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Designing and Negotiating Agreements in a Digitalized Era – a qualitative analysis*

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Abstract

Digitalization is a reality that governs more and more both the society and the economy, facilitating new and more efficient ways of setting up business and business collaborations. Rational agreement routines and well thought through contracts help organizations to avoid legal disputes and thus maintain long-term relations with customers and suppliers. Therefore, a digitalized platform where non-lawyers (purchasers, sellers) in a user-friendly interface can draft individual contracts without lawyers is expected to both increase the companies' labor productivity and to facilitate the evaluation of risks and opportunities over time. To our knowledge, there is very little known about the agreement routines and the firms' interest of making them more efficient using digital solutions. Based on semi-structured interviews that we carried out in Sweden during the autumn 2019, we found that companies and authorities are not fully in control of their agreements, when it comes to for example the origin of the agreements, the agreement routines, the storage of agreement and authorized signatures and do not fully use the potential of digital tools for managing and negotiating contracts. Unexpectedly, organizations seem to be of the opinion that the current, a little bit unmodern, system actually works for them. Therefore, new digital tools and/or digital platforms must really meet the needs of the organizations to correspond to the investment for it. Our interviews suggest that new simple digital solutions might be appreciated and used.

Keywords: digital services; negotiations of agreements; legal tech company; lawyers; transactional relationships; contracts and reputation.

JEL Classification: D86, K10, K19, K20, L14, L24, L33.

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1 Introduction

Digitalization is a reality that governs more and more both the society and the economy, facilitating new and more efficient ways of setting up business and business collaborations. Rational agreement routines and well thought through contracts help organizations to avoid legal disputes and thus maintain long-term relations with customers and suppliers (e.g., Haapio 2010, Kellgren 2019, Mäntysaari 2017). Additionally, in the event of a legal dispute, they can be used to evaluate risks and opportunities. However, to our knowledge, the literature of the design, implementation and use of digital services in the design and negotiation of agreements is limited. Our study contributes to the literature with results from a semi-structured interview study of different organizations' agreement routines and their demand for digital services in the design and the negotiation of agreements. We formulated our questions based on earlier literature and institutional settings of agreement negotiations in Sweden. The interviews were carried out during the autumn 2019, and are, to our knowledge, the first ones done in Sweden. Using the answers from our semi-structured interviews about agreement routines of companies and authorities and the companies' interest and willingness to use digital technologies in negotiation of agreements, we aim to test two hypotheses. Our first hypothesis is that companies and authorities are not fully in control of their agreements, when it comes to for example the origin of the agreements, the agreement routines, the storage of agreements, authorized signatures. Our second hypothesis is that companies and authorities are expecting that digital support can make the routines for designing and negotiating agreements more effective and therefore a digital negotiation platform would be helpful, effective and profitable for the organization.

In order verify or falsify our two hypotheses, we have carried out a semi-structured qualitative interview study with one big organization, two medium-sized universities, two listed multinationals, one state-owned public company, one small company, which is not closely held, and one closely held small company. The respondents were chosen to represent a variety of organizations, to get as different answers and spot as different needs as possible. Most of the interviews were carried out face-to-face, with two persons carrying out the interviews and taking notes. The interviews were semi-structured, with a set list of questions, which were asked to all interviewees, but where also some supplementary questions generated in the context of the answers provided by the respondents, which, could be explained and discussed further.

The rest of the paper is outlined as following; first, a few relevant references to early literature and a short presentation of institutional settings in Sweden are presented. Thereafter, the answers to the interview questions are presented and analyzed one by one, followed by a summary of the results, our conclusions, and some thoughts on the need for further research.

2 Early Literature and Institutional Settings

2.1 The (un)fairness of standardization

Despite the importance of contract design to outcomes, little attention has been given to how contract drafters use historical outcomes to inform subsequent contract drafting (Spencer, 2019). This is partly due to two technical barriers, long faced by contract drafters; having limited data on contract terms and outcomes and no analytical tools necessary to conduct robust analysis of contract data. In many cases, little or no contract

data are collected in a systematic manner. When contract data are collected, these data rarely include contract outcomes such as whether a contract resulted in litigation. As a result, even if companies have data on the terms contained in their contracts, they cannot identify the effects of those terms on key outcomes without outcome data.

