

Innovation in Norwegian Law Firms

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Abstract

This thesis investigates innovation activities in Norwegian corporate law firms. The research is focused on law firms as knowledge intensive business services. Innovation in law firms is at a crossroads. Many law firms are now considering taking advantage of legal tech and implementing more efforts in order to digitalize more of how everyday work is done. This thesis uncovers the sporadic use of legal tech for more limited tasks traditionally involving document production and processing of information. Innovation activities in Norwegian corporate law firms were found to be ad-hoc with no formal R&D structure. There was found to be a high presence of external actors providing technology and also a variety of triggers for innovation and the development of new services.

Structured interviews with profiled attorneys and experts on innovation in Norwegian corporate law firms were used as a basis for the analyzis.

Foreword

This thesis is the output from a semester of hard work and research and marks the end of the

author's Master of Science in Business Administration and Innovation Studies at the Business

School at the University of Stavanger. It will be helpful for the future pursuance of the

author's own legal career, current political decision making, and the perception of current

affairs in the legal industry.

I am thankful for the efforts and time offered by the interview subjects who all prioritized

sharing their knowledge and expertise despite being attorneys with a tight schedule. Without

this input the thesis could not have been completed. And of course, I would like to extend my

gratitude towards my thesis advisor, Professor Ragnar Tveterås, a true innovator. He deserves

thanks for the important input, feedback, and ideas offered. This has been extremely valuable

to me. I hope that my contribution is of interest and holds value to those who take the time to

read my thesis.

Oslo, Norway

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Kristoffer Sivertsen

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Chapter 1: Introduction

Innovation in law firms has until more recent years been a subject that has attracted little or no attention on a global level or national level despite that innovation is one of the most important catalyzers for economic growth and progress (Wood 2005, Stough 2003). The legal industry has been doing things their own way and been happy with business *as is*.

Changes and even more so, innovation, have been perceived as foreign (Carlsen, 2019). This is underlined by views of the legal industry as conservative and old fashioned as expressed by Norwegian attorneys themselves (Gulbrandsen, 2018; Parr, 2018). Legal tech has however started gaining traction. Attorneys now attend seminars and discussions about how the industry and lawyers will be in the future are now more common and are creating a *buzz* in the industry.

Lawyers graduating from universities have had more or less the same skillset and approach as their predecessors for decades. Lawyers are educated to have the same method and common approach to law in their legal system. Little focus has been devoted on the development of legal services and law as a business, representing a *status quo* for the legal industry compared to other knowledge intensive business services who constantly aim to change and improve their products and services – until recently.

New technology is already on our doorsteps. Both for law firms and educational institutions. The subject Legal technology: artificial intelligence and law is now offered at the University of Oslo. Possible changes in the legal monopoly could symbolize a new dawn for law firms.

External threats are also contributing to changes. Law firms now have to compete with *new players* following the introduction of online services and apps offering many of the same legal services as law firms have had a traditional monopoly on for ages. New technologies are forcing a change in the way law firms are creating value for their clients and what clients are expecting from law firms. Invoicing hours upon hours for modifications on legal templates may be a distant memory in the future. Claims of cutting the time consume on legal processes to mere quarters using automatized processes and artificial intelligence are being manifested

through artificial intelligence that is readily available today. This may disrupt the whole legal industry as we know it. In addition, we have seen attorneys jump the ship from prestigious law firms to join and take initiative in the legal tech movement (Weldeghebriel, 2017).

Furthermore, this thesis will be researching what changes are currently happening in the Norwegian legal industry with focus on which innovation activities and what use of technology is on the radar of private corporate law firms, and analyzing this through literature on knowledge intensive business services. Triggers for innovation and industry views for who will benefit from innovation in law firms will also be investigated.

The interest in the subject of innovation in law firms comes for the author as a consequence of having practiced as an attorney providing legal advice and counsel to clients and working with a legal robot. The possibility of investigating and collecting data for the future movement of an industry that the author has been a part of is both exciting and challenging. There quantity of academic works regarding innovation in Norwegian law firms are limited, the author therefore wants to contribute to increase the focus on the subject.

In this thesis, the research question: How does innovation happen in corporate law firms in Norway, what kind of innovation happens and how do they manage innovation - and the subquestion: how do corporate law firms in Norway prepare for the future using technology and who will benefit from this use be addressed.

The thesis will be limited to innovation within *Norwegian* corporate *law firms* and their innovation activities. The corporate law firms investigated will have a minimum legal area portfolio including labor law and company law. Other categories of law firms with a primary portfolio of practice areas within criminal law, family law and immigration law will fall outside the scope of the thesis.

Furthermore, the thesis will be limited against *legal tech companies* that do not provide full scale legal services as a law firm or perform innovation activities in close co-operation with a law firm. Legal tech companies can however be useful to understand and gain a perspective on changes in law firms and the competition they may encounter in the future.

Chapter 2: Background

The following chapter aims to give the reader an overview of the legal industry in Norway and an introduction to digitalization and legal tech to serve as background for this thesis.

2.1 Overview of the Legal Industry in Norway

In this section, the author will give an introduction to the Norwegian legal industry, an overview and a brief look at the organization model of law firms. This will help the reader understand the scale of the legal industry and the different types of law firms in Norway.

2.1.1 Introduction to the Norwegian legal industry

As of 2018, there were 2083 law firms licensed to practice in Norway, employing 9068 full time attorneys (Norwegian Bar Association, 2018). One of the more obvious ways to distinguish between these firms is by legal focus area. The broad categories of law firms are criminal law firms, general practice law firms, and corporate law firms.

Criminal law firms typically specialize on criminal law and counsel prior to and in criminal court cases as public defenders or counsel in other capacities related to criminal court cases. Important tasks for criminal law attorneys include counsel from charged with criminal proceedings until a possible trial and imprisonment. General practice law firms typically offer a broad spectrum offer legal areas typically revolving around the needs of private persons. Often based around family law and a combination of other legal areas and are typically not regarded as specialists, but more of a legal all-arounder. Corporate law firms will be defined closer in section 2.1.2. Many further categorical distinctions are possible, including the regional affiliation and size of firms in terms of number of partners and /or employees. In this thesis, corporate law firms that have a minimum legal area portfolio of labor law and company law are used as the bases of this analysis.

2.1.2 Overview of the Norwegian legal industry

The 20 largest law firms in Norway by turnover are all corporate law firms (Kolsrud, 2018). Corporate law firms generally offer services within the legal disciplines of company law, litigation, tax law, property law, intellectual property law, labour law, contract law, procurement law, shipping law, and petroleum and energy law. Some corporate law firms also include combinations of criminal law services and general practice law services into their mix of services. In contrast, general practice law firms typically offer services within family law, inheritance law, consumer law, personal liability law, and sometimes immigration law, while criminal law firms typically offer representation in criminal court cases and legal services related to such. All of the largest law firms in Norway are headquartered from Oslo (Kolsrud, 2018) and some have regional offices typically in the largest metropolitan areas in Norway.

By looking at the turnover in the law industry we can single out the five largest law firms who have a turnover higher than NOK 600 million according to Kolsrud (2018). These five include Thommessen, Wikborg Rein, Schjødt, Wiersholm and BAHR. Interestingly these five law firms are all dedicated law firms that are not part of a larger multinational consulting or auditing firm. This as opposed to some of the law firms that follow closely behind that are a part of the big four auditing firms represented by EY, PWC and Deloitte.

The Norwegian Bar Association report that there is a stable growth in the industry and that the number of attorneys entering the business is flatting out. There is also an increase in productivity following a decline since 2009. There is an average yearly growth in volume for the last 2 years (2016 and 2017) of some 5.3 percent. Also, the development of the market for business clients and private clients has been quite similar.

	2017	2016	Vekst
Thommessen	851	816	4,3 %
Wikborg Rein	833	862	-3,4 %
Schjødt	747	736	1,5 %
Wiersholm	693	681	1,8 %
BAHR	675	610	10,7 %
EY	579	535	8,2 %
Simonsen Vogt Wiig	545	495	10,1 %
PWC	462	450	2,7 %
Deloitte	452	427	5,9 %
SANDS	447	363	23,1 %
Arntzen de Besche	421	388	8,5 %
Selmer	414	391	5,9 %
Kluge	364	347	4,9 %
Haavind	357	316	13,0 %
Hjort	261	253	3,2 %
DLA Piper	260	234	11,1 %
Kvale	219	198	10,6 %
Grette	205	183	12,0 %
Føyen Torkildsen	171	162	5,6 %
Ræder	155	158	-1,9 %

Figure 1 Overview of the 20 largest law firms in Norway by turnover (Source: Kolsrud, 2018)

According to the Norwegian Bar Association's yearly report for 2018, the total market for law services in 2018 was NOK 16,80 billion. Total export of law services from Norwegian law firms was 1,05 billion and interestingly 66,5 percent of all export came from the 10 largest law firms who only make up 0,5 percent of the total number of law firms.

The total market for law services is split into three main categories: business clients, private clients and free legal aid with respectively 63 percent, 28 percent and 9 percent of the total market. The Norwegian state used NOK 1,6 billion on free legal aid (including criminal cases). Thus, financing a substantial part of the total law market. In addition to this the Norwegian Bar Association estimates that pro bono work is performed for around NOK 280 million in 2017.

Furthermore, the Norwegian Bar Association reports that there has been a yearly increase in per hour prices for services from law firms the last two years (2017 and 2016) of 6,9 percent. While the average yearly increase in per hour prices has been 4,8 percent in the last ten years. Compared to other relevant services the increase in the price of legal services are higher. In addition, the increase in per hour prices is the strongest in the northernmost counties.

2.1.3 Organization model of law firms

Law firms in Norway are normally organized through a partnership model. However, the company form for law firms varies from limited liability companies to sole proprietorships. According to the Norwegian Bar Association 2018 report there were 2010 partners, 2485 employed attorneys, 1608 trainee attorneys and 1778 sole proprietorships. The Norwegian Bar Association also reports that there is a decline in the number of law firms, and a noticeable decline in the number of sole proprietorships.

