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Title: The Land Code – Aspects for future of cadastral data

Abstract:

Traditionally, the management of the land relied on a particular form of representation: the map. With the arrival of computers and databases, the maps are now represented by digital data and have continuously evolved by virtually adding more thematic layers representing different attributes of the land and providing a more detailed and sophisticated representation. Today everything is still accelerating with the latest technologies of the digital revolution including "Big Data", the "Internet of Things", the "Blockchain", predictive algorithms of "Deep Learning", etc. These technologies offer analytical tools for introducing the notion of anticipation and prediction into land management. The new technologies of the digital revolution bring even more. They do not stop at the mere consideration of Big Data. Blockchains, for example, through their chain-based structure of contracts will allow the management of the deeds and land records in a whole new way by bypassing the work currently done by notaries and municipal offices holding registers. When reviewing these transformations, it becomes apparent that the representation of the land, and with it its management and governance will continue to change dramatically.

We therefore propose a whole new approach to master this new situation. One can envision a representation (codification) of the territory that could be called: "The Land Code". This term would refer to the fact that the proposed model would be both computational and legal. Blockchains, where computer code encrypts the management of the land (plots, properties, houses, or other land objects and thus affecting even cadastres and land registries) can give an indication of what the future may hold. "The Land Code" would be both digital (computer code) and legal since it would serve as "law".