# TIDYING UP CONTRACT PORTFOLIOS THE MARIE KONDO WAY

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Abstract: Contract portfolios are currently dominated by text. Turning them into more modern forms e.g.

by visualisation or code is challenging, especially if they do not have their source in identifiable contract templates. There can be many thousand clauses and wildly divergent expressions. This paper adapts the Marie Kondo method as a novel way of clustering such contracts and clauses to reduce legacy complexity and to rationalise the amount of transposition work required. It illustrates the process steps and choices that can determine the fate of any contract

digitisation or visualisation project.

# 1. The Future of Contracting: Improved Communication, Efficiency and Effectiveness

Globalisation and a general tendency towards heightened legal risk management have increased the use of contracts as a cornerstone of cooperation. Yet formal written contract documents themselves are not ideal instruments of collaboration, due principally to their length, complexity and the means by which they are produced. While they may work well from a lawyer's point of view, they are in fact quite poor for business: they seem strangely out of synch with the new tech-enabled world of commerce and with the new paradigms of discourse enabled and promoted by digitisation.

Whilst legislators increasingly use a low-brow style of expression on Twitter to form, broadcast and test national policy, lawyers still stand like a legion of centurions around the paper contract, as if it were a key cultural inheritance to preserve untouched at all costs. For the people expected to implement those contracts the documents appear forbidding and incomprehensible for the most part. Conventional contracts use an excessively legal-technical language, have little regard for design to ease understanding, and are generally not standardised. This often creates misunderstanding and friction in business dealings.<sup>1</sup>

There is a conflict of interest inherent to the traditional delivery model by lawyers of contractual documents – the more complex the documents, the more lawyer involvement is needed to manage them through their lifecycle. From the business point of view, time and money are being spent on lengthy negotiations over the wrong issues. Rather than providing the desired security and certainty, current contracts may actually lead to lost opportunity, value erosion, and conflict. Instead of facilitating communication or working as boundary objects – an interface between different individuals or organisations – contracts are too often seen as merely

Research by the International Association for Contract and Commercial Management (IACCM) has identified several pitfalls which characterise traditional contracting. See IACCM 2015. Collectively, the pitfalls reflect what IACCM annual surveys of its members prove: that negotiators all over the world spend much of their time preparing for failure rather than securing success and opportunity. See IACCM 2018. See also HAAPIO/BARTON 2017.

legal weapons.<sup>2</sup> In addition, some in-house or externally appointed negotiators still take opportunistic or even combative approaches to contract content to prove their own value to their clients, despite the fact that this can be counter-productive and cause additional delays.<sup>3</sup> In that sense, complexity drives lawyer income. This is the Gordian Knot that needs cutting to return the act of contracting to the business owners and the organisations which they are intended to benefit.

There are various movements currently under way to address this problem. In our previous work, we have looked into what lawyers can learn from *design thinking*<sup>4</sup> in general and *information designers*<sup>5</sup> in particular. We have also looked into how code can help to standardise and to automate contractual obligations. Experience and research tell us that there are solid benefits to be gained from simplifying and visualising contracts. Simplification, visualisation and automation of individual contracts or templates is already possible. It requires only resource (principally patience and time), and there are publicly available tools and guidance already to support. In this paper, we focus on the challenge presented by large and complex legacy portfolios, when the intention is to visualise or automate the contracts within the portfolio. We present a novel technique for overcoming the challenge, based on KonMari-ing or cleaning up contract portfolios. This technique will enable us to go where we want to go in the future of contracting: improved communication, efficiency and effectiveness.