This is in part explained by the smallest law firms falling out of the market and/or consolidating their positions in the market, this also applies to some of the medium sized law firms and even some of the larger law firms. In addition, the 25 largest law firms are increasing their share of the total market.

There is also an increase in the number of attorneys per partner. However, it is worth noting that law firms with up to 5 attorneys employ 40 percent of the total number of attorneys and that law firms with more than 50 attorneys employ 36 percent of the total number of attorneys.

Furthermore, there are different forms of being a partner to a law firm. The two most common forms of being a partner is being a partner with full rights (voting rights and influence) and an associated partner (primarily connected to payment and as a step up beyond senior attorney). Payment for partners of a law firm is normally distributed through different models of salary, bonus and dividend. For employed attorneys and trainee attorneys, payment is distributed through different models of salary and bonuses.

The Norwegian Bar Association also reports of increasing numbers of women in the law industry. In addition to this, there are various staff employed by law firms to function as support structure, such as legal secretaries, secretaries, IT-staff, accounting staff, marketing personnel etc.

2.2 Overview of Technologies

Norwegian law firms use different forms of technology to support their service offerings to clients. In this section, the authors will give a brief overview of digitalization, artificial intelligence and at the different types of legal technology that are currently being used and which purposes and advantages these have.

2.2.1 Digitalization

Norway is privileged to have a good start point for digitalization. According to NHO, "Norway has a well-functioning digital infrastructure, competence based businesses and strong industries with an international catchment," (NHO, 2018). Digitalization is an exogenous factor that law firms must adapt to and is currently a necessity for Norwegian law firms at some capacity, due to the recent requirements to submit law suits and documents electronically to the courts through the digital platform called Aktørportalen – and to interact digitally with pleadings for counterparts in law suits. This follows from changes in Courts of Justice Act § 197a and the ELSAM regulations.

Aktørportalen as a digital web based platform promotes digital documents as opposed to physical law suits and documents sent by post to the courts. This encourages Norwegian law firms to as a minimum, to digitalize documents as PDF with text recognition. One issue with Aktørportalen is that the system does not currently offer integrations with other document management systems being used by Norwegian law firms. This means that in addition to sorting document in a law firm's own document management system, the documents must be manually uploaded and sorted in Aktørportalen, without any possibilities of this being done automatically and exchanged from a document management system – although this should make the receipt and sorting of law suits and documents for the courts more efficient the backside seems to be that this in practice places an extra work load on the law firms who have to maneuver on at least two digital platforms. There is also the question of how efficient the courts manage the documents received through Aktørportalen, however that falls outside of the scope of this thesis.

Many corporate law firms have in recent years begun to focus on working more digitally. In practice, this means that client information and documents are now stored in systems often designed specifically for law firms – in the cloud or otherwise in order to enable and enhance efficiency in everyday legal work. This development is also partially driven by requirements from the courts to have evidence presented before it and supported by electronic document extracts – typically PDFs that are used on computers/iPads during court cases to support the both immediate evidence presentation and the oral principle when presenting evidence following the Dispute Act § 9-14 and § 21-9. Regulations are another important exogenous factor that law firms must adjust to.

These systems make document handling and processing more efficient. However, some law firms are still using old fashioned systems such as physical filing cabinets full of paper documents in combination with some digital attempts at document processing, which reduces attorneys's ability to increase efficiency and reduce time consumption per client. In addition, this leads to a need to manually scan documents for entry in Aktørportalen. For smaller law firms without dedicated secretary functions, this can entail that attorneys have to use production time on scanning documents with questions arising whether this will be considered ethical in lieu of invoicing of this to clients (Schmidt, 2019).

Some law firms are using systems to interact with clients and to manage projects. This includes interaction about and directly in documents where knowledge from both clients and lawyers are necessary for creating value through production of legal memorandums or other legal services. Microsoft Word also plays an important role with basic functions such a track change and commentary and is typically integrated together with systems for interaction. Some examples are Wikborg Rein's client portal, Sharefile, Legatics, High Q, KIM, ThommessenFlow and Haavind Collaborate.

Furthermore, some clients make demands to their legal providers that they deliver legal services to them on digital platforms following their discretion. This is typical for larger clients who demand forward thinking and specific ways of delivery following procurements. Client demands is also an exogenous factor.

2.2.2 Artificial intelligence

Recent years have seen the introduction of artificial intelligence (AI) to law firms as the next "big thing" in numerous articles and lawyer seminars and has been frequently used as a buzzword. For instance, the Norwegian Bar Association's magazine Advokatbladet has a frequently used tag for artificial intelligence on their website (see https://www.advokatbladet.no/tag/kunstig%20intelligens for more information).

Artificial intelligence, as opposed to human intelligence, is intelligence that is shown by machines in connection with solving problems. Typically, when referring to AI it is really software and powerful algorithms that are being discussed and what problems AI can solve. Because the nature of legal work is rule based, the legal industry is well suited for AI. AI is a partnership between man and machine that frees up attorneys from doing repetitive manual work to focus on more complex tasks involving strategic decisions and more discretion based assessments.

The presence of actual AI so far is often referred to as weak (Kerikmäe, 2018) and there is an ongoing discussion whether the AI present really is machine learning. Regardless of that discussion, Susskind's view that AI contributes to changes in the way legal services are performed and delivered (Susskind, 2013) is reasonable.

AI use in law is diverse. Ranging from Watson-based (IBM-technology) Ross offering a legal research platform through natural language processing helping attorneys understand, retrieve and rank information (https://rossintelligence.com/what-is-ai.html), to AI delivering client related services with for instance Law Geex who are offering contract analyzing tools and offering to "Say goodbye to copy/paste legal work!".

Natural language processing is an important part of AI offered to the legal sector and refers to how natural language data is analyzed and processed by computer programs. This is particularly useful in an industry such as the legal industry, where wording and phrasing is essential. Furthermore, natural language processing gives advantages in term of helping attorneys identify relevant wording in court practice to find relevant legal data and improving and could reduce time consume searching manually in sources such as Rettsdata and Lovdata.

Natural language processing holds advantages in analyzing, identifying problems and improving different contracts and legal documents. One clear advantage is also the time consume compared to attorneys performing this in a traditional manual manner. Law Geex tested their AI software against 20 American corporate attorneys in reviewing 5 non-disclosure agreements. The AI software achieved an accuracy level of 94 percent against an average accuracy of 85 percent among the 20 human attorneys. The groundbreaking element was that the AI software used only 26 seconds, while the attorneys used an average of 92 minutes (https://www.lawgeex.com/resources/aivslawyer/).

AI also powers chatbots using technology from machine learning AI companies – even from local Stavanger-based Boost AI. Currently chat-bots or virtual lawyers seem to be more relevant in other markets than for Norwegian law firms – although there have been made attempts to establish legal chat-bots and there are currently active legal chat-bots in Norway such as Huseiernes Landsforbunds' Lucy (https://www.huseierne.no/vi-hjelper-deg/om-var-juridiske-radgivning22/).

2.2.3 Legal tech

Legal tech can offer advantages to law firms. Legal tech can also be used to offer web-based services directly to customers without going through a traditional law firm. Possibly representing from riches to rags for law firms. This will hold relevance later on in the thesis when analyzing the results from the law firms interviewed.

Legal tech is developed both by external companies and internally in law firms. Some external legal tech companies develop technology and sell this to law firms. Lawbotics is one example of that – powered by blockchain. As an anti-pole, Justify, develops technology intended for selling legal services directly to consumers without go through a traditional law firm. Legal tech is singled out by Kerikmäe et al. (2018) as the biggest trigger for innovation in law firms, due to the effect of making several of the services provided by law firms more easily accessible. Clients who would normally seek out a law firm can instead simply use an application for a service that is already outsourced to begin with Thus, making legal knowledge close to public knowledge and more accessible. Law firms may need to embrace technology in order to remain competitive. LIGL is an example of a law firm that acquires

legal tech externally, while other law firms develop their own technology. Norwegian law firms also import legal tech from abroad.

There are different legal tech categories and different ways to arrange them. Praduroux et al. (2016) categorizes legal tech into eight groups: (1) lawyer to lawyer networks, (2) document automation assembly, (3) practice management, (4) legal research, (5) predictive analytics and litigation data mining, (6) electronic discovery, (7) online dispute resolution and (8) data security technologies.

The practical overview by Praduroux et al. is useful when looking closer at Norwegian law firms and the technologies they use, although some of these categories may for now hold little relevance for Norwegian law firms.

From the author's perspective it is also beneficial to highlight compliance which receives attention as an area where technology can enhance and make the process more efficient, as a separate category (9) as it can easily fall between document automation assembly and predictive analytics.

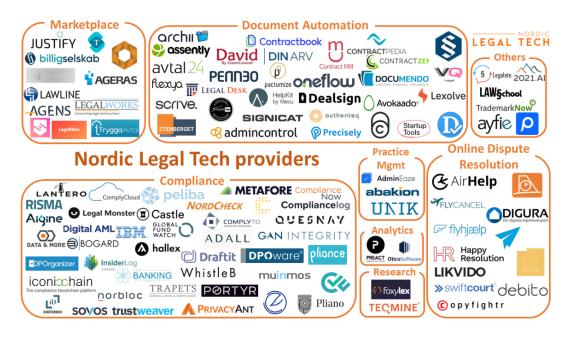


Figure 2 Overview of Nordic Legal Tech providers (Source: Nordic Legal Tech, 2019)

Lawyer to lawyer networks are meant to provide synergies for outsourcing and help create both social and referral networks. Typically, a client can state a legal problem and then be paired with a lawyer who can meet the client's need, almost like searching for a product on Amazon and being paired with a seller. A well-known example of this from the United Kingdom is Lexoo which in practice works as a lawyer-matching marketplace online where a client can request quotes – similar to services from other professions like insurance or electrical services. This enables the client to easily get in touch with a lawyer with the necessary skill set, while also making rates more transparent for the client and inducing competition. Stavanger-based Justify is working towards providing such a marketplace for legal services.

