Ownership and governance in the digital world

04 Ownership and governance in the digital world, in a context of consolidation of the data economy and of emerging regulation of gatekeepers
Introduction by Jean-Yves OLLIER.

Our digital environment shakes the classical foundations of property rights and fosters the appropriation of resources by gatekeepers. This n°18 of *Digital Issues* follows this common thread to review the state of debates on the regulation of digital platforms and on the promotion of data sharing. Through examples from various sectors, it seeks to illustrate how open and transparent data governance mechanisms can organize relationships between stakeholders in order to maximize the benefits of sharing digital assets for the economy and for society.

09 Property rights in the digital world
Emmanuel NETTER.

Do property rights have specific characteristics in the digital world? The analyses differ according to whether one is interested in the ownership of the telecommunication infrastructures that make up the Internet network, the ownership of the terminals that connect to it, or the ownership of the content that circulates on it. Regarding telecommunication infrastructures, we can see that they are made up of tens of thousands of private properties which, taken together, form a common good, the Internet network as a whole, benefiting from collective governance. Regarding terminals and connected objects, it will be observed that the owner depends, when they use their property, on the good functioning of the manufacturer's servers, whereas the property right is traditionally exercised without having to resort to third parties. With regard to the ownership of content, dematerialized works of art, informational commons, and cryptoassets will be analyzed differently.

15 Organizing the valuation of the black gold of the 21st century
Éric BROUSSEAU.

Data is not a purely collective good that could emerge from a regime of generalized sharing. Nor is it a good that would easily be subject to the organization of an efficient system of market exchange. Under these two cardinal regimes of organization of their circulation, the diversity and granularity of the available data would result in efficiency gains far below their potential. These are the reasons why it is necessary to go beyond a purely "regulatory" approach, by taking into consideration the relations between producers and users of data and the possible intervention of intermediaries who can, in a neutral manner, provide services ranging from the technical processing of data to the provision of services resulting from their analysis. However, care must be taken to ensure that alliances or intermediaries do not abuse the central position they may occupy.

24 Data monetization
Anne DEBET.

The current questions about data monetization are not so much about this practice, which has existed since the 1980s and which has been renewed with the so-called free model proposed by the major Internet players, as about its legal framework. Indeed, the GDPR (General Data Protection Regulation) does not facilitate the monetization of data, as it imposes very strong constraints on actors who wish to use, transmit, and process data that they have not collected themselves. Moreover, the various data controllers have difficulty complying with this demanding framework. Furthermore, direct monetization by individuals themselves, presented today as a form of personal emancipation, is ultimately of little interest, as the person concerned only derives a minor economic benefit from it.

34 Data issues in online advertising.
Recent evolutions in practices and value definition
Théophile MEGALI.

The functioning of online advertising is based on the massive usage of data, mainly to automate selling/buying processes, target consumers, or measure audience and ads performance. Thanks to their vertical integration, digital platforms are organized as "walled gardens", and take advantage of this accumulation of data. Yet, recent legal and technical evolutions have imposed a redefinition of the value of data and helped to change the actors' practices. This evolution appears to be significantly in favor of the "walled gardens" platforms.

39 The public reference data service: Governance issues
Mathilde HOANG & Antonin GARRONE.

At a time when the European Commission is drawing up a list of high-value datasets that will have to be released to the general public, it seems necessary to question the governance issues of such a scheme. The public service for reference data, created under the Law for a Digital Republic (2016), can provide lessons on the governance success criteria for these two schemes. In the case of the French model, the creation of a public service by law, as well as the formalization of a set of organizational and technical rules that frame the dissemination and reuse of data, led to the creation of a multi-stakeholder governance as well as the establishment of a reliable and efficient data infrastructure. Measuring the impact of the system, as well as taking into account the evolution of data policy at the national and international levels, will have to guide the evolution of the public service.

46 The governance of data exchange spaces: Challenges and solutions
Laurent LAFAYE & Fabrice TOCCO.

Europe has made data governance and data exchange spaces one of the priorities of its data strategy. Gaia-X, the Data Governance Act, and the Data Act illustrate the importance of capitalizing on the data generated by public or private organizations, and regulating data exchanges within a secure environment where trust, traceability, and good governance are paramount. These data spaces are responding to strategic objectives that are essential to meeting the economic, environmental, and social challenges of the 21st century. Many data exchange platforms are emerging, the market is being structured and regulated in order to fully benefit from the potential of data circulation. In this article, we propose to address these topics and clarify the fundamental role that secure data spaces play to build a solid and innovative European economy.

