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# The Digital Lawyer What skills are required of the lawyer in the Network Society?

The work expected of the legal profession and the education of its practitioners has undergone significant changes, and these continue as we speak. If nothing else, the development of the constitutional state has forced lawyers to abandon the outmoded notion of a legal education as training to become a judge. In the modern European constitutional state, law figures ever earlier in all operations. There is no denying that the fair trial is an important institution, but it now figures less prominently in the legal education. What we see more of today in practice and in legal training is a focus on the legal planning of the different processes by which society functions. Lawyers are - they should be - the professionals to take charge of such planning. A second essential change that has occurred is the transition to the digital Network Society. Our commitment to technological change has propelled the environment in which we work forward, beyond the Information Society and e-government. Legal life, like society at large, now operates in a digital environment, relying as it does on information systems, digital information, data repositories and information networks. This change has had far-reaching repercussions on the way lawyers work as a profession. Its impact on the legal education should be equally profound. At present, there is a poor fit between traditional legal training and modern needs. The changed environment in which we work has prompted discussion of «digital lawyers». The term is meant to evoke a group of lawyers who have special expertise in digitality, much like computer lawyers had in their day. There is no doubt that such expertise is needed. For example, from the outset information systems and software should be planned as a joint effort of IT professionals and digital lawyers. In the Network Society, with its characteristic juridification, more such specialized digital lawyers will be needed. The legal profession is changing to encompass a broader spectrum of duties. However, it is essential to observe that more is involved here than a need for specialization. We are all in fact digital lawyers. We cannot circumvent the demands that the constitutional state and the digital Network Society place on us to augment our professional skill set. We need look no further than information security and personal data protection to realize that we are all digital lawyers: the fundamental interplay of the two impacts virtually all aspects of legal information processing and communication. Being a good lawyer in the legal Network Society automatically means being a digital lawyer. The article examines a number of the crucial changes occasioned by the digital Network Society where the skills required of the legal profession are concerned. The scope of the paper precludes a discussion of the changes that will reduce the need for lawyers providing basic services. These include the increased availability of legal information on networks and citizens' improved opportunities to handle their affairs online.

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# 1 An example or two by way of background

[Rz 1] When the wider use of information technology was being pushed — and embraced — in the 1970s and 1980s, the trend sparked quite a debate on the benefits and drawbacks of computers. Many people wanted to put in their two cents worth on what was a novel development, and efforts were made near and far to identify its repercussions.<sup>1</sup>

[Rz 2] ILKKA NIINILUOTO, a well-known philosopher in Finland, examined the positions people were taking on information technology in terms of *determinism* and *voluntarism*. Anti-technological determinism maintained that the development of technology necessarily had detrimental consequences; it was development to be avoided. The opposite view was technological determinism, or, to cite the more common term, the technological imperative, which holds that technology inevitably has positive impacts. This was the mind-set embraced by the so-called technocrats. In between these extremes, as NIINILUOTO saw it, were voluntarist perspectives. These gave rise to arguments that the development of technology could be steered by societal decisions and regulation.<sup>2</sup> The debate among adherents of the alternative views was at times heated in different disciplines.

[Rz 3] Law contributed very little to the broader societal debate at that time. At the risk of being a bit mean, I would say that, given the lack of regulation, law, used to watching and waiting until it gets provisions to deal with, showed precious little interest in the issue.

[Rz 4] Neither did the measures taken in the judicial administration to develop information technology prompt much in the way of scientific debate. I was perhaps the most outspoken critic of the committee report on the prospects for IT, issued in 1973. I drew attention to the numerous problems in the committees plans, which were very optimistic but presented largely in checklist fashion. On the other hand, I also described the report as important and interesting. The authors had noticed the problems involved in combining information and undertaken to present a comprehensive picture of what constitutes significant legal information.<sup>3</sup>

[Rz 5] But developments in information technology have always spawned a variety of different attitudes among legal organizations and practicing lawyers. These have ranged from an out and out fear of computers to an excessive and uncritical enthusiasm for them. Let us take a look at an example from Lapland, the location of my university.

<sup>&</sup>lt;sup>1</sup> For the classification of different impacts, see Webster Theories of the Information Society 4th ed. (2014).

<sup>&</sup>lt;sup>2</sup> See for example NIINILUOTO, Should technological imperatives be obeyed? International Studies in the Philosophy of Science v 4 (1990) pp. 181—187.

<sup>&</sup>lt;sup>3</sup> See Oikeushallinnon informaatiojärjestelmän kehittämissuunnitelma [Plan for the development of the judicial administration], KM 1973:58 and SAARENPÄÄ, Oikeudellista tilastointia [Compiling Legal Statistics], Oikeus 3/1973 pp. 39—48 ( both in Finnish).