Document automation and assembly are designed to replace some of an attorney's more repetitive tasks so that the attorney's efforts can be better spent on other duties that require more strategy or assessment based tasks. Essentially, document automation and assembly systematize pre-existing text and data to a produce a new document that fulfills a client's need. These technologies can then cover a whole legal process within, for instance, mergers and acquisitions or downsizing. One example of document automation used in a Norwegian law firm is IDA TM by LIGL. LIGL purchases external technology from Thomson Reuters and uses internal capabilities from their employees and partners as input to develop the initial "shell" into the output: a full-blown legal product which involves automating templates and giving the client a full process for handling for instance dismissal of employees. Another example of document automation comes from Justify and their development of a do-ityourself legal product – a will (last testament). Examples of known technology used in Norway to support automation processes are Thomson Reuters as mentioned, and Lexolve by Lawbotics. Lawbotics offer similarly to Thomson Reuters the technology that has be transformed with knowledge from law firm or others with legal knowledge into automated templates or documents.

Practice management is a software tool that helps attorneys manage client-specific information similar to that of a customer relation management ("CRM") software. Legal research on the other hand uses advanced technology to identify legal information relevant to the search. Ross, as mentioned above is an example of this type of software.

Predictive analytics and litigation data mining is a tool that identifies meaningful relationships in data through statistical techniques, laying grounds for better decision making and prediction of future events (Kerikmäe et al. 2018).

Electronic discovery tools help produce and gather information for production in relation to a law suit or an investigation typically following a legal provocation. Although a recent ruling from the Norwegian Supreme Court has set the limits for how the discovery of evidence can be and thus possibly limiting the range of such technology (HR-2019-997-A). The supreme court stated that access to evidence must be specified in accordance with the Dispute act § 26-6 (1) and that a process of disclosure or discovery is not a wanted state in the Norwegian civil procedure. This technology will however be more relevant in legal systems where the process of disclosure or discovery is common, such as in the United States. An example of a Norwegian e-discovery technology provider is ayfie.

Online dispute resolution is a technology based tool to solve a dispute outside of the court room, typically through either offering objective dispute resolution or optimizing the outcomes for the two parties. Data security technologies are important for protecting confidential and sensitive information regarding a specific case or information provided by a client, or facilitating a secure transfer of data.

Compliance technology is typically a solution created to identify, sort and extract information automatically from pre-existing documents, for instance a process of due diligence or the General Data Protection Regulation ("GDPR"). As mentioned above, this category can overlap several of the other categories mentioned due to the many aspects of compliance including automatic document products, security technologies such as signatures and technology that can identify content in documents.

2.3 Legal Industry Views

According to the Norwegian Bar Association, the industry sees digitalization and automation as a positive opportunity in the future – especially among the largest (more than 50 lawyers), second largest (11-50 lawyers) and third largest (6-10 lawyers) categories of law firms who

see digitalization as something positive that will develop the industry the next 3-5 years (Nielsen and Djubvik, 2017).

When it comes to automation the largest law firms identify this as something positive that will develop the industry the next 3-5 years but there is a greater distance between the largest firms and the rest with this regard – 59 percent of the largest firms vs. 43 percent and 44 percent with the second largest firms and the third largest firms respectively see this as a positive development in the industry. It is also worth noting that law firms regardless of size categories see the emergence of new customer groups as positive.

Chapter 3: Literature Review

In this section, the author will review relevant literature for innovation in law firms that will help understand law firms as a knowledge intensive business services by addressing production and diffusion of knowledge and innovation in KIBS with focus on aspects such as competition, R&D, the role of the client and challenges with innovation.

3.1 Knowledge Intensive Business Services

Services are of relatively less importance to the Norwegian economy than they are to other developed economies, primarily due to the huge share that oil and gas revenues play here. Regardless, Norway and other developed economies are largely service-based. In 2018, the share of the service sector amounted to 55.6% of total value added in Norway (World Bank, 2019).

Knowledge intensive business services (hereafter referred to as KIBS) are defined as services from companies who provide support that is knowledge intensive necessary for business processes in other companies (Nählinder, 2005; Miles et al., 1995). Toivonen (2006, page 2) in this context even refers to KIBS as "expert[s]". KIBS both produce and process knowledge and contribute to the possibility of being able to externalize functions in manufacturing and within other service companies and therefore depend greatly on professional knowledge (Muller and Doloreux, 2007).

KIBS depend greatly on professional knowledge, and base their employment structure thereafter. For instance, attorneys in the legal sector are highly skilled and have undergone a highly specialized study to even be able to call themselves attorneys. The highly specialized employees are an important input in KIBS and a primary source of information and knowledge that builds the foundation for the service that is offered to clients or to transform knowledge from clients and supply solutions to client-specific issues. This is turn makes these activities costly based on the highly skilled input that is the employees.

Kerikmäe et al. (2018) on the other hand argues that the legal profession as a whole and the business models of many law firms will be facing a major change. Kerikmäe et al. highlights that it is paradox that law firms use highly skilled input to produce output that really does not have such requirements and that much of the services are simply data processing and therefore predicts changes for attorneys and clients in the future when competition is experienced from non-traditional actors.

The highly skilled input plays a role in the growing presence of KIBS in the economy (Mueller et al., 2001, Miles et al. 1995). Maskell and Malmberg (1999) point out the ability to profit from and enable economic transactions related to knowledge as important. Since knowledge is the main input and output in KIBS, these firms are therefore very representative of the "knowledge economy" Gallouj (2002). According to Miles et al. (1995, page 18), KIBS "involve economic activities which are intended to result in the creation, accumulation or dissemination of knowledge". With this Miles et al. refer to activities pursued in order to establish codified knowledge that can contribute to increased competitiveness.

KIBS' growing presence in the economy is an indicator of the "intertwining of different business activities" involving "increased interdependence of sectors" and "growing interpenetration of sectors" (Miles et al., 1995, page 20). In practice, this reflects through manufacturers using more producer services, while services on the other hand are using more technological products. This combined with a growing focus on specialization strategies and a company's core business activities subsequently pushing away prior business strategies that have been more diverse, leads to an increased need from other businesses for the support of KIBS and a shift towards moving in-house services externally (Miles et al. 1995).

Some KIBS hold unique knowledge combinations about how to apply technical knowledge to industry specific problems. Or even knowledge bases with specific combinations that are meant to serve clients firms and sectors (Miles et al. 1995). Although KIBS are often important users of new technology they are not limited to this, and often produce and convey new technology on the background of innovation strategies (Miles et. al 1995). To this there are issues of protecting intellectual property rights which holds importance to strategic decision making for investments in knowledge due to amongst others the risk of imitation.

Buying a service from KIBS differs quite a bit from purchasing other service. Strambach (1998, page 4) finds that "purchas[ing] of knowledge-intensive services is not the same as the purchase of a standardized product or service". With this Strambach identifies that services from KIBS are tailored to the specific client and their needs, and are not generic services.

3.1.1 Production and diffusion of knowledge in KIBS

The knowledge process in KIBS contains, as a starting point several elements that in turn ends up as the end result which meets the needs of the client company. This consists of integrating external knowledge, acquiring specific knowledge about an issue and elaboration of the codified knowledge (Muller et al. 2001).

Strambach (2001) presents a three primary steps model for production and diffusion of knowledge in KIBS: acquisition of tacit and codified knowledge, knowledge recombination and transfer of knowledge to client. Muller et al. (2001, page 5) explains that in the last primary step of Strambach's model the "process of knowledge recombination takes place within the KIBS: knowledge gained from interactions with clients is combined with existing knowledge whereas additional knowledge is acquired and new knowledge is generated".

During the first step, new knowledge and the acquisition of such is based on interaction with clients and on a learning by a trying approach in order to solve the clients issue (Muller et al. 2001). During the second step, the knowledge that has been acquired through interactions with clients is performed as a recombination and in turn allows the KIBS to partially codify the knowledge and develop their service towards a specific problem (Strambach 2001, Muller et al. 2001).

Lastly the knowledge or rather solution is now developed to a new or improved service that is transferred to the client and can solve the specific problem that essentially made the client get in touch with the KIBS to start with. Muller et al. (2001, page 6) highlights following this that "the diffusion of knowledge is interrelated with new possibilities for interaction and knowledge generation" and concludes that "interactions with client firms might enhance KIBS knowledge bases through learning processes and lead to new possibilities of interactions".

Muller et al. (2001, page 6) finds that the knowledge processing in KIBS is coherent and quotes Ancori et al. (2000, page 267) proposed knowledge appropriation: "the appropriation of crude knowledge — i.e. its integration in one's cognitive context — is not the result of a transmission, but rather the result of a re-engineering process". And explains that once the knowledge has been re-engineered it can be profited from in different forms shapes or rather services, against other clients. This contributes to, according to Muller et. al (2001, page 6) "to the divisibility of knowledge bodies". Subsequently, this will in turn increase and improve the knowledge base of the company and further once absorbed also the absorptive capacity, and as a consequence may lead to an increase in more innovation and thus economic growth (Mueller et. al 2001; Cohendet and Steinmueller, 2000).

The interactions between KIBS and small- and medium-sized enterprises (hereinafter referred to as SME) are singled out by Muller et al. (2001, page 7) to potentially have a "crucial importance for the support of innovating SMEs". SMEs often have three issues that can hinder innovation processes: capital, scarcity, lack of management qualifications and the difficulty in obtaining know-how and technical information according to Muller et al. (2001) who refers to Kleinknecht's (1989) list of possible problems. Therefore Muller et al. suggests that internal R&D by itself will not suffice if the SME is to succeed with innovation. Many SMEs could therefore have a "KIBS dependency". Muller et al. views that KIBS role in innovations in SME could grant KIBS the role of co-innovator. Muller et al. finds support in von Einem and Helmstädter (1994) who stress the role of KIBS as co-innovator and propose a daring description of KIBS as "midwives" to SMEs.

