common strategy. Hence, the public employers wish that the newly educated lawyers have a basic knowledge of the sector's digital landscape, ie, the structure of and division between national and local services, and who has the task or competences to handle which subject fields. At the same time, the lawyers must have a basic understanding of how computers work and of different digital technologies to make them understand not only the scope of a digital project, but also the possible legal problems or possibilities with the technology at hand. Thus, the future lawyers must be able – or at least interested in – talking to other professions such as IT-professionals. To be able to do so, one of the common broad competences asked for is knowing something about working in cross-disciplinary projects, eg, from the public sector's procedural model for IT-projects or through practical projects during the education.³²

The public employers, that I have spoken to, have all mentioned that for a jurist working in the sector, it is of course necessary to know administrative law and GDPR. But they have stressed that this is not enough for the future. Thus, they are looking for lawyers who, of course, have the classic legal skills to be able to participate in developing, buying, adjusting, and using digital solutions – and to complain if they are not working as expected. But nowadays, the employers stress that the technological solutions and possibilities are so complex that it is necessary for those taking care of law to have a basic understanding of

32 The Danish Agency for Digital Government, 'Statens it-projektmodel' <<https://digst.dk/>> accessed 27 April 2023.

the technology for them to solve their tasks in a proper way. Especially when it comes to the development of digital services or in making digital-ready legislation. Lawyers are the safeguards of rule of law and to keep on being this, they need to know what can happen when you digitize law and services within the public sector, the mantra seems to be.

Compared with the public sector, the private legal employers such as law firms and in-house lawyers are not as specific when it comes to digital skills and competences. They are mainly concerned with one thing, that is business. Time is money and therefore they are eager to make their working processes more efficient, wishing for the new lawyers to be able to participate in the development of digital tools to automate the company's internal working processes. The Danish market for legal services has not yet been liberalized in the same manner as, for example, in the United States or Great Britain,³³ and therefore the law firms are not yet under the same pressure to develop new services as abroad. But some of the major law firms are looking into developing new digital legal products and offer them as semi-automated services to their clients. Therefore, they ask for lawyers able to identify such possible new products, knowing that the market and their business model may soon change.³⁴

In short, the Danish legal employers seem to be asking for lawyers having a basic understanding of how computers work and of different digital tools and technologies. Besides this, the lawyers-to-come must to some degree master the four general competences characterized as 'the 21st century skills', that being critical thinking, communication, collaboration, and creativity. All competences that we have not until now been used to or very focused on developing at a typical Danish legal education.

Looking into this context, my colleague and I decided to frame our plans for a course focusing on digital skills and competences to be run at the legal education at Aarhus University in an, from an academic perspective, unusual way: We framed the course around the lawyers' tasks in a digitized job market, ie, we decided to develop a course about the practical side of working as a lawyer in a more and more digitized society. By doing so, we had a frame that

33 See eg Richard Susskind, 'Tomorrow's Lawyers' [2013] *Law Practice* 34; Dan Hunter, 'The death of the legal profession and the future of law' [2020] *University of New South Wales Law Journal* 1199; Chay Brooks, Cristian Gherhes and Tim Vorley, 'Artificial intelligence in the legal sector: pressures and challenges of transformation', [2020] *Cambridge Journal of Regions, Economy and Society* 135.

34 As concluded in, eg, reports by the The Danish Bar and Law Society, that is Advokatsamfundet, *Legal tech og advokatregulering* (2019) <<https://www.advokatsamfundet.dk/publikationer-og-boger/rapporter-og-vejledninger-1/legal-tech-og-advokatregulering/>>; the major law firm Bech-Bruun, *Inhouse-juristens nye digitale virkelighed. Et indblik i anvendelsen af legaltech i danske virksomheder* (2022) <<https://www.bechbruun.com/>>; and the yearly Karnov Group, *Brancherapport 2021* <<https://www.karnovgroup.dk/fremtidens-jurist-2021>> 63-86. All accessed 27 April 2023.

made it possible to have both digital learning activities on a knowledge basis, activities focusing on broader competences such as working in projects with IT-professionals, and space for reflecting both critically and innovative on the use of digital technologies, not at least compared to rule of law. As the idea developed, it turned out that we were not just interested in law, technology, or broader competences, but in laying the first bricks to, a basis for, a legal digital mindset for the lawyers of the future.

