



## Цифровая трансформация в экономике и праве

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### Abstract

В статье дается общее представление об изменениях в экономике, внутренних корпоративных процессах и обществе в условиях цифровизации, в том числе с учетом влияния кризиса COVID-19. Автор анализирует последствия для структуры экономики роста групп компаний, получивших позитивный импульс в свете цифровой трансформации, а также затрагивает связанные с таким ростом социальные проблемы. Кроме того, в статье высказываются обоснованные представления о том, как цифровая трансформация может изменить различные сферы деятельности компаний, образование и юридическую науку.

**Keywords:** цифровая трансформация, криптовалюта, цифровое право, образование, коронавирус, юридическая наука, мировой гигант



Digitalization is typically discussed with a focus on what is technically possible. For instance, I well remember having seen touch screens and Kindle-type reading devices long before they were available to the public at large. At the time, I wondered who would be prepared to pay money for functionalities I believed were exotic. In hindsight, I was right and wrong. I was wrong in believing that the functionalities I saw would not be broadly used; I was right in doubting that, in the isolation those functionalities were presented in at the time, they would make sense. Where my imagination failed was to conceptualize integrated platforms, which would make such features interesting.

Similarly, I think one should not think about digitalisation assuming that the type of economy we have been accustomed to would simply disappear and be replaced by a digitalised economy; nor that there would be major disruptions to the environment we are working in currently, with suddenly new ways of cooperating emerging. I find developments that are disruptive in a certain area but that easily integrate themselves into our daily life more likely and a better guidance for further thinking. An example of this type of integration - in which new developments enter the remainder of our daily life - is the taxi industry in big Russian cities such as Moscow, St. Petersburg and Nizhny Novgorod<sup>1</sup>, which is so easy to use that it becomes difficult to imagine the hurdles we had to overcome dealing with transport years ago.

The intention of this article is to help conceptualising what the future will look like, to give some selective ideas of concrete instruments and companies that could further the transformation, and to attempt to give an idea of the effects the current crisis may have on the transformation of the economy we all will be a part of in the years to come.

## **EFFECTS OF DIGITALISATION ON STRUCTURE OF ECONOMY**

Companies offering services in such a new manner that they could be included into the broadest sense of the term "digitalisation" differ from what we know in the more traditional economy:

### **THE EMERGENCE OF NEW GIANTS**

Already, throughout the last decades, we have seen many global corporate giants emerge. We now also refer to such giants as



unicorn; by that it is meant privately held companies with a valuation of more than US \$1 billion. Many of them have, at an impressive speed, expanded their operations across the world.

In a concurrent manner with the expansion of the corporate giants, listings of superrich people are quickly changing, and many newcomers are among those that are on the top of such lists. At the same time, the expectation that you would only have one employer in your working life becomes rarer and rarer. In parallel, start-ups are becoming important parts of the economy<sup>2</sup>.

All of those developments are not really new, and none of them is a straight line. Rather, there have also been crises for the global giants mentioned. The most well-known crisis of recognition of companies which links in a broader manner with digitalisation - the e-bubble - characteristically appears to have been associated with excessive expectations as to the speed of technical development. Also, the new economy suffers from the crises of the economy at large, and is likely to be affected by the coronavirus crisis. However, the mentioned changes are also likely to change the fundamental views and beliefs that have been considered natural up to now.

## **ABOUT EVALUATION AND REGULATION OF THE EMERGENCE OF GLOBAL GIANTS**

One could find the agglomeration of wealth with a few super-rich, which has been a consequence of the rise of the new economy, deplorable. I would rather welcome the fact that it is no longer only the families of magnates of the past that are part of the class of the super-rich, and also welcome the fact that creativity is being well rewarded. In any instance, it is difficult to see a viable alternative to the inequality mentioned: whatever regulation is implemented, unless it is as radical as the communist system, is likely to not substantially change this wealth distribution; furthermore regulation, particularly if is as radical as during the communist system, is likely to provide a substantial hurdle to creativity.

Among the proposals for regulation directed at the new economy are a forced split-up of companies, in particular where platforms have obtained large market shares. However, the effects of such a split up are doubtful because, for instance, a split up may well, instead of two fiercely competing platforms, lead to the platform as a whole losing significance as compared to other platforms. It is probably for this reason that, although IT-giants have had substantial



positions in markets over time, up to now this split up has not been tried.

There are some examples of companies with a substantial market position having been prohibited from factually forcing consumers to use all products offered by one single company. However, such rules, which impose dominant products to allow the connection of less important elements of other producers, seem to also not have much effect, since seamlessly integrated platforms are much easier to use than products from different producers.