[Rz 6] When the Rovaniemi Court of Appeal turned ten in 1989<sup>4</sup>, one way the event was marked was an essay contest.<sup>5</sup> One of the entries described lawyers who used computers as «keyboard lawyers». This was by way of questioning their professional legal skills; real lawyers and keyboard lawyers did not belong to the same professional family. These comments plainly reflected on the legal training offered at the University of Lapland. After all, in 1986 we introduced compulsory courses and exercises in legal informatics. One requirement — and achievement — of those courses was that students had to be able to use information retrieval systems.

[Rz 7] Attitudes changed quite quickly, however. The skills we taught, especially in legal information retrieval, gave many of our graduates an edge over others on the job market. We tried to tell and teach students that legal information retrieval is an important part of lawyers *basic method*. The time had come for it to become a part of the skill set of all lawyers in our increasingly computerized society, a society which saw the Council of Europe encouraging its member states to compile legal databanks. However, it seems we did not succeed in making all of our graduates presentable in this regard. Some were not willing to use computers at all, and some could not connect information retrieval skills with other legal skills. And some still continue this tradition. Unfortunately.

[Rz 8] If you permit, I would like to interject here that I experienced the benefits and drawbacks of information technology in practice when I was responsible for computerizing the calculation of points on the Faculty of Law entrance exam in 1971. Working with the Computer Centre at the University of Helsinki, we implemented the project, which was required by the central administration of the university, in summer 1971. The basic data on and points earned by about 3000 students were transferred onto computer using punch cards.<sup>6</sup> The work as such went smoothly and cooperation with the computer professionals was fairly straightforward. The biggest problem we encountered was that the calculations involved, which normally would have taken two days at most, took a full two weeks. As the computer specialists told me, it was the *computer doing the work*. Initially, we were in fact offered a far longer period of time for the calculations. The Computer Centre wanted to put and keep itself in the spotlight, dwarfing the needs of the faculties in the process. As we know, this was a very typical situation when information technology was first being adopted. There was a mismatch between the work and the tool and its use. This is still the case today to some extent.

[Rz 9] Years later, the development of office automation brought computers into the working environment of nearly all lawyers in Finland and elsewhere. This prompted a number of different approaches to the new tool. There were those who for one reason or another did not want to use computers and information systems themselves but considered the development a positive one; there were others who were excited about the new opportunities the technology offered; and there were still others who were indifferent. In this light, we should not be surprised that it took an astonishingly long time for lawyers to give up dictation as a way to produce legal text.

[Rz 10] On the other hand, the relatively rapid proliferation of interpretation and regulation problems sparked a trend towards professional specialization. Internationally we saw the emergence

 $<sup>^4</sup>$  The University of Lapland and the Rovaniemi Court of Appeal were both established in the same year — 1979.

<sup>&</sup>lt;sup>5</sup> Not published.

<sup>&</sup>lt;sup>6</sup> University entrance examinations were used at the time and still are in use today. The two faculties of law that existed at the time had a joint examination, administration of which was handled in Helsinki.

of the term *computer lawyers*.<sup>7</sup> The term *IT lawyer* later became common and even more recently we have seen *ICT lawyer* used commonly by lawyers to market their skills. The terminology of course varies from country to country. Today, one hears more and more talk of «digital lawyers». And this description is usually a positive, not only negative or distrustful one like «keyboard lawyers» was. But what is a digital lawyer at the end of the day? Answering this question is the focus of my presentation. What do we mean when we speak of «digital lawyers»? Is the title just a change in terminology, as we can see in the case of the more limited and very well-selling «cyber lawyer»? Or is the expression a creation of the markets? Or do we mean something else?

#### 2 Digital lawyer as a general title

[Rz 11] As the topic of digital lawyers has attracted some attention internationally, Ill start by looking at some few examples of the debate and the debaters.

[Rz 12] Perhaps the most illuminating treatment of the subject is «Educating the Digital Lawyer», a print and electronic volume edited by OLIVER GOODENOUGH and MARC LAURITSEN.<sup>8</sup> They are both well known in the modern American Law and IT discussion. LAURITSEN is one of the most prominent thinkers internationally in the teaching of Legal Informatics and one of the mainstays of the international Subtech meetings dealing with the issue. He does research and development on lawyers» software environment. Professor GOODENOUGH, for his part, is well known not only for his contribution to Legal Informatics but also for his knowledge of the connection between law and neuroscience.<sup>9</sup> «Educating the Digital Lawyer», published in 2012, became required reading in the degree programme for digital lawyers at Harvard Law School.

