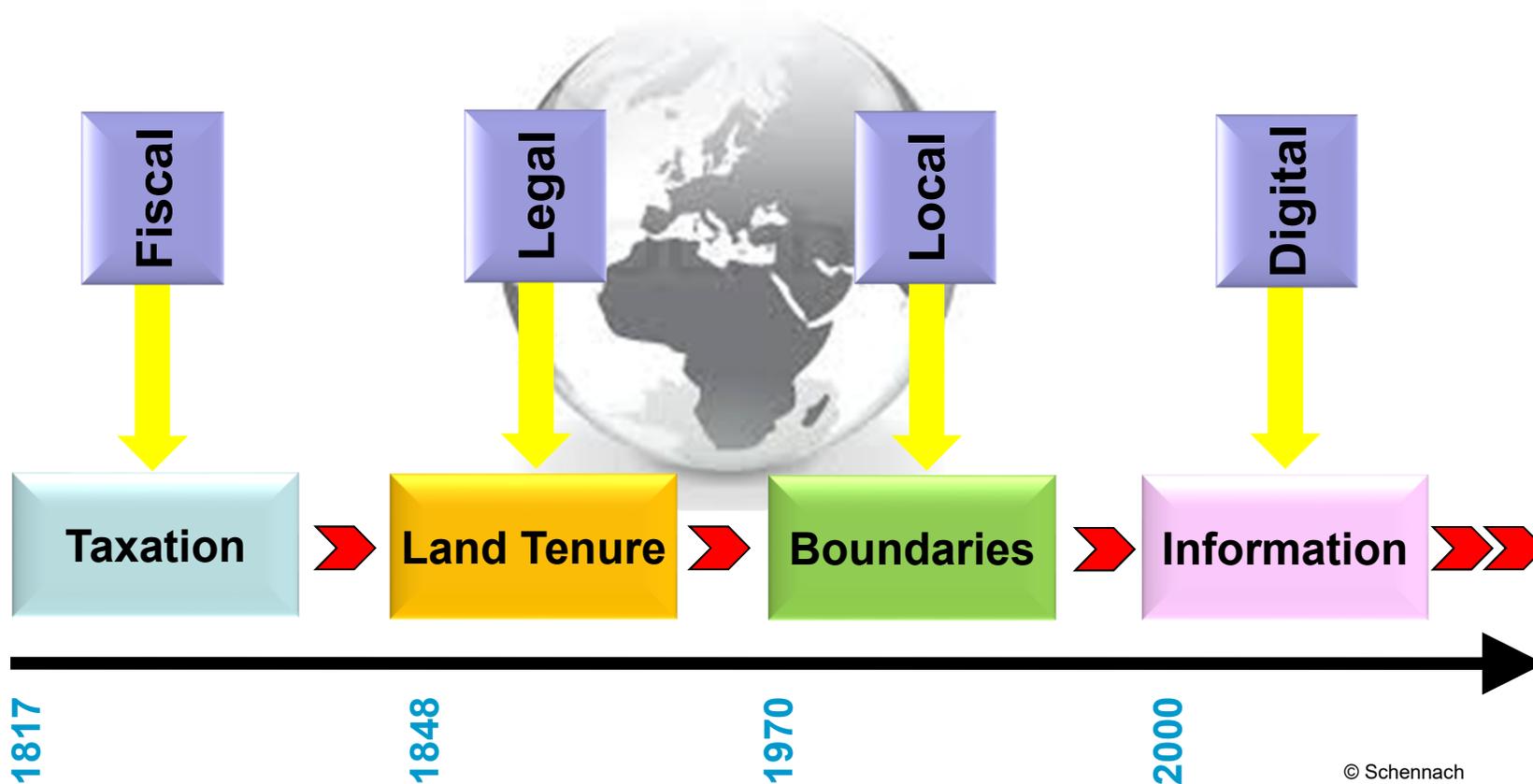


**Cadastre 4.0 -**  
**Integrating the community for**  
**global security on land tenure**

Gerda Schennach, Austria  
