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The Design of Commercial Conditions

Layout, Visualization, Language

Introduction. The role of contract within an organization can hardly be overestimated. Along with legal functions, a contract serves as a perfect communication tool and helps to minimize the risks. Nevertheless, a contract is often perceived as a purely legal document; a formality, necessary only for lawyers, and used exceptionally in court. A classical commercial contract is often too long, difficult to read and just not attractive to the majority of business managers. The aim of the following research is to find ways and techniques to change a commercial contract in such a way, that it engages readers to make a full use of a contract. The special focus is attributed to the language and design aspects of the contract design. Methodology. The cooperation with the international rail company Bombardier Transportation allowed to test the effectiveness of language and design modifications applied to the contract within the real life scenario. The prototypes of two sections of the General Terms and Conditions of Bombardier Transportation were created using language and designed tools discovered during the research. The comprehension and usability test conducted to compare the performance of the traditional and modified versions of the commercial conditions revealed a number of important findings. Results. Overall, the results suggest that the modified version of the contract is user-friendlier and has a greater level of usability, than the traditional version. The version of commercial conditions crafted using the special language and design tools allows the users to work faster and more accurately. The participants of the test preferred the modified version in all the aspects of the contract and indicated that it is easier to work with. Conclusion. The results of the experiment indicate that new approaches to the contract drafting that consider different users of the contracts, but not just lawyers, have potential to significantly influence the performance of the commercial contracts by changing the way the contracts are designed. Moreover, the findings of the research provide a range of methods and tools that can be used to draft the better contracts and change the existing ones, so that they become more relevant to managers, and therefore, perform better.

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1 Introduction

[Rz 1] Commercial contracts are valuable not only legal, but also managerial instruments that can facilitate communication, transfer knowledge, minimize risks and perform other multiple functions. However, quite often, commercial contracts underperform and do not deliver the expected outcomes.¹ One of the main reasons is that the majority of the contracts, being designed in the frame of the classical legal paradigm, do not take into account the needs and capabilities of other than lawyers users. Even though the information included in the commercial contracts is intended mainly for business people, such as project managers, sales, procurement and operation teams, contracts seem to be written only for lawyers and with the idea of litigation in mind.² A classical commercial contract is often too long, difficult to read and just not attractive to the majority of business managers. The prominent mismatch between the potential functions that a commercial contract can execute, and its actual performance clearly indicates the need of the paradigm shift in contract drafting and creation of new «good» commercial contracts that would focus on the business success, rather than litigation.³

[Rz 2] Changing existing approach in design of the contracts is a crucial step for the paradigm shift. The existing templates and forms should be redesigned to produce contracts that are user-centred and usable — good contracts. Review of the relevant sources⁴ has shown that there are four main groups of criteria for good contracts that offer the methods and tools for making the contracts better: structure, content, language and design. The present research focuses on the last two of them: language and design (including layout and visualizations).

2 Methodology

[Rz 3] Plain language and user-friendly design can make a big difference to the current look and feel of commercial contracts. In order to assess the differences in usability and attractiveness bet-

¹ Cf. HAAPIO, H., *Next Generation Contracts: A Paradigm Shift*. Lexpert Ltd., Helsinki, Finland. p. 2—3, (2013).

² Cf. HAAPIO, H., *Next Generation Contracts: A Paradigm Shift*. Lexpert Ltd., Helsinki, Finland. p. 2, (2013). STARK, D., & CHOPLIN, J., *Dysfunctional Contracts and the Laws and Practices That Enable Them: An Empirical Analysis*. Retrieved July 14, 2014, from works.bepress.com: http://www.works.bepress.com/debra_stark/6/ (2012).

³ Cf. HAAPIO, H., *Next Generation Contracts: A Paradigm Shift*. Lexpert Ltd., Helsinki, Finland. p. 71, (2013).

