Creis-Terminal, LabSIC of the Sorbonne Paris Nord University and Paris Saclay Applied Economics of the AgroParisTech INRAE

study day at Sorbonne Paris Nord University

Interconnections between digital and ecological transitions

Condorcet Campus, 2022-06-09, room 0.010, https://www.lecreis.org/

In order to meet the socio-environmental challenges imposed by climate change in a perspective of a truly sustainable development, interconnections between the ecological transition's modalities and those of the digital transition, transversally at work within the economic, social and cultural spheres, is the millennium first two decades' end's emerging question.

On the one hand, the pursuit of sustainable development objectives implies reviewing economic and social development strategies, rethinking our modes of production, transport and consumption patterns in order to limit our environmental footprint and put an end to resulting injustices.

On the other hand, the new modes of production, consumption and socialization patterns induced by the digital transition are impacting the complex systems within which these technological innovations emerge, in particular supply chains and social networks, by creating value based more on production, circulation and analysis of data than on direct production of goods, amenities and services, both economic and social.

For the United Nations, the information and communication technologies' (ICTs) contribution to the pursuit of sustainable development objectives is based on the establishment of infrastructures, the securing of investments, the promotion of innovation and the development of inclusive strategies. However, contrary to some preconceptions, ICTs are not always conducive to sustainable development. More detailed analyses and more in-depth work are needed to assess the direct and indirect impacts of ICTs in each of sustainable development's dimensions (social, economic and environmental).

In a context of an increasingly obvious degradation of our environment, on top of which a foreseeable health crisis was added, many actors are now calling for a social, economic and cultural life and work conducted remotely: for some, it is a question of sustainably reducing our environmental footprint, for others it is a question of slowing down the emergence and dissemination of Sars-Cov2 variants, responsible for Covid19. What are the resistances and resiliencies to this remote life managed at the cost of reducing and sometimes impoverishing human contact?

This Creis-Terminal study day intends to reflect on the provided opportunities, the imposed limits and the resistance induced by this remote life by examining the compatibilities and incompatibilities between digital transition and ecological transition. Thus, this study day will focus on the following issues:

- Digital transition implies a forced digitization of society: this means more hardware, software, networks, connections and therefore more energy and raw materials. Is this fully compatible with the ecological transition?
- Ecological transition requires a-territorial anchoring fostering local and short circuits: this implies new production and marketing methods. Are they compatible with the digital transition?
- Digital and ecological transitions both give rise to a complex of technological innovations whose profiles are sometimes disparate or even contradictory: from capital-intensive and high value-added technologies (High Tech) such as artificial intelligence, facial recognition or satellite communication, to innovations that are more capital-efficient, energy-efficient, easily appropriated or resilient to climate change (Low-Tech). Can we reconcile or even articulate High-Tech and Low-Tech within sustainable development paths to lower our environmental footprint?
- Digital and ecological transitions share a great appetite (harvesting, processing, production, marketing, etc.) for all kinds of data, especially individual data. Beyond the European

Union's General Data Protection Regulation, should we flee, resist, reduce or dodge the invasion of the real by the virtual?

To discuss these issues, CREIS-Terminal and LabSIC invite you to take part in this study day organized around presentations and round tables addressing the above-mentioned issues from multiple angles: social and environmental performance, stakeholder strategies, territorial anchoring, innovation and transition dynamics, knowledge appropriation, extra-financial information systems, regulatory instruments and governance.

Registration is open to researchers, teachers, associations, journalists, and other people concerned by the human stakes of this double transition, be they health, social, economic or cultural.

The program includes presentations by specialists from Ademe (Erwann Fangeat), CFDT-Cadres (Franca Salis-Madinier), CNRS (Gis EcoInfo: Françoise Berthoud), Ifip (TC9/W9.9: Per Fors), Institut Mines Telecom (Fabrice Flipo), and Inria (Claude Kirchner).

Scientific editors: Dominique Carré (LabSIC, Université Paris Sorbonne Nord), Dominique Desbois (AgroParisTech-Inrae, Université Paris-Saclay).

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