*Chair of FIG Commission 7*

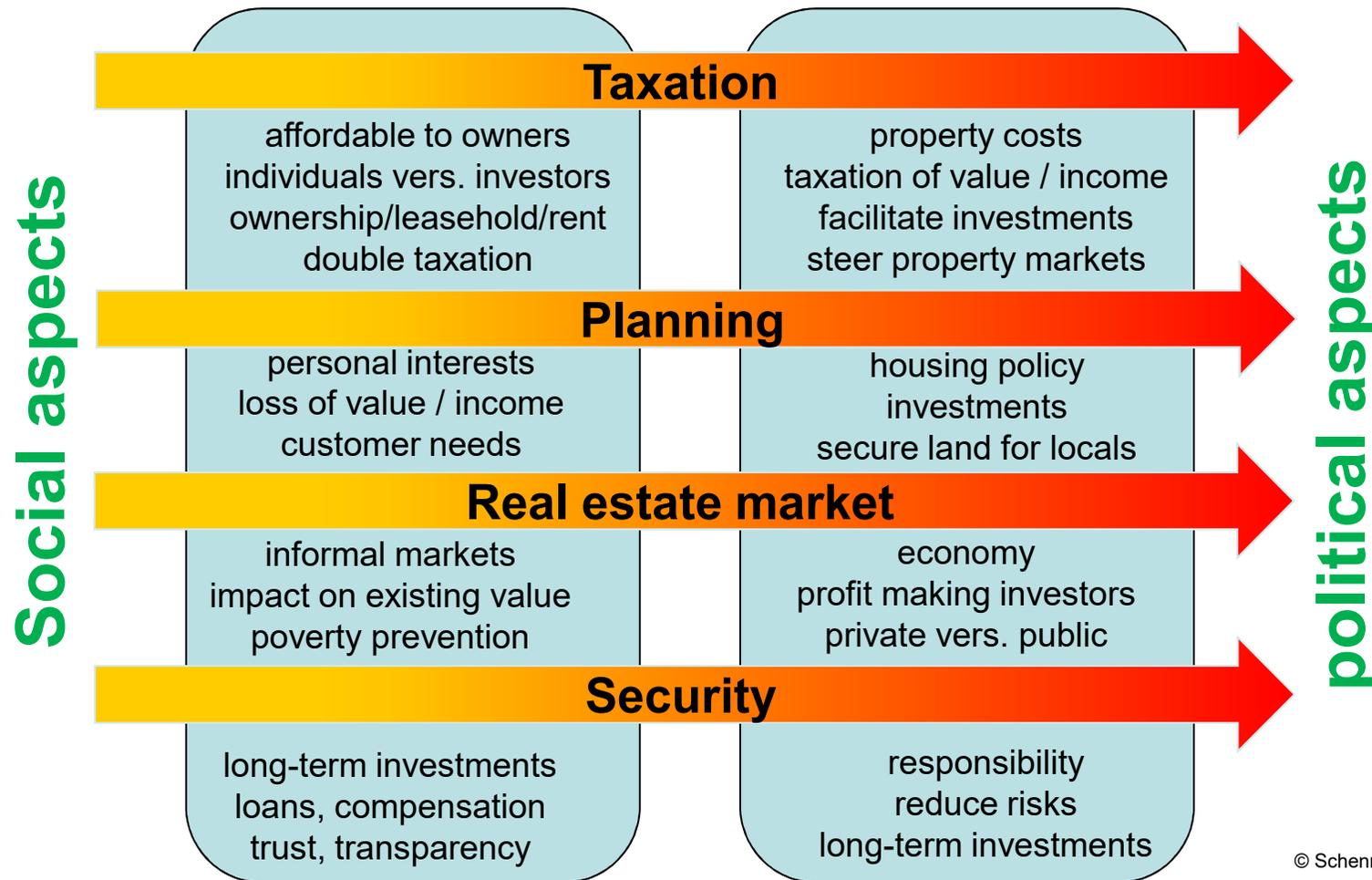
**Cadastre 4.0**  
**Integrating the community for global security on land tenure**