Contracts are legally binding documents that govern agreements between some parties. Generally, they define obligations between parties, typically regarding the delivery of goods, the performance of services, or payments. Contracts are essential to business transactions across all industries, as well as private transactions amongst the general public. Changes in the structure of the economy and society lead to changes in the routines for establishing agreements between parties. With the industrialization and standardization of goods also came the standardization of contracts. In the same way, digitalization and digital services is also pointing nowadays into the direction of the digitalization of the contracts.

However, contract law doctrines and policies, depending upon traditional insights towards freedom of contract and legality of contract terms, largely upheld the view that consumers have a duty to read the forms and are bound by them. Therefore, there is a need of standardized routines and standardized contract terms.

> A standard contract may be defined as: "*a contract entered into totally or partially according to pre-drawn terms and intended to be applied similarly in a large number of individual cases irrespective of individual differences*" (Sheldon, 1974: 17).

Usually, standard terms in consumer contracts are drafted by sellers. This offers no guarantee that the interests of consumers are represented in the standard terms and differences between strong and weak parties can result in the strong party dictating the terms of the contract (Llewellyn, 1939; Kessler, 1943; Slawson, 1971). However, but neoclassical economics argues in favor of the standardization of terms, which brings clear benefits to both contract parties, mostly by decreasing transaction costs like drafting and negotiation costs. Regardless, there is skepticism driven by the expectations that unequal bargaining power, the "take-it-or-leave-it" nature of standard terms, the practice of "signing-without-reading" and the fact that standardization of contracts might result in the application of similar terms to nearly all contracts concluded within business sectors, which might generate unfairness of using standard terms. The freedom of contract principle, which should ensure that everyone can construe contracts in any way they please, stands to become a "one-sided privilege" (Kessler, 1943), and therefore, the freedom of contract principle is desirable not only for moral reasons; it also has a very pragmatic component. Freedom of contract is expected to enable parties to make contracts that maximize their own welfare in the best way possible. However, if the weaker party to the contract is not able to change the content of the contract due to the 'take-it-or-leave-it' nature of the terms, consent of the weaker party to these contract terms can no longer be assumed (Slawson, 1971). This can lead to a de facto monopoly over contract terms by the industry, which is not necessarily welfare enhancing.

Standardizing contracts writing is expected to reduce the risk of the parties having different understandings of the content of the contract, and this makes things easier for both the buyer and the seller. It is easier to specify the details about a product or service and other contractual terms and conditions in a written document. It can be difficult to remember the terms of the contract and even more difficult to prove them without a

written document. Certain expressions, terms, and terms and conditions of contract are common, which suggest possibilities of developing digital routines for saving time for writing and covering all important details.

In addition to earlier theoretical and practical contributions about both the need and the way in which contract drafters can use data on contract outcomes to inform contract design, the article also anticipates and addresses limitations and risks of predictive contracting, e.g., technical constraints, concerns regarding data privacy and confidentiality, the regulation of the unauthorized practice of law and the potential for exacerbating information inequality. Building on recent developments in contract data collection and analysis, Spencer (2019), proposes "predictive contracting", a new method of contracting in which contract drafters can design contracts using a technology system that helps predict the connections between contract terms and outcomes. Nonetheless, Haapio (2010) analyzed *proactive contracting*, i.e., applying proactive law in the context of corporate contracting with focus on *large companies that deal internationally*, suggested that given that this type of organizations inevitably face legal issues of financial significance and complexity, it is particularly easy, even for experienced people, to get into business and legal trouble. Therefore, in order to avoid any conflicts, including legal issues, which can damage the company reputation for a long time, it is desirable to minimize the risk for unclear agreements by using proactive contracting. Proactive contracting can facilitate informed decisions, leading to increased legal certainty and therefore it decreases the overall risk exposure. This implies that proactive lawyers and their clients can design and implement both analogue and digital solutions that help secure sustainable routines for developing and negotiating agreements that lead to successful contract performance. Proactive law then translates into everyday actions, helping clients to take better care of their deals and relationships. Proactive law also has a very important "pre contractual" aspect, as the firm should proactively choose business and transaction model that will fit the parties, distributing risk in a rational way (e.g., Kellgren 2019 and also much of the Law & Economics doctrine). Such pre contractual choices might also be facilitated by digital contracting but is not covered in this report.