⁴ Cf. for example: JAMES, N., *Setting the standard: some steps toward a plain language profession*. Sixth PLAIN conference. Amsterdam: Plain English Foundation. (2007). WALLER, R., *What makes a good document? The criteria we use*. Retrieved April 15, 2014, from http://www.simplificationcentre.org.uk/downloads/papers/SC2CriteriaGoodDoc_v2.pdf (2011a). WHITEMARK, *Plain English criteria for documents and websites*. Retrieved April 17, 2014, from plainenglishawards.org.nz: <http://plainenglishawards.org.nz/plain-english-criteria/> (2013b).

ween traditional contracts and contracts crafted using the plain language principles and design tools, the prototype of several sections of the commercial contract was designed and tested.

[Rz 4] The empirical study was conducted in the cooperation with international railway engineering and production company Bombardier Transportation, a global market leader in the rail-equipment manufacturing and servicing industry, having 38,500 employees in 26 countries across the world.⁵ The experiment included redrafting of two sections of the «General Terms and Conditions» of Bombardier Transportation, which is a textual business-to-business commercial contract, used by Bombardier in business cooperation with its suppliers. The prototypes were created using language and design tools examined during the research. The redrafting process was divided into three main steps, according to the tools applied: changing of the language, changing of the layout and adding visualizations. Figure 1 shows the excerpts from the original and the modified versions of the contract.

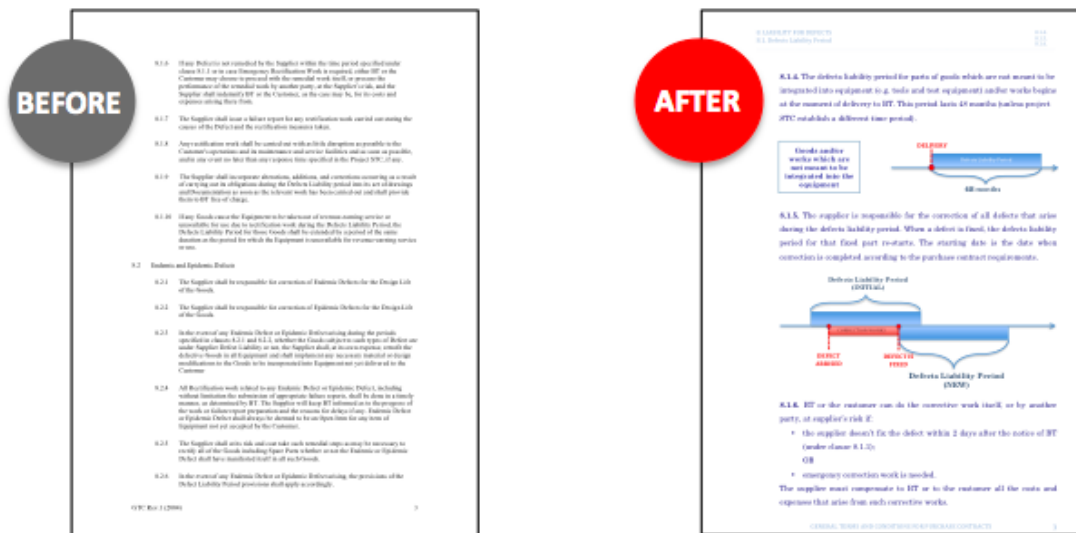


Figure 1. Excerpts from the original version and modified version of the contact

[Rz 5] To further analyze how much better the new version of the contract is, compared to the traditional one, the comprehension and usability test was conducted. The test included two means of data collection: a questionnaire and subsequent discussion.

[Rz 6] The questionnaire consisted of three parts: «General questions», «Comprehension questions» and «User Experience questions». The first part included questions about the participants: age, gender, nationality, educational background, primarily language and department they are working in. This information was necessary to form the participants» profiles and to evaluate the relevance of the sample. The second part of the questionnaire consisted of open-ended comprehension questions about the content of contract clauses. This part of the questionnaire was timed. Participants were asked to indicate the time when they start and finish this part of the test, in order to make it possible to calculate the average speed of answering a question on comprehen-

⁵ BOMBARDIER INC., About Us. Retrieved March 11, 2014, from [bombardier.com](http://www.bombardier.com/en/about-us.html): <http://www.bombardier.com/en/about-us.html> (2014).

sion. The questions were designed carefully in order to test the ability of participants to find and interpret the needed information. The third part of the questionnaire — «User Experience Questions», was designed to evaluate the perceived usability of the contract clauses. Such structure of the questionnaire helped to gather both quantitative and qualitative data in order to compare the two versions of the commercial conditions.