**200 years of innovation**



## Cadastre 4.0

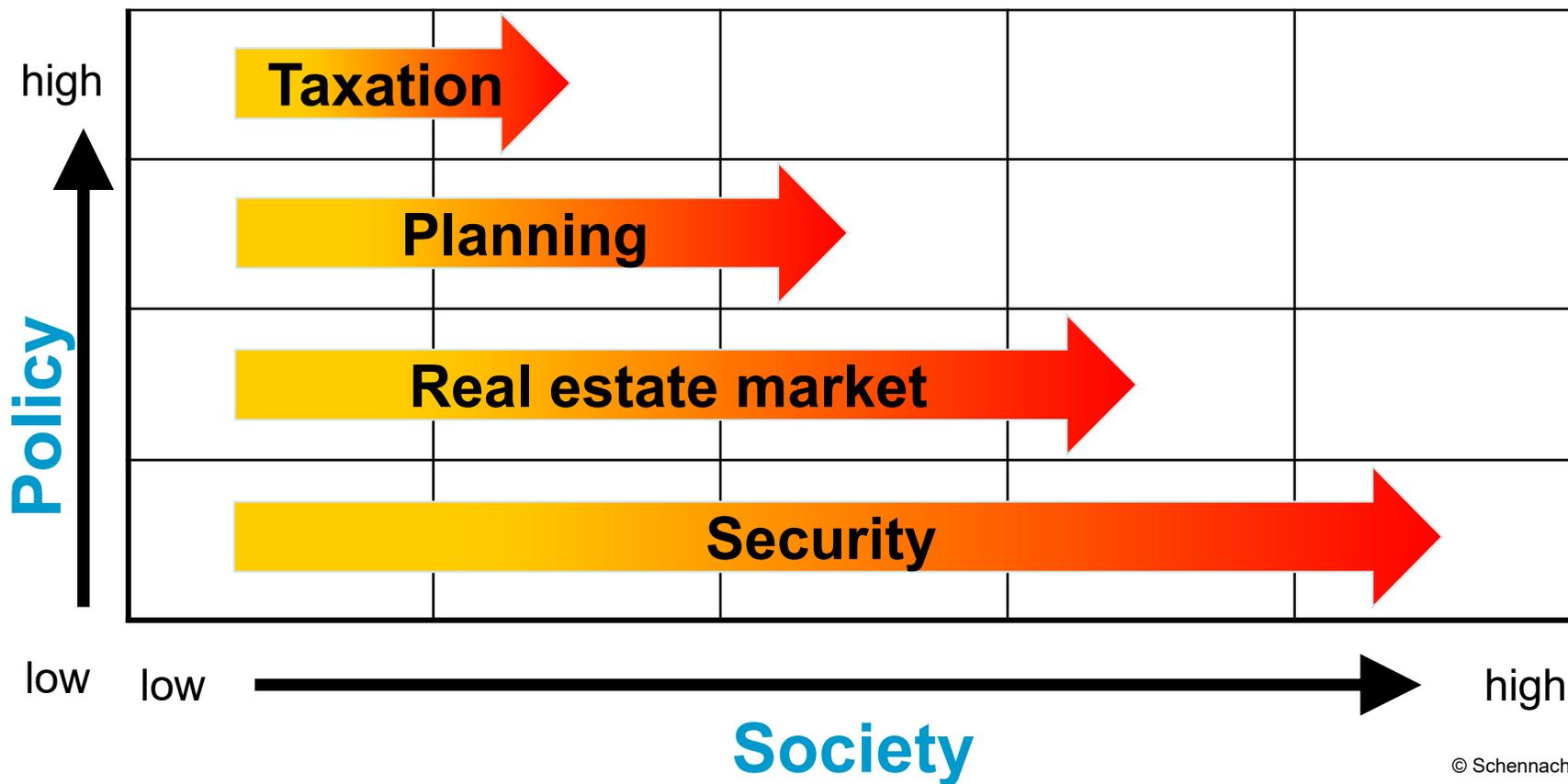
### Integrating the community for global security on land tenure