All we could achieve within a single basic course, we realised after having read Paul Leonardi and Tsedal Neeley's book about *The Digital Mindset*, which one of my colleagues working with digital transformation in business recommended, was that the students knew enough about digitalization and working with digitalization to be open-minded towards participating professionally in the digital transformation of law and society. Hence, it became our main aim that the students participating in the course would take the first steps to become an active part in the process of digitalization and that they would develop ability to reflect on digitalization from a lawyers' view.

4. Developing a teaching model for a legal digital mindset

The basic idea in Paul Leonardi and Tsedal Neeley's book from 2022, *The Digital Mindset*, is that you only need to understand 30% of each of three focal points to lay down the first steppingstones for a digital mindset which then can be further developed.³⁵ The book, in a language understandable to laymen, presents what these 30% is which makes it a usable hands-on presentation for those of us not well acquainted with the fundamentals of digitalization. The three focal points that Leonardi and Neeley are working with, are what they call the three "Cs": Collaboration. Computation. Change.

The first, Collaboration, is about understanding what computers can and cannot do.³⁶ Leonardi and Neeley introduce how computers work, including the basic ways of Artificial Intelligence (AI). By doing so, they give the reader a vocabulary and set of concepts to work with which makes it possible both to understand the limitations of digitalization and to communicate, at least on a basic basis, with others about digitalization. This includes an understanding of the limits of AI and machine learning as tools which often cannot give exact answers, but only probabilities.

Leonardi and Neeley's second C, Computation, is about understanding what data is and what the problems with data can be.³⁷ The main point here is that data is something that we produce depending on what information we want to

³⁵ Leonardi and Neeley (n 1), 1–12.

³⁶ *ibid*, 25–50.

³⁷ *ibid*, 73–96.

capture and how we categorize it. This includes a critical approach in identifying, analysing, and concluding on data, being aware of possible biases in both humans and machines; the latter especially when it comes to machine learning.³⁸

The third C is Change. While Collaboration and Computation is mainly focusing on the technical or systematic-analytical sides of digitalization, Change is concentrated on the societal and mental frame for digitalization. This includes how to handle possible biases between, eg, cybersecurity and privacy,³⁹ and how to remove mental barriers of distrust towards the digital to replace it with a constructive and curious, but still critical thinking.⁴⁰ As Leonardi and Neeley are aiming at helping business managers in transforming business to adapt to a digitized world, they link the technical-analysing knowledge and understanding with the mental change needed, if you want to succeed with digital transformation. This link is important, because it stresses that change is not coming from the computers, but from us humans. Digitalization is also a human process.

With the help of the three C's, my colleague and I were able to identify what the students basically needed to know about digitalization from a technical viewpoint, but also that it, at the end of the day, was about changing the way they were thinking about it, no matter whether they addressed the digital development sceptically or positively. Realizing this, we took it further due to the professional tasks of lawyers and supplemented the three Cs with three legal subject-specific focal points centred around three "Us": Understanding the legal-normative framework for digitalization; Understanding the organisational framework for lawyers' work with digitalization; and Understanding the legal-ethical challenges of digitizing the legal field. By doing so, we turned Leonardi and Neeley's digital mindset into a *legal* digital mindset.

What we wanted to gain with the first U focusing on understanding the legal-normative framework for digitalization was to make the student acquainted with both the Danish and the international regulations on digitalization, ie, the legal frame that they will have to know and work within in the future. This, of course, is mainly GDPR and the Danish Parliament's decision to work for digital-ready legislation. But our focus was not so much on the rules themselves, but on the principles and concepts and, foremost, on making the students interested in following the current development within EU regulation and principal cases on GDPR such as Chromebook, Google Analytics etc. The fundamental idea was that as a lawyer working with digitalization – or maybe as a lawyer in general – it is not enough to know the existing rules, but also to be able to, to some degree, foresee what is coming when it concerns the digital development.

