

ENGLISH SUMMARY

FROM INFORMATION SYSTEMS TO BLOCKCHAINS

ESSAY OF CONVERGENCE IN LEGAL AND FISCAL SCIENCES, ECONOMICS, AND MANAGEMENT

This workshop, on the 10h April 2020 in Lyon, is multidisciplinary and proposes a cross-fertilization discussion on computer systems and especially *blockchains* (BC) from a legal (tax), economics, and management points of view.

1. Articulation – Law - Economics – Management

The articulation between law, economics and management is specific since the University of Lyon brings together these three disciplines, in particular within the Universities of Lyon 2 and Lyon 3. At the same time, technological waves are changing these fields of sciences. New forms of regulation are developing in the areas of economic life and organization: economic and management considerations appear at the very heart of legal regulation (Kirat, et al., 2005). These information technologies, and for a long time, have been organized into systems, that is to say into abstract and practical sets whose elements are coordinated by a theory, the whole according to a purpose. Professor Causee concludes that legal science is having difficulty with the concept of system (Causee, 2019).

Therefore, this research meeting is open to the legal, economics, and management scientific communities. Impacts go beyond these high growth technologies, as though them the information, digital currencies, among them the bitcoins *blockchain* and other *blockchains*. While these technologies are still in their infancy, they lead to “blurring the lines departing disciplines, communities and bodies” (Faraj et al., 2018, p. 68), which is an indicator of the impact of these technologies in each of the three areas.

2. Impact of These Technologies in Each of the Three Areas

This research meeting aims to analyze the impact of high-growth technologies in terms of transformation. In other words, it aims to study the modification of the general characteristics of these disciplines. Are these changes likely to modify their form, make them different? Information systems have a strong potential for transforming financial and tax law, both from the point of view of public authorities and taxpayers or market operators (Cavalier, 2018; Cavalier and Guédon, 2018; Gregg, 2019). The disruptive effect naturally also affects work and management practices in the organization (Orlikowski and Scott, 2016).

Knowledge and practices in organizations are supposed to make the governance of organizations evolve. These new legal, economic and management grammars of this digital world that is being built remain to be explored and written, while at the same time their technological effects are beginning to be felt. The underlying spatial and temporal configurations of organizations have changed significantly. This leads to the creation of new organizational models adapted to new materialities (Thomas & Cooreen, 2016), to a redefinition of the value of work and law, which are part of the general concept of “new working methods” (NWW). They include practices such as Activity Based Work.

This disrupts the value of work, the environment, and the private sphere. The opportunities offered, especially by blockchains, are only one example of the economic and social incubation power of innovation: if it can be a vector for development aid to the least developed countries, it can also keep them further away from prosperity. The necessary computing power may act upon the environment with negative externalities. Conversely, if computing power is an issue for organizations and States, should we expect combinations with artificial intelligence? These associations would further increase the power of blockchains, already very hungry for computer capabilities. One think, for example, of *neurochains*. Will the combination of these two technologies spread?

The business world think their autonomy (*Decentralized Autonomous Organization*). This one-day research meeting offers a plural reading, legal and fiscal, economic and in terms of management, of this phenomenon of the transformation initiated by the information systems and their technologies. It proposes a grid comparing theoretical and conceptual aspects with field studies. It does not neglect the more peripheral topics, especially concerning the ecology of transformation, the configuration of business models, and transformation process. The results of the transformation and their measurement are a new challenge of digital management control (*IT controlling*). The event follows a report initiated by the French Senate (www.senat.fr/rap) and a transversal workshop organized by the University of Lyon on the modification of the contractual relationship resulting from the emergence of the blockchain (Marmoz et alii, 2019). Finally, in addition to the progress made since the event, this day will aim to identify local initiatives such as crypto-valleys developed by governments.

3. Cross-Fertilization Objective

The combination of several scientific communities aims at sharing the views of the different socio-economic domains on social regulations, appropriation by users, changing business models and steering systems. From the articulation between these three fields, law, economics and management results a cross-fertilization possibly opening horizons for new theories. The European Commission has also taken steps to improve the knowledge of each of the concerned disciplines. In addition to the practical and theoretical aspects, the conclusions could lead, for example, to legislative proposals, to information economies and even to new forms of organization. At the same time, companies have already appropriated certain functions of blockchains in the areas of logistics and industrial management notably by associating them with ERP.

KEY DATES

- Workshop date: Apr. 10, 2020
- Deadline for communications: Feb. 17, 2020

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- Definitive acceptance 16 March 2020