Going Virtual

A cadastre is, in the eyes of many, a dusty organisation where pen-pushers squander their time in the maintenance of large folios. Given this image it is pleasant to observe that in more and more countries these "lamentable" organisations are becoming forerunners in the development of virtual organisations, i.e. networks of organisations that use ICT to share and integrate information in order electronically to provide the user with products and services. This is what is happening in the world of land information. Over the past twenty years the land register ("land book"), cadastral register and cadastral map ("cadastral information system") have developed into fully digital databases incorporating automated procedures for submission of legal documentation on legal rights to immovable things, and fully electronic ordering, delivery and accounting for land-information services and products.

However, customers report that cadastral information only partially meets their information needs. They also require, for example, topographic information, data on subsurface infrastructure, information about restrictions on land as imposed by government bodies, value and tax information, facts on physical construction and, as a novelty, energy labels pertaining to property. As nowadays the keepers of such information are also digitised, collaborative networks evolve that result in the provision to users of shared and integrated information through the electronic distribution channel of their choice. The user is not precisely aware who is the actual provider. As the marketing and billing communication between customer and data provider also goes fully via the digital route, the provider is actually "going virtual" on their behalf.

An example is provided by my own country, the Netherlands, where almost 90% of all cadastral documents are electronically submitted, more than twenty million products sold annually over the internet, and the number of integrated products exceeds 300,000 per year. Payments are by internet banking and "paper" marketing is rapidly being replaced by the internet. Integration relates to information stemming from land register and cadastre being put together with data from numerous other sources. Geographic information from the topographic service, large-scale topographic information from the managing public-private partnership, subsurface infrastructure information from Cable and Pipeline Information Centres, information about public restrictions from government bodies, value and tax information from municipalities, and certified energy information from the Ministry of Housing. Added to all of this is physical and market information derived from various government and commercial partners.

Of course, there are generic government measures facilitating all this, such as regulations on authentic digital documents, digital identities, public key infrastructure, electronic signatures and the introduction of "key registers" within its own information architecture. Becoming a virtual organisation also impacts on how data providers organise themselves. The Dutch Cadastre (Kadaster), realising that in an environment where input, processing and output occur almost irrespective of the location of its fifteen regional offices, decided to drastically reduce their number, even perhaps, in the far future, down to just one. Not to mention a substantial cut in staff. The Netherlands is not a unique case; similar things are happening everywhere: organisations going virtual!

https://www.gim-international.com/content/article/going-virtual