

Territorial engineering instruments to foster the territorial appropriation of data

Marie-Hélène Gauthier

UMR CNRS IDEES 6266 (University of Le Havre Normandie)

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Content

- The CIFRE thesis for applied research in Normandy
- Context
- Hypothesis
- Conceptual framework and methodology : territorial engineering
- Supporting the hypothesis
- In conclusion: Is it possible to regionalize a data policy ?
- Bibliography
- Appendix: Summary of the regions' positions on data in 2021

The CIFRE thesis for applied research in Normandy

- . CIFRE thesis in geography and spatial planning
- . How the coordination of local actors can foster the use of data to serve the development of their territory ?
- . Action research: 50% academic research and 50% operational research
- . CIFRE thesis as a member of the administration of Normandy Region

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Data as a territorial and geographical object

. Context of *datafication*, of putting the world into data

. **Data as a territorial resource** (Pecqueur, 2020) :

- specificity (territorial data, Mericskay, 2018) ;
- potentiality (development of data catalogues to make known the existence of an informational patrimony) ;
- hidden features (strongly adapted to the territory with specific territorial actors);
- renewability (the data is in principle inexhaustible but not the associated processes).

. **Territorial strategies around data** :

Offensive : using data to promote efficiency through innovation, experimentation

Entrepreneurial : data to gain access to new markets and foster economic development, data to gain influence and to promote the territory

Resilient : data as a tool to solve local issues

Societal : data at the service of a new territorial model (must sustainable, more trustworthy, etc.)

Defensive : data is seen as a tool to rethink the processes and local services but it must be regulated (data protections, ethics, etc.).

Regulatory: the data strategy is used only to comply with the norms (open data, INSPIRE directive)

A glance at the different data strategies of regional governments in France

. Every regional governments have taken a stance on data. ([Positioning of Regional Councils](#))

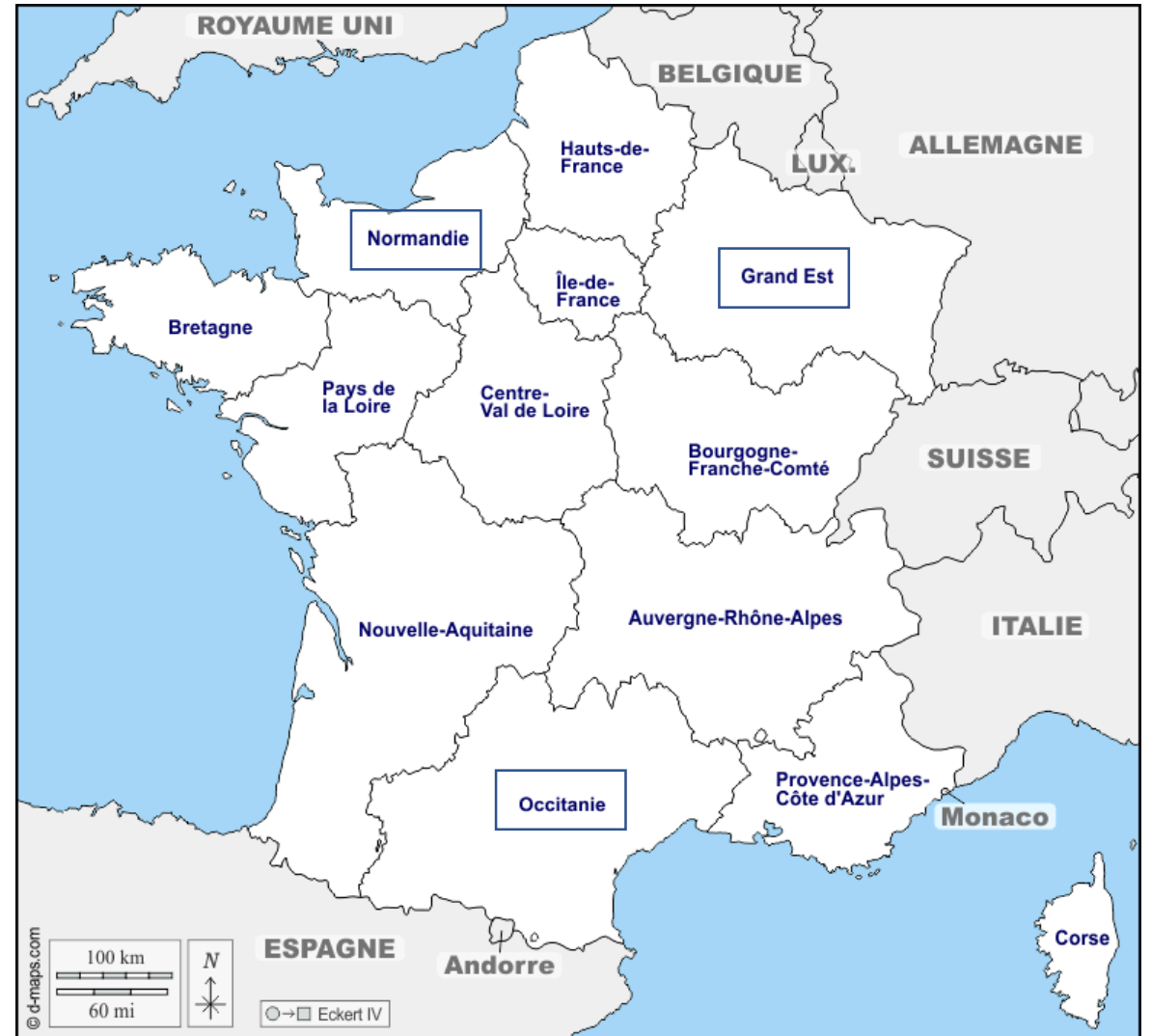
. A clear distinction between metropolitan and overseas Regions.

