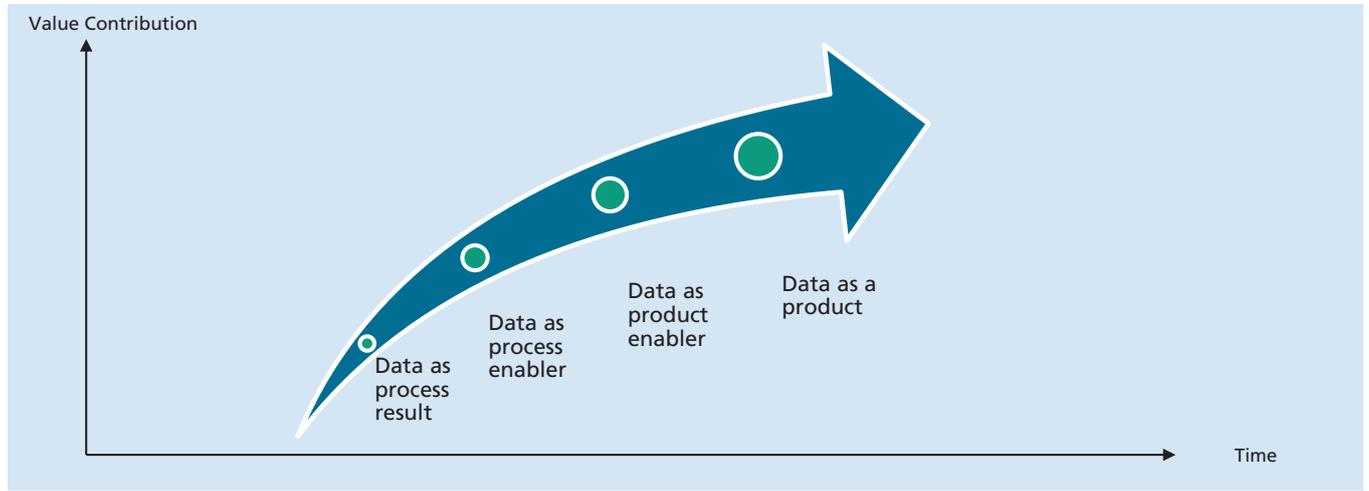


## The Digital Economy drives innovation in various sectors

Healthcare	Mobility	Retail	Manufacturing
 <ul style="list-style-type: none"> <li>– Personalized medicine</li> <li>– Translational medicine</li> <li>– Smart healthcare devices</li> </ul>	 <ul style="list-style-type: none"> <li>– Autonomous driving</li> <li>– Mobility services</li> <li>– Smart traffic management</li> </ul>	 <ul style="list-style-type: none"> <li>– Supply chain visibility</li> <li>– Goods and data traceability</li> <li>– Sustainability</li> </ul>	 <ul style="list-style-type: none"> <li>– Smart factory</li> <li>– Adaptive manufacturing</li> <li>– »Industrie 4.0«</li> </ul>
Product Innovation	Service Innovation	Process Innovation	Organizational Innovation

## Data has become a valuable key resource in these innovative scenarios

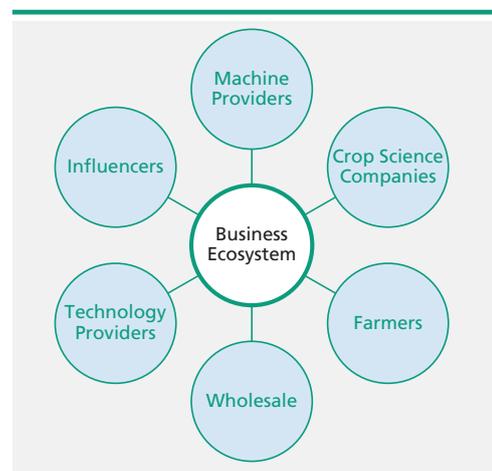


## Furthermore, the Digital Economy gives rise to the emergence of ecosystems – as the example of the farming industry shows