52 Health data governance in France and Europe: Dynamics and obstacles
Clément TONON.

The national and European governance of health data under construction is based on a triple movement of centralization and interoperability of databases, of expansion of access to a growing number of actors, and of extension of the purposes justifying their use. This movement raises the question of the deployment and security of the underlying technical infrastructure, as well as the legal terms of access and processing that will allow the maximum use of health data while ensuring the appropriate level of protection required by their particular level of sensitivity. In this article, we review the legal and political characteristics of the construction of the French and European models of health data governance, the most recent formalization of which is expected to take place during 2022 with the legislative act on the European health data space.

57 The conditions for the free circulation of agricultural data
Sébastien PICARDAT.

It is estimated that 2.5 billion billions of agricultural data are produced every day on a global scale. Knowing that the analysis of this data can, for example, give the French grain yield in real time at harvest time, it is crucial to control its circulation. This is the path that is being taken in Europe, where agriculture is the second most advanced economic sector in terms of data management, behind the automobile industry. Indeed, while it is essential for this data to circulate, as it is important for feeding new artificial intelligence models and new decision-making tools, it must be done within a secure framework and take into account the consent of farmers to the use of their data. The new European regulation Data Governance Act and the future European regulation Data Act (the counterpart of the GDPR for non-personal data) include this dimension.

60 Artificial intelligence and insurance:
Towards a reversal of the information imbalance?
Xavier VAMPARYS.

Thanks to artificial intelligence, insurers are now able to infer hidden information from data obtained, directly or indirectly, from their policyholders. The asymmetry of information, which was heretofore essentially favorable to the policyholder, who held information on their situation, state of health, etc. that was not shared with the insurer, is arguably being reversed. It is now the insurer who holds potentially more information on the policyholder, and therefore on their risks, than the policyholder themself. This reversal of the informational imbalance raises the issue of the status of information inferred by AI systems, and particularly the policyholder's right of access to such inferred information.

64 Regulation of digital mobility data
and of digital ticket sales and distribution interfaces
Jordan CARTIER & Fabien COULY.

Digital technology has become the primary means for travelers to access travel information and ticketing. In this context, digital mobility data and digital ticket sales and distribution interfaces are necessary resources for the creation of digital mobility services, which can contribute to less carbon-intensive travel by encouraging modal shift. For this reason, both the European and national legal frameworks require the opening up of digital data and distribution; the French legislator has also sought to guarantee transparent, fair, and non-discriminatory access to digital mobility resources through the intervention of the sectoral economic

regulator for transport. However, this sectoral regulation may be limited by the multi-faceted nature of the players involved, which will require the establishment of a coordinated regulatory framework.

70 Governance of an open source project: controlling a flow of innovation
Nicolas JULLIEN, Robert VISEUR & Jean-Benoît ZIMMERMANN.

In this article, we analyze the Free/Libre/Open-Source Software (FLOSS) projects' governance patterns, *i.e.* the set of means implemented for the orientation, control and coordination of totally or partially autonomous economic agents – individuals, organizations using the solution, companies using the solution to build commercial offers... – on behalf of a FLOSS development project. These governance aspects play a key role in the organization of an open innovation system, which works as long as the dynamic of innovation is strong.

77 Free software: Collectively managing the evolution of a technology
Nicolas JULLIEN, Robert VISEUR & Jean-Benoît ZIMMERMANN.

In this article, we analyze Free/Libre/Open-Source Software (FLOSS) emergence in the software intellectual protection context. FLOSS is not a negation of the intellectual property principle. While most classical models of intellectual property have as a source of revenue the monetization of access to a technology (the "software stock"), the idea of FLOSS is to use copyright to organize, *via* specific licenses, the management of the evolution of the technology and its interoperability (the "software flow"), which are just as important for the user as the stock.