. Similarities between local policies* and the regional positioning on data and artificial intelligence, i.e. :

- Grand Est
- Normandy
- Occitania

. Those Regions were created in 2015

*based on SRADDET (Regional plan for planning, sustainable development and territorial equality)



Data, a new scope of intervention for territorial development

. The **territory**, one of the central **elements of the regulation**: both for the **management of the data** (INSPIRE directive, open data, etc.) and for its **territorial purposes** (geographical information, mobility, etc.)

. However :

- **The public sector lacks the legitimacy to assert their leadership locally**
- A **private sector**, that is largely unregulated, produces and owns key data.

. Likelihood for the local authorities to **lose the control** over the territorial **data necessary** to their development and hence their **capacity to manage and govern efficiently** their territory

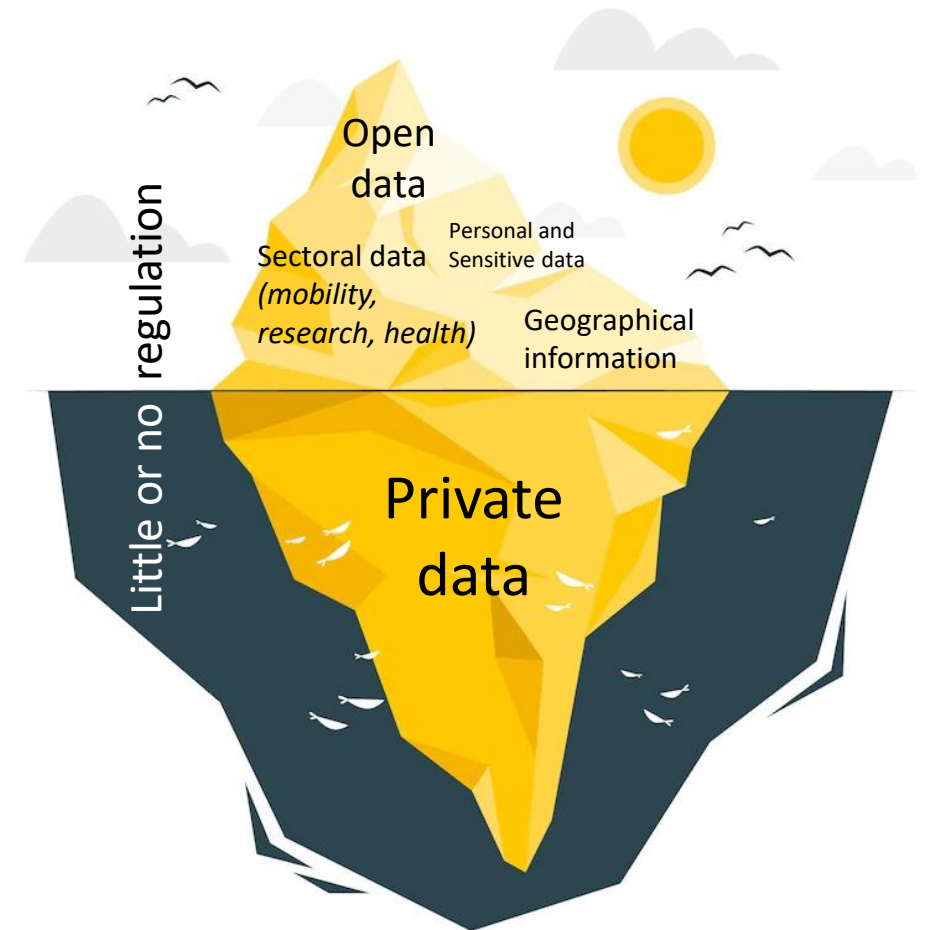


Illustration created by Storyset, available on freepik

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Hypothesis

« Without a certain context (of governance and public policies), the resource does not territorialise and the territory does not resource itself. ».

(Quote translated from : Lajarge *et al.*, 2012)



How does territorial engineering enable a local approach to data thus contributing to the emergence of a data driven regional development ?