2.2 Institutional settings in Sweden

The Swedish legal system is based on a combination of statute and case law. Since 1995, when Sweden become a full member of the European Union, European Union law is part of the Swedish legal system. Additionally, Sweden has acceded to a number of international treaties and conventions, including the UN Convention on the International Sale of Goods. Agents are protected by the Swedish Commercial Agency Act, which came into force in 1992, implementing the EC Commercial Agency Directive. Since 1995, as a consequence of Sweden's admission as an EU member on 1 January 1995, a new Swedish Act on consumer contract terms has entered into force (AVLK, 1994:1512). The new Act, which replaced a 1971 law of the same title, was enacted to incorporate into Swedish law the 1993 EC Directive on unfair terms in consumer contracts, hereinafter referred to as the 'Contract Terms Directive'. However, in Sweden, there is a basic freedom to contract, which means that in most cases, there are no formal requirements on the format of business documents.

3 Data and method

3.1 The design

As mentioned above, to our knowledge, the literature of the design, implementation and use of digital services in the design and negotiation of agreements is limited. Therefore, we contribute to the literature by designing a semi-structured interview with focus on identifying the main characteristics of agreement routines and their demand for digital services in the design and the negotiation of agreements. We formulated our questions based on earlier literature and institutional settings of agreement negotiations in Sweden presented in the previous section. Most of our questions are in line with Grundmann and Hacker (2017)'s overview of the interactions between digital technologies and contract law, which concluded that the use of digital technology in contracting will likely reinforce an adaptive, relational view and practice of contracting. Digital platforms, Big Data analytics, artificial intelligence, and blockchain, are all dependent on three pillars: the regulatory framework; digital support over the life cycle of the contract; and digital objects of contracting. In this context, the questions of our semi-structured interviews aim to collect information that can identify sources of asymmetries of information and directly and indirectly optimal solutions for all parts, which are always much easier to establish when using the ordering mechanisms of the law, rules, and efficient routines.

The interviews were carried out during the autumn 2019, and are, to our knowledge, the first ones done in Sweden. Given the importance of firm's structure in agreement negotiation, the respondents were chosen to represent a variety of organizations, to get as different answers and spot as different needs as possible; one big organization, two medium-sized universities, two listed multinationals, one state-owned public company, one small company, which is not closely held, and one closely held small company. Most of the interviews were carried out face-to-face, with two persons carrying out the interviews and taking notes. The interviews were semi-structured, with a set list of questions, which were asked to all interviewees, but where also some supplementary questions generated in the context of the answers provided by the respondents, which, could be explained and discussed further.

As already mentioned, given the importance of firm's structure in agreement negotiation, the respondents were chosen to represent a variety of organizations. In general, each type of organizations is relatively representative for organizations in their group with respect to agreement negotiations. For example, given the principle of autonomy of the universities in Sweden, the university is relatively representative for organizations that belong to the higher education sector. Similarly, multinational companies are following both international and country specific laws and rules, which can shape differently their routines of designing and negotiating agreements Therefore, having in our data two multinational companies and two universities, expecting to suggest both similarities and some differences between organizations that belong to the same organizational sector.

In the rest of this section, we will present the answers by type of organization, aiming to report a relative point of reference of potential differences in both the use of and the demand for digital services for agreement negotiations.

3.2 Characteristics of agreement negotiation

3.2.1 The decision-makers of the agreement routines

Table 1 shows that the purchase department, the CEO and the CFO are the ones that decide upon the agreement routines in most organizations. The universities stand out, where the legal services department play an important role. The universities also have public procurement officers, which do the practical work with public procurement.

Table 1 Who decide upon the agreement routines, by type of organization

Big authority	Purchase department
University 1	Legal services and university director
University 2	Legal services and sometimes vice chancellor or deputy vice chancellor for cooperation
Listed multinational 1	Purchase department
Listed multinational 2	Sourcing and technology, which includes purchase, logistics and forestry
State owned public company	CEO and CFO
Unlisted, not closely held company	Purchase department and CEO
Closely held company	Owner, at the same time CEO

3.2.2 The developers of the procedures regarding agreements

Table 2 shows that all organizations develop their own procedures regarding agreements, such as templates, digital tools, polices and routines. One university uses sometimes templates from the Association of Swedish Higher Education Institutions. The closely held company also gets templates and routines from the franchiser. Very often, different parts of the templates used, are of highly varied origin, as they emanate from different times, parts of the organization and other kinds of differing contexts.