38 To pinpoint that one has to be aware of the difficulties in using machine learning, Leonardi and Neeley even gives a short introduction to statistics, cf *ibid*, 97–115.

39 *ibid*, 119–143.

40 *ibid*, 145–196.

The second U – Understanding the organisational framework for lawyers' work with digitalization – involved understanding the organization of and the main drivers in both the public and the private sector. We wanted the students to be acquainted with the public sector's digital landscape such as the division between national and local services, and who has the task to handle which subjects. But we also wanted them to know the strategic goals of the sector as these had developed over time and are formulated in the current common strategy. This also involved tools such as the sector's procedural model for IT-projects or manual for developing digital-ready legislation. Concerning the private sector, the students then had to understand the traditional business model of law firms, and what was driving the digital interest and development within that sector, including the possible threat to the existing business model if the Danish private legal sector will be liberalised sometime in the future.

The final U was focusing on Understanding the legal-ethical challenges of digitizing the legal field. This involved understanding and being able to reflect upon digitalization as a tool to make, eg, public administration more effective vs the task of securing rule of law for the citizens. The aim with this U was to make the students aware of the grey zones derived from digitalizing especially the public sector and to make them able to approach the problems in a constructive way in order not to just put the development of digital services to a halt, but to be participating in digital projects as a core member. This involved being able to work in cross-disciplinary projects and to communicate with other professionals, especially IT-professionals, being aware of what they knew as lawyers and in which subject fields they were not the specialists. This U also involved knowing the ethical norms for lawyers and the institutional setup for enforcing them within the private sector.

In the course, we used the three Cs and the three Us as a frame for the teaching activities, both to clarify what they would learn something about during the course and to make it clear why we had picked the subjects and chosen the activities that we had. Every class opened with an introduction to which of the Cs and Us we would investigate today and, in this sense, the three Cs and the three Us formed a teaching model that made the interaction between technology, law, everyday work life as a lawyer, the mental preparedness to get involved in digital projects, the institutional frame one is working within ect. clear to the students.

Concerning the exam, we had an individual oral discussion based on an individually written assignment. The assignment consisted of an analysis of a self-picked case involving both a legal part and a practical-digital part, and in the assignment the student should also reflect on how to proceed to solve or further develop the subject of the case. By drawing on the students' knowledge and ability to analyse a current case, we wanted to push (and in the exam of course to test) their ability to identify both problems and possible solutions and

to reflect on digitalization as an ongoing process involving also legal subjects and thus, also lawyers.

5. Teaching activities

The aim of the course made it clear that we were going to do something different than usual (which, at least in a Danish context, is often reading legal sources and literature, maybe training in solving cases on the subject). At the same time, we realized that most of the subjects would need comprehensive cross references because of their close-knit connections and the literature available, illustrating exactly the close connections. The decision to do something different than usual was strengthened by the fact that the course was open for participants from both the classic legal education and the Master of Science in Business Administration and Commercial Law which gave a diverse academic grounding; a diversity that we wanted to use constructively in pushing the students to be professionally more open-minded than they often are following three or four years of study.

Hence, we decided to make use of and mix different sources and elements from class to class, both when it came to the texts to be read and to the more practical activities and discussions run during class. Therefore, the main structural decision was, as mentioned above, to begin every class with an introduction to today's main subject and how the program of today related to one or more of the Cs or Us. Besides this, it would be necessary to read some academic literature for every class, but this was often supplemented with public strategies or manuals, relevant regulation, reports or webpages about current cases etc. We had, as eye-openers, simple practical exercises in excel, showing the problems with unreliable data in the simplest way possible, and an exercise where we tried to develop a pseudo-code for one of the simplest criminal Danish laws to illustrate how difficult it is to develop a code able to contain all possibilities and thus give an authoritative solution to a legal problem; by doing this, we opened for a discussion about whether digital tools can be used as decision-makers or just as supportive tools for human decision-making. We identified relevant podcasts or podcast programmes to listen to in-between classes, both as a background for discussions and to show that the question about law and digitalization is highly debated and constantly changing. And finally, we invited practitioners – that being lawyers, IT-professionals, and specialists in strategic development of business administration – to share their experiences with practical life in implementing or developing digital solutions, eg, how to implement GDPR in the police force, how to develop digital tools to automate work processes within law firms, how to develop public services in the tension between administrative efficiency and rule of law, how to overcome the gap between lawyers and IT-professionals etc.