[Rz 13] BRIAN DONNELLY starts off the book with a contribution considering what the term «digital lawyer» in legal literature means.<sup>10</sup> Naturally, DONNELLY starts with ETHAN KATSH. Professor KATSH in particular has been an interesting pioneer in the field where theory is concerned. For example in 1995, in his «Law in a Digital World», he brought out clearly where the legal profession was headed with the developments in IT that were taking place at the time. And back in 1994 in one of his articles he used the express term *digital lawyer*.<sup>11</sup>

[Rz 14] Information has a central importance in KATSHS approach: lawyers are basically information processors. Not surprisingly, then, the new digital environment they work in poses new challenges for their skills and for what they do. As KATSH wrote:

A «digital lawyer» ... would focus on the informational component and would be concerned at least as much with the opportunities presented by the information as with the legal issues presented by the dispute. The shift in outlook that characterizes the digital lawyer may be subtle because all lawyers have a sensitivity to both text and

<sup>&</sup>lt;sup>7</sup> In the United States, an association of computer lawyers — the Computer Law Association (CLA) — was founded as far back as in the early 1970s.

<sup>&</sup>lt;sup>8</sup> GOODENOUGH, OLIVER / LAURITSEN, MARC, Educating the Digital Lawyer, LexisNexis (2012).

<sup>&</sup>lt;sup>9</sup> His paper «Mapping Cortical Areas Associated with Legal Reasoning and Moral Intuition» was awarded the Lee Loevinger Jurimetrics Research Award, in 2000.

<sup>&</sup>lt;sup>10</sup> Donnelly is Lecturer in Law at Columbia Law School.

<sup>&</sup>lt;sup>11</sup> KATSH, Digital Lawyers: Orienting the Legal Profession to Cyberspace, The University of Pittsburgh Law Review 1994, p. 1141.

context. Yet, the digital lawyer will be employing a broader range of skills and an outlook that reflects not simply what the new technologies do but the manner in which they do it.<sup>12</sup>

[Rz 15] The meeting of the old and the new as an issue affecting professional skills is a theme that runs throughout GOODENOUGH and LAURITSENS book. According to most authors, a digital lawyer is required to have more skills than others, particularly where information processing and management are concerned.

[Rz 16] Of others who have dealt with the topic, DONNELLY, like KATSH, highlights RICHARD SUS-SKIND. Professor SUSSKIND defended a dissertation on expert systems and went on to consider the future that lawyers have in store for them. His view is that the traditional lawyer is pretty much a vanishing breed. Lawyers in the trenches can no longer get by owning a law book or other basic work<sup>13</sup>. While SUSSKIND seems to be promoting himself quite a bit and comes across as a businessman, he also has an important message: the future of traditional lawyers is very problematic indeed.<sup>14</sup> In the Network Society, a rudimentary command of legal information using traditional tools is not sufficient. Many aspects of legal work can be at least partly computerized; and this is why the profession has to change.

[Rz 17] While we are on the subject, we certainly cannot overlook the ideas that were contributed even earlier in the Nordic countries, especially by Professors PETER SEIPEL (Sweden), JON BING (Norway) and, a bit later, PETER BLUME (Denmark). They did not speak about digital lawyers but rather analysed what was going on in the professional information environment. The legal profession has to keep up with the technological changes in society, in particular the new environment in which information retrieval takes place and the impact this environment has on our methodological readiness.<sup>15</sup> This was also one of the basic ideas discussed when I was planning the compulsory courses in Legal Informatics at the University of Lapland in the 1980s.

[Rz 18] I will not go further into earlier or contemporary international debates here — however interesting they may be — but rather will move on to present my current opinions on certain crucial considerations where digital lawyers are concerned.

#### 3 The lawyer in the digital environment of the Network Society

[Rz 19] My starting-point is quite simple. I would like to say that all lawyers — at least good ones — in a constitutional state in the digital Network Society are *digital lawyers* whether they like it or not. In fact, it would be misleading to speak of digital lawyers as a group in its own right with skills and knowledge relating to digitality only. As I see things, what we are dealing with is not a specialization such as that behind the development of the profession of computer lawyer.

<sup>&</sup>lt;sup>12</sup> Katsh, Digital Lawyers, p. 1169.

<sup>&</sup>lt;sup>13</sup> In Finland Professor Каико Wiкström put things most appropriately when he wrote about the «open the law collection doctrine». A law collection book has become a primary source; often, it is considered sufficient as well. See Wiкström, Kuka tarvitsee oikeuslähdeoppia? [Who does need the theory of legal sources?] (in Finnish) in Oikeus — kulttuuria ja teoriaa (Law as culture and theory (2007): pp. 271—286.