Table 2 The development of own procedures for agreements, by organization

Big authority	Yes, we make our own templates, and are looking for more digital tools. It would be useful to link suppliers and users to another and also with a chat function.
University 1	Yes, new templates are produced all the time. The finance department wants less complicated templates.
University 2	Yes, everything is home-made. Some templates have however used templates from the Association of Swedish Higher Education Institutions, https://suhf.se/in-english/ as models.
Listed multinational 1	Yes.
Listed multinational 2	Yes.
State owned public company	It is a mix of home-made, cut-and-paste, but there are also common standards at group level. The templates are not advanced. It is a word document. The customers' contracts are seldom used.
Unlisted, not closely held company	Yes.
Closely held company	The franchiser has templates and routines. For arrangement of external experts, the contracts are homemade.

3.2.3 The origin of the contracts

Table 3 suggests that except one of the universities, all organizations use their own employees (working with public procurement or purchasing) to draft the contracts. One of the universities seem to have a more dynamic and less systematic approach, so when new university lawyers are hired, they bring templates that were used by other organizations.

Table 3 Contract initialization and drafting

Big authority	The purchase department and the people who are working with public procurement draft the contracts.
University 1	Some templates come from the private sector, where we were employed earlier. Some research project contracts are re-used.
University 2	We make our own contracts at the legal department. Sometimes templates from The Association of Swedish Higher Education institutions, https://suhf.se/in-english/, are used. Sometimes, we also exchange contracts with other universities.
Listed multinational 1	We make our own contracts. We use Organime.
Listed multinational 2	We make our own contracts. We want the contracts at our own stationary. Only for minor contracts, we accept the stationary of the counterpart.
State owned public company	We have a history for contracts from the time when we had another principal. We draft new contracts ourselves. Purchase contracts are to a greater extent elaborated at group level.
Unlisted, not closely held company	We use “DokuMera”.
Closely held company	The starting point is the standard agreements of the trade organization. These are adapted by the CEO and the chairperson of the franchiser. The new standard agreements are adapted at a meeting where the franchisees vote by show of hands

3.2.4 Participation in drafting and negotiation of new contracts

Table 4 shows that both the drafting and negotiation of contracts are normally done by the employees directly involved (usually from purchase department), with active support from the legal department, in form of comments and suggestions for reformulation.

Table 4 Employees engaged in drafting and negotiating new contracts

Big authority	The director of the purchase department, the lawyer, the procurement department, and the agreement manager.
University 1	Often drafted by the researchers. The legal department comments and reformulates.
University 2	The involved parties, but the legal department plays an important role.
Listed multinational 1	The purchaser for the segment. The legal department also participates.
Listed multinational 2	Each person drafts and negotiates their contracts, which are signed by two persons. We do not need additional resources when drafting the contracts. The big work starts after the contracts are signed.
State owned public company	It depends on the kind of contract. The head of department is often involved, but we have an informal structure for this.
Unlisted, not closely held company	Strategic purchaser and, when it comes to drawings, the construction department
Closely held company	Each broker negotiates the contracts with their clients. There standard agreements can be amended largely.

3.2.5 The process for drafting and negotiating of new contracts

Table 5 suggests that the process of drafting and negotiating new contracts is very much based in the responsibilities of the departments of purchasing and law and their employees. As already suggested by Table 4, with a relatively small variation of one of the universities, organizations seem to have a set of own developed procedure for drafting and negotiating new contracts. However, one of the listed multinationals suggests that the process might need more information and detailed support and therefore it starts at the lower structure, and it proceed to the next group level for feedback; usually, a group manager, that person "owns" the issue, and feedback from colleagues in other locations and/or the legal department might be provided.

Table 5 How does the organization do when it drafts and negotiates new contracts

Big authority	The procurement department and the lawyers draft and negotiate new contracts.
University 1	The law department, the head of department, grants office and others are involved.
University 2	The legal department plays an important role
Listed multinational 1	Start in the lower structure, take it to the group level and ask if they already have something, if there is a group manager, that person "owns" the issue, ask colleagues in other locations, check with the legal department if necessary.
Listed multinational 2	We use standardized contract terms and templates.
State owned public company	In principle, the CFO shall check all new contracts. The CFO is a lawyer.
Unlisted, not closely held company	Inquiry, what we want to buy, evaluation, decision, contract, implementation
Closely held company	See previous questions. I would not draft new contracts without ensuring it with the franchiser.

3.2.6 The legal department

Table 6 suggests that organizations use their lawyers for legal disputes, reviewing contracts, ethical issues, whistleblowing and mergers and acquisitions. However, even in these organizations, many contracts are closed without lawyers being involved.