A more recent proposal appears suggests allowing the owner of data to demand the transfer of data to other operators.

Furthermore, regulation - which could strengthen smaller market participants - would be to establish quality rules. Doing so could, in particular, favour smaller players, as in virtual business, since in many new businesses the reliability of the operator plays a significant role for the consumer<sup>3</sup>. Accordingly, the bigger platforms typically set high standards of quality in order to attract the public, and potentially other platforms could more easily get users' traction if rules were to require them to maintain a similarly high standard. Such standards could be implemented by oversight, but also potentially by self-enforcement, with organisations uniting the platforms monitoring compliance and distributing ratings.

Another regulatory concern is that the initial success of a service could push smaller players like traditional retailers out of business, but this initially successful service could lack the flexibility to bind consumers for the long term. For smaller retailers to re-emerge, substantial effort would be needed, and regulation could provide a challenge for avoiding the related disruption.

To give examples on a more operative level, cities have struggled to deal with the short-term parking of suddenly emerging delivery services on full roads, and the disposal of goods returned from online purchases has created concerns.

Obviously, for those social networks that include exchange of opinion, a big concern is their influence on public opinion, and the potential that this influence is used in a partial manner. In this context, I will only briefly mention hate speech, and discussions on whether to implement prohibitions of actions in the context of such hate speech contained in criminal law through state supervision, self-regulation, or putting the focus on the parties to act under civil law, with lifting in such a case is preferable.

Turning to the effects of digitalisation on the workforce, it seems that, for the less remunerated, the change in patterns. and the fact



that there is no longer one employer responsible for their life, poses a challenge. Accordingly, it becomes more important for the state in particular to provide solutions for an adequate defence of the working conditions of the lower-income classes, and the same applies to adequately dealing with pension insurance issues.

## **SECTORS IN ECONOMY CHANGED BY DIGITALISATION**

In the following, I will attempt an overview of the sectors of the economy that will be affected by digitalization, and how this change is happening:

### **Digitalisation Facilitating Connections That Otherwise Would Not Have Been Possible**

By now, we are acquainted with technology giants that allow players that are local, like drivers or owners of apartments, to substantially increase their reach. This increased reach allows the classes of purchasers to be broadened, and presumably also increases supply (encouraging people to become taxi drivers and renting out their otherwise privately used apartments) that previously did not exist. When conceptualizing where this aggregation and ability to make connections that previously were not easily available can provide for change, certain areas come to mind; these include the better use of parking space - for instance ensuring that office parking space can be utilized in nonoffice hours without interfering with the office use<sup>4</sup> - and the better use of food that is otherwise wasted<sup>5</sup>. At the same time, both projects seem to indicate that the challenge for further platforms will be to more deeply integrate these areas into reality; for instance following free parking space, gates to this parking space and parking time, or, respectively, the shelf life of food and the dangers involved in using this food.

### **Crypto Currencies**

Increased Attraction Due To the Coronavirus Crisis. On the one hand, in the current environment, an alternative to current currencies seems to become more interesting than before. This is because government support measures are bound to weaken existing currencies. Importantly, the current tendency to implement



enormous support packages without at least a tentative understanding of the timing of the crisis, and the tendency to conserve the existing economy for whatever period is needed instead of focusing on adapting the economy, seem likely to contribute to concerns about the stability of currencies. Given the increased role of governments in the current crisis, their sense of urgency, the endorsement they are receiving when dealing with the consequences of the virus, and their increasing nationalism, they could also more strongly act to prohibit virtual currencies.

In the end, of course, virtual currencies are very unlikely to become a means of payment that any legal regulation will further - or even tentatively - permit. At the same time, it seems very difficult nowadays to make it impossible to exchange virtual currencies into respective national currencies. Prohibitions to become part of a system, in the context of what technically is similar to the issuance of rights (the so called ICOs) have existed for some time<sup>6</sup>, and such prohibitions seem to have proven inefficient. Accordingly, I do not believe that prohibitions will prevent virtual currencies from gaining traction in the post-crisis period.

Also, cryptocurrencies could benefit from the low energy prices during and immediately after the crisis, as the cost of operating these networks could decrease, and in particular the "mining" (which allows participation in the systems and is their vital constituent<sup>7</sup>) could become more affordable.

