



# Rural technologies at your service

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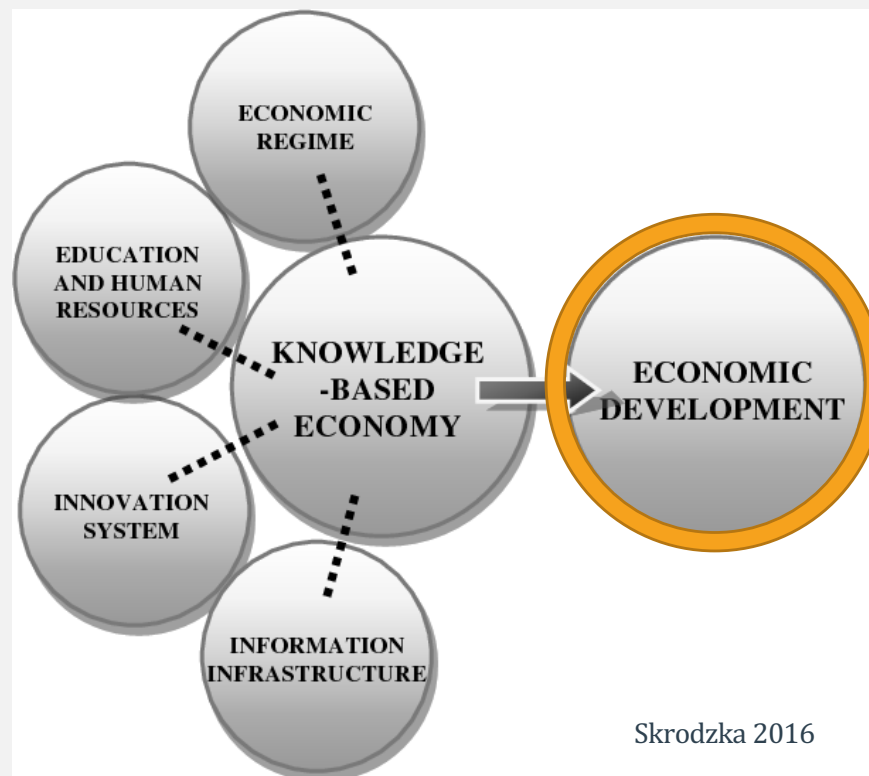
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## Rural technologies – what are they?



- Historically technologies have made agricultural work more efficient, safer and easier for the farmers
- Current technologies continue to do that. New possibilities arise that
  - **Connect** the rural businesses to networks
  - Enable **data-driven, knowledge-based economy, data society**
  - **Attract** new businesses and people to rural areas

## Data-driven, knowledge-based economy, data society



Knowledge is  
-created  
-acquired  
-transmitted  
-used

effectively by

-businesses  
-organizations  
-individuals  
-communities

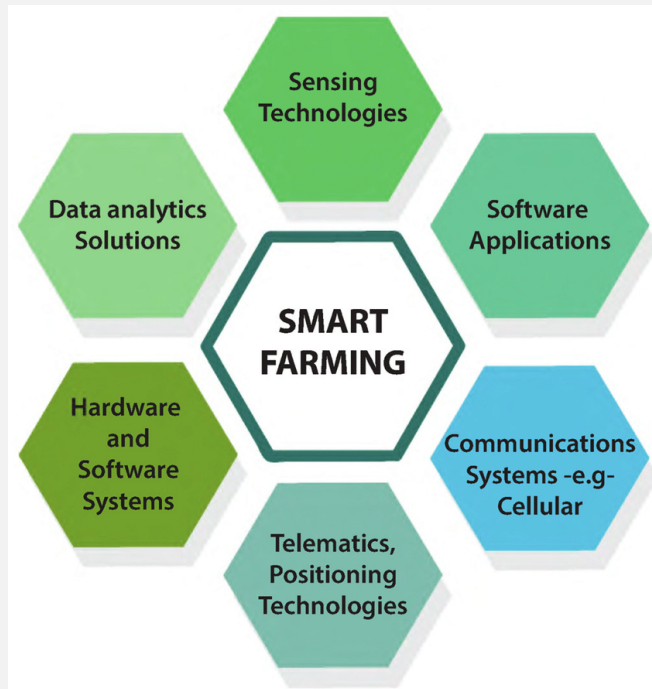


## Goal

- **New livelihood** is created in rural areas:
  - Use of new technologies improve farm productivity and environmental performance
  - The technologies reduce the importance of location (living, working, making business)
  - New businesses and people are attracted to rural areas