84 What is an open source cloud?
Jean-Paul SMETS.

There is one area in which the economy of the commons is still in its infancy, that of services. The open source economy, which has proven itself in the field of software, textbooks, hardware or music, has been investing in the field of services for a few years. We discover the beginnings of free processes in 2016 in the "Code des marchés publics" (Public Procurement Code). The free cloud, built by combining software, hardware, and operating processes – all free –, is a first example of a profitable service based entirely on the economy of the commons. It avoids the appropriation and high pricing effects of the major proprietary cloud providers. It lets us imagine an evolution of public service concessions towards reversible economic models without indirect appropriation of the public good.

90 Applying Net neutrality rules to social media content moderation systems
Winston MAXWELL.

I argue that the Net neutrality concept of "reasonable traffic management" can be applied to social media content moderation systems. Unlike recommendation systems which select, organize, and prioritize content, moderation systems should be neutral. Platforms should apply content moderation rules in an objective and non-discriminatory manner. The article explains the difference between content moderation and content recommendation (also called curation). The article then explores different forms of discrimination in content moderation. I propose two rules inspired by "reasonable traffic management" that should be transposed to content moderation: (i) discrimination in content moderation enforcement should not be motivated by commercial considerations, and (ii) discrimination should be based on objective criteria related to the nature of the content, the ease of detection, and the relevant harms flowing from over-removal or under-removal. Finally,

I argue that the proposed DSA should include the explicit requirements on the neutrality of content moderation, modeled on the language that appears on the European Regulation on the Dissemination of Terrorist Content Online.

99 The new legal framework of online sharing platforms: How Europe reinvents copyright
Jean-Philippe MOCHON.

Through best efforts diligences imposed on large online sharing platforms, such as YouTube or Facebook, to exempt them from liability for infringing content, Article 17 of the 2019/790 Copyright in the Digital Single Market Directive grants a new effectiveness to the IP rights of content creators. This much-debated legal revolution provides valuable lessons on the fabric of law in Europe, in a delicate balance between widely differing views among stakeholders, Member States and members of the European Parliament. It also illustrates the deep changes affecting the notion of property in the digital environment. Only through its internalization in the technological tools used by the digital platforms can it regain its full effectiveness, under the eye of the regulator. The substance of property rights is also to a certain extent affected under the pressure of digital uses. The European Commission and the European Court of Justice have tried to achieve this balance between copyright and freedom of expression by stating that no uploading of licit content must be prevented, even though the implementation of this principle remains to be clarified in practice.

106 Cloud: Regulations and sovereignty, Gaia-X
Anne-Sophie TAILLANDIER & Alban SCHMUTZ.

Within the last two years of Covid-19 pandemic, 82% of IT decision makers have increased their use of the cloud. Between 2021 and 2027, the European cloud market is expected to more than quadruple from €63 billion to €260 billion according to a latest KPMG report. No less than 550,000 jobs will be created, and 200 billion euros of investments are also expected. But 70% of the cloud infrastructure market is occupied by three main players. None of them are European. These hyperscalers depend on North American jurisdictions, which highlights the conflict between extraterritorial regulations and the protection of corporate and citizen data.

114 Europe - United States : Convergence is not yet a reality
Joëlle TOLEDANO.

The hope of a convergence of American and European public policies to better control the power of the major digital players? After a quick comparison of the European and American initiatives on digital technology, the article shows that the American projects are part of a broader national perspective for a challenge to the application of competition law.

120 The dialectics of ownership and access rights in the digital world
Jean-Yves OLLIER.

The right of access to a good or service consists in not being excluded from its use by its owner or by gatekeepers. It may result from a contract or from a legal requirement limiting their right of ownership or their control. To balance the powers of dominant platforms, address market failures related to access to data, and share the benefits of such access, some of the current regulatory proposals tend to transpose principles of competition and regulatory law, which were designed for infrastructures into the content and data layers.

129 From neutral networks to neutral data intermediaries
Jean-Yves OLLIER.

Net neutrality requires Internet service providers to treat all contents on their networks equally, irrespective of their origin or of the applications, services or terminals they use. This network operating rule is one of the guarantees of an open and universal Internet. The development of vertically integrated and closed ecosystems in the use layer raises the question of the relevance of this model as a reference to define the non-discrimination requirements which will apply to the economic regulation of gatekeepers. Neutrality is also highlighted in the European proposals on data governance to bring out an alternative model of trusted intermediary and promote data sharing.