Table 6 The importance of a legal department of lawyers for the organization

Big authority	Our lawyer is our lifeline. The lawyer deals with the review of cases until they get into a real dispute
University 1	Disciplinary cases, contracts, whistleblowing, invoices, when something goes wrong such as when the exams are missing, administrative law
University 2	Yes, about 600 contracts/year
Listed multinational 1	Ethical issues, whistleblowing, contracts, mergers and acquisitions
Listed multinational 2	We did not have one until 2012-13. Then we hired one from a big law firm. Now they have multiplied and are currently five.
State owned public company	Yes, at group level.
Unlisted, not closely held company	No
Closely held company	No

3.2.7 The use of external lawyers

Table 7 suggests that external lawyers seem not to be used on a regular basis. It seems that sometimes organizations are temporarily buying special legal expertise for special issues and legal disputes. The limited demand seems to be explained by the very high price of these services are high. This might explain that some organizations do not use external lawyers at all.

Table 7 Temporary purchase of legal expertise in agreement making

Big authority	Only in very special cases for contract law issues
University 1	No.
University 2	No, only in disputes on procurement.
Listed multinational 1	Yes.
Listed multinational 2	Yes, for mergers and acquisitions and special issues such as competition law.
State owned public company	Generally, not.
Unlisted, not closely held company	No.
Closely held company	Yes, when we need it, but not as a standard. It is always very expensive.

3.2.8 The most common types of contracts

Table 8 suggests that more data is needed to identify the most common types of contracts for the interviewed organizations in general. The contracts concern purchase, real estate, lease, warehousing, logistics, cooperation, and pricing. The companies mention Non-disclosure agreements (NDA) and code of conduct. One company has many forklift contracts. The most common contract for the universities regards research cooperation.

Table 8 The three most common types of contracts within an organization

Big authority	General agreement and other agreements.
University 1	Research cooperation, purchase, real estate lease.
University 2	Research cooperation, employment, purchase.
Listed multinational 1	Non-disclosure agreements (NDA), code of conduct, purchase.
Listed multinational 2	SSG contracts, logistics including code of conduct, purchase.
State owned public company	Warehousing, staffing, forklift.
Unlisted, not closely held company	Cooperation, pricing, logistic.
Closely held company	Assignment, NDA, Share/asset and debt transfer.

3.2.9 The use of master agreements

Table 9 suggests that most organizations do not use master agreements. If they do, organization are using Swedish master agreements, but there are also templates in English.

Table 9 The use of master agreements and their country's origin

Big authority	No.
University 1	No.
University 2	No.
Listed multinational 1	Yes. We prefer US and Swedish master agreements.
Listed multinational 2	We aim at using Sweden, Swedish law and the Swedish Chamber of Commerce for arbitration for all contracts.
State owned public company	No.
Unlisted, not closely held company	No.
Closely held company	We have templates in English. We have a huge problem with foreign clients, for example that NDAs in Swedish never come back.

3.2.10 Updating

Table 10 suggests that most organizations systematically update their agreements when they are renewed or prolonged. The universities do not have a systematic structure for the up-dating. The closely held company, which is driven on franchise basis, update their contracts through a democratic procedure when the franchiser and the franchisees meet.

Table 10 How are the agreements of your organization updated?

Big authority	We update when the contracts are prolonged. Since the contracts are normally subject to procurement, they have a certain time-limit.
University 1	We do not do this systematically. We do not have a digital system for this.
University 2	We do not do this systematically. We do not have a digital system for this.
Listed multinational 1	No clear structure. The aim is that the contracts shall be shorter.
Listed multinational 2	We renew our contracts on a yearly basis. The contract database reminds us when it is time for renewal.
State owned public company	We normally have three years on sales contracts.
Unlisted, not closely held company	We meet the suppliers on a yearly basis and prolong for a year. We have a contract log.
Closely held company	Through a democratic procedure. We are prepared for changes.

3.2.11 Oral agreements

Table 11 suggests that most organizations do not use oral agreements. One of the listed multinationals and the state-owned public company however do, the state-owned public company even "all the time". The closely held company sometimes use an oral assignment agreement. Minor contract compliance issues can also be a kind of agreement and are not seldom managed with orally.

Table 11 Does your organization use oral agreements

Big authority	No.
University 1	No.
University 2	No.
Listed multinational 1	Sometimes, but not regularly.
Listed multinational 2	No.
State owned public company	Yes, it happens all the time.
Unlisted, not closely held company	No.
Closely held company	Normally not, but it happens that the agreement on the assignment is oral.