<sup>&</sup>lt;sup>14</sup> One of our researchers at the University of Lapland, JUHANA RIEKKINEN, has provided an interesting and detailed assessment of Susskinds ideas in «Where are we now?», a contribution to our forthcoming publication.

<sup>&</sup>lt;sup>15</sup> PETER BLUMES Danish books on method have been important sources to consult here. The method of digital lawyers is at least to some extent different from that of the traditional lawyer. See BLUME, Juridisk metodelære, 5th edition, e-book in www.saxo.com.

[Rz 20] Digital lawyers should have a positive attitude towards working in a digital environment and on networks — or at least should develop one. In terms of professional knowledge and skills, any other way of working is already extremely risky. But it is equally risky to think that «working digitally» is just a technical alternative to traditional ways of lawyering. The knowledge and skills involved are different. ETHAN KATSH was absolutely right on this point.

[Rz 21] In tandem with this change we see the increasing juridification of digital work. The path information takes is increasingly regulated in the law and includes guidelines that set out good professional practice. The core legal regulation guiding the work of the digital lawyer necessarily begins with information security and data protection.

[Rz 22] The first requirement is that a digital lawyer must have a sound knowledge of *information security*. This should nowadays be the basic requirement in all digital data processing and communication. The starting-point in professional expertise is ensuring the confidentiality of information processing and communication in the digital environment. Unfortunately, the profession has been slow to wake up to the need for information security. For a long time it was thought to be a concern that could be relegated to IT professionals.<sup>16</sup>

[Rz 23] Different areas of law naturally have their own special requirements where information security is concerned. For example, in handling a case, an attorney cannot access the clients unencrypted email in a way that would jeopardize the clients secrets — even with his or her consent. What one should send in a sealed envelope should be sent using encrypted email. This rule is unfortunately still rather commonly broken.<sup>17</sup> This problem is not always acknowledged on the day-to-day level. The confidentiality of communication cannot be guaranteed in an environment that has shortcomings in information security.

[Rz 24] A second, equally important, requirement for working as a modern digital lawyer is a knowledge of *personal data protection* and how to use documents that adhere to the relevant legal restrictions. Quite a bit of the data processing in legal life is processing of personal data. It is and should be scrupulously regulated.<sup>18</sup> We should also remember the necessary connection between personal data protection and information security. There cannot be any acceptable data protection without sophisticated information security. They go hand in hand. The new Data Protection Regulation will make this connection more visible. However, it should have been understood years ago, at least by 1995, when the Personal Data Protection Directive was adopted. Now that personal data protection is one of our European constitutional rights, lawyers cannot be forgiven even occasional lapses in this area.<sup>19</sup>

<sup>&</sup>lt;sup>16</sup> For different perspectives on the development of information security, see DE LEEUW / BEGSTRA (eds.), The History of Information Security (2007). In Finland we proposed enactment of a general law on information security as far back as in 1997. The proposal was put forward in a report commissioned by the Ministry of Finance and compiled by the Institute for Legal Informatics at the University of Lapland in 1997. The project has made no real progress however. See also SAARENPÄÄ, The Importance of Information Security in Safeguarding Human and Fundamental Rights, pp. 45—60 in Greenstein (ed.), Vem reglerar Informationssamhället (2010).

<sup>&</sup>lt;sup>17</sup> For example, in Finland attorneys and even courts communicate regrettably often using unsecured network connections. In contrast, this practice changed for the better in government after the authorities charged with overseeing legality — primarily the Parliament Ombudsman — began to draw attention to the risk.

<sup>&</sup>lt;sup>18</sup> The new EU Data Protection Regulation, with reference to earlier principles, sets out the content of the present legislation in more specific terms but essentially does not change the principles. For instance, the right to be forgotten- in fact the right to be de-indexed, which has recently prompted a great deal of debate and caused considerable confusion after CJEU decision C-131/12 — is clearly covered in the present Directive although it is not referred to using the express term. See also BYGRAVE, A right to be forgotten, pp. 94—99 in Yulex 2014.

<sup>&</sup>lt;sup>19</sup> From the comparative point of view it is interesting to notice, that the three first topics in the digital curriculum designed by STEPHANIE KIMBRO are, most appropriately: 1) Privacy and Online Social Networking, 2) Internet Security:

[Rz 25] A third development that will radically change the way lawyers work in the Network Society is the heightened importance of e-justice and information government.<sup>20</sup> Our interaction with the courts and government takes place to an increasing extent digitally, on networks. A thorough command of how this all works is also becoming part and parcel of the basic professional skill set of the lawyer. It is a skill set that requires more than just mastering certain technical procedures; lawyers must have a sound knowledge of the legal conditions, opportunities, and risks related to what people do on networks, and of who is responsible for what. These are concerns that cannot be left to support personnel.