Every class had its own heading to address some of the subject fields asked for by the legal employers. Concerning public digitalization, we addressed digital strategies, administration directed towards the citizens, the digitalization of courts and online dispute resolutions, digital-ready legislation, and the role of the lawyer in digitalization projects. Regarding the private sector, we specifically addressed task and project management. These subjects were supplemented with more general subjects on digital technologies, ie, how to code (including the exercise of pseudo-coding, not real coding) and a short introduction to technologies such as machine learning, blockchain etc., on data quality and cybersecurity (including GDPR), the historical development of digital technologies and the changing role of lawyers, including lawyers' ethic in a development focusing on efficiency.

As illustrated with this short outline of the activities in the course, we did not go deep into any specific subject. The set-up was based on giving the students an understandable frame and good grasp of what digitalization is, what the technical possibilities and challenges are, how the subject area is regulated by law or misses regulation, and how they as lawyers can participate constructively in digital projects at the same time as they maintain their role as lawyers, focusing on rule of law. The aim was not to make digital experts out of them, but to prepare them for the digital job market that they are entering after graduating. The aim was to lay down the first steppingstones for a critical-constructive way of thinking about digitalization, so that they would be able not just to participate in digital projects, but maybe even take lead in a legally proper development of digital solutions.

6. Evaluation and reflections on the future development

At the core of all these activities and the reason for arranging the course was that we wanted the students to get and develop a basic understanding of both the technical, the organisational, the professional, and the individual level in the process of digitalization in the legal job market. We wanted the students to become able to participate constructively, but professionally reflected in digital projects. Following the course, they should neither be afraid of digitalization nor be so positive and eager to streamline, eg, the public administration that they lost sight of rule of law.

To know whether we succeeded or not, we had a colleague specialized in evaluations to evaluate both during the course to see if we were on track, and following the last class as we were interested in their reflections before exam hit them. And then, of course, we could see how the exam worked out.

Both the assignments, the grades, and the feedback from the students indicated that we succeeded. The students told us that the course had helped them de-mystifying most aspects of, and provided them with a language to talk

about, digitalization. In addition to an understanding of the technical digital Cs, the students felt that they had got an understanding of the mental, professional-social, and professional context that is part of the digitalization process. Furthermore, they had got an understanding of the principles behind data protection, but also how these challenges the digital opportunities (in relation to data transfer to third countries etc.). As a bonus to the Us, the students also indicated that they had gained a fundamentally better understanding of the rule of law due to the discussions about effective digitization vs rule of law and due process. Thus, they simply felt better prepared to assess advantages vs disadvantages in the digital development taking place and to identify and react professionally on the tension between efficiency and law.

We did not reach the 30% mentioned by Leonardi and Neeley, though. In that sense, we did not succeed, because we simply did not have the hours needed to make the 30%. We prioritized to reach approximately the first 10% and then spent time to develop a digital legal mindset instead. And this time was well-spent, I think, because it showed that the 10% of the three Cs was necessary to know something about, even for a lawyer. Through the course, the three Cs did not show all that you may need to know about digitalization, but the Us showed that you even as a lawyer need to know *something* about digitalization – and that was a huge factor for the students' motivation through the course. In that sense, I think that we laid down the fundamental steppingstones for a legal digital mindset to be further developed. In all modesty, I think that we succeeded in identifying the minimum of what every law student should know about digitalization.