Muller et al. (2001) suggest that not only do SMEs benefit from KIBs, but that it is likely that KIBS also benefit from interacting with SMEs with respect to the KIBS own ability to innovate. This is due to how the knowledge base of KIBS is developed: through their client specific activities. Muller et al. (2001, page 8) deems this as logical on the background that KIBS innovation capacities "are influenced through those interactions". Because of this, Muller et al. present a hypothesis of what they refer to as a "virtuous circle" based on Muller (1999) and argue that SMEs and KIBS that are interacting both contribute to their own innovative capacities. Muller et al. describes this as a "core sequence" that has three subsequences. First, the interaction itself. Second, the resulting knowledge base expansion. Third, the ensuing evolution of the firm.

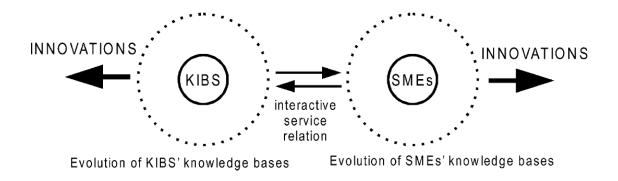


Figure 3 The virtuous circle associating KIBS and SMEs (Source: Muller et al., 2001, pg. 8)

Muller et al. (2001) argue that despite of the presence of modern day communication technology, KIBS activities appear to favor core regions. This is according to the Muller et al. due to face-to-face contact being highly valued as well as the importance of a physical exchange point of tacit knowledge. KIBS are dependent on direct contact with clients in order to deliver tailor solutions for their problems. Getting to the tailored solution requires recombining existing knowledge often with new input. Fundamental for this is personal contact, at least in the start of a client relationship to build a common understand, but also retrieving the tacit knowledge required from the client for the solution. Muller et al. find that proximity holds an importance for the production and diffusion of knowledge in KIBS and existing spatial patterns could be reinforced by modern communications technology and refers to the work of Héraud (2000) who highlighted this.

Further to this, knowledge flows could favor regional differences and stimulate regional inequalities (Muller et al. 2001, Wood 1998). Muller et al. lean on Wood (1998), who found that KIBS and their increasing importance represent a possibility for core regions, however possibly at the cost of other regions. Muller et al. find that KIBS play an important role with respect to activating innovation potential because of the mutually beneficial relationship between SMEs and KIBs, which in turn may influence and affect production and diffusion of knowledge inside national innovation systems and subsequently also at a regional level.

KIBS contributes largely to the production of knowledge and diffusion of it. Which benefits an economy. Thus, it is of importance to underline the systemic dimension of these processes and presence of personal contact points for innovation (Muller et al., 2001).

3.1.2 Innovation in KIBS

KIBS are drivers for growth through being an enabler for innovation (Asikainen, 2013; Gallaher and Petrusa, 2006). In light of businesses outsourcing support operations that require a significant and highly specialized skill set, KIBS are experiencing growth and are being seen as a "parallel knowledge infrastructure" (Asikainen, 2013, page 78). This despite KIBS not being science-based in the same manner as universities, but regardless being in possession of specific high-level expertise (Hertog, 2000).

3.2 Competition

Miles et al. (1995, page 70) describe innovation in KIBS as a result of fierce competition with great technological content and find in their case studies that "high levels of competition are one of the main factors driving along services' innovation". They argue that this competition is to a great extent shaped by regulations and highlights the need for KIBS with environmental regulations, technology-related rules and liberalization of trading across borders. Further to this, Miles et al. highlight that sector trends are important in order for KIBS to adjust their service offerings and that the innovation process spectrum ranges from the evolutionary development of an already existing service/product on one end, to a radical new service/product on the other side.

Competitiveness and customer needs are the underlying reasons for KIBS' need to innovate. This in turns differs from manufacturing firms where other goals of R&D like product are in the center. The innovations in KIBS are incremental, not radical, this yearns a constant development of an existing service according to Asikainen (2013, page 81) who finds support for that view in Gallaher and Petrusa (2006) for the claim that this is due to the presence of short-term innovation strategies focusing on "market entry, retaining or gaining market share". Asikainen (2013) further finds that this builds up on the notion of science only having an indirect contribution to innovation in services.

3.3 R&D

Innovation in KIBS is tightly connected with their R&D activities. However, R&D activities in KIBS are often ad-hoc based and rely on market features as opposed to new technology based KIBS which are more science-based, and also differ from most industrial R&D (Miles et al. 1995). This links to the purpose of KIBS presenting value to clients through client-specific solutions for a specific problem or demand. Thus, the KIBS ability to learn and utilize networks are of high importance and visible as a characteristic of their organization (Miles et al. 1995).

None the less, KIBS still hold typical services innovation characteristics. KIBS are rarely organized through R&D departments, often project based, high degree of involvement with clients and high degree of influence from regulations (Miles et al. 1995).

Asikainen (2013) and Cainelli et Al. (2006) refer to the presence of co-existence of several innovation types in services from product, process to organizational innovations as more common. This is found to be due to the complexity of the production, distribution of the services and the effects and interaction with clients. Differentiating between product and process innovation can therefore be difficult (Asikainen, 2013; Hertog 2000). However, the presence of process innovation is less likely where production of output is highly tailored unless the client sees value in the development (Asikainen, 2013; Sirilli and Evangelista 1998).

Miles et al. (1995 page 65) apply the term "fuzzier" versions of R&D to describe their findings from their case study of KIBS. In this lies that some KIBS demonstrate a wider approach to R&D that includes research broader than first assumed, for instance "teleworking services were conducting research aiming at identifying firms willing to hire teleworkers, while computer continuity services were exploring new markets which could employ their existing technical capacities".

Further to this, Miles et al. (1995, page 65) find that in innovations that were knowledge based, the "further knowledge development emerges as an immediate spin-off from ongoing

projects" and on the basis of this, claim that this is the R&D and that sometimes separating the R&D activities from the development of a service in specific can hardly be done.

Asikainen (2013) finds that a lot of the R&D in services stem from both external cooperation, outsourcing and a use of a multitude of information sources which. This leads to enabling both the transfer of technology and spillover of knowledge. Even some KIBS see competing firms as an information source for innovation and R&D, especially KIBS that are the most innovative (Asikainen, 2013; Evangelista, 2006).

R&D is still primarily performed in-house in KIBS. Much of this can be justified due to the nature of client-relationship. However, Miles et al. find that in some KIBS in a case of Product Data Interchange, that R&D activities were actually outsourced to specific industry and research organizations. However, as Miles et al. find, for most KIBS there is some degree of outside R&D support typically involving software and hardware companies and sometimes technical engineering and multimedia consultancy even in some cases developing into a codevelopment partnership between the outside provider and the innovation KIBS.

Miles et al. (1995) find that there is a relatively low level of formal R&D with this respect and that services are relatively poor at innovation. This in turn stands for a slower rate of the growth of productivity which subsequently leads to according to Miles et al. (1995, page 48) that "innovative processes services are often lumped together as "supplier-driven" sectors".

Miles et al. (1995) find that despite all their study subjects, KIBS, had R&D activities, none had a dedicated R&D department – and presume that only service firm that are of a significant size have a dedicated R&D department. However, they argue that there is not the same need for a formalized approach to R&D necessarily as with manufacturing companies on the other hand although specifying that services innovation "lag behind that of manufacturing". Although, Miles et al. (1995, page 51) predict that the "result may well be that services innovation will come to resemble that of manufacturing to an increasing extent" and argue on basis of how the division of labour is undertaking a process of "modularisation" where "discrete task elements are distinguished, re-examined, subject to technical change where appropriate, and incorporated in new combinations of service-product bundles, with production being allocated across agents in new ways".

Use of services from external companies that are technology-related KIBS to innovative and create new services may result in spillover-effects from KIBS that are "the most active innovators in the economy" and have "high levels of R&D expenditure, patenting, etc. of software and IT services" (Fagerberg et al., 2005, page 450).

3.4 Role of the Client

Miles et al. (1995) find in their search for identifying different forms of innovation in service production that it derives from processes of innovation triggered by demands from clients and that serves as an important driver for further innovation. Further to this, Miles et al. (1995, page 46) establish that "the specificity of service innovation is more a matter of quantitative than of qualitative differences", that "there is considerable variety among services (as there is within other sectors too)" and that "there are ongoing technology-related and other developments which are leading to change in services innovation – and probably also to change in other sectors as well, leading to some convergence of characteristics".

R&D in KIBS are usually client-led to a large degree with the exception of non-project-bound development focused on more specific strategic areas (Miles et al. 1995). Miles et al. found that informal R&D took place in what they refer to as "grey hours" and that in KIBS with a high level of consultancy that there was not much opportunity for R&D that what non-project-bound or non-client-led due to financial reasons (invoicing matters). Miles et al. describe the relationship between R&D activities and client input in KIBS as "complex" and point out that with respect to the end product and it's delivery, there is a lot more input from clients than versus the way this is produced in the KIBS.

Since the service production in KIBS is based around the client relationship and is dependent of the client to customize and tailor the service accordingly to meet their needs, it is reasonable to say that the client is in the center of the innovation process. This view has support in literature. Asikainen (2013, page 80) who points out how KIBS rely on "[...] engag[ing] the customer instead of relying on solutions offered by dedicated R&D departments". This in turn leads to an ad-hocracy approach being the starting point for innovations with R&D activities happening next to other activities in KIBS. Another typical

trait for KIBS is that there are usually no specific R&D budgets or projects (Asikainen, 2013, Crevani et al., 2011).