At the same time, it seems even more important than before for cryptocurrency systems to ensure transparency. Such transparency deserves a discussion of its own, and only a small part of what is required for transparency will be discussed when, immediately below, regulation is discussed. In addition, I would like to here add the importance of one key element of regulation outside the narrow cryptocurrency area: namely, insider regulation for all trade that is public in any manner, which is indispensable to create confidence with the investor community at large, and ensure that changes in prices are taken advantage of by a small circle of persons.

About Regulation of Cryptocurrencies. At least in an overall assessment, since such systems have emerged, the regulation of systems that allow the issue of cryptocurrencies has been relatively patchy. As already mentioned in the previous section, one focus of regulators has been to limit offerings of participations in such systems. The difficulty in such regulation is that, typically, limitations of such offerings in the one country can be avoided by using instruments that allow money transfers into other countries.



Anecdotal evidence suggests that the turnover with credit cards from non US-countries linked to the ICOs that were popular at the time has increased since the US implemented a rule that investors were subject to KYC rules. Accordingly, rules and regulatory actions that have a deeper effect on these systems are likely to have more relevance for the long term.

An example of such regulatory actions is prosecution for activities that are suspected of being fraudulent. At least in some cases, from the outside, the impression is that such prosecution is based on developments that were not easily predictable by the very founders of the system. Also, such development - at least partially - seemed unsurprising to investors acquainted with the structure typically chosen and the problems typically faced by similar projects. Given the specifics of the projects, it would not seem overly likely that they invest into projects without knowing what issues tend to be involved in these. Accordingly, the result of the prosecution for fraudulent action does not appear to be overly adequate for the projects.

Furthermore, crypto-projects and their founders have been prosecuted because of the absence of licenses for, for instance, operations that are similar to what is considered banking in the respective jurisdictions. At the same time, the danger of confusion with banking operations - at least from the perspective of the typical consumer - is minimal.

Foundations have been established to ensure the development of a certain system or product, and disputes have arisen as to the limitations of such foundations abilities to act. On the other hand, from the perspective of the very systems and founders, it has not been easy to clearly establish such limitations, because of the lack of clarity at the outset of the project.

Despite all that I have said in defense of cryptocurrency projects and their founders, there seems little doubt that many projects have been not been backed by any credible developments, and that the general evaluation of them being fraudulent has a good basis. Also, without any doubt, cryptocurrencies can be used for money laundering.

All of this seems to lead to a result very similar to the one described for IT-giants (see above 1.2 - The Emergence of New Giants), with the few projects that have focused on compliance - for instance by filing prospectuses or by obtaining licenses at an early stage and using the money they raised wisely - having a substantial competitive advantage as compared to the projects that follow. On the other hand, given that we seem to be at a relatively early stage



of development of these types of blockchain projects, there appears to be considerable room for better using the technological progress they bring to the economy at large. For this to be possible, it would be desirable that regulation be more adequate to deal with the specifics of projects than the regulation broadly summarized above. The best manner, without going into too much detail, to do so would be regulation that follows functional approaches and that monitors the consistency of how such projects are implemented. For instance, the use of funds and the ongoing improvement of transparency - in line with the stages of development of relevant technology - could be focused upon.

By contrast, the regulation of a single aspect, such as the definition of a "crypto-asset" (which in reality, presumably, is the position that participation in the system gives with rights of participation, including through mining and controls, for instance when it comes to systems being split - the so-called fork being the consequence, and making the crypto-asset similar to a share in a joint stock company) is likely to complicate comprehensive regulation and deflect attention from defining the needs that regulation triggers.

## **REPLACEMENT OF TRADITIONAL CORPORATIONS BY DIGITALIZATION?**

There are instances where innovators seem to have the ability to disrupt the industry, with Tesla being the proof that this can happen for the automotive industry. At the same time, in the aforementioned automotive industry, it seems unlikely that all the incumbents are replaced. Rather, what could be observed for some time in the pharmaceutical industry seems characteristic for the type of ongoing process we will be seeing in the future - namely that incumbents rejuvenate themselves and adapt, including by (in one manner or another) cooperating with startups that can be more innovative but also be attracted by the comparatively easy finance an acquisition by an incumbent can bring with itself.

## **CONSEQUENCES OF THE CORONAVIRUS CRISIS FOR DIGITALISATION**

Of course, because of the current crisis, it is likely that investments that would otherwise have been used for digitalization will be abandoned, reduced, or at least delayed for some time. In



contrast, however, it is noteworthy that one element of the future of employment - namely distant working - has already been significantly furthered by the current crisis<sup>8</sup>, and there is ongoing contemplation on how to replace the social interaction that has been reduced by the various quarantine regimes with virtual lunches or virtual conversations whilst walking, so that multitasking becomes impossible.