## Example 1/3: Smart Farming



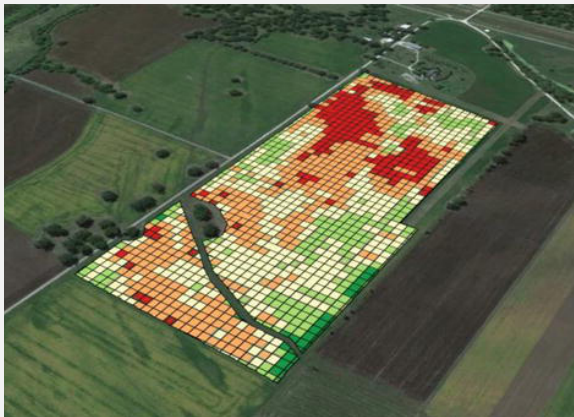
Several technologies:  
positioning, sensing,  
communication, data  
management and control



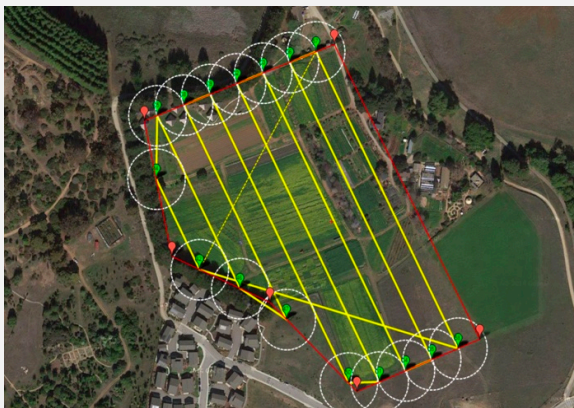
Possibility to produce  
**individually**, based on  
local circumstances and  
markets