For the clients, the use of services from KIBS contribute to benefits for them. Through innovation in KIBS there is an expectancy of a client's competitive position (Miles et al. 1995). Miles et al. (1995, page 78) found in their research that "the smooth exchange of product data information between outsourcing and subcontracting firms in the PDI case was hoped to prove a major competitive factor for clients; in multimedia-based training, the intention was to gain improved efficiency in the use of time and a reduced need for tutors to lead mundane training sessions". This improved the clients use of information and also enhanced both the knowledge and how the knowledge was applied with the result that the clients competitive position was improved. Miles et al. identify that they sometimes find a first mover advantage, but that the benefits normally include reducing costs, improving quality and more efficiency.

3.5 Challenges

Certain features of the service innovation process however, including the issue of protecting intellectual property may lead to a discouragement of the creation of innovations in KIBS (Asikainen 2013, Gallaher and Petrusa 2006). Protecting intellectual property is a typical issue for KIBS contrary to manufacturing firms where it is simpler to obtain protection for a product in most national and international legislation.

Information technology (IT) holds high importance in KIBS. Unless KIBS are able keep up with fast changes in IT and have the necessary skill set, then this could hinder innovation as Miles et al. (1995) find especially in markets that are less profitable. In addition, they find that problems and uncertainties with the infrastructure for IT and associated standard could make introducing new services harder.

Miles et al. (1995) find that for many KIBS, similar as for many SMEs, there are often scale problems through issues with poor access to both information and capital resources. In addition, they find that many KIBS are vulnerable to changes in market conditions, and may

not be able to easily develop or obtain new skills. Also, Miles et al. find that social and historical factors could play a role in why many KIBS have been slow to adopt knowledge management strategies.

Innovation in services is dependent on massive organizational change (Miles et al. 1995). Typically, new work patterns and routines are a part of innovation in KIBS and take time to be introduced and integrated into the KIBS. Miles et al. refer to an example of introducing PDI systems in architecture were the implementation needed much adaption which they single out is a factor in long lead times in innovations, as mentioned above. Yet for Miles et al. (1995, page 68), estimating lead times for service innovation is "rendered difficult by the fact that what is often taking place is the gradual development of the service package in a more or less continuous process of innovation, over a long series of interactions" and underline that this typically is applicable in the case of incremental innovation as opposed to the case with radical innovation. Further to this, Miles et al. highlight the lack of training and availability of "suitable skills" as a concern. In addition to a need for management support and benefits for employee commitment to innovation.

Maunsbach (2017, page 4) argues that innovation in law is special due to the unique role of law "that is a result of a legislative process, usually submitted to democratic review" and thus "recognition of the importance of openness and democracy is a necessary part of a model that aims to investigate conditions under which innovations in law take place". Further to this Maunsbach also emphasizes that the important condition of openness separates innovations in law from innovations in general. Partially due to the role of non-disclosure in legal practice. In addition, Maunsbacher highlights that because the legislative process is time-consuming due to democratic concerns, this inevitably means that innovation in law is on a slow ride as a contrast to other innovation.

The actors are also different, according to Maunsbach innovations in law are facilitated by legislative bodies and therefore the incitement to create something new is not the same as in other innovation where economic operators facilitate such due to the prospect of increased market shares and more profits – legal innovation must follow legislators concern: the well-being of the people. Thus, Maunsbach argue that innovations in law can appear as social innovations.

Innovation in the legal sector is also different from other innovations with respect to the aspect of being copied by other actors. Maunsbach explains this on the background of legal constructions being primarily limited to its legal jurisdiction/state/territory and that therefore copying and transformation will happen at a slower rate. Some innovations may fit for civil law countries while others may be misplaced for common law countries — and some may not be applicable because of cultural aspects. Law has a need to be adapted thoroughly to fit its legal system. Thus, a legal one size fits all is likely the wrong size — at least for legal system innovations.

Chapter 4: Modeling the Production of Legal Services

In this chapter, the author will present an original model which shows the generalized stepby-step production process of legal services. Each step in this process is discussed in some detail. Innovation opportunities and barriers to innovation are briefly considered where relevant. This chapter is written in lieu of a more traditional thesis theory chapter.

4.1 General Model of the Production Process of Legal Services



Figure 4.1 General model of the production process of legal services

Figure 4.1 is a step-by-step-model which roughly conceptualizes the production process of legal services. It begins with the initial input "request from client" and progresses through a process of five broad steps. The model concludes with the delivery of the finished product "legal advice". This original model is based on the author's own experience from working as an attorney at various corporate law firms in the Stavanger area and producing legal services for clients, both businesses and private persons. The model is therefore generalized so that it is applicable to the majority of formal client/lawyer interactions.

In the following sections, the author will detail each individual step of this conceptualized production process model, and in some cases how each step is affected by innovation. A more detailed model has been developed for each of the broad five steps listed in Figure 4.1.

4.2 Request from Client

The background for the input "request from client" that initializes a legal service starts with problem awareness, as shown below in Figure 4.2. The "problem" in question is the situation which the client is trying to find a response to, or to create. There are innumerable legal problems which a client could be seeking answers to, and a comprehensive list of them would be nearly impossible to create. Examples of a problem could be based on legal steps being taken against or on behalf of the client, or the rectification of damages caused by changes in domestic or international legislation, new court practice, or local government regulations.

Other problems could arise from market changes, or the use of new technology or competition. Many law firms therefore focus on marketing their efforts that highlight possible new problems that could affect existing and potential clients. For example, in Norway there is a high degree of article writing among law firms especially around the release of the Norwegian National Budget and legislative changes.

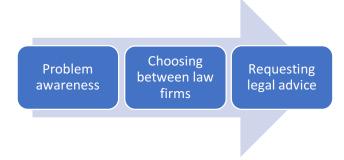


Figure 4.2 From problem awareness to requesting legal advice

The first stage is the initial phase where client contact is established and the assignment that will eventually end up as a legal service is initiated. This is normally triggered by a request from a client or a business or a private person who is set to become a client. The request will traditionally be in the form of a phone call or e-mail from the client or triggered by an attorney contacting the client.

Requesting legal advice can be a cumbersome process. The more modern approach beyond telephone or contact by e-mail, utilized by some law firms seem to be through a contact form or even more progressive, through chat window integrations even through some law firms' Facebook pages. This demonstrates a development in innovating how requesting legal advice is done and simplifying getting in touch with law firms.

By formally requesting legal advice, the client makes a concrete choice with respect to which law firm to render legal services from. At this stage, the client is aware that there is a problem that needs to be solved and is looking for someone with a special competency to advise. Innovation through technology and new delivery methods could make the need for law firms obsolete for simple legal tasks.

For the client, there are many different sources of information available when choosing a lawyer, for example company websites, word of mouth, social media, and websites that give an overview of attorneys. In Norway, the latter includes websites such as www.advokatenhjelperdeg.no. One could also consult the Norwegian Bar Association or websites like www.mittanbud.no. Contact is also often established directly with an attorney, especially if the clinet and the attorney have had a previous relationship. Pricing information can be difficult to obtain up front - due to the specialized nature of legal services, consultations are often required before prices can be decided on. In addition, it is difficult for both businesses and private persons to compare prices for legal services between various law firms before initiating a formal process. This is an area where innovation likely will occur through the use of technology and new marketplaces for legal services.

Once the request has reached the law firm and an attorney has been assigned, the information in the request will be processed and if sufficient enabling the attorney to identify roughly what the problem is and what legal services are relevant for solving the client's need. The information may also help the attorney determine whether using time on the request should be pursued at this point or not.

There is room for process innovation in terms of requesting legal advice and the initial communication with Norwegian law firms. These beginning stages could be made more efficient and transparent for the client. London-based legal tech company Lexoo has introduced a new approach that is referred to as revolutionizing and has gained popularity

among businesses. Although currently not serving the Norwegian market, Lexoo offers an attorney matching online marketplace. This marketplace enables clients to specify their problem and not have to browse law firm's websites to figure out who is suitable for the assignment. In addition, the marketplace promotes transparency and competition when it comes to costs. Furthermore, the pricing is fixed (for more information, see https://www.lexoo.co.uk/).

The author is familiar with a similar marketplace concept for legal services being developed in Norway by the Stavanger-based legal tech company Justify. Such attempts to create a legal marketplace could be mutually beneficial to law firms and clients. The former would be more directly visible to potential customers, and the latter would have a better oversight of firms and their pricing information. This could potentially create more intense competition between Norwegian law firms.

4.3 Meeting

When the request for legal advice is pursued, it is common to arrange meetings or telephone conferences. The aim for these initial meetings is normally to define a scope for the service together with the client, agree on goals, and establish and clarify what the need of the client really is and what expectations from the legal services are reasonable for the client. Price estimates can also be given at this stage. Figure 4.3 below is a model which shows how these two elements together make up the assignment, which has client value at its core. For a law firm, it is integral for the client to regard the legal services as valuable.

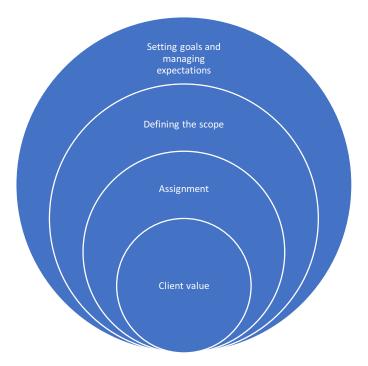


Figure 4.3 The client value model

Figure 4.3 illustrates how clarifying goals and managing expectations is important for attorneys in order to deliver in accordance with the assignment and achieve client value. If a client has unrealistic expectations from an assignment, the attorney will likely not be able to deliver what the client sees a valuable service and valuable use of knowledge. It is also important to establish a defined scope to limit what falls within the assignment. Establishing a scope is mutually beneficial for both sides. It limits the tasks that are to be performed by the attorney and the legal areas that are to be covered, which subsequently sets a boundary for what knowledge must be used as an input. On the client's side, it safeguards against unnecessary time consumption that will turn into invoiced hours on the client's bill.

These are both issues that are addressed several times during some assignments. This also has important implications in terms of the high standards expected from attorneys, which are codified and developed by the legal sector itself through the Norwegian Bar Association (Advokatforeningen, 2019).