Digital Farming



Ecosystem

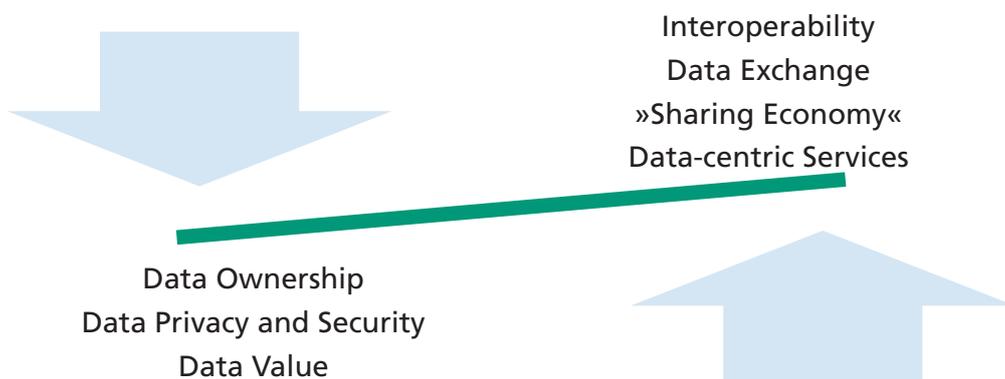


## Data sharing between ecosystem partners is key to success



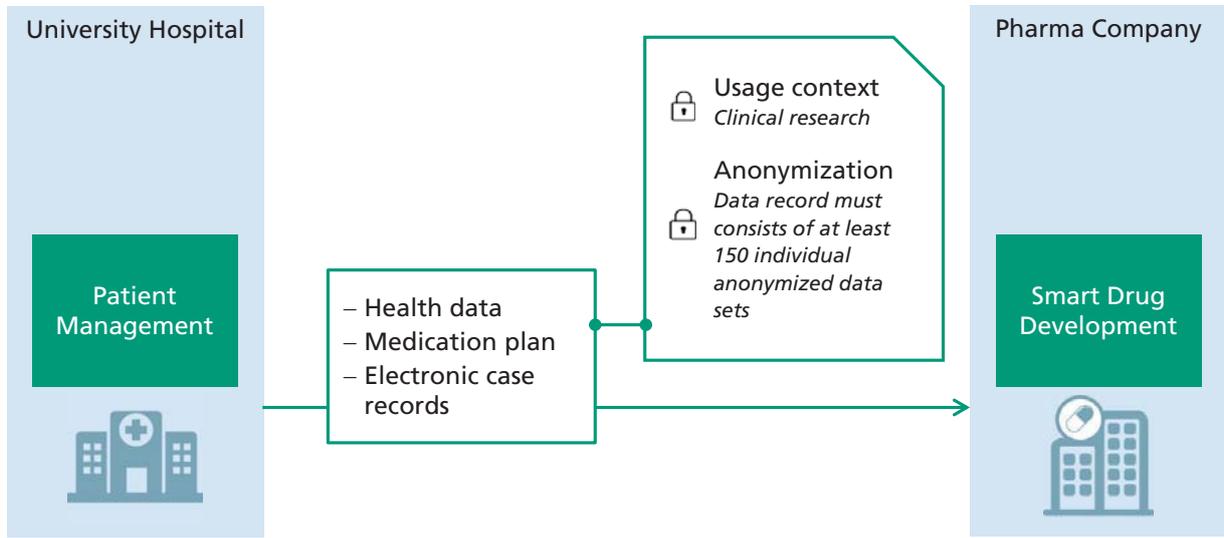
Image sources: Johns Hopkins University (2016), Umweltbundesamt (2016), Smellgard, Schneider & Farkas (2016), urbanmanagement.nl (2017)  
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## Both businesses and individuals end up in a conflict of interest – between the demand to share data and the need to protect it



Data sovereignty is the capability of a natural person or corporate entity for exclusive self-determination with regard to its economic data goods

# Data sovereignty is about attaching usage restrictions to shared data – as shown in a healthcare example



# Data sovereignty is a key prerequisite for the Digital Economy and requires an international effort

- Data sovereignty allows individuals and businesses to **benefit from their data** and thus, from the Digital Economy
- It enables data sharing while keeping control over it, hence, fostering **digital trade** and business interaction in **ecosystems**
- An **technical infrastructure** and **standard** for data sovereignty is required – as proposed by the **Industrial Data Space** initiative

## Data Sovereignty

Key Prerequisite for the Digital Economy

Prof. Dr.-Ing. Boris Otto  
Vienna · January 22, 2018