### 2. The Challenge: Complex Legacy Portfolios

Complex non-standard contract portfolios are difficult to manage and to organise. In the rush to «get the deal done» and to satisfy certain Key Performance Indicators, cross functional teams feel a tension between the contract as an entity in itself, and the contract as one building block in a broader portfolio. Bespoke agreements are often viewed positively, as being more likely to reflect the unique requirements of a business or the wishes of a valued counterparty, and free text additions or changes are very common. In large organisations, contract negotiation teams in the pre-bind phase typically spend time ensuring compliance with a high-level playbook, but do not spend much time maintaining a consistency of form or expression across the documents. This would involve a centralisation process, and specific liaison with teams doing other, similar deals. This is rarely done because of lack of time. Clauses are used and re-used, but also frequently re-written. If one were to simplify a portfolio with a single expert going one contract at a time, one of the great challenges would be memory. Many of the clauses or their variations will be seen again and again, but with thousands of different clauses, many with echoes of each other. How to map them and their relationship to each other? Performing the transposition one contract at a time, and relying purely on experts and their memory will not work.

For contracts as (ineffective and incomplete) boundary objects, see GUYER 2019, with references.

Year after year, limitation of liability and indemnification clauses have retained their top positions in the most negotiated contract terms (IACCM 2018). Negotiations over these issues slow down the process. For the obstacles to and benefits of speed to contract, see also IACCM Contracting Principles at https://www.iaccm.com/resources/contracting-principles.

<sup>4</sup> HAAPIO 2013, BERGER-WALLISER/BARTON/HAAPIO 2017.

<sup>5</sup> Haapio/Passera 2013.

<sup>6</sup> Haapio/Barton 2017, Waller et al. 2016, Unsworth 2019.

See, e.g., PASSERA 2017. Even the business world has taken notice of these developments. For example the Financial Times recently published an article asking «Can contracts use pictures instead of words?» (LOVE 2019).

For design aspects, see IACCM's Contract Design Pattern Library, https://contract-design.iaccm.com. For resources relating to the coding of obligations, see also CommonAccord, http://www.commonaccord.org.

We are aware of the fact that these are umbrella terms that can cover many different kinds of projects. For example, contract automation can be used to refer to the automation of contract formation or of contract execution, or automation for digital contract interconnectedness. These may require the involvement of different internal and external resources. For the sake of limited space, we do not go into details, such as external contract partner integration or contractually required change mechanisms.

We use the word «transposition» to describe the intersemiotic translation or transmutation of text into signs of a nonverbal sign system, for example exchanging a contract clause written in text for a diagram (or text/diagram combination) or code.

For a professional organiser like Marie Kondo, the multitude of contracts and clauses, with their language and form, viewed within a large portfolio would look rather like the mess which can arise in a large family house with multiple occupants. Each expert and each cross functional team can be compared to a family member wanting to lay claim both to their own physical part of the house (by analogy, the contract(s) for which they have responsibility), and to the common parts, including even the abstract «culture» of the house (by analogy, the playbook and the portfolio of which that contract is a part). That claim to self-determination is a decentralising force. Whilst teams are obliged to obey the general rules, they also insist on being empowered to manage the detail as they wish. Generally speaking there is a sense of ownership and unity, and a benevolence to other family members and to the family unit. The mess does not frequently arise because of ill-will between family or team members. Usually, the root cause is insufficient time and a prioritisation of the single deal. This lack of time impacts communication. It leads to high levels of untracked repetition. It also leads to frequent imbalances between the individual versus the collective interest, and finally to the mess and complexity. In that sense, even in the most harmonious and healthiest businesses, a complex legacy portfolio of contracts can bear comparison with a messy house full of clutter.

The drivers of contract complexity are multiple, <sup>11</sup> and include *writing style*: the language in the contracts tends to include terms of art, long sentences, buy-backs and antiquated language; *diverse authorship*: there is no standard form of legal writing, and two people tasked with describing the same agreement or obligation will frequently present it differently; *document length*: more provisions to account for, and a high level of textual interdependency; *document structure*: the contractual position prevailing between the parties at any particular time often requires an understanding of the priority and interrelationship of the various documents that form part of the contract; *language(s)*: large portfolios can contain contracts expressed in multiple languages, involving a need for collaboration between experts from different countries as well as translators; *relationship complexity*: contracts often inter-relate beyond simple questions of off-set amongst the parties; and *applicable laws*: contracts contained in the portfolio may be written subject to multiple laws and customs, which have an impact on their meaning. A single clause can have many different outcomes depending on the law applicable to it. This is often a factor exacerbating all the other challenges.