3.2.12 Signing of contracts

Table 5 suggests that most organization use the procedure print, scan and sign. The big authority and the closely held company use digital signature. The majority of respondents see a growing interest for digital signatures, not least to meet the needs of their contractors.

Table 12 How are contracts signed; by using pen, digital signature or something else?

Big authority	Digital signature.
University 1	Print, scan and sign.
University 2	Print, scan and sign
Listed multinational 1	Normally pen. Some suppliers' contracts are signed with a digital signature.
Listed multinational 2	Print, scan and sign.
State owned public company	Print, scan and sign or just over e-mail.
Unlisted, not closely held company	Print, scan and sign.
Closely held company	Digital signature.

3.2.13 The authority of the counterpart

Table 13 shows that two of the authorities use transcript from the Swedish Companies Registration Office to check the counterpart's authority to enter into an agreement. The big authority also checks the power of attorney. The closely held company, that uses digital signature, use a bank ID to check the identity of the counterpart. There is no information from the closely held company about whether the authority of the counterpart is checked or not. The other organizations do not check the authority to enter into agreements systematically.

Table 13 The screening of the counterpart's authority

Big authority	Transcript and power of attorney.
University 1	Transcript.
University 2	Not at all.
Listed multinational 1	Not at all.
Listed multinational 2	Not at all. In the case of leasing of cars, the authority of the counterpart is checked.
State owned public company	Not at all.
Unlisted, not closely held company	Not at all.
Closely held company	Bank-id.

3.2.14 Inefficient agreement routines

Table 14 reports that none of the organizations says that they lose deals due to inefficient agreement routines.

Table 14 Organization deal losing due to inefficient agreement routines

Big authority	No.
University 1	No.
University 2	No.
Listed multinational 1	No.
Listed multinational 2	No.
State owned public company	No.
Unlisted, not closely held company	No.
Closely held company	No.

3.2.15 Storage of contracts

Table 15 suggests that most of the organizations store their contracts digitally. Only the closely held company and the unlisted company save their contracts in binders in a fireproof cupboard. The closely held company had however just started to use digital signatures, so our analysis is that it will most likely also start to store the contracts digitally.

Table 15 How are the contracts stored?

Big authority	Digitally in cloud.
University 1	The database 360 and in paper form.
University 2	In the diary.
Listed multinational 1	Server with back-up
Listed multinational 2	Pdf and paper. The purchase department have fire-proof cupboards.
State owned public company	Paper and digital copy.
Unlisted, not closely held company	Binder in fireproof cupboard
Closely held company	Binder in fireproof cupboard

3.2.16 Monitoring of contracts

Table 16 shows that the listed multinationals, the big authority and the unlisted not closely held company have systems to monitor the contracts. The closely held company did not consider this question relevant, most likely because it does not have many long-term contracts. The universities and the state-owned public company seem not to have clear routines for this.

Table 16 Monitor contracts ‘s routines (e.g., notice, renegotiation, guarantees, etc.)

Big authority	Yes, in the procurement function.
University 1	The person responsible for the system. There is a risk when that person is exchanged.
University 2	We do not have a clear structure in place for this.
Listed multinational 1	There is an ADB function.
Listed multinational 2	Yes.
State owned public company	We do not have a clear structure in place for this. The head of unit and the key account manager are in charge of this.
Unlisted, not closely held company	Yes, everything is in the contract log.
Closely held company	Not relevant.

3.2.17 Digital support for managing contracts

Table 17 presents that the universities and the unlisted not closely held company do not use any digital support for managing contracts. The other respondents use digital support for managing contracts.

Table 17 Does your organization use digital support for managing your contracts, such as digital templates or digital storage of contracts? Which one in that case?

Big authority	Yes. Templates and the contract database.
University 1	No.
University 2	No.
Listed multinational 1	ADB and templates.
Listed multinational 2	Yes.
State owned public company	A Word document.
Unlisted, not closely held company	No.
Closely held company	Yes.

3.2.18 Digital support for negotiation of contracts

Table 18 suggests that most organizations do not use digital support for negotiation of contracts. However, the big authority saves everything digitally that has to do with the negotiation of contracts, for example all e-mail communication. The unlisted not closely held company has a digital folder structure where information regarding the negotiations are saved. The closely held company save all e-mail conversation. The others do not have a digital support for negotiation of contracts. One respondent answered that since it is the contract that is binding what is said in the negotiations is not relevant.

