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Digitalization induced privatization of law

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I hereby declare that I have compiled the thesis/paper independently and all works, important standpoints and data by other authors have been properly referenced and the same paper has not been previously presented for grading.

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ABSTRACT

This paper attempted to display that the development of digital technologies is disrupting the traditional law and market relationship by creating possibilities for market to gain power over the law. It adapts the theory of four modalities of regulation to illustrate the changes brought on by digitalization and demonstrates that digital technologies are causing a change of dynamic between law and market, in favor of the latter. This shift in dynamic is described as privatization.

The author argues that the effects of the digital technologies and the process of digitalization is allowing for private interest to hold more power, which based on the assumption that government sector is exercising their powers with the public good as the main motivator, while the private sector is being driven by private profit interest, could lead to harm democratic values. With this paper the author aims to provide theoretical justifications for government regulation of digital technologies.

Keywords: Digitalization; regulation of digital technologies; privatization.

INTRODUCTION

"Our choice is not between "regulation" and "no regulation."

Lawrence Lessig (1999)[1]

The increasing prevalence and importance of digital technologies, and the impact they have had across the variety of different aspects of modern society, cannot be denied. Digital technologies have advanced more rapidly than any other innovation in human history, and within two decades of existing have reached around 50 per cent of the developing world's population[2]. In fact, the cumulative impact of digital technologies has become so profound and wide-ranging, that it has brought on the dawn of a new digital age. Digital technologies are impacting personal and social life, professional fields and how the labor is organized, finances and even politics and elections.

The emergence of digital technologies and formation of a digital society has raised discussions regarding regulation of cyberspace. One of the first questions to be raised was whether the cyberspace could be regulated?

Already in 1999 Lawrence Lessig argued that cyberspace is akin to real space, as within both, individuals are either directly or indirectly regulated through four modalities of regulation. Those four modalities identified by Lessig are law, market, social norms, and architecture.

Another question often times dominating the discourse of digital technologies, is even if the technology and cyberspace can be regulated by traditional legal tools, should the government do it or should it let the filed self-regulate? Seeing that there is an evident plea for government regulation from the side of tech experts[3] [4], the first option seems to be the right choice. As much as, the governments across the world are slowly realizing the importance of traditional regulation of digital technologies, there still exists a considerable amount of reluctance towards government intervention.

[1] Lessig,. L. (1999). Code and Other Laws of Cyberspace. New York, USA: Basic Books.
[2] Report of the UN Secretary-General's High-level Panel on Digital Cooperation: *The Age of Digital Interdependance*.
[3] Smith, B., Browne, C. A. (2019) *Tech Firms Need More Regulation.* The Atlantic. Retrieved from: https://www.theatlantic.com/ideas/archive/2019/09/please-regulate-us/597613/, 3 August 2020.
[4] Huddleston, T. (2019) *Bill Gates: 'Government needs to get involved' to regulate big tech companies.* Retrieved from: https://www.cnbc.com/2019/10/17/bill-gates-government-needs-to-regulate-big-tech-companies.html, 3 August 2020.

This paper attempts to illustrates how digitalization is causing the privatization of law, as the process is making law become subject to market. It does so by adapting the theory of four modalities of law and applying it to digitalization process. Analyzing digitalization through different modalities of regulation allows to display how the regulators are being affected and how they are affecting each other. With this paper the author hopes to highlight the importance of government regulation in regard to digitalization and offer theoretical justifications for government interference.

The paper states that, while the theory of four modalities of regulation proposed by Lessig presumes law as the predominant regulator with other ones being subject to it in one way or another, digitalization is disrupting the balance between law and market, allowing the latter to take supremacy. However, there is reasons to believe that market supremacy will cause a negative impact on fundamental democratic values and rule of law, due to the fact that there is separation between public and private values.

This paper is based on the presumption that government sector is exercising their powers with the public good as the main motivator, while the private sector is being driven by private profit interest. Thus, the outcomes cannot be expected to apply universally.

The paper starts off by giving an overview of the works of Lawrence Lessig, introducing his theories on regulation in cyberspace and explaining how they have been adapted for this paper. The next chapter after that focuses on defining the relevant terminology used in this paper – such as digitalization - and connects it to the works of Lessig. The third chapter illustrates how digitalization is causing an emergence of private legal system, and finally the fourth chapter attempts to illustrate how this private legal system will have a negative impact on democracy[5] and rule of law due to private interest values not being aligned with public values.

[5] Bartlett, J. (2018). *The People Vs Tech: How the internet is killing democracy (and how we save it).* Random House.

1. LAWRENCE LESSIG'S FOUR MODALITIES OF LAW

This paper starts of by giving an overview of some main ideas introduced by Lawrence Lessig, since they are fundamental to the arguments this paper is based on. This chapter starts off by giving a general overview of the main theories of Lessig and shows how they came to be and how they have affected the field of cyber-regulation. The final sub-chapter of this chapter is tasked with connecting this paper to Lessig's four modalities of law.

1.1Four Modalities of Regulation

Lawrence Lessig - an American lawyer, academic, and political activist[6]- who in his 1998 essay playfully[7] titled as "The New Chicago School", identified and introduced a new distinctive approach to the research of different kinds of regulation and their effects on the behavior. Within that paper and many of his later works he refers to four constraints on behavior - law, market, social norms, and architecture.

When introducing the four constraints that influence the behavior of individuals within "The New Chicago School" Lessig takes time to note that law, market, social norms, and architecture are not the only constraints on behavior[8].

However, Lessig does not at any point attempt to explore what those other constraints might be and similarly in "Code and Other Laws of Cyberspace "published in 1999, he focuses on how those specific constraints are affecting behavior in cyberspace.[9] In that book Lessig refers to each individual constraint as a regulator, which further allows for each constraint to be recognized as one of the modalities of regulation – all modalities are linked to each other and combined, form a system of regulation that individuals' behavior is subject to[10].

[6] Jansen, B. (2019). Towards a Hermeneutics of Pathetic Dots Finding the Gap Between Law and Reality, *Yuridik*a, 34 (3), 421.
[7] Lessig,. L. (1998). The New Chicago School. *The Journal of Legal Studies*, 27 (2), 661.
[8] *Ibid*., 662.
[9] Lessig (1999). *supra nota 1.*
[10] *Ibid.*, 124.

Lessig explains the four modalities - law, market, social norms, and architecture – and the different effects they have with the help of the "pathetic dot" – "a creature subject to different regulations that might have the effect of constraining (or as we'll see, enabling) the dot's behavior" (see Figure 1.)

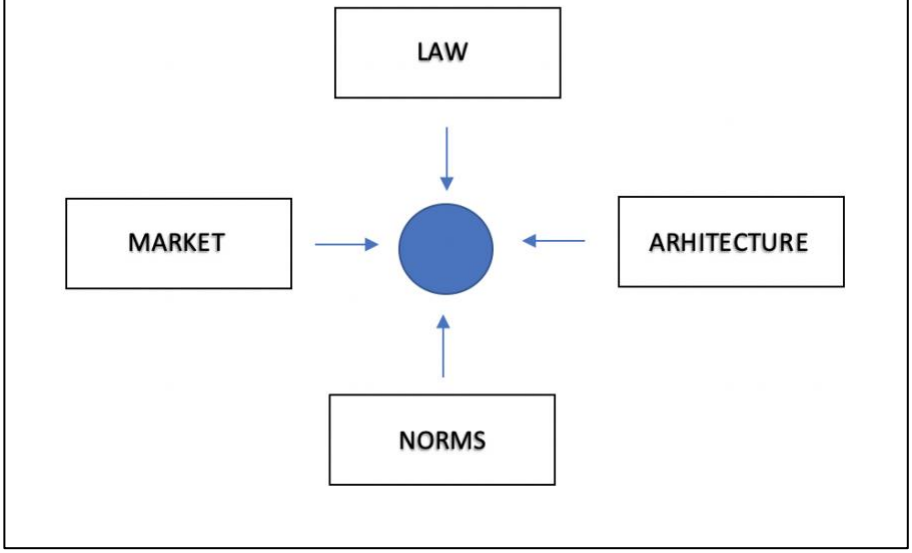

Figure 1. Four modalities of regulation constricting dot's behavior
Source: Lessig,. L. (1999). Code and Other Laws of Cyberspace

In his writings Lessig provides multiple examples illustrating and supporting his theory; the author has decided to use the example of smoking drawn by Lessig to portray how exactly the different modalities might be affecting the behaviors.[11]

Law affect the behavior by setting out certain limitations and threatens *ex-post* punishment if those limitations are crossed and orders of law not obeyed[12]. It is important to note that within this paper the law is understood as the rules created through the political process of democratic law-making through the elected public officials.