The aggregation of these existing factors creates an additional layer of complexity when the intention is to make a generational change in the contracting practices of an organisation. To automate, to simplify or to re-design the whole portfolio at the same time means to achieve a sufficient understanding of the entire portfolio in its current state, both horizontally and vertically. This is where *responsible digitisation* requires us to stop and think. It would be irresponsible to proceed with a generational change – for example, from conventional contracts to smart or visual contracts – before designing an effective process to achieve *a common portfolio understanding*. Not only would it be likely to fail, it could lead to wasted time, internal inconsistency, and even to disputes.

The factors described above have more or less encrypted large contract portfolios. Seldom can single individuals or an elite «commando» of Subject Matter Experts effectively gain a full understanding of each contract making up the portfolio. A common framework of understanding will need to be created as far as possible. What is needed is a process to achieve that framework understanding, preferably supported by technology. <sup>12</sup>

See, e.g., WALLER ET AL. 2016. For the reasons of complexity, see also SIEGEL/ETZKORN 2013, p. 13–23 (listing among the factors that fuel complexity, for example, learned helplessness, complexity being used as a moneymaking tactic or as a shield, insiders' pride in using jargon, and companies and governments finding it «easier to just keep amending and adding on, sometimes to laws or policies that are irrelevant or of unknown derivation»).

Apart from the Marie Kondo method introduced here, there are other methods of tidying up that could be used for contracts, including those offered by lean management or agile software development. Comparing these methods or ways to reach and measure clarity and understandability is, however, beyond the scope of this short paper.

# 3. KonMari-ing Contract Portfolios

In her popular Netflix series on tidying homes, Marie Kondo supports her clients by applying a standard set of steps: on-boarding a client; a tour of the home; greeting the home; consulting client on ideal home style; explanation of the KonMari method; application of the method; completion of the project; and exit meeting. They key elements of the Marie Kondo method<sup>13</sup> include, first of all, tidying by category, not location: she will for example ask a resident to take all clothes, regardless of where they are currently stored, and pile them all up on a bed. The method requires a strong involvement of the client in the process. Marie Kondo is never seen tidying cupboards herself, save by way of demonstrations. Part of the process includes having the client thank and then throw away their own possessions if they do not «spark joy»: possessions are only ever discarded by the owner, unless the owner has died.

The KonMari method insists on the tidying of the house as a project, and applies many standard project management techniques. The purpose of each project is to rationalise the objects in the home and to restore them to a more appropriate relationship with the lives of the residents. Often, the project begins when the objects have to a large extent taken over the home or the life of its inhabitants. They need to be reappropriated. In the same way, the vast array of writing and of clauses in a large portfolio of contracts needs to be rationalised and reappropriated, and put at the disposal of the business. For this reason, the *responsible digitisation* of a large portfolio of complex contracts needs to include a project to tidy up existing contracts. This is why we recommend a process that resembles the KonMari method. The objectives of such a process, like those of the KonMari method, include an organisational level (tidying a clutter) and a psychological level (calmed minds, better oriented to a more clearly defined future).