[Rz 26] A fourth crucial consideration — one to be remembered and mentioned — is the changed landscape of legal information retrieval and information management. Some time ago we found ourselves entering the age of legal databanks. Their use changed — or was supposed to change — our basic method and significantly so. As lawyers, as a profession, we share a whole range of methodological elements. These distinguish us from those engaged in other professions. I have divided these elements into categories on three bases: knowledge, skill and procedure. Today we have an even more extensive change on our hands — information retrieval in a network environment. We speak of information literacy as a new and essential skill in looking for and managing information. Some of the competences that have become increasingly salient in this context are a knowledge of legal interfaces and ability to critically assess the results of an information query. Gone is the day when we might delegate information retrieval to support personnel. What we see here is a radical change in the legal culture, and a change that continues.

[Rz 27] In terms of expertise in and the development of the theory of the sources of law, there is another important facet to this change: the new information spaces we deal with might change the way in which we structure arguments. This was demonstrated quite a few years ago in fact by the well-known American researchers on legal information Professors FREDERICK SCHAUER and VIRGINIA WISE. Drawing on an analysis of the grounds presented for court judgments, they put forward a hypothesis that when judges have more on their computer screens than traditional legal source materials, justice begins to change. Accordingly, they asked: «If the increased use of nonlegal information is seen as an independent variable, then questions arise about what this means for the nature and practice of law. Will it produce an even broader manifestation of the phenomenon we might call the delegalization of law?»<sup>21</sup> This was and still is a good question. And in any event it — too — should prompt us to reflect on the phenomenon of LAW via the Internet far more seriously than as a mere technical issue or in terms of access to databases.<sup>22</sup>

[Rz 28] In my view, the four key considerations I have just discussed provide adequate support for my contention that in trying to be good lawyers in the digital environment of the Network

WIFI, Hotspots, and Understanding How Hackers Operate and 3) Protecting Confidentiality of Client Data Online. See KIMBRO, What should be in a digital curriculum: a practitioners must have list, p. 256 in Educating the Digital Lawyer.

<sup>&</sup>lt;sup>20</sup> I wont be using the term e-government. It harks back to the old and old-fashioned Information Society. The more appropriate expression for the Network Society is information government, that is, government which is dependent on information systems and information networks. VICTOR MAYER-SCHÖNBERGER and DAVID LAZER have first used this concept. See for example SAARENPÄÄ, Regulating the Network Society. A challenge for the quality of Legislation and other activities, pp. 97—112 in KnowRight 2012 (2013).

<sup>&</sup>lt;sup>21</sup> Schauer / Wise, Legal Positivism as Legal Information, Cornell Law Review 1997, p. 1109.

<sup>&</sup>lt;sup>22</sup> See also SAARENPÄÄ, The network society and legal information. Some observations from the Nordic point of view. LAW via Internet 2011 papers in www.hklii.hk/eng/Free\_Access\_to\_Law(eng).pdf and generally Peruginelli / Ra-GONA (eds.), Law via Internet. Free Access, Quality of Information. Effectiveness of Rights. European Press Academic Publishing (2009).

Society, we are necessarily digital lawyers. In a constitutional state there is no real alternative. In this light, the expression «digital lawyer» should not be reserved only for describing lawyers who specialize in digital issues.

[Rz 29] Of course, such lawyers exist in the profession and always will. Lets in fact take a brief look at a number of legal tasks and activities that require experts on the digital environment.

#### 4 Special Digital Lawyers

[Rz 30] This presentation of special digital lawyers makes no attempt to be comprehensive; not at all. I will only take up several tasks which in light of our topic require lawyers to have particularly interesting skills. There are no doubt many other tasks, too, where a sound knowledge of legal informatics — and thus an awareness of how important todays digital working environment is — will give added value to ones professional skills on the job market. A lawyers basic education should, quite simply, include a sufficient understanding of todays digital environment. A good lawyer cannot remain blind to developments in society at large. This has been known to happen, however.

[Rz 31] The first topic I would like to take up here is *personal data protection*. Here we see a new legal profession in the making alongside the more traditional one. The new EU Data Protection Regulation will require data protection officers to be appointed in all public-sector units as well as in most private-sector organizations and businesses.