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Conceptual framework and methodology : territorial engineering

. **Dispositif (Instrument)** : « *A set of elements arranged for a specific purpose.* » (Translation from the definition of Le trésor de la langue française informatisée)

- A generic definition that underlies both: a perimeter situated in space and time, a coordination or even a negotiation and a purpose.
- Applied to today's topic :
 1. Territorial actors, data, expertise, infrastructures, financing, experimentation territories, etc.
 2. In time and space : geographically, technically, cognitively, politically, etc.
 3. At the service of the territory, of the general interest

. **Territorial engineering**: *“All the concepts, methods, tools and instruments developed and used by the local actors of the territories in order to support the conception, the realization and the evaluation of their project”.* (Translation from the definition of Lardon, 2007)

Conceptual framework and methodology : territorial engineering

The **components of territorial engineering** (Piveteau, 2011) :

1. A **toolbox** at the service of the **territorial project**
2. An **association of actors**, coordinated for the **development of expertise** within the territory
3. An **institution** that guides the action

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I. A toolbox of data included in territorial projects

. **Shared governance** that meets the challenges of **territorial cooperation** (role of animator and facilitator)

. A **comparable purpose** (to develop use cases with a general interest dimension) with **support for project leaders** according to **different approaches** depending on the territory's projects:

- **Data Grand Est** (Grand Est): infrastructure and data sharing; financial support
- **DataLab Normandie** (Normandy): expertise and tools to encourage experimentation
- **Ekitia** (Occitania): trust and recognition

. These instruments are part of **territorial trajectories that still differentiate the strategies of open data and/or geographic information** (their core expertise) from the strategy towards the **private sector and the academic sphere.**

II. Joining forces to develop the territory's data expertise

- . Different governance models **depending on the territory**, but all of them involve several **different players**: consortium agreement (DataLab Normandie), Association then Public Interest Group (Ekitia), partnership agreement with a State/Region support (Data Grand Est)
- . The **lack of expertise** on the part of local authorities coordinating or carrying out a data system is reflected in the implementation of **shared governance with the private sector and academics**
- . The **scope and representativeness of the actors** to be involved in governance raises questions

III. The territorialization of norms to establish data

- . A territorialized approach which translates into :
 - A **normative framework**: ethical charter, label, shared platforms, etc.
 - A **territorial anchorage or hold** of the actors
 - Recourse to **prefiguration (*a test and learn method*)** (either a co-constructed experimental system or support for a system that has already proved its worth in the territory)
- . **Dissemination** (free access) and/or **performance** (paying access) logic
- . The **use case** as a **lever for anchoring** the data
- . Because those instruments are **relatively new**, it is difficult to **assess their impacts**
- . The question of the **superimposition of standards and norms** arises

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In conclusion: Is it possible to regionalize a data policy?

. **Data and territory** can **benefit mutually** from a **local anchorage** of data. The territory provides a certain **stability** in the face of the volatility of the data. In exchange, the data contributes to **its development, its resilience, its manufacture** (Rallet, 2021).

. Although the **Regions** were able to position themselves very early on as a **key level of governance** for spatial planning issues, particularly in the digital scope (Vidal, 2002; Ullmann, 2006), they seem to benefit from the latest laws that put them at the center of data management, but also to **invest in this new scope of intervention** represented by data.

. Although **territorial engineering instruments** seem to be able to **contribute to the territorial appropriation of data**, particularly by **facilitating inter-organizational coordination** (Dionnet and Guérin-Schneider, 2014), the question of **territorial anchoring** and the **superimposition of norms** (local, national, European) to which it is exposed raises questions about the **durability** of these instruments.

. A **territorial governance** approach will make it possible to evaluate the **relevance and coherence of a regionalization of data policy**.

In conclusion: Is it possible to regionalize a data policy?

Territorial engineering instruments to foster the territorial appropriation of data

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> . Active forces in the territory . Diversity of actors . Shared governance (co-construction) . Improving capabilities of territorial actors . Adapted to territorial issues . Lever for territorial development 	<ul style="list-style-type: none"> . (In)compatibility of actors' games and strategies . Recent instruments (lack of hindsight and use cases) . Instruments dependent on the motivation of the actors . Representativeness of the ecosystem and scope of the actors . Implementation
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> . Lacks the legitimacy of local and regional authorities . The growing importance of data in territorial development . The multiplication of funding dedicated to data and artificial intelligence 	<ul style="list-style-type: none"> . Technical and technological developments (temporality) . Superimposition of standards and norms (multiplicity of systems) . Sustainability of governance systems . Adaptability of the system (relevance) . Maturity of actors

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Appendix

Summary of the Regions' positions on data in 2021*

Régions		Offensive	Entrepreneurial	Resilient	Defensive	Societal	Regulatory
Métropolitaines	Auvergne-Rhône-Alpes						
	Bourgogne-Franche-Comté						
	Bretagne						
	Centre-Val de Loire						
	Corse						
	Grand Est						
	Hauts-de-France						
	Ile-de-France						
	Normandie						
	Nouvelle-Aquitaine						
	Occitanie						
	Pays de la Loire						
	Provence-Alpes Côte d'Azur						
	Ultramarines	Guadeloupe					
Guyane							
Ile de la Réunion							
Martinique							
Mayotte							

* Preliminary results