## 3.1. The Contract Portfolio Clean-up Process Using the KonMari Method

As in any project there are certain cornerstones that will be needed in a contract portfolio clean-up process. In parallel with the KonMari method, a client will have to be identified, including a Sponsor. There will need to be on-boarding meetings, regular check-ins, and exit meetings. In the following, we assume such standard project management cornerstones will be integrated into the process, and focus instead on the novel steps specific to the process by which a complex contract portfolio can be cleaned up and prepared for the future. When the goal is to visualise or automate contracts within a large portfolio, we therefore propose the following process steps, illustrated in Figure 1:

1. Clause Extraction: Clauses create the genetic code of contracts. Not all clause types have the same importance, but many clauses impact contract performance, as DNA impacts life-quality and expectancy. Without knowing what clauses are contained within the portfolio, it will be hard to do many of the steps described below. The contracts therefore need to be collected in one digital repository, in a machine-readable format. If the record exists, if resources are sufficient and if it is perceived that trending is an important dimension to track, the contracts to be uploaded should include contracts for prior years, not just current, in-force contracts. The contract repository should include all the meta-data that exists about the contract, e.g. relevant market, counterparty, period, size/economics, etc. A solid data management infrastructure will be required, <sup>14</sup> and there are off-the-shelf tools already existing to support clause extraction from large portfolios of contracts. <sup>15</sup> At the end of this process step, the organisation has a complete machine-readable collection of its contracts and of the clauses in it – one entry for each contract, and one

<sup>13</sup> Kondo 2015

<sup>14</sup> MS Excel may be sufficient, though there are now other platforms dedicated to big data exercises of this kind, such as Palantir Foundry, https://www.palantir.com/palantir-foundry.

Analytical systems such as KM Standards (https://kmstandards.com), RAVN (https://www.ravn.co.uk), and Seal Software (https://www.seal-software.com) can be used for clause extraction.

- entry for each clause (i.e. duplicates are eliminated, reducing the number of entities needing to be transposed in step 12).
- 2. Clause Keywords and Expert Prioritisation: Clustering the clauses by theme is an important step in extracting meaning from the corpus. A good high-level taxonomy will allow an understanding of typical contract composition, and of the types of clauses which could be replaced or supplemented with e.g. visual design patterns or smart contract clauses. At the same time, this step should allow insights into the frequency of the individual clauses in contracts, and of the frequency of use of the keywords to which they belong. This can create or validate the playbook being applied in practice. Finally, the subject matter experts (SMEs) currently advising on the portfolio should advise on the relative importance of the keywords, from a thematic perspective. This will be important in terms of setting thematic priorities within the process. In addition, it is important to ensure that the SMEs are engaged throughout the process to create an analogy to the KonMari method, the SMEs are some of the key occupants of the house being tidied, and must also live in it afterwards. For that reason, they must be involved and feel comfortable with the process. At the end of this process step, the organisation has mapped every clause identified in step 1 to a limited number of keywords, and has the data points required to move on to step 3.
- 3. Importance Assessment: Each theme in the taxonomy will not have equal importance in the area of activity (commercial or otherwise) under consideration. Not all functions of contracts will need to be replaced or supplemented, even where that would be possible. A weighting or scoring system, on the right level of granularity can give a good guide to the relative importance of each theme from a risk perspective and/ or from the impact opportunity inherent to the topic. Factors that can be taken into account include (i) the length of the clauses (longer clauses take more reading time, so replacing them may yield proportionally higher efficiency gains); (ii) the importance of the keyword to which the clauses map (as determined by the SMEs in step 2; (iii) the trending of the clause over time (clauses and clause types used more frequently over time may be perceived as more important than clauses used less and less over time). These factors can be turned into a single algorithm to evaluate «importance», and each theme/clause can be given an «importance factor». At the end of this process step, the organisation has a view on the relative importance of each of the individual clauses identified in step 1.
- 4. SME Allocation and Clause Review: Teams of SMEs managing complex portfolios are usually composed of professionals with different experience and skill types and levels. In asking the SMEs to comment on the quality and desirability of individual clauses in the corpus of clauses formed in step 1, it will be important to allocate the right expert to the right clause or clause type. To give the simplest example, imagine a team of three experts, one of whom has one year of professional experience, the other has five years and the last expert has 20. In this example the years of experience are accepted by everyone including the experts themselves to translate into «expertise». In such a scenario, and assuming all SMEs have equal time to give to the project, the available time of the most experienced SME can be allocated to the most important clauses and the least experienced can be given the least important clauses. The point here is to create an allocation system that makes sense and makes best use of the available resources. The second element here is to ask the SMEs to review their clauses. As part of this they should jointly decide how granular they need to be in their assessments and agree on a standard database format. Individually, they should then record their views on the quality and desirability of the clauses they are reviewing, and be allowed to record comments on the clauses. Naturally, some clauses may be perceived acceptable in some contexts but not in others, and this element of contextual differentiation should be noted as well in the evaluation process. At the end of this process step, the organisation has a complete list of the clauses in its portfolio, with the most important ones assessed for quality by its most appropriate experts – a key step on the road to an organisational (as opposed to an individual) view on the clauses in its portfolio.