Also, once recovery begins (in particular if recovery leads to steep growth at least in some sectors), corporates may well want to quickly implement new, more efficient, procedures. For instance, the typical reservation against hiring technologies that they did not put emphasis on soft skills could be overcome by focussing on how to test them if a larger demand of workforce arises (also see briefly below 2.5 - HR).

## **DIGITAL TRANSFORMATION OF EXISTING ORGANIZATIONS**

As alluded to above (see 1.4 - Replacement of Traditional Corporations by Digitalization?) currently successful companies are likely to adapt themselves to the challenges of digitalization, and below I will attempt to give a description how this process of adapting to the new realities could look like.

### **METHODOLOGY FOR CONCEPTUALIZING**

In order to understand where digitalisation can lead to, I find it useful to review the recent past. As we all know, the paperwork involved with accounting ledgers has long since been replaced by automation, which is symbolized by global giants like SAP and Oracle. Such global giants have expanded into adjacent areas, and other cycles of automation have been happening again and again. Also, it is interesting to remind ourselves of the difficulty linked with implementing the aforementioned automation of accounting; transferring other processes from the traditional manner in which they were handled to a new method in and of itself presents similar problems.

### **PLATFORMS**

Digitalisation seems to be relatively easy to gain traction, where current processes can be referred to as horizontal, and which (for



instance) consist of a multitude of similar communications (for instance letters or e-mails) going to different addressees<sup>9</sup>. An example of this type of horizontal connection is platforms for bidding<sup>10</sup>.

## **VOLUME BUSINESS**

For quite some time, and in many cases, technology has transformed voluminous and routine processes companies have undertaken into technical ones. For instance, it is not new that due diligence for compliance purposes with a flexible design of keywords has been undertaken by systems; this includes some analysis of the results, as well as due diligence for specific clauses and the instance change of control clauses.

Whilst, as mentioned, such automation has successfully worked already, comparing this to accounting programs (about them see 2.1 - Methodology for Conceptualizing) leads to the conclusion that projects of this type have limitations. This is because of their limited reach, and because their interaction with the other programs used in companies will not be seamless. In turn, this analysis will prompt projects to try to be more ambitious in trying to include all potential functionalities<sup>11</sup>.

## **DOCUMENT MANAGEMENT**

Document management programs are starting to expand into activities to be undertaken on the basis of those documents. They now, for instance, include reminders at the time where potentially a termination notice has to be issued.

## **HR**

Of course, it is not possible to predict where the revolution new technology is making possible will end. However, taking into account that artificial intelligence can replicate creative activity (for instance compose, perform, or be active in other artistic areas), the criticism of automation in hiring interviews, namely that soft skills are not included<sup>12</sup>, does seem short sighted.



## **TECHNICAL AID IN SOLVING LEGAL CASES**

If the architecture of a system allows those seeking legal aid to make the choices themselves, and therefore submit their claims to counterparties or courts, work from lawyers to establish facts could be replaced by this system. Interestingly, the building of this architecture requires lawyers to help in conceptualizing.

## **TRANSPARENCY THROUGH STATISTICS?**

Technically, for quite some time it has been easy to assemble data on the success of litigation and to make statistics on this basis, and the increased ability to process data should allow for making better use of this ability by, for instance, obtaining case data directly from courts or clients. The reference for such statistics could be entire law firms or from lawyers, and also the type of matter, for instance consumer litigation. Of course, the immediate conclusion would be that the firm or lawyer with the smallest percentage of lost cases would seem preferable to clients, of course. Evidently, such a conclusion would be misleading in that a firm or, respectively, the lawyer taking more cases that are difficult to win would look worse even if the firm or the lawyer had displayed outstanding skills at the litigation.

Those rather simplistic examples demonstrate that it should not be difficult to conceptualize different, more reliable approaches, and the success of such approaches would not so much depend on technical means or programming but rather on an independent assessment that is only focused on getting better results. For instance, an evaluation of the odds of success by an independent person before a law firm is chosen, or evaluation by claimant or type of claimant.

## **THE CHALLENGE OF ADAPTING THE PROCEDURE**

An example of how difficult it is to use the benefits that technology brings is the calendars that practically everybody nowadays keeps in a computerised form. Normally, the functionality allows those calendars be opened to others. As a consequence, meetings can easily be scheduled not by asking people but by assessing their availability through their calendar.