[Rz 7] The sampling process was conducted in collaboration with Bombardier Transportation. Contract users from different departments of the company (legal, contract management, finance, operations, project management, etc.) were invited to participate in the test. The total amount of participants, who took part in the study, was 19. Such size of the sample is estimated to be valid as it goes along with the previous similar studies.⁶ However, this experiment, as well as the previous ones, is a small-scale research initiative, and, therefore, the results should be seen as indicative, rather than statistically generalizable.

[Rz 8] Before the testing, the participants were divided into two groups according to the version of the contract that they will use during the test. The groups were formed in such a way that the representatives of different departments and nationalities were divided roughly equally between the groups. The participants were not told which version of the contract they were working with and the versions didn't contain any type of descriptive titling. After the questionnaires, the participants were asked to give some feedback about their feelings and share their thoughts on the topic. The moderators facilitated the discussion. The analysis of the results of the comprehension and usability test revealed a number of important findings.

3 Results

3.1 Speed and accuracy

[Rz 9] First of all, the performance of the participants, working with different versions of the contract conditions is examined. In particular, the respondents were asked to complete five comprehension questions, and the starting and finishing time was recorded. This provided an opportunity to compare the accuracy of responses and the speed of working on each question.

[Rz 10] Overall, the results depict that participants, using the modified version of the contract, were able to answer the questions more quickly and accurately. Thus, the participants using Version 1 needed in average 200,40 seconds to answer one question, while the users of Version 2 completed one task in only 174,67 seconds in average (See Figure 2). This may suggest that it was easier for the participants to locate and comprehend the relevant information using the modified version of the commercial conditions compared to the traditions version.

⁶ Cf. GLPI, & SCHMOLKA, V., Results of Usability Testing Research on Plain Language Draft Sections of the Employment Insurance Act. Retrieved May 20, 2014, from davidberman.com: <https://www.davidberman.com/wp-content/uploads/glpi-english.pdf> (2000). MANAGING INDUSTRY-CHANGING INNOVATIONS, PRO2ACT. Retrieved July 11, 2014, from mindspace.fi: <http://www.mindspace.fi/en/pro2act/> (2013a). MANAGING INDUSTRY-CHANGING INNOVATIONS, UXUS. Retrieved July 11, 2014, from mindspace.fi: <http://www.mindspace.fi/en/uxus/> (2013b). PASSERA, S., 2012 16th International Conference on Information Visualization. Enhancing Contract Usability and User Experience Through Visualization. An experimental Evaluation. (pp. 376—382). Montpellier: IEEE. (2012).