With regards to smoking, law establishes a certain age restriction to the sale of cigarettes, making it so that if you are younger than the age set up by the law you cannot purchase and consume cigarettes. In this case, if you are caught by the law enforcement either consuming cigarettes while

[11] *Ibid.*, 122- 125.
[12] *Ibid.*, 124.

being below the age restriction or selling them to a such a person, you will get punished either by a fine, jailtime or some other form of sanctions.[13]

However, laws are not the most significant constraint of smoking and one could argue that social norms apply more pressure to the smokers' behavior than laws.

Social norms are not promulgated through official institutions, such as courts or legislature, nor do they carry with themselves a threat of legal sanctions,[14] instead they regulate through the enforcement of community[15] and the fear of social exclusion. One will not get any legal punishment by smoking inside a private car with other people in it, however the norms state that one should ask for the permission before doing so.

Markets use the devices of price, supply, and scarcity as tools of regulating the behavior. In the case of smoking, the market can constraint the behavior of smoker's by affecting the variety of cigarettes available and their pricing. The wider the variety of products and their price levels the lower the constraint on the behavior.

Lessig defines to the final regulator – the architecture – as "the world as I find it, understanding that as I find it, much of this world has been made"[16]. Thus, the architecture is in a sense the nature of how things are and how things are constructed. A man-made wall is an architecture that restricts behavior, and so is human anatomy. In regard to smoking the design of cigarettes is the architecture that affects smoker's behavior, for example smokeless cigarettes will result in less limiting constraints compared to the cigarettes with a smoke and strong odor.[17]

In conclusion, each one of the four constraints impose a different kind of sanction on the dot for engaging in certain behavior. While the four constraints exist separately from each other, have different functions, and effects, according to Lessig there is a clear interdependency between them. Lessig sees the regulation of the dot's behavior as a linked and combined effort of four constraint.[18]

[13] *Ibid.,* 122.
[14] Posner, A. R. (1997). Social Norms and the Law: An Economic Approach. The American Economic Review, 87 (2), 365.
[15] Lessig (1998), *supra nota 7,* 662.
[16] *Ibid*., 663.
[17] Lessig (1999), *supra nota 1,* 123.
[18] *Ibid.*

1.2. From New Chicago to Code is Law

Lessig introduced his theory on regulation as a combined effort through four separate modalities in a 1998 paper titled "The New Chicago School". It is important to note that the adjective "new" within the titled is not supposed to be defined and understood as a synonym to "radical" - it does not attempt any dramatic break from the past - nor does it try to label the authors thoughts as an extraordinary discovery never before seen within the discourse of law.

Rather, the term "new" is used to group together various projects across the departments within the Chicago School focused on "understanding and using various techniques of regulation"[19]; and explore whether any new insights could be drawn by creating a separation between the first- and second-generation research, that otherwise would have been missed. Furthermore, the separation created by the new title, serves as an organizational tool classifying research from across departments together, that otherwise would be seen as existing separately.[20]

1.2.1. The Old Chicago School

The old school can be seen as the collection of works across different departments, that all came to the common conclusion that law is inferior to other constraints as it is generally less effective at regulating behavior due to its crude regulations, slow responses, clumsy interventions and self-defeating effects[21].

The department of law and economy portrayed this belief through the field of antitrust, arguing that the market itself will resolve the problem of monopolies. The department focused on studying the interplay between law and norms, is best represented by Robert Ellickson's[22] research on norm behavior among California ranchers, which concluded that within a specified field of law, lawyers and judges found the local legislature to be less significant compared to local social norms.

Lastly, the studies focused on the relationship between law and architecture were focused on understanding how different social structures regulated the behavior. Here, the old Chicago school can be identified through the argument that the separation of powers between the President and

[19] Lessig (1998), *supra nota 7,* 673.
[20] *Ibid.,* 672-673.
[21] *Ibid.,* 665.
[22] Ellickson, R. C. (1991). Order without Law: How Neighbors Settle Disputes. Harvard University Press.

the Congress is upkept by the corresponding buildings being physically separated from one another by a swamp. [23]

Thus, the main takeaways from the old Chicago school are as follows - the law exists separate from other regulators[24] (see Figure 1.); other regulators can be fixed and thus the law cannot simply dictate and change them; and generally, the other methods are more effective regulators compared to law.

1.2.2. The New Chicago School

In comparison to the Old Chicago School which diminishes the importance of law, the New Chicago School can be identified through the belief that law does not exist separately from other regulators, but rather it has dominance over other regulators, which are subsequently subject to law – portrayed on Figure 2.

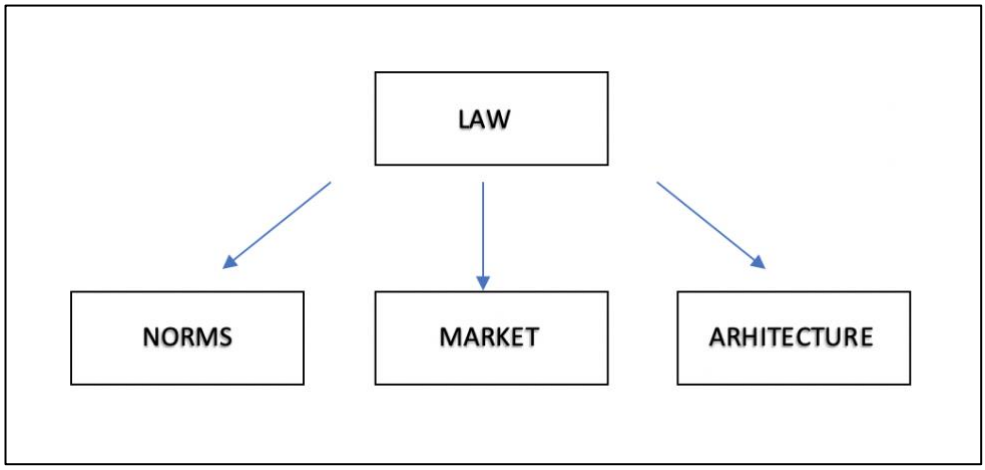

Figure 2. Other regulations are subject to law
Source: The New Chicago School. *The Journal of Legal Studies*, 27 (2).

The relationship between the law and the other constraints is not always obvious and thus can be direct or indirect – law can regulate either directly through traditional means of regulation associated with law; or indirectly by regulating the subordinate regulator and thus changing the effect the regulator has on the behavior.

[23] Lessig (1998), *supra nota 7*, 665-666.
[24] *Ibid.*

As an example, market regulates the behavior through regulating the consumption of individuals; but so does law, for example in the form of excise duty applicable for alcohol, which in turn by raising the prices of alcohol products indirectly has an effect on the consumption. Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC recognized qualified digital signatures to have the same legitimacy as hand-written signatures, which in turn normalized signing the documents digitally within Estonia and other European Union Member States, thus creating a new social norm. Even the architecture, in a seemingly inflexible structure, can be influenced by law, for example in most cases the law has the power to clearly change how certain structures are made, for example through setting a certain level of quality standards applicable to architecture.

Consequently, the above examples prove that the alternative regulators do not just simply exist next to law, but rather they are subject to it in one way or another.