Calendars have been open in this sense for many years. However, frequently, when trying to schedule meetings in this manner, one hears that calendars are not kept up to date, that even if there is no



appointment the person having access to the calendar is not entitled to schedule meetings, and that the calendars are not accessible to those not in the system of the organisation. Also, there do not seem to be any tools to share availability with people outside the organisation. Doing so, of course, would require that internal meetings are kept confidential from the outside, and various levels of confidentiality would help in seamless scheduling.

Perhaps implementation of scheduling procedures will be furthered by the current focus on remote work and the difficulty to make a "quick call".

## **THE POTENTIAL IN TECHNOLOGY TO FOCUS ON INTERNAL PROCEDURES**

Technology could lead to disruptions by facilitating and ensuring compliance with procedures. I will exemplify this through the example of the treatment of a long-term illness that requires relatively simple, but constant, medication and examination. Instead of the typical paper prescriptions, an entry into an app could be made, which could be easily accessible to the patient, and where the patient could note not just which actions were taken to comply with the prescriptions, but also any questions that the patient may have, and any changes in treatment that may occur. This example also illustrates how much the transparency of the doctors could be increased, and how much easier it could become to establish whether a doctor has reviewed the information they received in a timely manner.

## **SUMMARY**

A common theme of all the above examples is that success depends on the ease of implementation and the less the user is required to change their behaviour. The more technology focuses on a key part of activity and seamlessly takes it to the end, the bigger the disruptive effect could be to the procedures; the less they are interrupted, and the more the project starts with an action that already is part of a process and continues this process, the bigger the likelihood it will be successful in the short term.



## **UTOPIA IN EDUCATION AND LEGAL SCIENCE**

In order to think from the opposite and conceptualize how to change patterns we have been acquainted with for many years, I will expand into education and legal science:

### **EDUCATION**

The increase of the ability to process data, made possible by digitalization, could increase the efficiency of courses towards a certain result. Online programs could be devised to measure related abilities individually. This could be used to teach drafting of contracts in a detailed, sophisticated manner. Switching some of the traditionally theory- and case-focused-learning to more or less sophisticated drafting would seem appropriate, as most of the lawyers in practice are indeed busy with drafting, and only a smaller proportion of them decides cases or works in theoretical contexts. As a reminder, for instance, German legal training is very closely structured to train judges, and in particular to transmit all the knowledge available required to determine decisions in cases.

Obviously, when drafting, knowledge of the law is needed to avoid clauses that are not valid as they infringe binding law, to avoid simple duplication of the law but also to assess what the clause achieves in comparison to what the law would have mandated, and to use terminology.

Finding the clauses appropriate for teaching requires conceptualizing courses anew. This is because, typically, in the minds of practitioners, clauses - such as pricing clauses in M&A agreements - are very special, so that the time required to define the situation and make it understandable to students makes is too long to use them for training, and more simple parts of purchase and sales agreements would probably be preferable as they would allow for, for instance, explaining product liability issues. As another example, dealing with corporate law, the financing of a company can be discussed on the basis of a joint venture agreement, and could be used to explain legal regulation of capital contribution and prohibition of their return, alongside the criteria for taking the decision on the manner of financing.

Clearly, developing courses anew would be sophisticated work, as there are no precedents, and examples used in specialized training



would need to be simplified and a full discussion of legislation would be needed to be tied to the discussion of the clauses.

Students' deficiencies could be evaluated individually to overcome difficulties they may have in understanding drafting examples, and, on the basis of a differentiated data set which can be adapted to experience, students' deficiencies would be corrected on an ongoing basis, and specific courses for such deficiencies would need to be developed.

Accordingly, grading would not so much be a reflection of a relatively simplistically average of select abilities as it is today. Rather, grading would be a reflection of needs in training, and - concerning the final grade - a reflection of specific abilities useful for a future employer. This grading could, for instance, give an idea of common sense when addressing legal questions, as contrasted to the attention to detail in drafting and the ability to solve difficult legal questions.

## **LEGAL SCIENCE**

The level of legal science largely depends on the level of detail that legal writing summarizes. With technology, by referring to excerpts of decisions and writings, such legal writing could much more easily assemble a concise picture of questions without requiring the amount of work that was necessary earlier in order to assemble material, whereas a legal scientist will traditionally identify a problem and search for the material that relates to this problem. German commentaries are comparatively voluminous<sup>13</sup> and are frequently updated every year. With technology, when a court decision or an article is being read, the place where this writing can be used could be determined, and the text therefore technologically prepared. Technology could therefore help to get Russian legal science to a level that, despite the role Garant and Consultant has been having, it has not achieved.