# Smart Farming... Based on **PA**

Analyze



Measure



Precision  
Agriculture

Act



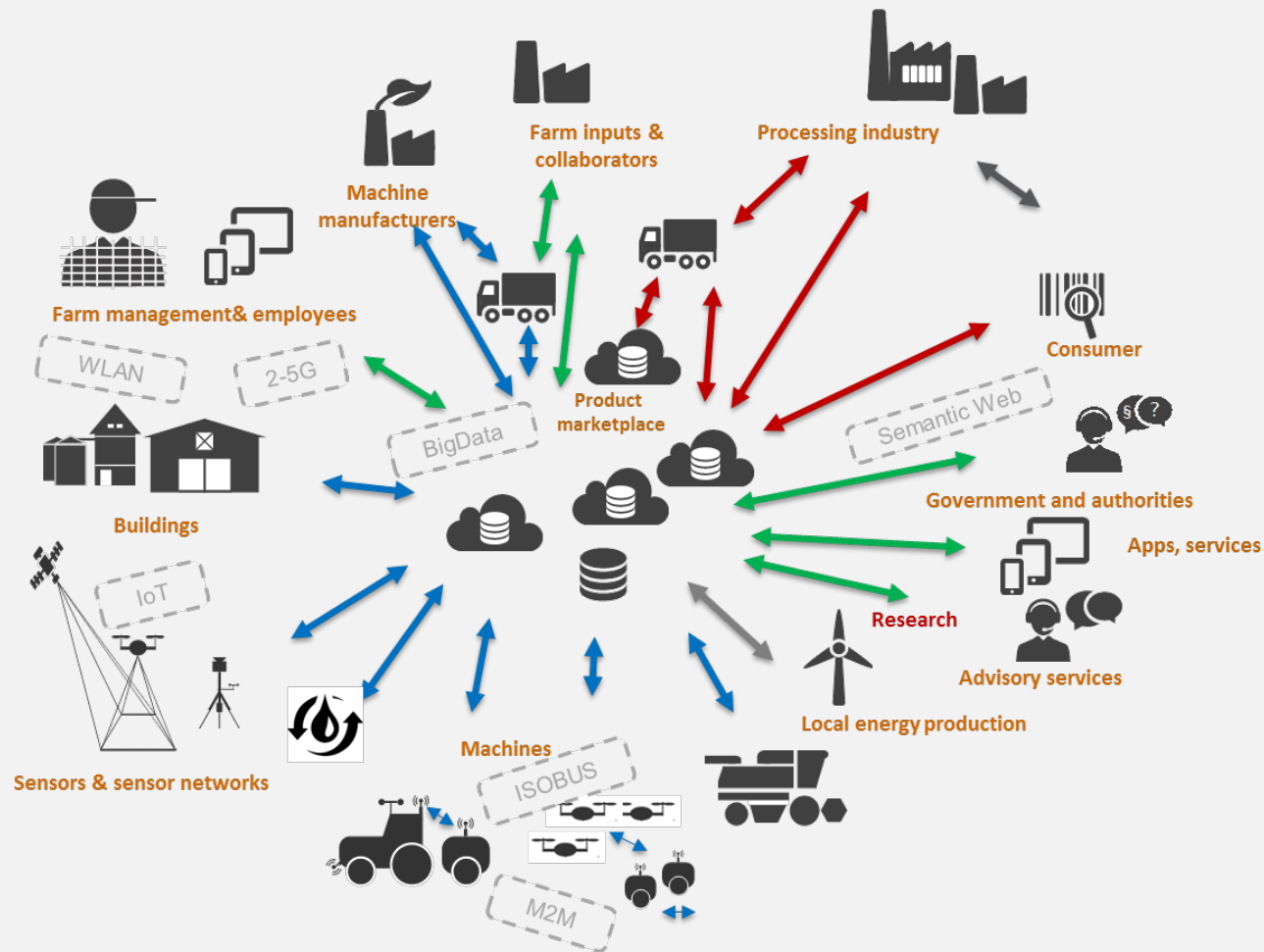
Act



Act



# Smart Farming... integration + networking



**Integrated technologies  
→ Farming on demand**

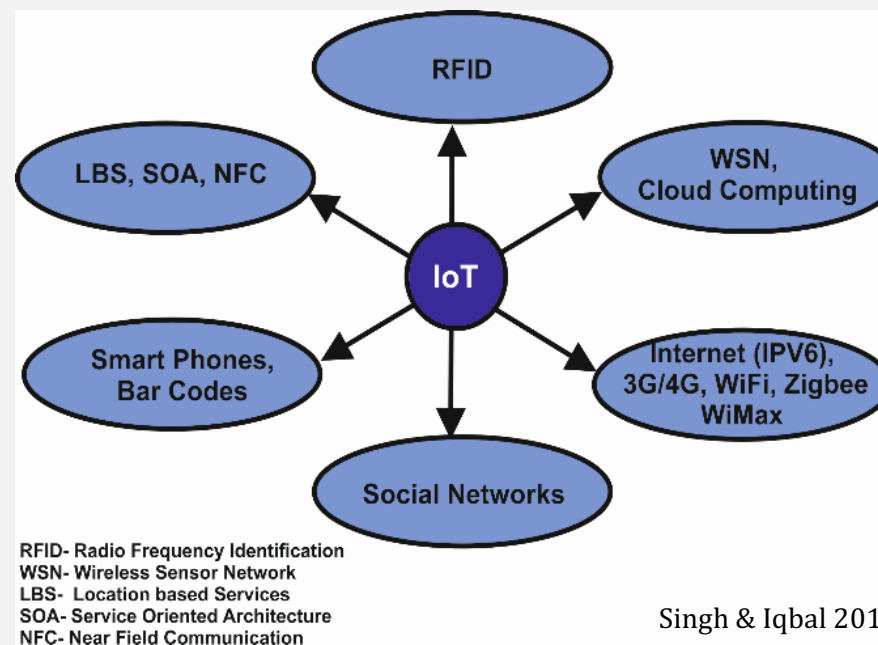


## Smart Farming... hidden technologies

- e.g. IoT:

### Internet of Things (IoT):

A system of **internet-connected objects** that are able to **collect and transfer data** over a wireless network without human intervention. The personal or business possibilities are endless.