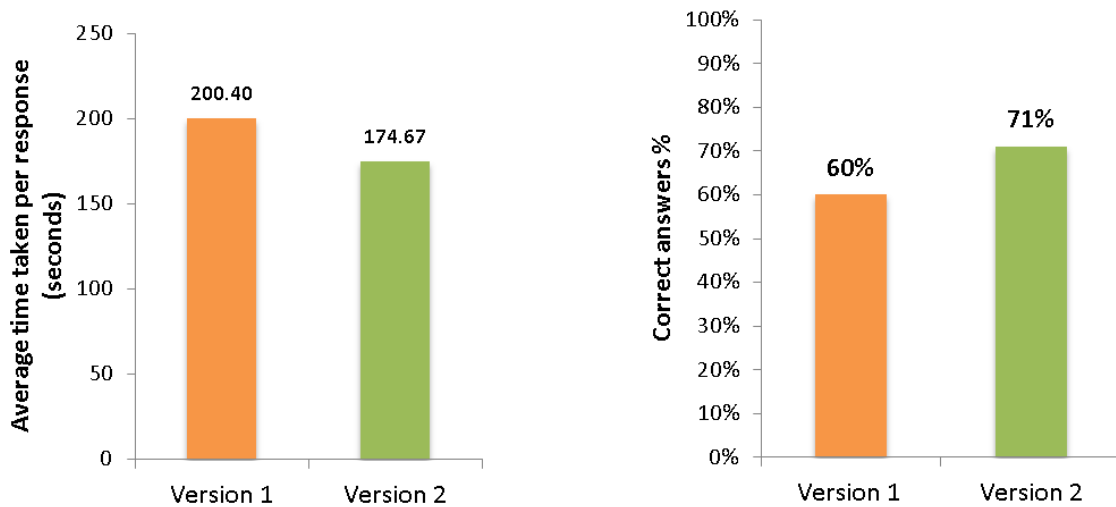


Figure 2. Speed of responses **Figure 3. Accuracy of responses**

[Rz 11] As Figure 3 shows, the participants, who used the modified version of the contract clauses, in average gave more correct answers than the ones who used the traditional version (71% and 60% of correct questions correspondingly).

[Rz 12] Therefore, the modified version of the sections of GTC performed better according to two indicators of speed and accuracy. The difference in both aspects is quite significant. This was confirmed during the group discussions and in the answers to open questions in the third part of the questionnaire. The results showing accuracy and speed of responses also support the results gained from the previous studies that proved that modified versions perform better than traditional ones.

3.2 Perceived difficulty and confidence in future success

[Rz 13] The participants of the test were asked to indicate the perceived difficulty three times during the test: before they received any contract (1); after the quick scan of their assigned version of the contract (2); after answering comprehension questions with the help of their assigned version (3). This provided an opportunity to measure the anticipated difficulty of use compared to the effective difficulty of use of the two versions. Before seeing the contract, the participants indicated the average anticipated difficulty of 4 on a 7-point scale, where 1 stands for not at all difficult and 7 stands for extremely difficult. After the skimming through the assigned version, the respondents indicated the average expected difficulty of 4,5 for Version 1 and 2,89 for Version 2. So, a modified version inspired a significantly easier experience, while the traditional version is perceived even slightly more difficult than expected. After using the contract versions, the respondents of both groups recorded slightly lower perceived difficulty of finding and understanding information than after a quick scan. Therefore, the actual difficulty of working with the clauses was a bit less, than expected for both versions. The results are summarized in the Figure 4.