[Rz 32] Although we already have data protection officers working in different countries on the basis of the EU Data Protection Directive, the change to be brought by the Regulation will be a significant one. We will need data protection officers who, as the job title implies, have a thorough grasp of data protection and the related information security.<sup>23</sup> This job is not earmarked for lawyers, but clearly the legal expertise they have gives them the most appropriate professional background for the task. Other requirements are a sufficient knowledge of information technology and — and this is crucial — the ability to work well together with members of other professions. This skill takes on heightened importance in the work of a data protection officer; much of the work involves planning ahead and has to be done with a range of other professionals, day in and day out.<sup>24</sup> A similar combination of skills, as well as the ability to work effectively with other professions, is increasingly one of the cornerstones of the professional skills required of the good digital lawyer. We can no longer base what we do solely on the assumption that a lawyer will read and assess the traditional documents produced by members of other professions.

[Rz 33] There is a small, but growing, special group of digital lawyers comprising legal professionals who offer expertise in the area of different certifications, digital information audits and information security audits. Services like these require a sophisticated combining of different professional skills. We are heading towards a world of *legal certifications* and *standards* and, for example, *binding corporate* rules.<sup>25</sup> The age of hand-crafted local solutions is at least partly over.

<sup>&</sup>lt;sup>23</sup> See SAARENPÄÄ, Data Protection in the Network Society — the exceptional becomes the natural, pp. 85—127 in Galindo (ed.) El derecho de la sociedad en red, Lefis series 14 (2013).

<sup>&</sup>lt;sup>24</sup> In Finland even now all health care units must have a data protection officer. Unfortunately there are not as yet any professional requirements for them in legislation. In contrast, the new EU Data Protection Regulation emphasizes the importance of professional competence.

<sup>&</sup>lt;sup>25</sup> This development is partly linked to the new EU Data Protection Regulation.

But this is not the whole story. It is essential to note that developments in technology constantly present us with new challenges, in particular as regards the implementation of information security but, in addition, as regards how communications can be monitored under exceptional circumstances. This translates into stringent demands being placed on digital lawyers specializing in information security to continually upgrade their professional skills.<sup>26</sup>

[Rz 34] A second important area of specialization for digital lawyers is *planning*, or what we might call *legal design*. Law has sometimes been classified as one of the planning sciences in the general classification of sciences.<sup>27</sup> And a planning science it is at its best; its job is not to explain practices and developments after the fact. Here we see a new element, one introduced by the need that has arisen to plan information systems and documents. In the modern constitutional state, data processing is more than a technical procedure and information is far more than cheap or free raw material. In the legal Network Society the path information takes interacts constantly with peoples human and fundamental rights. This requires legal planning of information systems that is very distinct from the planning we have seen to date. «Planning» can no longer mean a legal assessment of the planning and implementation phases after the fact. The path that information will take must be anticipated from the outset such that it is unassailable in not only technical but legal terms; it must accord with all the relevant legal principles and rules.<sup>28</sup> And it is digital lawyers who have the special skills to do this planning. They are needed. But there is a shortage of them. Thus, the following statement, made by Professor KLAUS LENK, is right on the mark when it comes to digital lawyers designing information systems:

Only the machine part is designed, and if human behaviour is modelled at all, this is in order to make sure that the technical part of the systems is correctly handled and working well. To put it in another way, we have good software engineers, but hardly any organizational architects being able to accommodate organization, IT and people.<sup>29</sup>

[Rz 35] An essential consideration here is the planning of practical documents. We are entering an age when all agencies and offices in the public sector — if not elsewhere as well — should plan their documents to meet the various demands relating to public and private information without causing an unnecessary administrative burden. In this document planning process, the digital lawyer should grasp and observe the legal constraints imposed by the path information travels. The day when bits of traditional documents were struck through on a case by case basis should be well behind us. We need dynamic digital documents, documents which can be adapted to different situations with different content depending on considerations of personal data protection, trade secrets and degree of confidentiality, yet which retain their communicative and evidential value.

[Rz 36] One interesting, distinct group among digital lawyers consists of those lawyers who offer

<sup>&</sup>lt;sup>26</sup> Progress in technology readily leads to a need to revise legislation. For example, the Swedish Signals Intelligence Act (FRA), which has prompted much debate, was drafted at a time when most communications were unsecured or only moderate secured. The effectiveness of the law has thus declined constantly.

<sup>&</sup>lt;sup>27</sup> This is, among other things, one of Professor ILKKA NIINILUOTOS basic ideas. See for example NIINILUOTO, The aim and structure of applied research, pp. 1—21 in Erkenntnis, January 1993, Volume 38, Issue 1.

<sup>&</sup>lt;sup>28</sup> A good example is the net neutrality principle. It is like an umbrella covering network communication.