1.2.3. Code is Law

Lessig reintroduces the New School of Chicago in 1999, in a paper in Harvard Law Review titled "The Law of the Horse: What Cyberlaw Might Teach" in the form of modalities of regulation[25] and then again in his book "Code and other Laws of Cyberspace" in the form of a "pathetic dot"[26]. The latter popularized the theory of four modalities of regulation and even reached out beyond the field of legal practitioners to average internet users.[27]

In the book "Code and other Laws of Cyberspace" Lessig built on the ideas of Joel Reidenberg's "Lex Informatica"[28] in which the latter stated that the architecture of cyberspace – its technological capabilities and system design choices- is the most efficient solution to maintaining regulation within cyber environment. Thus, the thesis of code as a law of cyberspace was created.

Lessig argued that the same modalities of regulation exist within the real space and cyber space, and thus similarly to the real world, the cyber world is regulated by law, market, norms, and

[25] Lessig, L. (1999). *The Law of the Horse: What Cyberlaw might teach.* Harvard Law Review, 113.
[26] Lessig (1999), *supra nota 1,* 122.
[27] Levi-Faur, D. (2011). Handbook on the Politics of Regulation. Edward Elgar Publishing, 272.
[28] Reidenberg, J. R. (1997). , Lex Informatica: The Formulation of Information Policy Rules through Technology. Texas Law Review, 76.

architecture. The last manifests itself in the form of a code – software and hardware – making the cyberspace what it is. The cyberspace code differentiates from the real world "code" by the fact that it is always man-made, in contrast in the real world there exist certain constraints that are beyond human control – for example the laws of physics. Hence, Lessig's reasoning for code as the most prominent modality of regulation within cyberspace.

In 2007 John D Luteran applied Lessig's theory to the virtual society that has emerged within the World of Warcraft[29] and analyzed how each modality expresses its constraints within the game society and concluded that achieving order in cyberspace is a realistic option[30].

During his analysis of the game he concluded that the architecture is the most powerful and effective compared to other modalities, as any behavior depicted in the virtual society within the game can be controlled solely through modification of the code. However, the aspect of customer satisfaction serves as a great limitation to seemingly unrestricted power, which further proves that no modality exists in vacuum and there is always a certain level of interdependency.[31]

1.3. Theories on regulating the cyberspace

1.3.1. Cyberlibertarians

The paper and the subsequent book served as an answer to the ideas of cyberlibertarians, who believed that the cyberspace cannot be regulated by traditional methods of regulations and thus the space should be self-regulated. The roots of cyberlibertarian school of thought can be traced to the "Declaration of Independence for Cyberspace" published by John Perry Barlow in 1996[32], which stated that:

> "We have no elected government, nor are we likely to have one, so I address you with no greater authority than that with which liberty itself always speaks. I declare the global

[29] World of Warcraft is massively multiplayer online role-playing game (MMORPG) developed by Blizzard Entertainment in 2004.
[30] Luteran, J. D. (2007). *The Application of Lawrence Lessig's Four Modalities of Regulation in a Virtual Society: An Examination of the Legal Structure of the World of Warcraft.*(Research paper) Cleveland-Marshall College of Law, Cleveland.
[31] *Ibid.*
[32] Barlow, J.P. (2019). A Declaration of the Independence of Cyberspace. *Duke Law & Technology Review*, 18 (1), 5-7.

> social space we are building to be naturally independent of the tyrannies you seek to impose on us. You have no moral right to rule us nor do you possess any methods of enforcement we have true reason to fear."

The main argument of the Cyberlibertarian movement can be found within that quote[33] from the Barlow's Declaration of Independence – the traditional governments lack legitimacy in cyberspace as they had no real way to exert control over all "citizens" of cyberspace nor had they any methods to only regulate the behavior of their citizen once they crossed "the border" between real space and cyber space.[34] This idea was picked up by David Johnson and David Post, who in the article "Law and Borders – The Rise of Law in Cyberspace" stated the existence of cyberspace undermines the traditional sovereign state, which are heavily reliant on geographical location and existence of border for enforcing their rule. Thus, the cyberspace will self-regulate and the new rules, existence of which will not be bound to any physical location, will be created that will serve instead of laws.[35]

Nowadays it is not difficult to spot weaknesses within the cyberlibertarians theory. Unless a person uses certain technological solutions - such as a Virtual Private Network (VPN) for example - an individual's seemingly anonymous persona can easily be connected to a geographical location using the Internet Protocol (IP) data[36], thus making it possible to enforce states laws within cyberspace.

1.3.2. Cyberpaternalism

Cyberpaternalism developed as a response to cyberlibertarians, with Lessig's works being fundamental to the development of Cyberpaternalism. Connected by the belief that cyberspace can be regulated by the traditional legal controls, however direct legal controls need not to be the only options for regulating cyberspace and that cyberspace can be regulated through indirect actions affecting the architecture of structure in place.

[33] Murray, A. (2016). Information Technology Law: The Law and Society, (3rd edition). UK: Oxford University Press, 62.
[34] Levi-Faur (2011), *supra nota*, 26.
[35] Johnson, D. R; Post, D. (1996). Law and Borders – The Rise of Law in Cyberspace. *Stanford Law Review*, 48.
[36] Government Technology (2007). *Identifying the Geographic Location of Web Visitors Using Wi-Fi.* Retrieved from: https://www.govtech.com/security/Identifying--the-Geographic-Location-of.html, 3 August 2020.

One of the first influential works within the school of Cyberpaternalism Reidenberg's "Lex Informatica". Reidenberg argued that the technical standards that govern "the physics" of cyberworld, could functions as geographical borders[37], which would in turn make regulating possible. Thus, the *Lex Informatica* could be understood as rules imposed on the users by technological capabilities and system design choices.[38]

1.3.3. Network communitarianism

Meanwhile in Europe scholars saw an emergence of a new regulatory theory bringing attention back to the "dots" and "citizens" of cyberspace lead by Andrew Murray. Unlike the cyberlibertarian school of thought, network communitarianism which transformed the "pathetic dot" into a dynamic node within a network community, constantly in communication with other nodes. Murray repainted Lessig's model by concluding that regulation should not be understood as a sum of the four constraint, but rather the process of regulation should be viewed as a dialogue between the dot and the community.[39]

In essence network communitarianism recognized the community and the role of self-governance within cyberspace, but did not hold the same belief as cyberlibertarians, that only self-regulation is a viable regulation option. This sort of belief is shared amongst multiple scholars, who argue that while government regulation is incompatible with cyberspace, complete self-regulation is not a viable option.[40]

1.4. Application of modalities of regulation in this paper

While Lessig's theory regarding cyber regulation does have weaknesses and thus deserves certain level of criticism, the discussion regarding the validity of criticism towards Lessig's theory falls outside of the scope of this paper. In "Code and Other Laws of Cyberspace" Lessig did not only establish that regulation of cyber space through law is possible, but he also highlighted the importance of it. While the main argument of the books relates to the superiority of code as the regulator of cyberspace, Lessig used them to illustrate why the law should play a role in governing.

[37] Reidenberg (1997), *supra nota 28.*
[38] Murray (2016), *supra nota 33*, 66-67.
[39] Ibid.
[40] Solarte-Vasquez, M. C. (2013). Regulatory Patterns of the Internet Development: Expanding the Role of Private Stakeholders through Mediatized "Self-regulation". *Baltic Journal of European Studies*, 3 (1).

Lessig states that the "invisible hand of cyberspace"[41], pushed by government and market, is molding the architecture of cyberspace according to its will and there is a need for deliberate actions to assure the survival of fundamental values. The code – the most effective regulator in cyberspace – is not fixed, it is man-made, and thus can be altered; and the lack of regulation by the methods of law, will not equate to no regulation at all, simply it will mean that something else will regulate the architecture.[42]

In this paper the author will use Lessig's' modalities of regulation – namely law, market, and code - to illustrate how digitalization is inducing the privatization of law and creating a sort of Old Chicago School utopia, where law is ineffective and meaningless, compared to other modalities.

In the next section the author will attempt to illustrate how the process of digitalization of government structures and services is displacing law as one of the modalities of regulation and gives power to other forms of constraints, mainly the market and code.