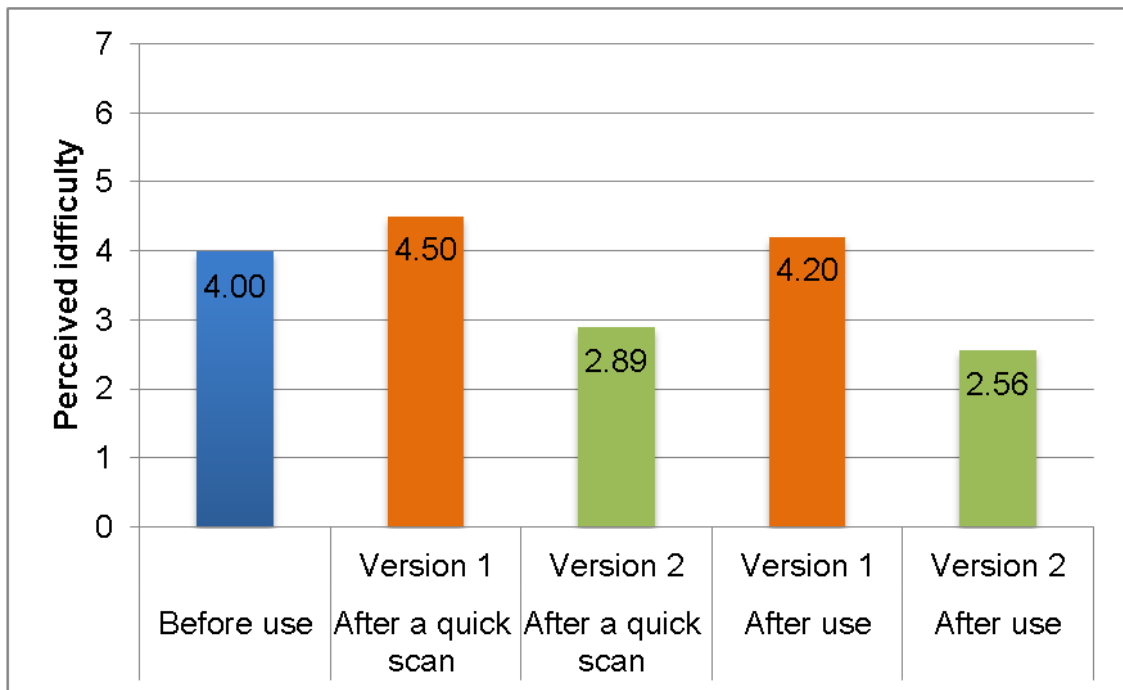


Figure 4. Perceived anticipated and effective iddificulty (sic) of use

[Rz 14] The graph above shows that the modified version provided a significantly easier experience compared to the traditional version. Ease of use leads to greater usability of the contracts, which proves that the modifications, made in the contract clauses create an expected effect. Moreover, the Version 2 was perceived to be a lot easier to use even after only a short look at the contract. This provides valuable insights. In particular, the fact that the contract looks easy to use may improve the willingness of the contract users to work with the documents.

[Rz 15] Along with perceived iddificulty (sic), after completing the comprehension tasks the participants of the experiment were asked to indicate, how that they can find answers to the questions about any contract if it were presented in the same style and format as the one they reviewed within this test. The same question was asked about the confidence in understanding information, once found.

[Rz 16] The results, presented in the Figure 5, show that the modified version of the contract gives more confidence to contract users that they will be able to both find and understand information in the similar kind of contracts in the future, compared to the traditional contract. It is interesting to record that the levels of confidence in locating and understanding information are almost the same to each other for both versions of the contract (4,73 and 4,55 for the traditional version and 5,89 and 5,78 for modified version correspondingly). This shows that modification of language, layout and design significantly simplify both finding and comprehending information given in the contract.