## **SPECIFIC OBSTACLES**

It is also easy to see what the hurdles for such developments are: those developments require substantial preparatory work and the changing of structures. For instance, courses would need to be developed which focus on dealing with deficiencies as opposed to simply repeating and updating what has been seen as state of the art for decades or even centuries.



Substantial effort - both in terms of programming and summarizing the existing material - would have to be taken for science.

## **STAFFING OF DIGITALIZATION**

Frequently, it is argued that digital competency should exist at the highest level in companies, and that (at the very least) a member of the board should be in charge of innovation. However, such a member of the board, if it is not integrated into the structure, is likely to take decisions which are unlikely to be successfully implemented.

If the aforementioned attention by the leadership is not available, frequently, people who are enthusiasts are assigned to digitalization, and the hope is that they convince the organization necessary to keep up with the development of technology. Frequently in such a case, before they are successful in convincing others, the enthusiasts become disappointed and leave for start-ups or better paid jobs.

## **SUMMARY**

Accordingly, I do believe that almost every procedure can be substantially changed by technology, and substantial efficiencies and wealth can be created by doing so. When progressing, the less sophisticated activities are likely to be the first to be digitalized. In this process, lawyers will not be replaced, but rather will act as participants in the change and managers of it, as well as those that provide the substance for it. Gradual change may, at some time, turn into a speedy one. To use an actual example: the ability to conduct shareholders meetings online is of huge help and may gain substantial traction if meetings are suddenly forbidden, as has happened in the context of the coronavirus crisis. In the end, the hope is that we can all better focus on worthwhile issues.

## **REFERENCED**

[1](#)1. Only mentioning the cities, I have had recent and positive experiences with.

[1](#)2. See for the 5 % or 80,000 being employed by startups in Berlin. Gründeszene. (2020, February 11). Berliner Startups sorgen für fast 80.000 Jobs in der Hauptstadt [Berlin startups provide



almost 80,000 jobs in the capital]. <https://www.gruenderszene.de/karriere/startup-jobs-berlin-hauptstadt?interstitial>

↑3. The importance of brands in online purchases is confirmed by the research. See Universität zu Köln. (2019, July 3). Online sind starke Marken noch wichtiger als im Laden [Strong brands are even more important online than in stores]. <https://wiso.uni-koeln.de/de/aktuelles-und-neuigkeiten/news-einzelansicht/online-sind-starke-marken-nochwichtiger-als-im-laden>

↑4. See about parkingbnb at Facebook. Parkingbnb. (2020, January 3). Parkingbnb soft launch in Hong Kong. This [Video]. Facebook. <https://www.facebook.com/watch/?v=598015701015522>

↑5. See such an initiative described in Tiarcenter. (2019, November 12). Foodsharing in Russia. <https://tiarcenter.com/en/foodsharing-in-russia>

↑6. Typically enacted by prohibitions to invest into ICOs like the famous Chinese prohibition in Russell, J. (2017, September 4). China has banned ICOs. Techcrunch. <https://techcrunch.com/2017/09/04/chinas-central-bank-has-banned-icos/>

↑7. By way of explanation: Tuwiner, J. (2020, March 19). What is Bitcoin Mining and How Does it Work? Buy Bitcoin Worldwide. <https://www.buybitcoinworldwide.com/mining/>

↑8. More in detail, for instance: The Slow Hunch. (2020, March). Post-COVID: Which Behaviors Will Stick? <https://www.nickgrossman.is/2020/post-covid-which-behaviors-will-stick>

↑9. The projects mainly discussed in 1.3.1. — Digitalisation Facilitating Connections That Otherwise Would Not Have Been Possible — are horizontal in this sense.

↑10. See 4c: Legal as an example of a platform of beauty contests.

↑11. A project that has this type of ambition is Trood. (n.d.). What and how we do. <https://trood.com/en/what-and-how-we-do/>

↑12. Schütz, M. (2020, March 1). Der Hightech-Irrtum in den Personalabteilungen [The High-Tech fallacy in HR]. [Spektrum.de. https://www.spektrum.de/kolumne/der-hightech-irrtum-in-den-personalabteilungen/1708144](https://www.spektrum.de/kolumne/der-hightech-irrtum-in-den-personalabteilungen/1708144)

↑13. The wellused commentary to the German Civil Code Palandt, which is updated annually, in its 65th edition in 2006, had almost 2,900 closely printed pages and a text shortened by abbreviations.