- 5. Investigate Portfolio: Once the key clauses have been identified and assessed for quality, modern text mining<sup>16</sup> or AI tools will allow the organisation to assess where those clauses appear, i.e., within which contracts. Naturally, some will appear multiple times, in many contracts, but the library of clauses will only have a single example of each clause. Each contract can then be transformed into its own clause DNA. Instead of unstructured data and freetext clauses, the individual entities will have been transformed into a sequence of important and less important themes, with the stronger and weaker points in the structure identified and marked. At the end of this process step, the organisation understands the «clause DNA» of all its individual contracts, and has a view on all the important clauses it contains.
- 6. Create Quality Benchmark: Once each contract has been evaluated in step 5, a point system can be used to create a benchmark and to estimate where each contract fits into that benchmark. The point system should harness the importance of the keywords covered, and the respective quality of the clauses actually detected in the contracts. At the end of this process step, the organisation understands the «quality» of its portfolio of contracts over time, <sup>17</sup> and can drill down utilizing all the meta data that was captured in step 1 (e.g., comparing markets, clients, etc.).
- 7. Upload New Contract/Automated Contract Review: Benefiting now from an encyclopaedic collection of clauses and some insights into real-life standards, a contracting party can move on to investigate new incoming contracts in a more or less automated manner. What they will need for this is a text mining tool applying fuzzy logic<sup>18</sup> coupled potentially with a semantic layer<sup>19</sup>. At the end of this process step the organisation will have a much more efficient, quicker and more standardised contract review procedure which allows it to focus only on new clauses.
- 8. Enter New Clauses: The only elements remaining to investigate by SMEs as new contracts come in will be new clauses which have never been seen before by the organisation, and contracts bearing little relationship from a content perspective with contracts already within their portfolio of business. New clauses are entered into the database of clauses. At the end of this process step the organisation will have a method for keeping its database of clauses complete and up to date.
- Investigate New Clauses: The SMEs will assess new clauses for keyword and for quality. At the end of this process step the organisation will have a method for maintaining the quality of its database of clauses.
- 10. *Quality Calculation*: The SMEs who previously provided only advice around potential clause impact on an exception-basis will be able to provide their internal client with an assessment of the quality of the overall contract. At the end of this process step the organisation will have a method for estimating the quality of its individual contracts.
- 11. New Contract Evaluation: By retaining an ongoing and standardised view of the quality of each of its contracts, as well as of the overall standard pertaining at any time, the organisation will be able to compare individual contracts to the overall benchmark in real time. At the end of this process step the organisation will have a method for maintaining real-time reporting on the terms and conditions of its portfolio, and to follow trends and spikes over time.
- 12. *Complete the Process*: With a catalogued collection of clauses, assessed for quality or triaged by mechanism, and a clear framework to assess the quality of a contract made up of known clauses and unknown clauses, the process is ready to feed into its final state: transposition of the portfolio into its new form. This can be a re-design or self-executing contract clauses, ideally to be preceded by contract simplification.<sup>20</sup>

<sup>16</sup> Smith-Waterman is one of many well-established algorithms, available without fee and first posited in 1981. See SMITH/WATERMAN 1981

<sup>&</sup>lt;sup>17</sup> One example of such an exercise can be seen in PAIN ET AL. 2018, p. 16.

