

SMARTER CITIES IN GERMANY A REVIEW AND OUTLOOK

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Urbanisierung in Deutschland: Lösungen der Städte und Kommunen
für die Herausforderungen der urbanen Entwicklung

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BUSINESS @ THE SPEED OF THOUGHT

In Pearson Education Limited 2008

The Internet has changed everything.

→ The Internet will change everything.

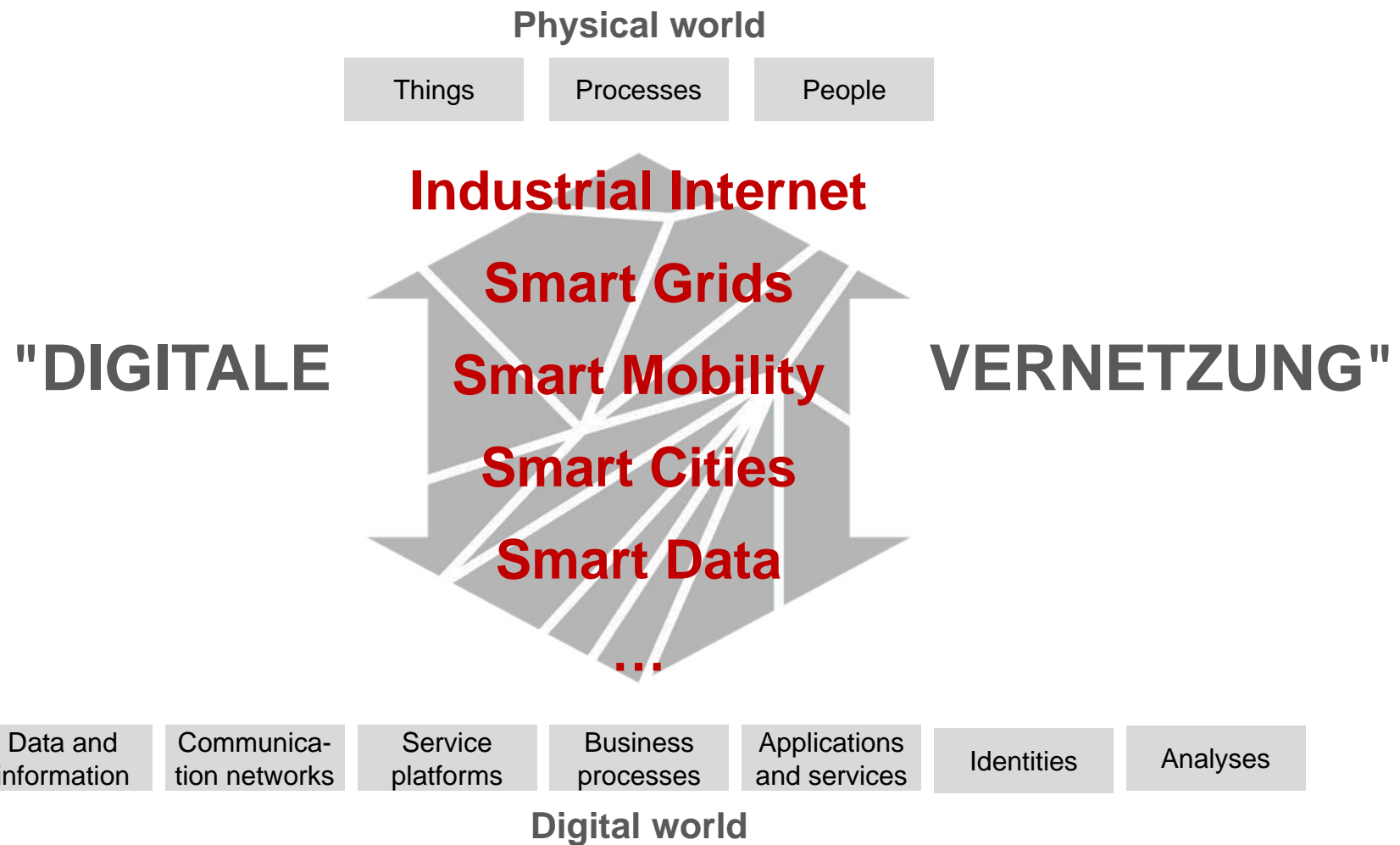
→ A network of networks will change everything.

→ A network of specialized networks will change everything.



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CONTINUOUS NETWORKING



WHAT MAKES A CITY SMARTER?

Environment

Cities that produce **almost no CO₂-Emissions** and are **highly energy-efficient**.

Resilience

Cities that are able **to mitigate the effects of climate change and terrorism**.

Resources

Cities that are profoundly **resource-efficient**.

Quality of life

Cities that provide the **best quality of life** for all residents.

The **Smart City** intelligently interlinks all its potentials and city systems

Society

Cities that **allow for political participation** of all their inhabitants.

Government

Cities that **open** up their public **administration** data and processes.

Climate Change

Cities that can easily adapt to the **effects of climate change**.

E-Mobility

Cities that foster the **change towards electro mobility**.

ALMOST 2000 SMART CITY DEFINITIONS, BUT ALL BASED ON DIGITAL NETWORKING

Study Mapping Smart Cities in the EU,
DG Internal Policies 2014:

*A city seeking to address public issues **via ICT based solutions** on the basis of a multi-stakeholder, municipality-based partnership.*



ICT as Enabler and Integrator for Smart Solutions

- National Platform City of the Future: Research and Innovation Agenda 2015
- acatech Integrating ICT for the City of the Future, 2014
- Morgenstadt City Insights Reports, 2013
- FOKUS Smart Cities Portal, Sept. 2011
- Münchener Kreis Smart Cities Conference in Berlin, Juli 2010

THE „SENSIBLE“ CITY



Cities develop
from solution providers to
platform providers !

EXAMPLES



Monitoring,
Control,
Optimization



Smart urban apps,
Open innovation,
Digital ecosystems



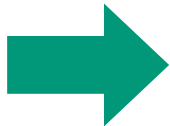
Crowdsourcing,
Digital
Engagement



Integration, Analysis and Collaboration Tools



Open Interfaces and Open Standards



Urban Data and Service Platforms



Public IT Infrastructures



STATUS OF SMARTER CITIES IN GERMANY

Cities and Communities

- Several Digital Agenda and/or Smarter City/Community Roadmaps
- Large amount of domain-specific pilots (some solutions transferred into normal operation), but often not cross-domain or platform-driven
- Often scattered responsibilities in different administrations and lack of know and expertise in digitization
- Various studies, metrics and rankings

Research and Development

- ICT for Smarter Cities Center at Fraunhofer FOKUS since 2011; eGovernment and Digital Public Services since 2003
- Fraunhofer Initiative Morgenstadt since 2012
- Acatech Initiative City of Tomorrow, 2012-2014
- National Platform City of the Future, 2013-2014
- Year in Science on City of the Future 2015
- European Innovation Platform Smart Cities and Communities since 2014

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