Table 18 Current use of digital support for managing and negotiating contracts

Big authority	Yes, we save everything.
University 1	No.
University 2	No.
Listed multinational 1	No.
Listed multinational 2	No.
State owned public company	No.
Unlisted, not closely held company	A digital folder-structure.
Closely held company	E-mail conversation are saved.

3.2.19 The need for digital support for managing and negotiating contracts

Table 19 shows that five respondents expressed a need for more digital support to manage and negotiate their contracts, whereas three did not have such a need. During the interviews become clear that the respondents are expecting that the digital support is useful but made the assessment that it was not important enough to implement in the near future.

Table 19 The need more digital support for managing and negotiating contract

Big authority	No.
University 1	Yes.
University 2	No.
Listed multinational 1	Yes.
Listed multinational 2	Yes for sales (price, amount what, how). This information is kept by the sellers.
State owned public company	No.
Unlisted, not closely held company	Yes, it depends on the price, though.
Closely held company	Yes.

4 Evaluation

As mentioned in the introduction, the purpose of the study is to try to identify where there may be a demand for digital services in the negotiation of agreements. We aimed to examine the agreement routines of companies and authorities. In this section, where the findings of the study are evaluated, the aim of the study is first followed up. Thereafter, the hypothesis is verified or falsified. Finally, the purpose of the study is discussed, and we share some thought on the need for further research.

Our first hypothesis was that companies and authorities are not fully in control of their agreements, when it comes to for example the origin of the agreements, the agreement routines, the storage of agreements, authorized signatures. The data collected during our interviews demonstrate that there are many kinds of agreement routines in companies and authorities, most of them, but not all, using some digital services. The agreement routines are either decided by the persons who are dealing with the counterpart directly, e.g., the purchase department or by the management of the organization, such as the CEO or the CFO. By some respondents, the legal department play an important role. The agreement routines and procedures, such as digital tools and templates, are developed by most of the respondents themselves. The answers regarding digital tools surprised us, since we assumed that most organizations used standardized products.

Our second hypothesis was that companies and authorities are expecting that digital support can make the routines for designing and negotiating agreements more effective and therefore a digital negotiation platform would be helpful, effective and profitable for the organization. Perhaps interestingly, but not unexpected, not all organizations have legal departments. Even when organizations have legal departments, the legal department does not participate in day-to-day work with the conclusion of agreements. The drafting and the negotiation of contracts is done by the parties directly involved. Neither are external lawyers used on a regular basis. If they are used at all, it is for special issues and legal disputes. The internal legal departments are mainly used for legal disputes, reviewing of contracts, ethical issues, whistleblowing and mergers and acquisitions.

Most of the respondents have a set procedure for drafting and negotiation of contracts and use (rather basic) digital support for managing contracts. They also systematically update their agreements when they are renewed or prolonged. This does however not fully apply to the universities. Furthermore, most agreements are in written form and signed with a pen. Digital signature is however up-coming. Only one of the organizations that use pen and paper have a fireproof cupboard as the main storing point for the contracts. All other organizations save them in digital form.

Surprisingly, most organizations do not check the authorization of the counterpart to represent its principal, and organizations have different views of the relevance to save documentation of the negotiations. Only one of the respondents systematically saves all documentation. One representative for a listed multinational emphasized that it is what is written in the contract that is binding. This is true, but for the interpretation of contracts, the intentions of the parties are important. Three out of five respondents answered that they would need more digital support to manage and negotiate their contracts. However, none of the organizations answered that they lose deals due to inefficient agreement routines.

The purpose of the study was to try to identify where there may be a demand for digital services in the negotiation of agreements. Data from our interviews suggested that just now agreement negotiations seem to work well with quite old-fashioned routines, but this does not exclude the alternative that digital negotiation tolls and/or digital platforms would work better.

5 Discussion and Conclusions

Using data from a semi-structural interview, our study provides, for the first-time, information about how companies draft contracts in Sweden and their willingness to use new digital solutions designed to make easier the process of designing agreements. The analyzed organizations are not randomly selected, but they represent different types of organizations. Therefore, our results should be interpreted from this perspective. The answers from our semi-structured interviews support our hypothesis that companies and authorities are not fully in control of their agreements, when it comes to for example the origin of the agreements, the agreement routines, the storage of agreements, authorized signatures. This suggest that the availability of effective analog and digital services could be helpful for all organizations. However, our data does not support our second hypothesis that companies and authorities are expecting that digital support can make the routines for designing and negotiating agreements more effective. This result might be explained by almost absent information about the easiness of using digital services, their costs and their benefits in terms of decreasing bot the time for writing and negotiating agreements and the risk for business failure.