This stage could benefit from innovation and increased use of technology. By clarifying the goals and expectations for the legal services through, for instance, a digital marketplace or other digital solution offering direct communication and frame setting for the assignment both with regards to content and prices, the client and the attorney could each save valuable time

and in turn use fewer billable hours. However, for some clients the personal touch from a physical meeting may hold an intrinsic value.

4.4 Collection of Information

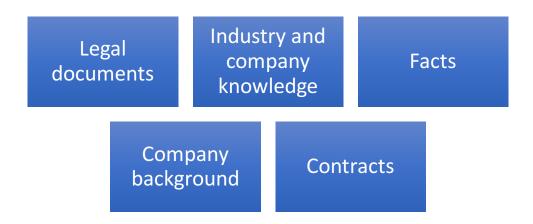


Figure 4.4 Types of information to collect

Collecting sufficient information is important in order to successfully perform a legal service. There are several forms of information that the attorney must obtain, including case specific information, industry specific knowledge, knowledge about the company or the private person, legal documents received by a possible other party, and more depending on the case.

In order to get to the bottom of a client's problem, information naturally plays a crucial role. It is therefore important to have an efficient way of collecting such information for the attorney to be able to understand the case's full complexity and to manage all the questions of the assignment. Only then can the attorney communicate what concerns must be addressed.

Collecting this information can often be very a manual and labor-intensive process, however there has been an increased focus on the safe transfer of documents and files, especially following the implementation of the General Data Protection Regulation (GDPR) in Europe in 2018. This has led to some law firms investing in technology for a more secure transfer of these sensitive documents and files. Of course, many law firms had also invested in this kind of technology prior to GDPR. There are many different types of software used for this purpose. Sharefile for instance allows the law firm to safely collect and share documents with clients and other third parties.

Further attempts to innovate the collection process are currently being used at some law firms. For example, some law firms are developing their own interaction portals that allow for increased involvement from clients, and help law firms with collecting other types of information than simple documents. This is beneficial for better project management as well. Some law firms on the other hand still manage physical documents and use traditional binders and archive systems - in 2019! From the author's own experience, many clients prefer presenting physical legal letters, claims or similar that they have received to the attorney at the meeting stage, and share information orally. This leads to law firms having to use resources to digitalize these documents and sort them into a client management system.

Attorneys must in this case transcribe and input this information into such a client management system. This time consumption is ultimately invoiced to the client in the form of extra billable hours, therefore the client has a rational interest in facilitating a minimum use of time on this by utilizing more digital functions. However, some old-school clients are from their own ways of doing business both used to and secure with physical documents and may therefore be seen as a barrier to innovation in this respect.

The handling of documents also holds relevance when transferring a client or a case to another law firm. This typically presents an issue when one law firm has a digitalized information handling system and the other does not. A tangible issue for many Norwegian law firms is that although they may have invested in technology to manage documents which is capable of communicating with other systems, the court system for handling lawsuits and documents, Aktørportalen, does not communicate with other systems as of 2019. As a result of this, law firms often have the burden of having to do double work with documentation. However, this may be changing soon, and the author is familiar with attempts on addressing this issue from Domstolsadministrasjonen (The Norwegian Courts Administration).

4.5 Transformation of Knowledge

Case-specific information collected from the client is combined with the specialized knowledge previously held by the attorney (the "attorney know-how"). The attorney will also consult relevant sources such as legislation and legal practice. Other legal sources can also be relevant. Figure 4.5 gives a simplified overview of how these important pieces are

synthesized to create legal advice. The process can be called "transformation of knowledge". Individual bits and pieces of information may be relatively insignificant but together they will gain value through this transformation of knowledge.

The goal is to combine the industry specific knowledge from the clients, together with attorney know-how, legislation and legal practice and other sources to create value for the client through legal advice solving a specific problem or possibly safeguarding to avoiding a future problem or addressing compliance issues. At the heart of the triangle that illustrates a legal service, is the client knowledge which determines what type of legislation, attorney know-how and legal practice and other sources are relevant.

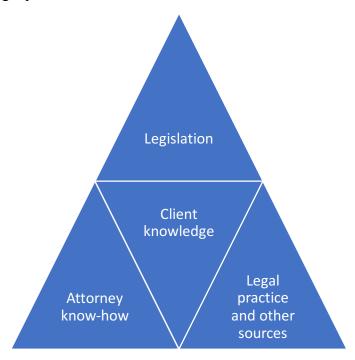


Figure 4.5 Key pieces needed for transformation of knowledge

There are currently two main sources for legislation in Norway, legal practice and other sources. These are "lovdata" and "rettsdata" and they offer a wide spectrum of legal sources. Common for both is that the attorney or the one investigating legal sources has to be familiar with the searching mechanisms, which currently are manual, meaning that one must specify key search words, go through and analyze search hits in order to find what one is looking for. There is a room for innovation and use of technology to automate this process and reduce the time that is used searching for legal sources which will reduce both time consumed and hours invoiced to the client. From the author's understanding, it is possible to acquire the necessary keys to both of these services in order to utilize application programming interfaces (APIs) to

collect the data and use it in internal systems and gain efficiencies. Many law firms already have built internal databases for best practices and key legal source to avoid repeating the same tasks over and over again.

4.6 Legal Advice

Once the knowledge has been transformed by the attorney, the final stage of "legal advice" can be reached and the production process for the individual case is assumed to be completed. This legal advice represents the final product that ultimately crowns the production process in law firms. At this stage, value has been created for the client. Legal advice can encompass a wide variety of subjects, from whether or not to file a law suit or to settle a claim, to recommended compliance activities or general legal advice for a specific problem. Ultimately getting to this point and producing the legal advice often demands a high degree of client involvement as do all stages of this process. Client involvement in the process is visualized in Figure 4.6 below.

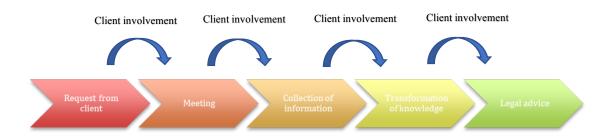


Figure 4.6 Client involvement

The model shows how the client is a necessary catalyst for inducing the next step at all stages with personal input that leads to the output "legal advice".

Since the client plays such an important role for all stages of the production process, including the last stage, it is reasonable that innovation can also give increased efficiency in this area. Some law firms are addressing this with focused efforts on improving client interaction. The process of working together with clients to produce legal advice can be simplified by using certain methods and technology to induce higher degree of involvement. Some law firms in Norway are now using platforms that allow for direct involvement from clients in document being produced and direct interaction, while other law firms are developing individualized solutions. It must be noted that some more "old school" law firms do not seek to improve in this area at all, instead relying heavily on sending e-mails back and forth, phone calls, or even traditional face to face meetings to interact with clients.

Once the legal advice is produced, it is delivered to the client digitally or even by telephone, often regardless of the complexity of the client's original legal problem. For many legal problems, there are standardized answers that more or less applicable to clients in similar situation. Especially for these simple problems, there seems to be room for innovation in how legal advice is delivered to the client. These answers could be made available through an interactive platform which could reduce costs and free time for attorneys to undertake more complex and strategic legal advising. However, this would demand that individual law firms invest in such a platform. Answers to many legal questions are already available online from different sources. Making simple legal answers available at reasonable rate could lower the threshold for some clients to purchase legal services and could create a new client segment for law firms.

Chapter 5: Methodology

In this chapter, the author will explain the methodology used in this thesis and how it was utilized from the forming part of thesis to the analyzed data. Qualitative data which is the main source, has been collected from eights semi-structured interviews with attorneys from different Norwegian corporate law firms based in either Stavanger or Oslo.

5.1 Research Process

The theme of this thesis was inspired by the author practicing as an attorney in a Norwegian corporate law firm and having an interest in innovation and legal tech. Innovation in Norwegian law firms has been largely unexplored in scientific literature. The author therefore wanted to give a contribution to more focus on a subject that already is and will increase in importance in the near future.

Investigating literature on KIBS enriched the idea of exploring innovation activities in law firms. After having reviewed several articles on KIBS and the production of knowledge services from many authors, the thesis author established a frame for the research on innovation in law firms revolving on these areas:

- 1. Use of the term innovation. The author expected this to be an indicator for what kind of a relationship the law firms had with innovation and if this was something that there was actually a focus on. In addition, this could show how businesses models were structured and rigged for possible changes in the legal industry in the future and if the law firms were willing to go hand in hand with the opportunities that new technology could present.
- 2. Developing of new services in the company and how it is done was particularly interesting to research due to how law firms saw themselves as developing new services either with or without technology.
- 3. Gathering and processing information for developing services was used as an area of research to identify what efforts were implemented to improve and meet client expectations for interactions in a digital society.

- 4. Formalized R&D and focus on innovation in law firm leadership and the degree of such, was an area the author wanted to investigate closer to identify whether there was any difference with other KIBS similar to law firms. In addition to identifying who was involved with innovation activities in law firms.
- 5. External technology holds benefits for law firms who naturally need a special competency to deliver and changes the ways traditional legal services are performed and was therefore of interest to the author.
- 6. Goals and triggers for developing new services and using legal tech and digitalization was found to be a useful category of questions for identifying what makes law firms invest time, effort and money into innovation activities.
- 7. Expectations and possible challenges was used a category for gathering industry views on the future of the legal industry in light of innovation activities and new technology.