<sup>&</sup>lt;sup>29</sup> LENK, The Nuts and Bolts of Administrative Action in an Information Age, p. 229 in Snellen, Thaens, van de Donk, (eds.), Public Administration in an Information Age, A Handbook, 2nd edition, Amsterdam et al.: IOS Press, 2012.

new digital legal services. Digital contracts in general, contracts requiring electronic signatures and electronic contract management are products typically offered as part of such services.<sup>30</sup> Digital last wills with digital signatures also belong to that area. And of course all kinds of digital documents as such, or equipped with small expert systems, are typical digital products.

[Rz 37] To some extent these services will be provided by law offices that update the array of products they offer, but at the end of the day developing and supplying these products will involve specializing in digital legal products and services. The principal players in this trend will be and should be — digital lawyers.<sup>31</sup>

[Rz 38] In this connection, we should not overlook the professionals who operate legal information services. These represent a crucial area where digital lawyers are needed but one that is often forgotten. Lawyers information literacy skills in daily practice alone are not enough in the constitutional state. We also need high-quality legal information maintenance. It cannot develop without lawyers who are up to the task and law librarians who are responsible for the daily work.

[Rz 39] The principal problem to be addressed in both development and information management is determining the role of legal expertise. The days when librarians provided guidance for simple information retrievals are well behind us — or should be. The emphasis today is on legal expertise and management of the supply of legal information.<sup>32</sup> ANDREW M. WINSTON puts things aptly when he writes, «Knowledge management is now focused on how to help attorneys do more with less.»<sup>33</sup>

[Rz 40] If we consider the role of legal librarians and other professionals in the area of legal information management, it is fairly clear that a digital law librarian or knowledge manager who has received adequate legal training is one of the main pillars of legal certainty in the constitutional state. It is thus bewildering that even in the United States, which has a long tradition of high-calibre legal library services, it is still being debated what legal expertise a law librarian needs, and no uniform criteria have been established for training in the profession.<sup>34</sup> This situation indicates an unfortunate inability on the part of two professions with the same goal to work together.

[Rz 41] Larger law firms in Europe already have a sizeable number of lawyers working in the area of information and knowledge management. This is no doubt a welcome development — provided that these lawyers also have a sufficient knowledge of the information sciences and knowledge management. A sound informational environment can only be created by people who have the requisite professional skills, breadth of vision and capacity for cooperation.

<sup>&</sup>lt;sup>30</sup> MARC LAURITSEN mentions «Online Documentation Systems» as one example. See LAURITSEN, Liberty, Justice and Automata, p. 946 in Chicago Kent Review (Vol. 88:3). He also analyses the legal issues relating to the manufacture of automated products such as these.

<sup>&</sup>lt;sup>31</sup> In 2011, the Finnish Bar Association presented its Entrepreneur of the Year Award to Ms. MARITA WILLMAN, a graduate of the University of Lapland, who creates products offering remote management of contracts.

<sup>&</sup>lt;sup>32</sup> We should also remember those digital lawyers who work or do research internationally. In their case, it is not enough to have normal information literacy skills only. There are other requirements, among them at least a readiness to carry out systematic information retrieval or information retrieval in systems, cultural information literacy and the use of comparative informational tools. And, generally speaking, comparative law has a new information environment.

<sup>&</sup>lt;sup>33</sup> ANDREW M. WINSTON, Law Firm Knowledge Management: A Selected Annotated Bibliography, p. 177, in LAW LI-BRARY JOURNAL Vol. 106:2 [2014-10].

<sup>&</sup>lt;sup>34</sup> See CAULFIELD, Is This a Profession? Establishing Educational Criteria for Law Librarians, LAW LIBRARY JOURNAL Vol. 106:3 [2014-19], pp. 288—328.

[Rz 42] Here, it is also worth drawing attention to what has been rather slow progress in the legal literature. It is unusual, and in fact regrettable, that most of the legal literature is still either traditional, print literature or electronic versions of traditional works that lacking the features which give more sophisticated e-books added value. We have been very slow indeed. Traditional books are being published to be read by lawyers who read fewer and fewer traditional books; what they do instead is look for information on the content of publications. Of course, databases that allow a full-text search of all works are coming to the rescue here in increasing measure.<sup>35</sup>

[Rz 43] In addition to remaining mindful of all things digital, we must point out, as Jon Bing has done, that we still need traditional libraries. And this means that chance will have a part to play in lawyering. The next book over on the shelf might be more important to us than the one we got up out of the chair to get in the first place.

[Rz 44] Let me now take a step into an area which quite often seems to be left out of the discussion of digital lawyers. A considerable number of the lawyers in the Network Society are *bound to particular information systems* and *software applications* in their work. Even those lawyers are, however, at least partly, digital lawyers. This can be both positive and negative. Are we getting narrow-visioned «one solution» lawyers or open-minded skilled workers?