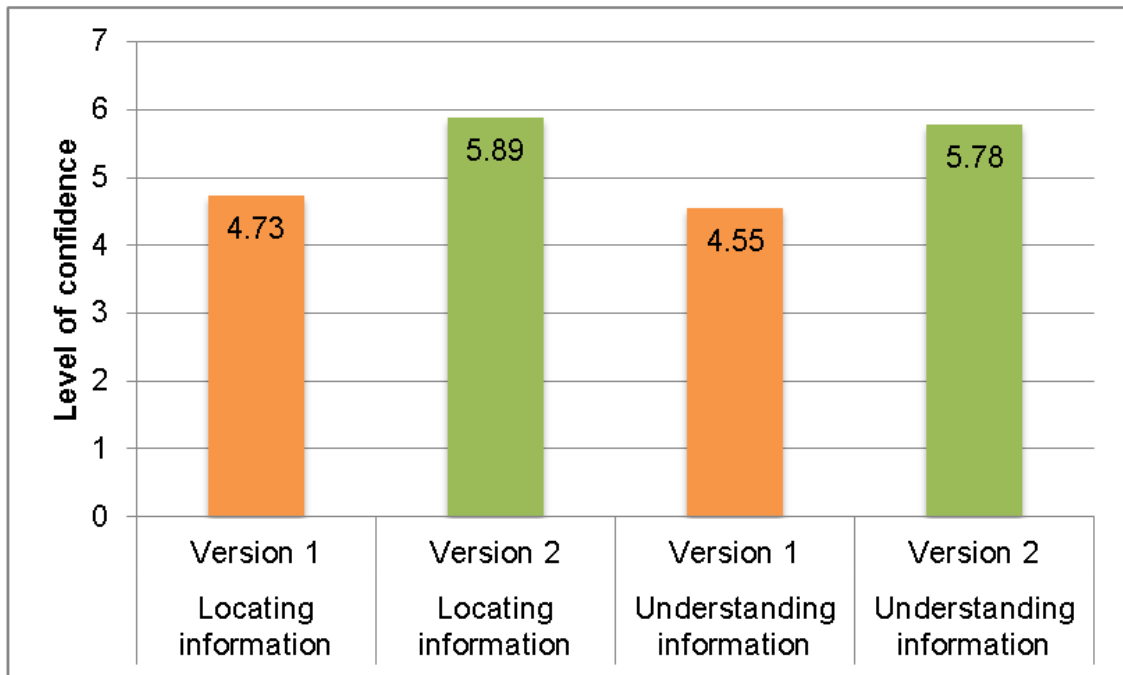


Figure 5. Level of confidence in the future success

3.3 User experience

[Rz 17] The results of the test indicate that 83% of the research participants prefer modified version of the contract conditions to the traditional one. The feedback of the respondents supported that trend as well. Most of the participants generally found the new approach to the contract drafting effective.

[Rz 18] Along with the general preference, participants were asked to indicate, which version of the commercial conditions they would prefer judging on particular aspects of the contract. As the table below shows, participants of the test preferred the modified versions regarding all the aspects.

Preference of different aspects of a contract		
	Version 1	Version 2
Presence of visualizations	5%	95%
Style of layout	32%	68%
Easier to read and skim through	26%	74%
Easier to understand	0%	100%

Table 1. Preference of different aspects of the versions

[Rz 19] However, at some points, the results are more prominent, than in others. In particular, the absolute majority of the participants have indicated that the modified version is easier to understand. This again proves the results described in the previous sub-section regarding the ease of use of the Version 2 compared to Version 1. 95% of the respondents appreciated the presence

of the visualizations in the modified version. The Version 2 was considered easy to skim through by 74% of contract users. Style of layout was attractive to 68% of the respondents.

[Rz 20] Additionally, in the third part of the questionnaire the participants were asked to rate different aspects of the version they used while completing tasks on comprehension. These parameters included look and feel, style of layout, language, structure of the clauses, presence of the visualizations, type size and line spacing. The results gained help to analyse what aspects of the traditional contract are especially disliked and need more attention and how well were the modifications in the Version 2 perceived. The Table 2 summarizes the results. Generally, the participants rated the modified version better than the traditional version in all aspects discussed.

[Rz 21] While the average rating of all the aspects of the Version 1 is 2,7 on a 5-point scale (where 1 stands for «I didnt like it at all» and 5 stands for «I liked it a lot»), the average for the Version 2 is 4,2.

Evaluation of different aspects of a contract		
	Version 1	Version 2
Look and feel	2,8	4,4
Style of layout	2,9	4,0
Language	2,6	4,1
Structure of the clauses	2,7	3,7
Presence of visualizations	1,6	4,7
Type size	2,8	4,2
Line spacing	3,6	4,4

Table 2. Evaluation of different aspects of the versions

4 Conclusions

[Rz 22] Overall, the results of the experiment indicate that commercial conditions that are crafted using the tools of plain language and design provide faster information processing, better comprehension and more pleasant user experience, than the traditional ones. Therefore, it is possible to conclude that the new approaches to the contract drafting that consider different users of the contracts, but not just lawyers, have potential to influence the performance of the commercial contracts significantly by changing the way the contracts are designed.

[Rz 23] There are a number of limitations that should be considered when using the results of the following study. First of all, the limited time frame of the research implied several limitations to the experiment conducted on the basis of the company. In particular, the prototype that was created included the re-drafting of two sections of the contract, but not the whole contract. Moreover, out of four groups of criteria for the good contracts only two where researched in detail and applied to the prototype. Another limitation relates to the size of the research population. As the sample for the comprehension and usability test is rather small, the findings should be considered as indicative, rather than conclusive. However, they provide encouraging insights and confirm the results of the previous similar studies.

[Rz 24] The insights provided by this study and several previous similar projects show the huge potential of the contract simplification and visualization. Therefore, the future research in this field in highly encouraged.

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