[41] Lessig (1999), *supra nota 1*, 4.
[42] Lessig, L. (2000). Code is law: On liberty in cyberspace. Harvard Magazine. Retrieved from: https://harvardmagazine.com/2000/01/code-is-law-html, 3 August 2020.

2. DEFINITION OF RELEVANT TERMINOLOGY

Before moving into any substantial discussions, the basic terminology needs to be established. Within the first sub-chapter, the author explores the definition and different tools of digitalization. The second sub-chapter focuses on the process, tools and ideology of privatization. Finally, the author establishes how the terminology is used within the bounds of this paper.

2.1. Digitalization of government

As the term "digitalization" is playing a big role within the title of this paper, the exploration of the term is warranted. In addition, this chapter defines digitalization in public sector and some relevant tools.

2.1.1. Digitization, digitalization and digital transformation

The terms digitization, digitalization and digital transformation can often be seen used synonymously and with few attempts made to distinguish meaning behind the terms and between their use in practice[43]. This misconception can somewhat be understood since digitization and digitalization are so closely connected; they might appear as identical to the distracted eye. However, this two-letter difference does create a clear separation between the two and there is a certain analytical value in making such a distinction[44]. The current subchapter will attempt to define those three similar terms and in a process of doing so, illustrate a difference between them.

2.1.1.1 Digitization

The term "digitization" relates to the material process of transforming analogue data into digital form. Essentially digitization is a process of converting any sort of analogue information into strings of 1s and 0s[45], which can then be stored, transferred, manipulated, and/or displayed on digital mediums. To illustrate, film photographs previously only accessible in physical form that can now be viewed on computer devices have undergone digitization. The fundamental difference

[43] Mergel, I., Edelmann, N., Haug, N. (2019). Defining digital transformation: Results from Expert interviews. Government Information Quarterly, 36 (4), 10.
[44] Jensen, K. B., Craig, R. T., Pooley, J. D., Rothenbuhler, E. W. (Eds.) (2016). *The International Encyclopedia of Communication Theory and Philosophy*. Volume I, A-D. Malden: John Wiley & Sons, 556.
[45] *Ibid*, 556-558.

is that while analogue data can have any value within a continuous range, serving as an answer to descriptive questions, the digitized data on the other hand answers the "yes or no" questions, since there are only two distinct values the data can have – either 0 or 1.[46] The limited value range of digitized data causes an inevitable alteration to the qualities of the information making it distinct from the original data. The digitized data is more universal[47], can be easily stored, provides users with greater control over it and has a capacity to be easily and accurately transferred from one user to another, allowing for increased interactivity and flexibility as to how and for what purposes the data is used.[48]

2.1.1.2. Digitalization

Defining digitalization is much more difficult of a task compared to digitization, as it has a certain aura of ambiguity and confusion surrounding it[49], since it is not a material process such as digitization which can clearly be tracked.

Some sources refer to digitalization from simply a business standpoint, describing digitalization as the process of changing a business model using digital technologies in order to provide new revenue[50]. Others expand bit further stating that digitalization is a combination of digital innovation and transformation[51]. The author tends to side with scholars going beyond the realm of economics and seeing digitalization as a phenomenon that restructures and shapes different domains of our society.

Digitalization has changed the nature of civic engagement by giving citizens a greater ability to shape their own civic participation and allowing for leaderless forms of collective actions to take place[52]. Furthermore, digitalization is interconnected with globalization, enabling new forms of cross-border politics to be developed by opening up borders and linking local and national information with global networks, thus introducing new stakeholders into the political playing

[46] *Ibid*.
[47] Negroponte, N. (1995). *Being Digital.* Ney York: Alfred A. Knopf, 16.
[48] Jensen (2016*), supra nota 44*, 556-566.
[49] Bloomberg, J. (2018). *Digitization, Digitalization, And Digital Transformation: Confuse Them At Your Peril.* Forbes. Retrieved from https://www.forbes.com/sites/jasonbloomberg/2018/04/29/digitization-digitalization-and-digital-transformation-confuse-them-at-your-peril/#d74c14a2f2c7, 12 March 2020.
[50] *Digitalization. Gartner Glossary: Information Technology.* Gartner, Retrieved from https://www.gartner.com/en/information-technology/glossary/digitalization , 12 March 2020.
[51] Oswald, G., Kleinemeier, M. (Eds.) (2017). *Shaping the Digital Enterprise: Trends and Use Cases in Digital Innovation and Transformation*. Switzerland: Springer, 15.
[52] For example, such as Arab Spring in 2011, Occupy Wall Street in 2014, or Honk Kong protest movement in 2019.

field[53]. The most noticeable impact of digitalization has been caused to social structures in so far that some scholars argue that technology and society cannot be understood without one another[54].

For the sake of simplicity, the author prefers to describe digitalization as an impact of the changes caused to different dimensions of modern society by digitization. Schreckling and Steiger describe digitization as "inevitable, irreversible, tremendously fast, and ubiquitous"[55]. Seeing as there is a causal relation between the two processes, the same characterization can thus be applied to digitalization. Digitalization thus accompanies the economic, societal, and political aspects of the contemporary era, being one of its defining attributes[56].

2.1.1.3 Digital Transformation

Digital transformation is a buzzword often used within business-oriented media[57] prompting enterprises to "do" digital transformation to accelerate their growth[58]. Gartner Glossary[59] defines digital transformation as "anything from IT modernization (for example, cloud computing), to digital optimization, to the invention of new digital business models". This definition is quite wide in its nature and leaves a lot of room for interpretation.

To be more specific the term digital transformation should be associated with the need to use new technologies in order to stay competitive in the modern market[60]. Digital transformation is considerably less about the implementation of information and communication technologies (ICT) and more about changing the business model as a whole – simply digitizing existing services is not enough to be called digital transformation. In addition, digital transformation includes the cultural changes happening inside the organizations as a whole. For successful digital transformation the whole organizational structure of business has to be redefined bottom up – making strategical changes that allow the business to keep up with the pace of ICT development.

53 Sassen, S. (2006). *Territory, authority, rights: From medieval to global assemblages*. Princeton, NJ: Princeton University Press.
54 Castells, M. (2010). *The rise of the network society*. Malden: John Wiley & Sons.
55 Oswald, (2017), *supra nota 51*, 3.
56 Jensen, (2016), *supra nota* 44, 560.
57 A search of the term "digital transformation" on the Forbes.com platform, showed that the phrase was included in more that 50 article headlines within the first three months of 2020.
58 Agarwal, K. (2020) *Why Digital Transformation Is A Necessity For All SMBs*. Forbes. Retrieved from: https://www.forbes.com/sites/forbestechcouncil/2020/03/17/why-digital-transformation-is-a-necessity-for-all-smbs/#7d0185df3680, 1 April 2020.
59 Digital Transformation. *Gartner Glossary: Information Technology*. Gartner, Retrieved from https://www.gartner.com/en/information-technology/glossary/digital-transformation, 13 March 2020.
60 Mergel, (2019), *supra nota 43*, 2.