5.2 Methodological Process

The author's process can roughly be broken down to six steps:

- 1. Designing a question standard and identifying interview subjects. The questions were designed in able to gain an understanding of the law firms and their innovations activities. All questions were standardized for a better structure and possibility of a comparative view. However, since BAHR Leap as the only interview subject that was clearly separated from the law firm itself, the questions had to be adjusted somewhat to be able to serve the original intent and purpose of the thesis. The questions were formulated so that the interview subject could give a reply independent of the authors own pre-understanding.
- 2. Getting in touch with the interviewees and collecting the data either through physical meetings, skype meetings or written exchange of questions and answers per e-mail. Parallel to these activities the interviews were transcribed with exception of the interviews that were performed per e-mail. The sample of interview subjects was singled out to be corporate law

firms that had a minimum legal area expertise within labour law and company law – either based in Stavanger or Oslo. The subjects were primarily identified through sources as Advokatbladet and based on word of mouth as attorneys that were involved heavily in innovation in their respective law firms. Some subjects were identified despite the author expecting them not to have a focus on use of technology due in order to have broad data from the legal industry and not just from technology hungry law firms.

The subjects were contacted primarily by e-mail and then followed up by phone call. Eventually eight interviews were completed. All lasting approximately 45 minutes to an hour with the exception of the questions answered per e-mail. The interviews were performed with a laid-back informal approach enabling the subjects to feel comfortable to address the questions in the manner they preferred. Some law firms contacted did not wish to be interviewed on the subject and some did not respond at all, reducing the wanted sample of twelve to eight. The interview subjects are listed below in table 1. All the interviews were performed in Norwegian which could make the data subject to semantic losses (Temple and Young, 2004).

Name	Title	Company
Joakim Marstrander	Advokat/Partner	EY
Mads Ribe	Advokat/Senior manager	EY
Morten B. Tidemann	Advokat/Partner	LIGL
Dan Sørensen	Senioradvokat	Selmer
Kristoffer Lerum	Advokat/Partner	Torstrup
Thomas Hansteen	Advokat	Kluge
Elise Johnsen Kirkhus	CEO	BAHR LEAP
Per Bergstad	Advokat/Partner	Projure
Ingeborg V. Aavatsmark	Senioradvokat	Wikborg Rein

Figure 5 Table of interview subjects and respective law firms

3. Reading and reviewing the transcriptions. After the interviews were performed and transcribed the author reviewed them and made a brief overview and summary of the most important findings.

- 4. Coding and summarizing the interview data. The most important findings from the previous step was then immediately after broken down and analyzed.
- 5. Analyzing the data was performed and presented in the form that is in chapter 6 and broken down into seven categories as illustrated above under chapter 5.1.
- 6. Interpreting the results. The findings where then interpreted with basis in lieu of the relevant literature and the individual findings from each interview were presented in a comparative perspective.

Chapter 6: Analysis of Results

In this chapter, the aim is to promote a general overview of the results from the eight interviews performed and analyzing the qualitative interview data collected from the corporate law firms.

6.1 Use of the Term "Innovation"

Based on the data collected on the use of the term "innovation" in Norwegian corporate law firms, six out of eight of the interview subjects replied that the term holds an importance in the company. Among the two law firms that replied that the term innovation does not hold importance, one of the two responded that it is discussed sometimes between colleagues. This reflects a relatively high level of focus on innovation in the legal industry. It can also show that corporate law firms in Norway value innovation as important to business success. But this can also echo an understanding embedded in the Norwegian legal industry that innovation has to do mostly with digitalization or technology.

Innovation in terms of technology holds an importance for company strategy and/or business development in the majority of the law firms interviewed. A recurring observation from the interviews, is that digitalization is the main current focus for innovation. This indicates that digitalization-based innovation activities are more relevant for current affairs in corporate law firms than a full-blown focus on artificial intelligence. A reason for this focus could be that it would be a contradiction to have revolutionizing technology based on AI without having digitalized the working process and method for legal work. However, current digitalization could possibly be an important pre-stage to more advanced use of AI-based legal tech and even further - virtual lawyers – in the future.

Another aspect of this discussion mentioned by multiple interviewees is the increased efficiency that can be brought by new and innovative tools. For instance, interviewees discussed efficiency gained by using tools for automatic scanning and processing of contracts/agreements and due diligences. Norwegian corporate law firms are looking to do things more efficiently by reducing time consumption for tasks that are repetitive and today require lawyers to put down several hours on more or less "cookie cutter" problems. This

focus on efficiency indicates that law firms have an interest in optimizing their internal resources, including how labour resources are used. Therefore, it is reasonable to assume that innovation activities in terms of technology deliberately happen in Norwegian law firms when they can improve their current performance and division of labor.

For some of the law firms interviewed, innovation is a stated goal for the company in itself. This seems to be a reflection of an innovation buzz that has hit the legal industry in Norway in recent years with several articles in legal magazines, seminars and news articles about innovation and how digitalization and legal tech will affect business. However, those interviewees expressed uncertainty with respect to what their respective companies define as goals for innovation. This uncertainty could be a reflection of innovation polices not being stated specifically enough. Vague phrasing about corporate goals for innovation could be a way for some law firms to keep up with the development of new technologies and signals from competitors.

Some law firms on the other hand focus on innovation as future-focused thinking together with clients. This category would approach new technology with a client focus as opposed to a product focus. When focus is skewed towards clients, services are developed differently. Client-focused law firms seek to address the needs of the specific client and consider the value of developing a service with regards to a later recycling of that service towards other clients which can allow the law firm to regain some of efforts invested in developing the new service. This reflects how KIBS usually have client-led R&D with the exeption of development on specific strategic areas (Miles et al. 1995).

LIGL stands out from the other interviewees having both a policy of only recruiting lawyers that have an interest in innovation and stating a focus on disruptive innovation, and embedding innovation so heavily into its organizational culture and values that innovation serves as a symbol that holds importance for the company identity – which then again could be important as a marketing tool towards clients seeking a modern corporate law firm that they can depend on now and in the future - even with the existing market potentially being disrupted and encountering a "game of thrones situation" where the current market-leading law firms are dethroned and a new markets arises (Bower and Christensen, 1995).

6.2 Development of New Services in the Company

The eight interview subjects all responded that they personally contribute to the development of new services in the company. From the data collected, it is apparent a natural difference exists between those corporate law firms who have an active relationship with technology and digitalization and those that who do not. This division is related to the development of new legal services within two broad categories: what are considered traditional legal services on one hand and legal services fueled by new technology and digitalization on the other. The latter gives far superior possibilities to improve and develop legal services into the future and allows room for more radical innovation.

Law firms that have not formally embraced technology and digitalization cite changes in domestic and international legislation and practice, client demands, and market changes as drivers for developing new services. An example of this is the EU General Data Protection Regulation (GDPR) which was implemented in mid-2018. This required European law firms to develop or purchase a service to ensure compliance for the law firms themselves with many law firms offering this service to their clients - for what may be the single most important recent change in data privacy regulation. This implied that routines had to be developed for the processing of data and for the consent of the use of data collected through various activities. This new service could be seen as motivated by an exogenous factor instead of being internally motivated or rather endogenously motivated – legislation and therefore as "forced innovation" although also representing an opportunity to meet marked demands for the service. This serves to illustrate that innovation happens in corporate law firms that do not have an active relation with digitalization or legal tech and that law firms may be more innovative than given credit for – constantly solving new problems and developing new solutions.

Law firms that have embraced technology and digitalization are also pushed by the same drivers as law firms without a focus on technology, to develop new services. This is natural in light of the law profession being heavily based on legislation, practice, and client and market needs, although using technology to develop new services seems to be more of an exception than the main rule. However, this seems in part to be because the law firms who are testing out new technology are focusing mainly on performing traditional legal tasks more efficiently

and even automating them. Therefore, it seems reasonable to say that technology gives a competitive advantage to those law firms' internal capabilities, since this is more in the direction of building upon existing legal services, rather than developing a new legal service – while delivering the service more or less in the same way as before. For some of these improvements are so massive with respect to time consume that is seems reasonable to view this as radical innovation despite being an improvement of a current service. This is especially with regards to automated processing of contracts and compliance activities.

Furthermore, new ways of interaction with clients are already being pursued or developed by corporate law firms – either by using existing internal capabilities or hiring external services to optimize a platform for interaction and project management. This can be viewed as a new service that promotes high client involvement. Some of the goals that are mentioned among the law firms that have a focus on this are: higher involvement and cooperation with clients in the production of legal documents and services, better flow for exchanging documents, lower costs, and increasing transparency with respect to hours consumed and invoiced to clients.

Some of the law firms interviewed are looking at different ways to deliver services to clients. LIGL stands out by already having developed a legal service where clients can buy automated legal documents and processes directly from a website or application without having to go through an attorney – where the client's information is transformed from a questionnaire and automated into documents covering the client's needs. The author is also familiar with LIGL wanting to deliver technology based legal service to other firms and thus creating a new market within an existing market. This can be argued to be disruptive innovation.

Another law firm is looking at using technology to develop a service which would expand their library of clauses for contracts. This firm seeks to implement an approved stamp and a rating system and to stream this legal work with clauses. This would make it easier to use and navigate in for the user and represents an improvement of internal capabilities. Developing these clauses for external sales to other law firms could represent a new way of interacting and performing services within the legal industry.

The interview data shows that there are visible efforts to use and improve legal services with legal tech among most of the law firms. Some have had efforts attempted that are not pursued further, while some are actively pursuing and using legal tech in their legal work. The most

common type of legal tech used among the law firms seems to be automation in processing documents and automation of document production. Further opportunities for innovation exists here and time will tell how well law firms have been able to adapt and integrate legal tech into their business model and functions.

6.3 Gathering and Processing of Information for Service Development

Observing the interview data proves that the client plays an important role for the development of new services in the law firm. This seems to be the case regardless of whether the law firm is developing a new service that is a more traditional legal service or a more futuristic technology based service.

Furthermore, when developing traditional legal services most of the law firms receive a request from a client, then have a meeting, collect information, transform the information and deliver the legal service, as discussed in chapter 4 figure 4.1. To this many of the law firms asked are already started to use or are in the process of developing services to improve and enhance the dialogue and cooperation with the client through digital platforms and the exchange of documents. This can be seen as incremental innovation and reflects how attorneys and law firms must adapt to follow businesses and private persons who expect a hassle-free way of communicating and working together with attorneys in a world where technology, WIFI and 5G is making most services available from anywhere.