## Example 2/3: Remote Working



Communication  
technologies



Free from location



New professionals and  
businesses to rural areas

## Remote Working... hidden technologies

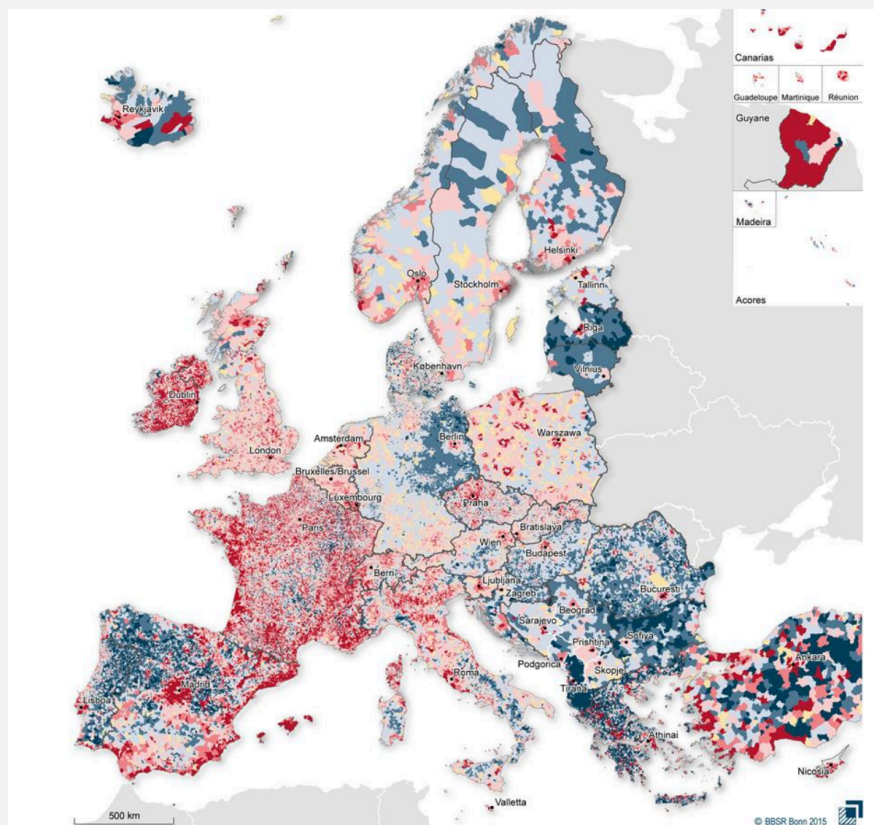
Again, several technologies  
are needed:

- VPN—A virtual private network
- VoIP—Voice over Internet Protocol
- Data Backup/Recovery
- Network Security
- Malware Protection
- Collaborative Tech Tools
- Cloud Technology
- Home Office
- Management/Project management tools
- Time Tracking



Lenovo 2020

## Example 3/3: Smart Shrinking



Building on local strengths



New livelihood to  
shrinking areas



## Smart Shrinking... Smart Villages

SDG-Smart Rural  
Villages



- the United Nations Sustainable Development Goals (SDGs)

## Smart Shrinking... Smart Villages



- A holistic and inclusive approach:
  - Citizens have access to connected devices.
  - Citizens access **digital services** as they need them, on time, anywhere.
  - Services are customized for the specific SDG needs of citizens.
  - Partner organizations are continuously learning and **adapting** their services.

International Telecommunication Union. Building Smart Villages: A Blueprint. 2020.

## Discussion

- To enable the positive development, we need:
  - An effective innovation ecosystem
  - Multi-Actor Approach:
    - Effective interaction of citizens, entrepreneurs, companies, universities, research organizations, advisors, investors, and government agencies
  - Easy access to the networked solutions (mobile apps...)
  - Intermediate technologies and tailoring toolkits
  - Fair rules for all participants
- Each area should build on its individual strengths and potentials!

## Connection

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