[Rz 45] In Finland, for example, the database system for electronic administration of justice, AI-PA, will be the first e-justice system for the general courts that binds a judge to a system where all the tools related to adjudication and the associated communications are the same for all judges in the country. Judges make their decisions in the context of the information system.<sup>36</sup> They themselves use the system. The solution we see here is no longer a mere tool but a comprehensive digital environment for adjudication, information management and communication.

[Rz 46] Achieving and maintaining a balance of information among the parties — and the judges — in court proceedings is one of the cornerstones of a fair trial. And this is a crucial consideration in efforts to develop a judges workstation. The business of the judicial administration cannot include limiting the sources available — legal literature for example — before proceedings even begin. This is one of the principal challenges e-justice faces in the near future. What can and what should a judge see and look for when turning his or her terminal on? At least he or she must be a good digital lawyer in the new digital environment.<sup>37</sup>

## 5 Conclusion

[Rz 47] Following the preceding — necessarily brief — comments, it is time to sum up. I will begin by recalling ETHAN KATSHS ideas on the skills required of the digital lawyer. The changing environment in which we work demands new skills. And the changing constitutional state requires our work to be of a wholly new, higher standard. Sluggish progress in developing large-scale

<sup>&</sup>lt;sup>35</sup> In Finland the commercial databank Edilex is such a solution. It provides the user access to all important Finnish legal journals with the same full-text retrieval.

<sup>&</sup>lt;sup>36</sup> AIPA is an electronic database containing all the documents related to a judicial matter dealt with by the prosecutors, district courts, courts of appeal and the Supreme Court. All the instances with access to the system may use these documents in their work.

<sup>&</sup>lt;sup>37</sup> One major problem with the Finnish AIPA is — and will continue to be — how literate the judge is who uses it. AIPA cannot be a comprehensive databank of legal source materials. In the worst case, it will create more judges who work according to what, following the well-known idea of Peter Seipel, we call the «arms length rule»; these are judges who do not read, but only judge using the system.

information systems, new technology and conservative lawyers are a very bad combination in trying to develop the modern constitutional state and make it work in the digital environment.

Several but not so many years ago, I was talking with a young judge about how some judges were found to have trouble deciding copyright cases involving software and online music distribution. The judge, who held a doctorate in law, saw nothing strange in this situation. He pointed out that these were such new issues. We do not expect judges to have expertise when it comes to new phenomena

[Rz 48] There has certainly been no shortage of debate and research on the relation between technology and law over the years. Indeed, it is an essential concern that should be taken up in the field. For the most part, though, studies end up being assessments of old legislation and the need for new laws to accommodate changes in technology.<sup>38</sup> And where a substantial change in technology is upon us, we see a lowering of the threshold for creating a new area of expertise. The advent of computer law and computer lawyers as a new field of research and a new professional field provides a graphic example of this tendency. One essential component of our basic method should be justified doubt when assessing any meeting of the old and the new. Encounters between the new and the old are written large in the history of legal informatics.

[Rz 49] The same justified doubt has an important role to play when speaking of digital lawyers. Here, however, it has to be extended to apply to our basic method. As lawyers, as a profession, we share a whole range of methodological elements. These distinguish us from those engaged in other professions. I have divided these elements into categories on three bases: knowledge, skill and procedure. Something has happened now in the relation between the general and specialized which makes it impossible for us to entrust digitality solely to lawyers specialized in it. We are all genuinely digital lawyers in addition to our needing a range of digital lawyers who specialize in different professions.

[Rz 50] In closing, Id like to go back to the ideas of Brian Donnelly. He concludes his contribution in Goodenough and Lauritsens book as follows:

Certainly a lawyer who understands that information in digital forms is now increasingly a part of law practice, and that soon virtually all information needed to do legal work will be digital, would want to acquire the knowledge and skills to gather, manage and present this information. Yet, almost all faculty, in almost all law schools, have continued to operate in an analog world with curriculums designed decades ago.<sup>39</sup>

[Rz 51] This observation should give us pause. It is a most appropriate ending for this presentation on digital lawyers in a digital world. We still have our work cut out for us on the path to a digital legal life. It is understandable that good digital lawyers are — and will continue to be — worth their price.

<sup>&</sup>lt;sup>38</sup> LYRIA BENNETT MOSES analyses this in an excellent way in her paper Recurring Dilemmas: The law's race to keep up with technological change, pp. 239—285 in Journal of Law, Technology & Policy (Vol. 2007).

<sup>&</sup>lt;sup>39</sup> DONNELLY, What does digital lawyer mean, p. 67 in Educating the Digital Lawyer.

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