<sup>&</sup>lt;sup>18</sup> For fuzzy logic, see Cintula/Fermüller/Noguera 2017.

<sup>19</sup> The IACCM's technology search tool provides more than a dozen examples of tools capable of supporting this process step, see IACCM/CAPGEMINI 2019.

The steps following the tidying up process are beyond the scope of this paper. Real-world contract simplification and visualization guidance, case studies and examples are available through IACCM's resources; see, e.g., Contract Design – Simplification and Visualization

Naturally, various follow-on advantages are additionally available, such as drafting tools and template creation (inductively utilising available clauses and knowledge of quality) in order to guide future consistency and standardisation. The operational time extracted from the contract review and set up phase as a result of the newly tidy landscape can be refocused on these novel activities.

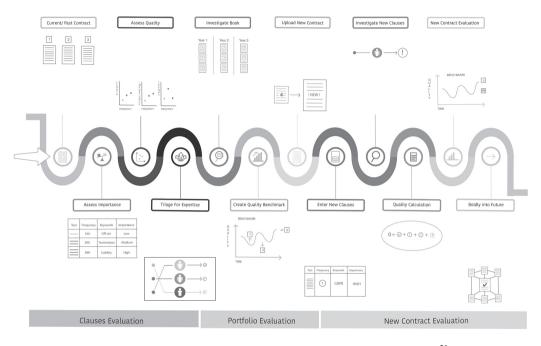


Figure 1: Contract clean-up process using the Marie Kondo method<sup>21</sup>

#### 4. Conclusions

Any organisation with a complex portfolio of existing contracts will need to implement a tidying process prior to embarking upon a major modernisation, whether turning conventional contracts into visualised contracts or Smart Contract code. This tidying process should be regarded as a separate project and be managed as such. It should integrate existing subject matter experts to ensure a smooth transition for the business, and focus on clustering clauses to a limited set of meanings, so as to allow recycling. Tailoring such a process as a project team will allow everyone to follow the execution of what is a demanding process with considerable impacts on daily activities. The positive outcomes include easier management of future contract submissions, and a better understanding of the legacy unstructured portfolio, which can then be more easily enhanced with images or Smart Contract code, leading the organisation from legacy complexity to clarity. Like after a successful KonMari clean-up process, the organisation and its people can reach calmed minds, better oriented to a more clearly defined future.

alization, https://www.iaccm.com/gp/ContractSimplification and IACCM's Contract Design Pattern Library, https://contract-design.iaccm.com. See also Passera/Haapio 2019 and the resources mentioned in the Introduction. – In addition, Alan Siegel and Irene Etzkorn offer a systematic approach geared toward simplification based on three key building blocks: empathy with the users' needs and expectations; clarity through the use of both plain language and design; and distilling the communication, boiling it down to its essence (Siegel/Etzkorn 2013).

<sup>&</sup>lt;sup>21</sup> The image is also available at http://www.helpingtheworldtoagree.com.

#### 5. References

Berger-Walliser, Gerlinde/Barton, Thomas D./Haapio, Helena, From Visualization to Legal Design: A Collaborative and Creative Process. American Business Law Journal, Vol. 54, No. 2, 2017, p. 347–392.

CINTULA, PETR/FERMÜLLER, CHRISTIAN G./NOGUERA, CARLES, Fuzzy Logic. In: Zalta, Edward N. (Ed.), The Stanford Encyclopedia of Philosophy, Fall 2017 Edition. https://plato.stanford.edu/archives/fall2017/entries/logic-fuzzy (accessed on 16 December 2019).