To summarize, the organizations are not yet fully digitalized; they do not have automatic systems which automatically check the authorization, enable digital signature, save the different draft versions and the communication around the negotiations, and store the final version of the contract digital support for managing contracts. The reason behind seem to be their experience of successfully using the old-fashioned way to handle contracts and oral agreements work. The reason for that it works is most likely that Swedes do not go to courts very often with their disputes but have rather a practical approach. In our view, the companies and authorities would be better equipped with a higher extent of digitalization of their contracts. The technique is already there. However, we cannot say that price, in terms of time and effort, would be worth it, then compared

what is gained by other efforts. It was a common belief by the respondents, that their contract routines could be improved, but that it was not worth it.

The conclusion of this study is that the agreement routines of the examined organizations are not as efficient as they could be if available digital solutions were used. The gap between demand and supply of digital solution is however driven by the judgement that the current systems work quite well for the organizations, so they do not identify an urgent demand for new digital solutions.

5 Thoughts on Further Research

In behavioral and computational economics and in agent-based social simulation, there is an increasing focus on how to best to model human decision making. When modelling human decisions, the modelled entities are assumed to have characteristics and behavioral patterns of the real humans and consider all institutional settings required in the given scenario. Although human decision making is very complex, most computational models of human decision making are rather simplistic (Sun 2007). Therefore, the results of our semi-structured interviews are, in our opinion, relevant for both the designers, the implementors and users of digital technology for agreement negotiation. Furthermore, our results indicate that contract practice is what, from a legal perfectionist perspective, may very well best be described as surprisingly sub-par, but perhaps paradoxically, that is rationally so.

Event though, our study covers several types of Swedish companies, it is far from fully analyzing the rationality and consequences of the contract practice it has described (for example, it the rationality depends on which contractors are involved). It would be highly interesting to carry out larger scale studies on the same theme. Even though the organizations that participated in our study provided detailed information about their activities related to agreements design, more data are needed in order to increase the robustness of our results.

Nonetheless, like Grundmann and Hacker (2017)'s overall picture of the changes and the development of the European Contract Law because of the mere existence of a digital arena suggested, the changes require additional solutions, but also, and perhaps, more importantly, revision and updating of traditional contract law concepts and, probably, even contract law theory, which is largely built on the old-fashioned ways of doing business, negotiating contract and closing deals. New strategies, theories and solutions might be integrated much faster in a digital solution, but it might also create a monopoly situation for the informed organizations.

All organizations interviewed in our study are developing their routines, and therefore the design of relatively flexible routines might be punch line for the tech firms that are facilitating the companies the possibility of inviting their partners to negotiate their contract agreement in a digital negation room. *When*, *how* and *at what price* are questions that the legal tech companies are working on just now. *To be continued*…in our next study!

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Appendix

A1 The semi-structured interview

1. Who decide upon the agreement routines of your organization?
2. Does the organization itself develop procedures regarding its agreements, such as templates, digital tools, policies and routines?
3. Which is the origin of the contracts? Who has participated in drafting the contracts originally?
4. Which employees participate in drafting and negotiating new contracts?
5. How does the organization do when it drafts and negotiates new contracts?
6. Does the organization have a legal department of lawyers who works with agreements?
7. Does the organization use external lawyers in their agreement making?
8. Which are the three most common types of contracts in your organization?
9. Does your organization use master agreements which are used at many markets? Which jurisdiction governs the agreement? If not the Swedish jurisdiction, are the agreements adapted to Swedish law?
10. How are the agreements of your organization updated?
11. Does your organization use oral agreements?
12. How are contracts signed; by using pen, digital signature or something else?
13. How is the counterpart's authority to enter into an agreement checked; by transcript, ID or in another way?
14. Does it happen that your organization loses a deal due to inefficient agreement routines?
15. How are the contracts stored?
16. Are there routines in place to monitor contracts, regarding for example notice, renegotiation, guarantees, complaints and information duties
17. Does your organization use digital support for managing your contracts, such as digital templates or storage of contracts? Which one in that case?
18. Does your organization use digital support for negotiation of contracts, for example for saving e-mail conversations regarding contracts?
19. Does your organization need more digital support for managing and negotiation its contracts? What in that case?