The data collected regarding development of services that are not a part of a specific client assignment show that some of the law firms interviewed do in fact develop services outside of specific client assignments. Reasons for this vary. As discussed earlier, many law firms have a strong client focus and have an interest in standardizing a service that will be attractive to many current clients as well as sussing out what a future client might need. This does also involve a strong product focus. However, a majority of the interviewed law firms do take a starting point in the current client's needs and do not seek to develop services that are not a part of a specific assignment. Instead, they develop services addressing current problems for clients.

6.4 Formalized R&D and Focus on Innovation in Firm Leadership

From the data collected there seems to be very little formalized R&D among the law firms. One interview subject regards itself entirely as an R&D department in light of being separated from the law firm and its direct activities. But most law firms pursue development of new services while also performing traditional legal services. Some interviewees reported that specific team efforts are put in place when working on specific projects, while others have a dedicated group of attorneys that are involved in the pursuing services or digitalization. Overall, the results show that formalized structures for R&D do not exist among the sample of law firms interviewed and that there is therefore an ad-hoc approach to R&D in these. This reflects how R&D activities in KIBS are ad-hoc based and rely more on market features and links to creating value through client-specific solutions and how separating R&D activites from the development of new services is close to impossible (Miles et al. 1995).

This seems reasonable for law firms who depend on delivering their traditional legal services to make money, especially given that external investments in Norwegian law firms are currently problematic due to limitations on ownership interest in law firms and the legal monopoly. This may however change with political advances and changes in legislation following Advokatlovutvalgets utredning NOU 2015:3 Advokaten i samfunnet.

For the majority of Norwegian law firms, having a chief innovation officer, chief digital officer, et cetera, is more of an exception than a rule. Most law firms that report technological efforts have attorneys who are interested in technology, but no formalized role in its furtherance at their respective workplaces. The data shows that there is a mix between younger and more experienced attorneys and partners with regards to who participates in these mostly informal innovation efforts. In addition, necessary competencies within IT and others seem to be included only when needed.

6.5 External Technology

Six out of the eight interviewees reported that their firms use external digitalization tools or other external legal technology. Some law firms also have co-operations with external legal tech companies. EY for instance enjoys the benefit of being part of an international

consultancy environment that has the financial muscles to purchase whole technology companies or even acquire whole law firms such as Riverview Law and integrate desired efforts into the organization. Some law firms purchase technology and use their own input to develop the finished legal service. LIGL is an example of such. This gives law firms competitive advantages because employees at law firms have different areas of specialized knowledge than those at tech companies.

6.6 Goals and Triggers

Overall, the law firms surveyed seem to be focused on performing tasks more efficiently and share a commercial motivation behind their use of digitalization or legal tech. Most users of legal tech state that they want to be able to give the best advice and services to their clients and if technology improves advice and services, then it is important to use it. Some law firms want to cut time usage and open new markets, for example LIGL.

There is a certain "keeping up with the Joneses" effect that motivates innovation efforts in the legal sector, meaning that the risk of falling behind other law firms is a competitive driver for early innovators and a threat for law firms who currently do not actively engage in any use of digitalization or legal tech.

Some law firms see legal tech and automation as a way to keep talent from leaving the organization – one way to retain highly skilled and trained employees is to keep them from having to do boring, repetitive tasks as much as possible. Others want to use technology to be an attractive employer that attracts the best young legal talent. EY wants to create a better working world, essentially highlighting their use of technology as a way to improve services to businesses in general. Other law firms cite changes in legislation as a trigger for the push to develop new services, as the aforementioned GDPR discussion proves. One interviewee stated that he wanted to contribute to reducing attorney costs because today's law services are too expensive, expressing a deeper message of social purpose.

6.7 Expectations and Possible Challenges

From the data, there are various expectations around the use of digitalization and legal tech. Some law firms expect to see more legal services that are not provided by lawyers themselves and more "cannibalization" of a law firm's own services. Some law firms expect the quality of legal services to improve especially in larger, more document-intensive cases. Most law firms expect traditional legal services to be performed by law firms - only better. To this there is also an expectation that more manual legal tasks will be automated.

Some believe lawyers and clients will benefit equally from more use of digitalization and legal tech. Some law firms believe legal services will be cheaper, while some find attorneys to be the ones profiting from more legal tech. In addition, some law firms identify new markets for legal services following increased use of legal tech and big changes with respect to the delivery of legal services and the platforms they are delivered from. There are also expectations identified for more fixed pricing and increased competition.

Some law firms see access to capital for technology investments as a problem due to restrictions on external investments in law firms. This reflects a typical issue for KIBS (Miles et al. 1995). Some also see limitations following the partnership-model in the legal industry as a potential problem with implementation of technology and the will to invest. Unless a partnership values investments in the future through use of technology more than current dividend than it seems reasonable that access to capital could be an issue and an obstruction to technological innovation in law firms.

Focus on innovation activities such as seminars and networking events seem to be centered in Oslo possibly presenting regional disadvantages for other larger legal environments in Norway such as Bergen and Stavanger.

6.8 Summary

Based on the data from interviewing eight corporate law firms in Norway, the focus is currently on establishing a digital foundation for future use of legal technology. There is an interested in using legal tech to improve services and most of the innovation activities can be identified as incremental, with some degree of disruptiveness. Most of the law firms have some relation with the term innovation. Increased efficiency is an important goal. R&D activities are ad-hoc based and lack formal structures. These activities are mostly triggered by client needs. There are also difficulties with the lack of access to capital. Expectancies are that both law firms and clients will profit from innovation.

6.9 Critical Evaluation of Methods

There are potential disadvantages when performing qualitative research. This also includes the danger of biasness. Originally the author wanted to include a larger sample of corporate law firms, however due to the lack of response, wish to participate and delayed responses the sample ended up being eight corporate law firms. The sample of attorneys at the corporate law firms interviewed are not necessarily representative for the legal industry and may not be representative for their law firm due to the complexity of some of the law firm's organizations and personal opinions influencing their responses.

The interview questions were highly standardized with the exception of some modifications for the questions provided to BAHR LEAP as a legal tech company being a daughter company to the law firm BAHR and given the freedom to explore innovation and legal tech. This has an advantage from a comparative perspective. However, since the questions were formed and standardized based on having reviewed literature on KIBS this could increase the risk of path dependency.

6.10 Personal Reflections

The author is after having analyzed the data and having received much input and impressions about the future of legal industry of the opinion that innovation is happening in the quiet in corporate law firms that do not have an active relationship with new technologies. Furthermore, the corporate law firms who are already pursuing new technology seem to have a pragmatic and sensible approach with the efforts that are being made to embrace the future of the legal industry in lieu of what capital resources are available due the heavy restrictions following the legal monopoly and who can have ownership interest in law firms. Removing such restrictions could open up for more innovation and use of and investment in new

technologies. This could lead to law firms taking the chance to allocate funds to develop more services that are not based on current client needs, but future needs. However, this is a political decision that must be made – it remains to be seen if there is political will to liberate and induce a more "free-market approach" to the legal industry and reduce the number of restrictions.

Because the author is of the opinion that the legal industry is currently in a "middle stage" where digitalization is the key and focus, discussions regarding the demand for attorneys in the future have not been addressed or seen as relevant at this point in lieu of the data collected and the literature approach used in this thesis.

Chapter 7: Conclusion

In this thesis, the author set out to research how innovation happen in corporate law firms in Norway and to identify what kind of innovation happens and to see if any legal tech was utilized.

Norwegian corporate law firms seem to be in a "middle stage" where focus is currently on preparations for the next steps: automation and legal robots - thus digitalization is the current focus. Legal tech is used sparsely and currently for more limited tasks traditionally involving document production and processing information.

Innovation largely happens spread across law firms with no formal structure for R&D activities – typically through an ad-hoc approach. Degree of involvement from the leadership of law firms vary. Technology and subsequently knowledge – are both bought from external actors. Innovation is triggered by different factors: client needs, market changes, new legislation and retaining highly skilled and trained employees.

New services are mostly developed for a specific client assignment - clients play a large role in the development of new services. There are challenges in developing new services: most innovation actors use the majority of their workday on billable hours, access to internal and external capital is limited, law firms approach innovation with a limited perspective and the advantage of technology currently seems unclear.

There seems to be a perception that both law firms and clients will profit from innovation. Specific innovation activities for the Norwegian legal industry such as seminars and networking are centered in Oslo giving the law firms in the capital an advantage.

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Appendix: - Interview Questionnaire

Background questions

1. What is your background? Do you have a legal background?
2. What is your role in the company?
3. What is the company's main business area?
4. How many employees/partners are in the company?
5. Which legal areas are practised in the law firm?
6. What kind of clients are advised by the law firm?
7. What kind of assignments are performed for your clients?

Innovation questions

8. Do you use the term "innovation" in the company?
9. Do you develop new services in the company and how do you do this?
10. How do you gather relevant information for developing services? How do you process
this information?
11. How large is the role of clients/customers in developing new services in the company?
12. Do you develop new services that are not a part of a specific assignment for a
client/customer?

13. Do you have a department that works with research & development: innovation or legal
tech/digitalization?
14. Do you have anyone in the company leadership that has a special focus on
innovation/legal tech/digitaliation?
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15. Who participates in this work from the company's side? Younger/experienced
attorneys? Others with a different background than legal?
16. Do you use external companies for developing new services, legal tech or digitalization
in the company?
17. What do you wish to accomplish through the using legal tech and digitalization? What
drives you wish for change?
18. What triggers your wish to develop new services?
19. Are you experiencing or do you see any challenges in developing new services in the
legal industry?
20. Who do you believe will benefit from innovation/legal tech/digitalization I law firms
and why?
21. Do you participate in networking events for innovation or legal tech/digitalization?
22. Where do you work with innovation(geographical)?
23. What changes do you think may be upon the legal industry in the future? How will the
future lawyer be and which tasks will still be performed by attorneys?