The paragons of digital transformation are such enterprises as Amazon, Airbnb and Uber – they all created an entirely new business models implementing the new ICT solutions, thus undermining and replacing the existing ways of service delivery and business structure.[61]

2.2.2. Digital transformation of Governance

Since the notion of digital transformation emerged within the private sector[62], it is inevitably associated with the need for increased efficiency and creation of additional value. As the process of digital transformation made its way into the public sphere it has been used to describe the process of modernization of government systems through implementation of ICT. Digital transformation within public sector agencies tends to move slower compared to those in private sector, since there are stricter institutional frameworks the governments have to adhere to – such as laws and regulations on a formal level, as well as habits, norms, customs and values, on an informal level[63]. Thus, equivalently to private sector, merely digitization of exciting methods is not enough to be called transformation – there needs to be a fundamental restructuring of government culture and how the basic government functions are performed. Generally, when digital transformation is used within the context of government it relates to both the transformation of internal process and organizational culture of government, and to the way the relationship between government, citizens, and other stakeholders is being transformed.[64]

The widespread use of digital technologies within private service delivery has raised the expectations citizens have toward public service delivery, thus making the external pressure the main incentive behind digital transformation of government processes and services[65]. Citizens approval is dependent on the quality of the services that are being delivered in terms of their costs, accessibility and fairness. Governments are looking to create additional public value for citizens through digital transformation, as the "transformed" government has potential to offer more efficient, transparent and user-friendly services. [66]

[61] Ibid.
[62] Mergel, (2019), *supra nota 43.*
[63] Kitsing, M. (2019). *Alternative Futures for Digital Governance. Proceedings of the 20th Annual International Conference on Digital Government Research*. June 18-20, 2019, Dubai, United Arab Emirates. (48-59). New York: Association for Computing Machinery.
[64] Barcevičius, E., Cibaitė, G., Codagnone, C., Gineikytė, V., Klimavičiūtė, L., Liva, G., Matulevič, L., Misuraca, G., Vanini, I. (2019). *Exploring Digital Government transformation in the EU - Analysis of the state of the art and review of literature.* Luxembourg: Publications Office of the European Union.
[65] Mergel, (2019), *supra nota 43,* 7.
[66] Barcevičius (2019), *supra nota 64.*

Using digital solutions within government has transformed from being a sign of innovation to a mundane element due to such legislation as Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC, which creates an obligation for government institutions to recognize electronic signatures as hand-written ones[67]; and Directive 2014/55/EU of the European Parliament and of the Council of 16 April 2014 on electronic invoicing in public procurement which established a pan-European e-invoicing standard.

Indeed, the digitalization of government services has been an important agenda with the European law-makers with the Commission leading the way stating that "digital transformation of government is a key element to the success of the Single Market" (footnote)[68]. Consequently, the eGovernment action plan 2016-2020 promises to create an "open, efficient and inclusive, providing borderless, personalized, user-friendly, end-to-end digital public services to all citizens and businesses in the EU".

Digital technologies that have served as the basis for the recent governance innovation within the EU are:

- Artificial Intelligence, which according to the European Commission has potential to significantly improve society and economy through "better healthcare, more efficient public administration, safer transport, a more competitive industry and sustainable farming". [69]
- Blockchain technology, which has an ability to reduce fraud, error and costs often associated with paper-intensive processes, as well as increase the transparency, thus fostering trust in government.[70]
- Robotics and automation technologies offer a possibility to automate routine clerical tasks, while reducing human errors and decreasing costs, thus allowing human staff to focus on more high-value tasks. [71]

[67] As long as the signature in questions complies with the requirements of certification.
[68] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016DC0179
[69] European Commission. (2018). Factsheet: Artificial intelligence for Europe. European Commission. Retrieved from https://ec.europa.eu/digital-single-market/en/news/factsheet-artificial-intelligence-europe
[70] Berryhill, J., Bourgery, T., & Hanson, A. (2018) Blockchains unchained: blockchain technology and its use in the public sector. OECD Working Papers on Public Governance.
[71] Barcevičius, (2019), *supra nota 64.*

- Behavioral and predictive analytics, which while raising certain ethical concerns, can aid governments with better optimized resource division; faster and better service delivery; and offers a possibility for intervention before the problems have developed. [72]

Whenever digitalization will be mentioned further, it should be defined as a mixture of digitization, digitalization and digital transformation. Digitalization of government refers to the transformation of analogue data used within government into digital data, but also to the implementation of new tools within government processes; but it is also is used to describe the changes brought on by the use of digital technologies within government structures. Thus, any effect brought on to the regulators through digital methods, can be described as digitalization within the limits of this paper.

2.2. Privatization

In order to proceed with the discourse without any potential confusion, privatization as a term needs to be further explored and defined. The barebone meaning of privatization is selling property owned and controlled by the government to private hands. However, this is not sufficient enough to accurately explain the phenomenon of privatization, as the meaning behind privatization is dependent on the distinction between public and private and thus, cannot be explained in a "one size fits all" manner as the existing political and socio-economic implications need to be taken into account.

2.2.1. Separation of "public" and "private"

The exact meanings behind the terms "public" and "private" is difficult to establish as they heavily depend on the context they are used in, whether they are used in reference to natural persons or legal entities, and what is the intention and purpose of distinguishing between the two.

Furthermore, it is complicated to clearly contrast between the two as there is no need for "either or" approach as both terms can apply to the subject referred. According to Kit Barker a subject

[72] Bright, J., Ganesh, B., Seidelin, C. & Vogl, T. (2019). Data Science for Local Government. Oxford Internet Institute, University of Oxford.

may be "more or less" public or private[73], thus instead of being contradictory, the terms simply stand on opposite side of one scale. Armstrong *et al* describe the two terms as "interpenetrating and complex categories that shift over time in relation to content and degree of separation"[74]. Neil Smelser wrote that the distinction between private and public "constitutes a political strategy"[75], since when one makes such distinction, they also inevitably take a stance towards public order.

In order to interpret the conveyed meaning behind the words, the current economic, social, and political environments as well as the historical background should be analyzed, as the terms are in a constant state of construction[76] by the governments and private individuals, fluctuating from one to the other based on the preferences of the relevant stakeholder[77]. In everyday usage the terms are most frequently used in order to distinguish between governmental and non-governmental bodies within the political and economic sectors.

Within legal context the terms similarly can have varied meanings depending on the legal family and jurisdiction the terms are applied to. While the line between the "public" and "private" is not clearly defined, the distinction between the two is fundamental. The general understanding is that public law and its branches regulate the government structures and the relationships formed between citizens as the state, while the many branches of private law ensure and enforce private rights applicable to natural and juridical individuals. [78] The separation between the two is fundamental to the property law, as it is based on the existence of private property rights and ownership.

The author has decided to build up upon Lessig's theory of four modalities to illustrate the divide between public and private. Public is seen as being synonymous to law. Here it is important to note that „the law" is understood in its Austinian sense as something "independent, isolated, logical and self-consistent system, separate from other kinds of rules and their enforcement and

[73] Barker, K. (2013). *Private Law: Key Encounters with Public Law.* Cambridge: Cambridge University Press, 3-4, 19-21.
[74] Armstrong, H., Armstrong, P., Connelly, M. P. (1997). Introduction: The Many Forms of Privatization. *Studies in Political Economy: A socialist review,* 53 (1), 3.
[75] Rodin, J., Steinberg, S. P. (Eds.) (2003). *Public Discourse in America: Conversation and Community in the Twenty-first Century.* Pennsylvania: University of Pennsylvania Press, 19.
[76] Armstrong (1997), *supra nota* 74.
[77] Verkuil, P. R. (2006). Public Law Limitations on Privatization of Government Functions. *North Carolina Law Review,* 84 (2), 405.
[78] Merryman, J. M. (1968). The Public Law- Private Law Distinction in European and American Law. *Journal of Public Law,* 17 (1), 10-13; Wacks, R. (2008). *Law: A very short introduction.* New York: Oxford University Press, 36-37.

comprising only those rules commanded on a subject by a sovereign"[79] with sovereign referring to a government formed through democratic elections, thus making a law a political process. Ideally "public" should be driven by the notions of public interest and public values. Seeing as private interest is the integral aspect of functioning market, it is seen as synonymous to private. The market functions through competition and trade. The other two "regulators" are fluctuating and can be affected by both side and can fall within a range of more "public" or more "private".

By creating a strict separation between law and market as regulatory powers, and aligning one with public interest and other with private interest, the author puts a theoretical limitation to this paper that needs to be taken into account.

2.2.3. Defining privatization

Privatization can have different meanings across the world, as the fundamentals of the economy of the specific state and the purpose served by privatization need to be understood to arrive at a somewhat clear definition. Furthermore, as the distinction of the two sectors in of itself carries with it a certain political meaning[80], so does the word privatization and it is most often used in order to take a stance towards a socio-economic situation.

Having analyzed relevant literature, the author of this paper has concluded that privatization exists within three dimensions – privatization as a process, privatization as a tool, and privatization as an ideology.