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# Global relevance



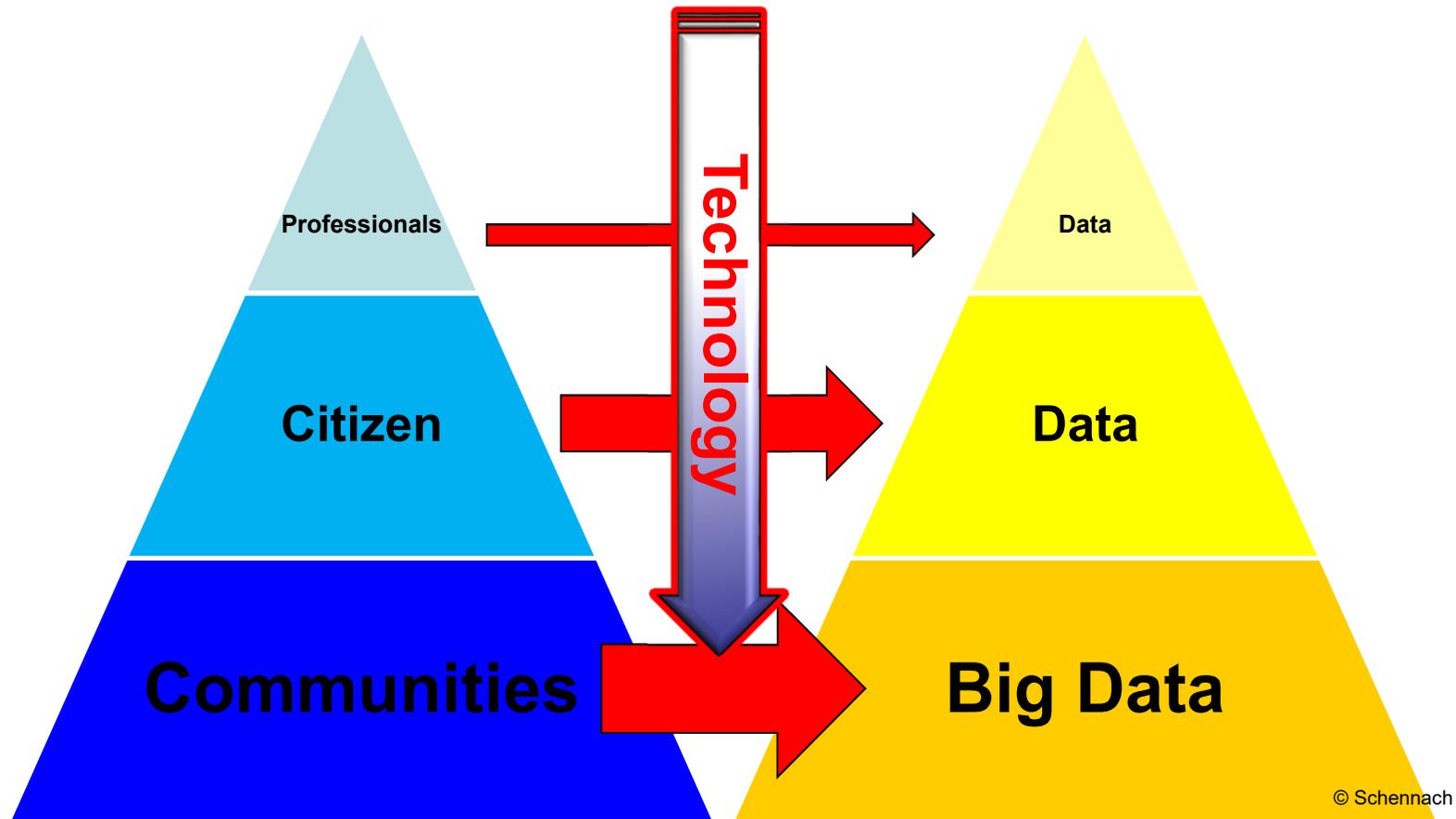
# What about technology?