GUYER, SALLY, Contracts as Boundary Objects: What Does This Mean and Why Should We Care? Contracting Excellence, 21 October 2019. https://journal.iaccm.com/contracting-excellence-journal/contracts-as-boundary-objects-what-does-this-mean-and-why-should-we-care (accessed on 16 December 2019).

HAAPIO, HELENA, Next Generation Contracts: A Paradigm Shift. Lexpert Ltd, Helsinki 2013.

HAAPIO, HELENA/BARTON, THOMAS D., Business-Friendly Contracting: How Simplification and Visualization Can Help Bring It to Practice. In: Jacob, Kaj/Schindler Dierk/Strathausen Roger (Eds), Liquid Legal. Management for Professionals. Springer, Cham 2017, p. 371–396.

Haapio, Helena/Passera, Stefania, Visual Law: What Lawyers Need to Learn From Information Designers, Cornell University Law School, Legal Information Institute, VoxPopuLII Blog 15 May 2013. http://blog.law.cornell.edu/voxpop/2013/05/15/visual-law-what-lawyers-need-to-learn-from-information-designers/ (accessed on 16 December 2019).

IACCM, Commercial Excellence: Ten Pitfalls To Avoid In Contracting. International Association for Contract and Commercial Management 2015. https://www2.iaccm.com/resources/?id=8451 (accessed on 16 December 2019).

IACCM, Most Negotiated Terms 2018. International Association for Contract and Commercial Management 2018. https://www.iaccm.com/resources/?id=10243 (accessed on 29 October 2019).

IACCM/Gapgemini, Contract Automation Software Comparison Tool, 2019, https://software.iaccm.com/search (accessed on 16 December 2019).

KONDO, MARIE, The Life-Changing Magic of Tidying Up: The Japanese Art of Decluttering and Organising (English Edition). Thorndike Press, Waterville (ME) 2015.

LOVE BRUCE, Can Contracts Use Pictures Instead of Words? Financial Times, 23 October 2019. https://www.ft.com/content/032ddcb0-e6b1-11e9-b8e0-026e07cbe5b4 (accessed on 16 December 2019).

PAIN, DARREN LEE/ANCHEN, JONATHAN/KRUEGER, FINN/ASHISH, DAVE, Sigma No. 2/2018: Constructing the Future: Recent Developments in Engineering Insurance. Swiss Re, 14 June 2018. https://www.swissre.com/institute/research/sigma-research/sigma-2018-02.html (accessed on 16 December 2019).

Passera, Stefania, Beyond the Wall of Contract Text – Visualizing Contracts to Foster Understanding and Collaboration within and across Organizations. Doctoral Dissertation, Aalto University 2017.

Passera, Stefania/Haapio, Helena, Start Your Simplification Journey with the IACCM Contract Design Pattern Library. Contracting Excellence Journal, 8 September 2019. https://journal.iaccm.com/contracting-excellence-journal/contract-management-start-your-simplification-journey-with-the-iaccm-contract-design-pattern-library (accessed on 16 December 2019).

SIEGEL, ALAN/ETZKORN, IRENE, Simple: Conquering the Crisis of Complexity. Twelve, New York 2013.

SMITH, TEMPLE F./WATERMAN, MICHAEL S., Identification of Common Molecular Subsequences. Journal of Molecular Biology, Vol. 147, Issue 1, 1981, p. 195–197.

Unsworth, Rory, Smart Contract This! An Assessment of the Contractual Landscape and the Herculean Challenges it Currently Presents for «Self-executing» Contracts. In: Corrales, Marcelo/Fenwick, Mark/Haapio, Helena (Eds), Legal Tech, Smart Contracts and Blockchain, Perspectives in Law, Business and Innovation. Springer Singapore 2019, p. 17–61.

Waller, Robert/Waller, Jenny/Haapio, Helena/Crag, Gary/Morrisseau, Sandi, Cooperation through Clarity: Designing Simplified Contracts, Journal of Strategic Contracting and Negotiation, Vol. 2, Issue 1–2, March/June 2016, p. 48–68.