2.2.3.1 *Privatization as a process*

The simplest way to define and understand privatization is by looking at it through the prism of property law and ownership. In her article in Fordham Law Review from 1992 "The What, Why, and How of Privatization: A World Bank Perspective" Mary Shirley defines privatization as the transfer of ownership of assets to the private sector[81]. From this perspective privatization is simply a legal process resulting in property rights over previously public assets moving to new private owners.

[79] Stuart, H. (2015). *Private Justice: Towards Integrated Theorising in the Sociology of Law*. New York: Routledge, 2.
[80] Rodin, (2003). *supra nota 75*.
[81] Shirley, M. M. (1992). The What, Why, and How of Privatization: A World Bank Perspective Colloquium. *Fordham Law Review*, 60 (6), 24.

Privatization as a process is continually ongoing and has no feasible boundaries – as long as there exists public property it can be privatized. A similar notion was delivered by the World Bank almost 30 years ago in 1992, stating that "there are virtually no limits on what can be privatized"[82]. Thus, the process of privatization in essence is the expansion of the private sector until it becomes a dominant force in the economy[83].

2.3.3.2. *Privatization as a tool*

Privatization can also be defined as a tool available for the government to help it achieve certain economic goals. As an example, government can choose to implement privatization in response to the low profit performance of the government owned enterprise, thus cutting costs associated with the property. In 1991 The World Bank saw privatization as a measure that would help borrowers achieve efficient growth with equity, thus helping the organization meet its fundamental goal[84].

There are a multitude of objectives the government can hope to fulfil through implementation of a privatization program. The proponents believe that privatization will have a positive effect on a states' economic performance as it can be used to:

- shift from state monopoly within certain market sectors;
- improve the internal efficiency and increase the productivity;
- increase the prospects for raising investment capital;
- raise revenue for the state and improve the allocation of public resources;
- reduce state control in the economy;
- promote market economy. [85] [86]

2.2.3.3. *Privatization as an ideology*

Defining privatization simply as a process or a means to an end, is not enough to capture the impact privatization can have on society. Privatization can morph into a political and economic ideology

[82] Ibid.
[83] Tvaronavičiene, M., Kalašinskaite, K. (2005). Analysis of privatization: Different approaches. *Journal of Business Economics and Management,* 6 (1), 53.
[84] Shirley, M. M. (1992), *supra nota* 19.
[85] Tvaronavičiene, (2005), *supra nota 83*,53- 56; Shirley, M. M. (1992), *supra nota* 81, 23;
Gomes, L. O. M. (2001). Researching privatisation: some notes about public policy evaluation. *Revista de Administração Contemporânea,* 5 (2), 223.
[86] Parker, D., Saal, D. D. (Eds.) (2003). *International Handbook on Privatization.* Cheltenham: Edward Elgar Publishing, 32.

directly influencing the system of governance and public policy decisions. In such a way, it allows for government to make a commitment to privatization and construct public policies that would aid and evoke privatizing. To illustrate – during the widespread wave of privatizing the Thatcher administration was driven by the idea of freeing markets from government control[87]. Margaret Thatcher believed that by decreasing the state's power the power of people will be enhanced[88].

Privatization as an ideological part of a system of the governance is characterized by an elevated role and consideration given to the private interest. It is believed that decreased state intervention within economy, strengthens the personal freedoms of individuals[89] and that private managed assets are more efficient when compared to those managed by the public sector[90]. Thus, while privatization reforms form only one part of the governance, their influence extends further by creating a system of governance that values and promotes competition, efficiency and private interest.

2.2.4. Privatization in this paper

The author adapts the definition of privatization proposed by Special Rapporteur on Extreme Poverty and Human Rights, Philip Alston, in his report on human rights and digital welfare, states to the UN General Assembly:

> "Privatization is a process through which the private sector becomes increasingly, or entirely, responsible for activities traditionally performed by government, including many explicitly designed to ensure the realization of human rights. It can take many forms, ranging from the complete divestiture of government assets and responsibilities to arrangements such as public-private partnerships."

This definition also includes outsourcing and private outsourcing and private-public-partnerships.

In relation to the public sector outsourcing refers to a transfer of service provisions to private bodies, while financing and the responsibility of oversight remains with the public sector. Thus, the main rational behind outsourcing is the hope of maximizing value for money by opening up

87 Parker, D., Saal, D. D. (Eds.) (2003), *supra nota 86*, 42.
88 Edwards, C. (2017). Margaret Thatcher's Privatization Legacy. *Cato Journal,* 37 (1), 91.
89 Reason Foundation Annual Privatization Report 2006.
90 Gomes, (2001), *supra nota* 85, 225.

public sector services to the market competition, which is expected to lead to increased productivity and efficiency. Outsourcing allows for the provision of services at the lowest cost possible, as there is usually more than one private body interested in securing a contract with the government and the ones able to demonstrate the highest efficiency at the lowest price, are more likely to do so. [91]outsourcing allows for the government to alleviate its everyday workload, while still fulfilling its obligations to the citizens.[92]

Public-Private - Partnerships (PPPs) involve an establishment of a long-term relationship between the government and private actor with a shared risk, whereas outsourcing involves conclusion of a temporary contract and the risk remains with the government. PPP are most often used in infrastructure development, typical projects including roads, bridges, airports, water systems, pipelines, power plants and so on. The private party is for the most part responsible for the risks associated with the design, construction, financing, operation and maintenance, and the public party is responsible for the regulatory and political risks.[93]

This sort of power sharing is altering the distinction between the two sectors in fundamental ways.[94] Furthermore, governments are becoming increasingly reliant on the private sector contributions when implementing public policies and delivering public good – such as essential infrastructure[95].

When applying the previously defined definitions of "public" and "private", the privatizations should be seen as any change of dynamic between law and market that gives the latter more regulatory power over "the dot" compared to law. Due to on-going digitalization process law, previously superior modality of regulation (as portrayed on Figure 2.), is being displaced with market becoming the modality to which other ones a becoming subject to.

[91] Domberger, S., Jensen, P. (1997). Contracting Out by the Public Sector: Theory, Evidence, Prospects. *Oxford Review of Economic Polic*y, 13 (4).
[92] Drahokoupil, J. (Ed.) (2015). *The Outsourcing Challenge: Organizing Workers Across Fragmented Production Networks*. Brussels: European Trade Union Institute
[93] European Court of Auditors, (2018) *Public Private Partnerships in the EU: Widespread shortcomings and limited benefits*. Special Report.
[94] Linder, S. H. (1999). Coming to Terms With the Public-Private Partnership: A Grammar of Multiple Meaning. *American Behavioral Scientist*, 43 (1), 47.
[95] Wang, H., Xiong, W., Wu, G., Zhu, D. (2018). Public–private partnership in Public Administration discipline: a literature review. *Public Management Review*, 20 (2), 295.

3. PRESERVING THE FUNDAMENTAL PUBLIC VALUES

Within "Code and Other Laws of Cyberspace " Lessig called for the law to focus on regulating the code in order to achieve control within cyberspace. Seeing that within digital environments the constraints imposed through architecture are often times absolute – there is no way to execute a behavior that goes against the regulation, seeing that such an option had not been built into the code – instead of viewing cyberspace as something uncontrollable and beyond regulation is nonsensical. The cyberspace "environment" is a perfect tool of control, as it can only be built by humans, who therefore, can morph this environment according to their interests and values. As Lessig explains it in his essay:

> "Our choice is not between "regulation" and "no regulation." The code regulates. It implements values, or not. It enables freedoms, or disables them. It protects privacy, or promotes monitoring. People choose how the code does these things. People write the code. Thus the choice is not whether people will decide how cyberspace regulates. People--coders--will. The only choice is whether we collectively will have a role in their choice--and thus in determining how these values regulate--or whether collectively we will allow the coders to select our values for us."[96]

The author, similarly, to Lessig, argues for government superiority as a regulator of cyberspace, as they do not believe that market regulation can facilitate liberty and prosperity of cyberspace, mainly because those concepts do not align with their interests and values.