- internet of things / VGI / sensors e.a.
- everyone produces and publishes everything
- data are accessible for everyone and become a public (community) good
- data reflect visible world  $\neq$  legal status
- smart procedures for selective processing of big data
- smart systems – automatic acquisition of data and information
- work is no longer bound to location of land
- users (land owners) equal partners in systems
- users (land owners) may be big players in systems

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# Data acquisition



# New business models

- communities produce **substitutes**
- society is user **and** producer
- open government data vers. open data
- **ownership of data** (citizen, third party, community data...) and structures (hosts, clouds.....)
- financing / self-financing / cost-benefit models
- **shift of power** from public authorities to communities/citizen
- distributed responsibility models
- public authorities take role as facilitator and moderator
- **users** equal partners in systems
- change of paradigm for professionals

## **The changing paradigm**

### **Cadastre for Society gets created by Society**

- **technology** is available and cheap
- **new type** user society growing
- land owners get **active** information providers
- citizen as **passive** data providers

### **Stakeholders become Decisionmakers**

- user profiles changing **communities**
- community creates their own "**regulations**„
- **standards** set by communities

### **Citizen become Shareholders**

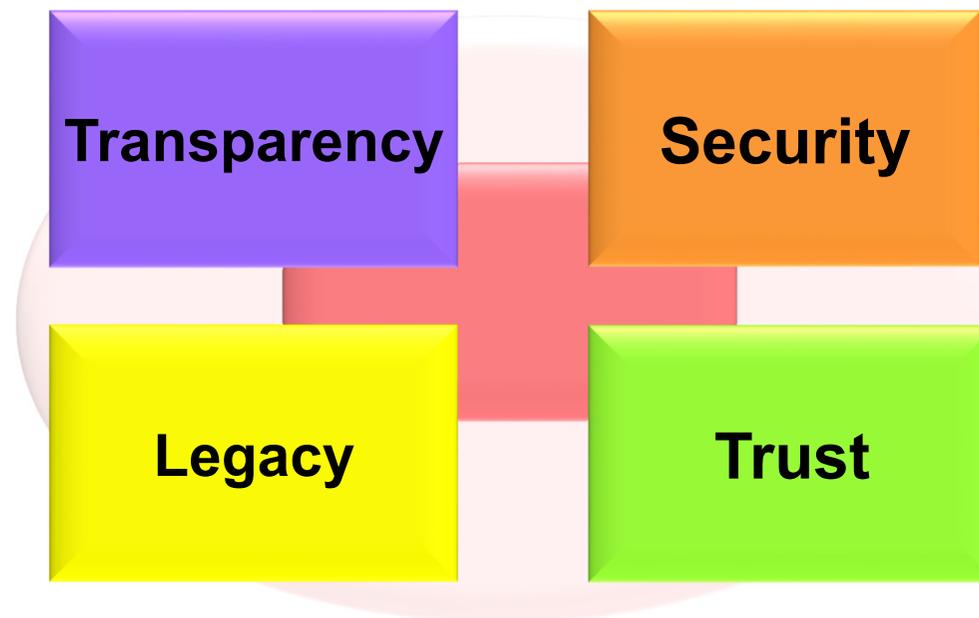
- communities are **core part** of the (formal) processes
- citizen are **owner** of information
- **self-monitoring** systems secure fit-for-purpose - quality

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# The 4 basic principles of cadastre



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# Cadastre 4.0

- services on demand by users provide **legacy** (cultural variety)
- flexible processes – defined in moment of request
- self optimising processes increase **security** for users
- datasets know at their creation where they will be integrated
- system finds data which is needed/appropriate from relevant data sources and creates product/service
- **transparent** to users ► citizen ► land owners
- infrastructures and potential of systems for big data mgt.
- decentralised steering on demand (authenticity)
- users and stakeholders intervene directly into the processes
- self-monitoring systems create **trust** (blockchain))

**Cadastre 4.0**  
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# **Cadastre 4.0**

***Cadastre 4.0 is a system based on fully automatically processing within a network surrounding of people and devices embedded in technological intelligence***

The aim is to get to a self-operating structure built upon intelligent devices and procedures and data collections where the demand is defining the process instead of building upon defined and fixed processes.