The main consideration behind the actions of actors belonging to the public sphere should be delivering public good and benefitting the society as a whole. The respect towards rule of law and democratic principles are essential elements in the process of delivering and serving public interest. Some examples of public values would be fairness, accountability, and transparency. [97]

In comparison the body of private values is constructed by having individual gain as the main motivator. Thus, the importance is placed on values that would allow for the highest possible fulfilment of private interest, such as efficiency and profitability.

[96] Lessig (2000), *supra nota 42.*
[97] Verkuil, (2006). *Supra nota 77,* 411.

Classical liberals believe that exercising the private interest is a way of achieving public good[98]. In his books, Wealth of Nations, Adam Smith wrote: "It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest" [99]. According to Smith when individuals are focusing on increasing their personal gain, their actions contribute to the good of society and thus private interest is the best way to achieve public interest goals. Performing labor in order to increase personal gains, supports Locke's belief that private interest is beneficial for the public interest, as the labor performed creates new products that the members of society can use.

All the same, Locke concluded that the process of acquiring private property and the ownership rights includes exclusion of the same property being used by others[100], thus the freedom associated with private property is similar to scales – while the freedom of one side increase the freedom of the other side decreases. This can directly be transposed onto the modalities of regulation- while the ability of market to regulate increases, the ability of law to do so decreases.

The increased interest of the US companies in prioritizing the role of the private sector in weather forecasts is an example that greatly summarizes the current and possible risks that come with the conflict between the private interest and public values. The meteorological data is currently offered to the public in a free and unrestricted way by the government agencies and heavily depends on international collaboration. Previously, private parties within the sector had solely a value-add role, however new technological advancements have made it possible for private companies to start extracting their own proprietary weather data. While the public sector views weather data as a public good, the private parties see it as a commodity that can be monetized. Such collision of public values and private interest puts the whole field of weather forecasting in danger as "the entire global forecasting apparatus depends on this free exchange of data". [101]

[98] *Ibid*., 404.
[99] Smith, A. (1776). *An Inquiry Into the Nature and Causes of the Wealth of Nations.* Vol 1. London: Methuen, 16.
[100] Locke, J. (1887.) *Two treaties on civil government.* London: Routledge and son; Gibbard, A. (1976). Natural Property Rights. *Noûs*, 10 (1), 77.
[101] Blum, A. (2019). *Inside the Weather Wars That May Threaten the Daily Forecast You Depend On*. Time. Retrieved from: https://time.com/5615625/private-companies-weather-forecasting-threat/, 30 April 2020.

4. ISSUES WITH DIGITALIZATION INDUCED PRIVATIZATION

The preceding chapter defined privatization, in the context of Lessig's four modalities of regulation, as a process that tips the scales between law and market regulatory powers in favor of the latter. This chapter will try to illustrate how digitalization is causing the public sector to become dependent on the private sector, thus facilitating the move to a more private regulatory system and what are some issue related to it.

4.1. Outsourcing of regulatory powers

Statements arguing that private sector actors are faster, more capable and more efficient in developing and regulating cyberspace, which are very similar to the ones dominating the Old School of Chicago, serve as a reasoning for outsourcing of government digital services. Thus, private companies are in leading positions in regard to designing, constructing, and even operating of digital public services[102]. For instance, Google started offering public services back in 2009[103], in 2020 the government of United Kingdom agreed to a deal with Google allowing for public sector organizations to receive a discount on Google's cloud platform[104].

In addition, government often times have no monetary capabilities to compete with private companies when developing their own solutions[105] and poaching by the technological titans is causing a brain drain from public research and public sector in general[106]. In fact, Estonia, which has been called a leader in technology, did not develop its e-government platform in-house[107], but rather it was outsourced to multitude of private companies across sectors. While, the Estonian government used mainly Estonian companies to develop their digital solutions, most of the

[102] Alston, P. (2019). Report of the Special rapporteur on extreme poverty and human rights.
[103] Parr, B. (2009). *Google Launches Google Public Sector*. Mashable. Retrieved from: https://mashable.com/2009/09/15/google-public-sector/?europe=true, 3 August 2020.
[104] Browne, R. (2020). *UK agrees to cloud deal with Google for public sector discounts*. CNBC. Retrieved from: https://www.cnbc.com/2020/06/03/uk-agrees-cloud-deal-with-google-for-public-sector-discounts.html, 3 August 2020.
[105] Chambers, J. (2016). *Why Estonia hasn't built a government digital service*. GovInsider. Retrieved from: https://govinsider.asia/digital-gov/why-estonia-hasnt-built-a-government-digital-service, 3 August 2020.
[106] Wilbanks, J. T., Topol, E. J. (2016). *Stop the privatization of health data.* Nature. Retrieved from: https://www.nature.com/news/stop-the-privatization-of-health-data-1.20268, 3 August 2020.
[107] Parr (2009), *supra nota 97.*

cyberspace is developed and regulated by the big tech titans – Facebook, Google, Amazon, and Apple.

It has to be noted that public service outsourcing can carry with itself positive result, however any sort of outsourcing of public services contributes to delegation of regulatory powers from law to market. In his book "Outsourcing Sovereignty: Why Privatization of Government Functions Threatens Democracy and What We Can Do About It" Verkuil insisted that outsourcing is directly undermining the government's ability to govern and thus creating a power asymmetry between law and the market.[108]

As an example, in 2014 the Danish Ministry of Tax announced that they hold no control over more than 200 digital systems implemented, which used machine learning algorithms in policy making, thus directly affecting citizens[109].

Related issue that seems to be often overlooked, is a potential conflict of interest arising from the interdependent relationship being formed between governments and tech giants. In the case of a scenario, where the state is receiving a certain benefit from the private company, it is not incorrect to question whether the state will be more likely to advocate for self-regulation of digital platforms.

4.2. Regulation by platform

Seeing that there is no public actor that can legitimately establish rules applicable to all users of cyberspace, the private regulation of platforms is a logical solution and thus more governments start tasking platforms with regulatory functions[110].

Facebook is one of multiple platforms that does not create any content themselves, instead it provides its users with a tool for public circulation of user created content. While the platform does not create the data, it is in control of most important decision regarding the data – for example will the data be distributed, if so, then how and to whom. Essentially, what the platforms are doing

[108] Verkuil, P. R. (2007). Outsourcing Sovereignty: Why Privatization of Government Functions Threatens Democracy and What We Can Do about It. Cambridge University Press.
[109] Barcevičius, (2019), *supra nota 64*,
[110] Belli, L., Zingales, N. (Ed.) (2017). Platform regulations: how platforms are regulated and how they regulate us. Official outcome of the UN IGF Dynamic Coalition on Platform Responsibility, 46.

is imposing certain restrictions which then either directly or indirectly causes changes to individuals' behavior, making them a regulatory body within that space.

The fundamental part of regulating is done through the architecture that governs the platforms. For example, people often refer to the algorithms when explaining the working process of Facebook - the algorithm decides what gets displayed to the users and how prominently. In addition, the users are regulated by Terms of Service, which establish what content users are allowed to share, what activities to perform and what data of theirs will be collected; in its essence the Terms of Service can be viewed as being "the law" of the platform. Thus, in addition to the architecture of the platform, the users' behavior is also regulated through a contractual relationship between platform and them. [111]

Seeing that the platforms themselves are in charge of creating Terms of Services, sets them as the main regulatory body for the platform, which in turn could be equated to platform having the quasi-law-making powers. In addition to creating the terms, platforms are in charge of monitoring the enforcement of said term, marking them as a law-enforcement body. Thirdly, most platforms impose an alternative dispute resolution mechanism to solve conflicts amongst users based on the law of the platform[112], giving them a quasi-judicial powers.[113] Arguably, this is a clear violation of separation of powers doctrine, which is a fundamental element of democracy and rule of law, and can be found enshrined into most states' Constitutions. Further, it reduces the capacity of other regulatory actors to oversee and check and, if necessary, limit the powers of said private regulators.

2.6 billion – this is how many monthly active users Facebook has as of the first quarter of 2020[114]. As a comparison, the most populated country in the world is China, with 1,4 billion people. This means that Facebook's legal system has more subjects, than any other territorial based legal system. This seems to give power to the main arguments proposed by Johnson and Post, stating that the development of cyberspace will lead to a new self-regulatory system being established, which similarly to territorial based legal systems will be applicable only within clearly demarcated spheres of cyberspace[115].

[111] Ibid., 44.
[112] Ibid., 45
[113] Scott, C. (2002). Private Regulation of the Public Sector: A Neglected Facet of Contemporary Governance. Journal of Law and Society, 29 (1), 59.
[114] Statista (2020). Number of monthly active Facebook users worldwide as of 1st quarter 2020. Retrieved from: https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/ , 3 August 2020.
[115] Johnson (1996), *supra nota 35*, 1400.

However, there is an obvious and important difference that needs to be drawn between the traditional territorial based legal system and the "legal system" of the platforms. Upon the individuals birth they automatically become a subject to the laws of a certain state and presuming, that the individual is born in a democratic and "rule of law" respecting state, there will be a framework in place that allows them to have an effect on the state's laws.

Contrastively, in the case with the platforms, the contractual relationship established between the two parties is completely unilateral – users have no option to negotiate the terms, as all the conditions are provided by the platform and the user has an option of either agreeing to pre-established terms or not. It might seem as a fair condition, seeing that a person has no choice but to be subject to state laws, however in regards with platforms, the user can make a decision whether to use the platform or not.

The standpoint of current paper's author is that it is becoming increasingly difficult to evade socials media platforms and owning at least one type of social media account is becoming a social norm, seeing as digitalization has penetrated wide variety aspects of life, and can be seen as one of the defining characteristics of modern time[116]. The ability to not be dependent on one or multiple platforms can be seen as a privilege[117] – Google offers 109 different services[118], many of which can be very critical for individuals personal and professional life[119], making it very difficult to opt out of using Google services. For example, a student might not even have an option to decline usage of Google Classroom[120]. Thus, there is a clear pressure to use certain services and therefore consent to becoming a subject of that particular private "legal system", which raises questions regarding informed consent and overall validity of said contractual relationship. The problem with private services becoming unavoidable to a person's every day, is well-illustrated by Sofia Ranchordás:

[116] Castells (2010), *supra nota 54.*
[117] Johson, E. (2018). *If you can quit social media, but don't, then you're part of the problem, Jaron Lanier says*. Vox. Retrieved from: https://www.vox.com/2018/7/27/17618756/jaron-lanier-deleting-social-media-book-kara-swisher-too-embarrassed-podcast, 3 August 2020.
[118] Google Developers. Product Index. Retrived from: https://developers.google.com/products/, 3 August 2020.
[119] Patterson, D. (2018). *How I tried and failed to quit Google*. CBC News. Retrieved from: https://www.cbsnews.com/news/how-i-tried-and-failed-to-quit-google/, 3 August 2020.
[120] Service provided by Google that helps teachers manage coursework.

> "Consumers can also choose not to consent to the gathering of data. However, how often does the average consumer do it? How many suitable alternatives would a citizen-consumer have, should she reject to have her data collected by a smart city? She can surely walk rather than use a smartcard for transportation. But where will she deposit her garbage bags when all the waste bins in her city require a personal card which is linked to her address?"[121]

4.3. Market supremacy of tech titans

Enhancing tech titans with regulatory functions of any kind, increases the amount of power they have among market competitors, thus strengthening their already powerful market position. To make the matter more severe, none of the tech titans are shy to leverage their market power to disadvantage their competitors. For example, Facebook frequently buys off the competition before they have the chance to develop further; Amazon tracks the sales data of competitor's, who due to Amazon's supremacy in online retails are forced into the platform, to develop alternatives for those products.

Due to their enhanced regulatory and market power big tech companies will be elevated into the position of public service providers, in fact most of the tech companies are actively working towards it[122]. The COVID-19 pandemic serves as a proof, that big tech companies have become an indispensable public digital utility – Facebook was implemented as an international broadcaster; Amazon was used for emergency medical supply delivery; and Google for public service announcements.[123]

There is an apparent lack of regulation within tech industry and cyberspace[124]. Evidently, such dependency on private actors and the outsourcing of public services to private interest is hindering the governments capacity to regulate[125] cyberspace. Law as a modality seems to still hold a

[121] Ranchordás, S. (2018). *Law and Autonomous Systems Series: Cities as Corporations? The Privatization of Cities and the Automation of Local Law.* Oxford Business Law Blog. Retrieved from: https://www.law.ox.ac.uk/business-law-blog/blog/2018/04/law-and-autonomous-systems-series-cities-corporations-privatization, 3 August 2020.
[122] Larsson, A., Teigland, R. (2019). Digital Transformation and Public Services: Societal Impacts in Sweden and Beyond: Routledge Studies in the European Economy. New York: Routledge, 258.
[123] Scott, M. (2020). *Coronavirus crisis shows Big Tech for what it is — a 21st century public utility*. Politico. Retrieved from: https://www.politico.eu/article/coronavirus-big-tech-utility-google-facebook/, 3 August 2020.
[124] Alston (2019), *supra nota 96.*
[125] Verkuil (2007), *supra nota 102.*

superior position, even when direct regulation is happening through private, thus market rule enforcement. However, the assumption could be made, that unless regulators take a deliberate action to regulate, the market control will become a dominant regulatory power.

CONCLUSION

This paper attempted to display that the development of digital technologies is disrupting the traditional law and market relationship by creating possibilities for market to gain power over the law. The author argued that the effects of the digital technologies and the process of digitalization is allowing for private interest to hold more power, which has the potential to harm democratic values and rule of law.

To illustrate that process, the author adapts Lawrence Lessig's arguments regarding the regulation of cyberspace. Lessig in his works argued that regulation of cyberspace is possible and even viable option, as it is subject to same regulatory power as the real space, defined by Lessig as four modalities of regulation.

Next the author defined the process of digitalization and privatization in the context of Lessig's modalities of regulation. Digitalization is described as effects on regulatory powers caused through digital technologies and the processes associated with them; and privatization as change of dynamic between law and market, which allows the market to have more influence over individual's behavior. The paper is however theoretically limited by presumption that law as regulator uses its power to serve public good and regulates with public interest as the aim. On the contrast market is ruled by private profit interest, and there are reasons to believe that private interest is willing to sacrifice public good for profit.

The author has shown how digitalization is causing the law to become privatized as, the government have become dependent on private sector. Seeing, as governments has mostly fallen behind private sector in regard to digitalization, has normalized the outsourcing of digital public services to private sector and has made private companies responsible for designing, constructing, and even operating of digital public services. In addition, the complexity of regulating social media platforms, has tasked private companies with regulatory functions – they are responsible for creating rules and ensuring their enforcement, and in most cases also for solving any potential disputes that may arise on their platform. The rapid development of tech giants, has allowed them to offer more services within variety of sectors of life, thus making them indispensable.

Some of the adverse effects caused by outsourcing of digital government functions, could include conflict of interest between the parties and limited ability to regulate. In addition, allowing the private tech companies to set their own regulations regarding user behavior, affirms and strengthens is regulatory powers. Additionally, the private companies' right to regulate human behavior is not established through public legal order, rather through contractual agreement. As it is shown in final chapter of the paper, this agreement is of unilateral nature and raises questions regarding the role of informed consent within those.

Considering the above, the author would like to highlight the importance of government regulation of digital technologies. Seeing as this paper did not focus on the methods or tools of efficient regulation, it is crucial that there continues to be an active discussion among policy-makers, tech experts and legal scholars. There is a need for legal instruments that would allow to predict and curb negative impact the development of digital technologies could have on fundamental democratic values.

In addition, deliberate regulatory action needs to be taken to limit market powers of tech giants, seeing as they are currently essentially regulating as monopolies, which further strengthens their position.

Finally, the author would like to suggest that public sector institutions focus on developing their own in-house digital products and services, in order to become less dependent on private sector expertise.

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