

Plattform Industrie 4.0

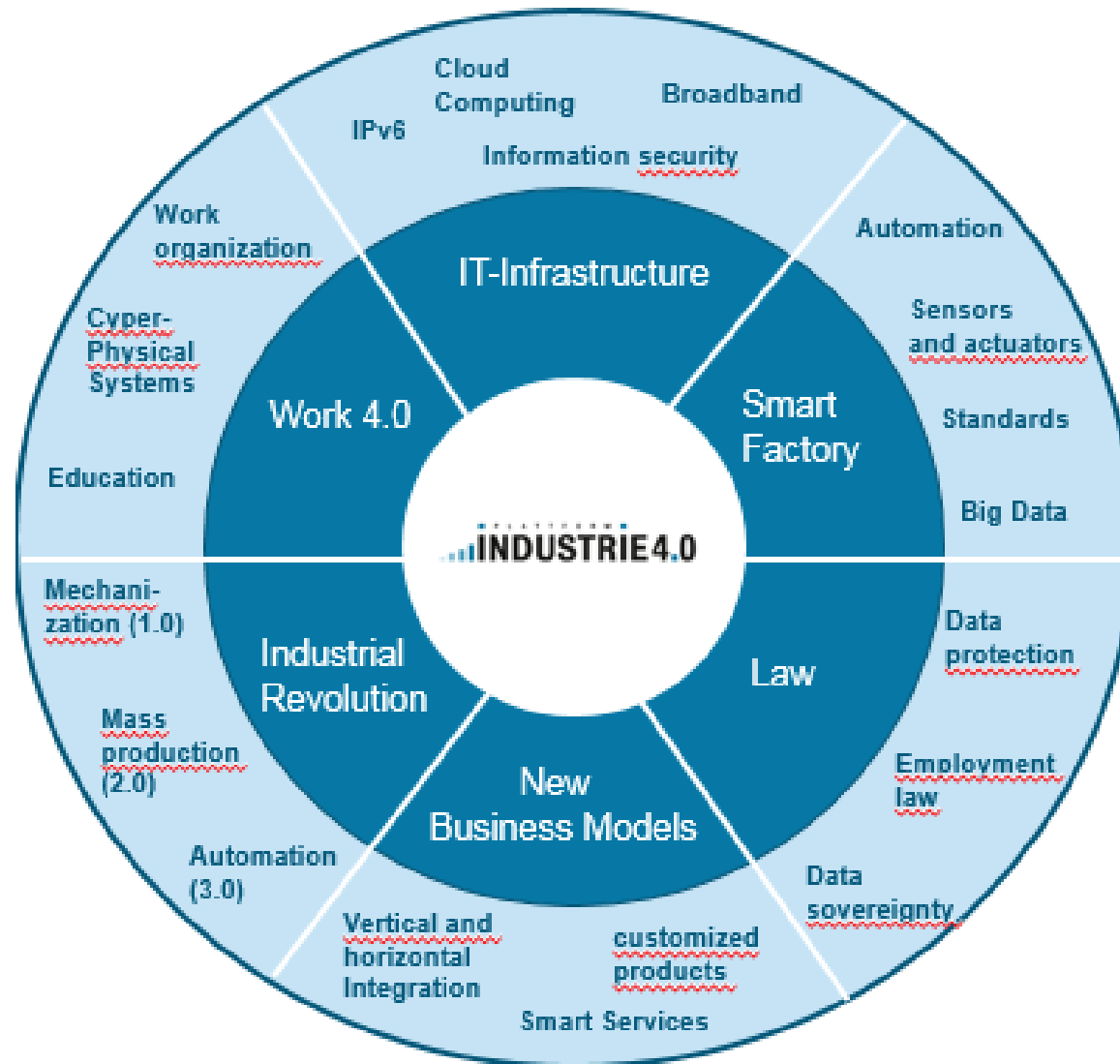
Digital Transformation „Made in Germany“

Vision: Industrie 4.0?

[What] Industrie 4.0 signifies the 4th industrial revolution, a **new stage of organization and control of the entire value chain along the lifecycle of products.** This cycle orients itself by increasing individual customer requirements and ranges from idea, order via development and production, delivery of product to the customer to recycling, including associated services.

[How] Basis is the availability of all relevant information in real time, by connecting all elements participating in the value chain, combined with the capability to deduce, from the data at any time, the optimal flow in the value chain. By connecting humans, objects and systems, dynamic real-time optimized and self-organized intercompany value networks are created, which can be optimized according to different criteria - costs, reliability and resource consumption.

What do we mean by Industrie 4.0?



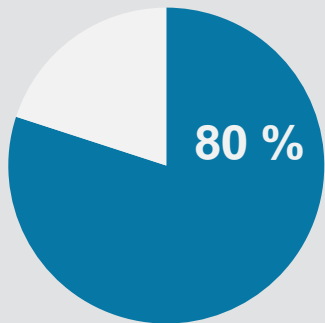
Industrie 4.0

Understanding Opportunities & Challenges

Industrie 4.0

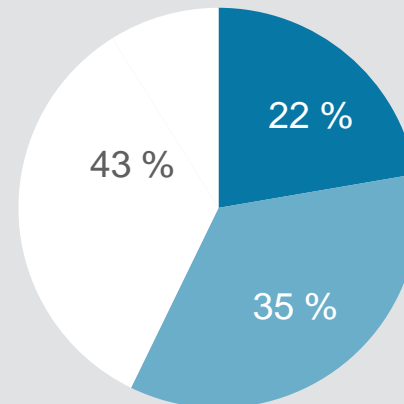
Chances and Challenges for SMEs

How many companies are actually already putting Industry 4.0 into practice?



of the companies in the fields of **electric engineering industry and the electrical industry** deal with the issue of „Industry 4.0“.

About **20 %** of these companies have implemented concrete industry 4.0 solutions.



Companies in the field of **machinery and plant engineering**

- Yes, intensively.
- Yes, marginally.
- No, but we heard about it.
- No, we have not heard about it yet.

Source: Survey among members of Zentralverband Elektrotechnik- und Elektronikindustrie e.V. (ZVEI), Oct 2014

Source: VDMA: Industrie 4.0-Readiness (Oct 2015); N= 431 companies in machinery and plant engineering with more than 20 employees

Plattform Industrie 4.0:

Shaping the digital transformation together

The digitale Transformation Needs a broad-based foundation

Industrie 4.0...

- ▶ ... is a project of and for society as a whole...
- ▶ ... , which requires a close alliance amongst the private sector, academia, politics, trade unions and associations ...
- ▶ ... and needs to be translated into practice and be implemented now.

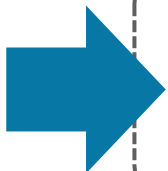


The **Plattform Industrie 4.0** provides support for the coordinated and organised transition into the digital economy in Germany

Plattform Industrie 4.0

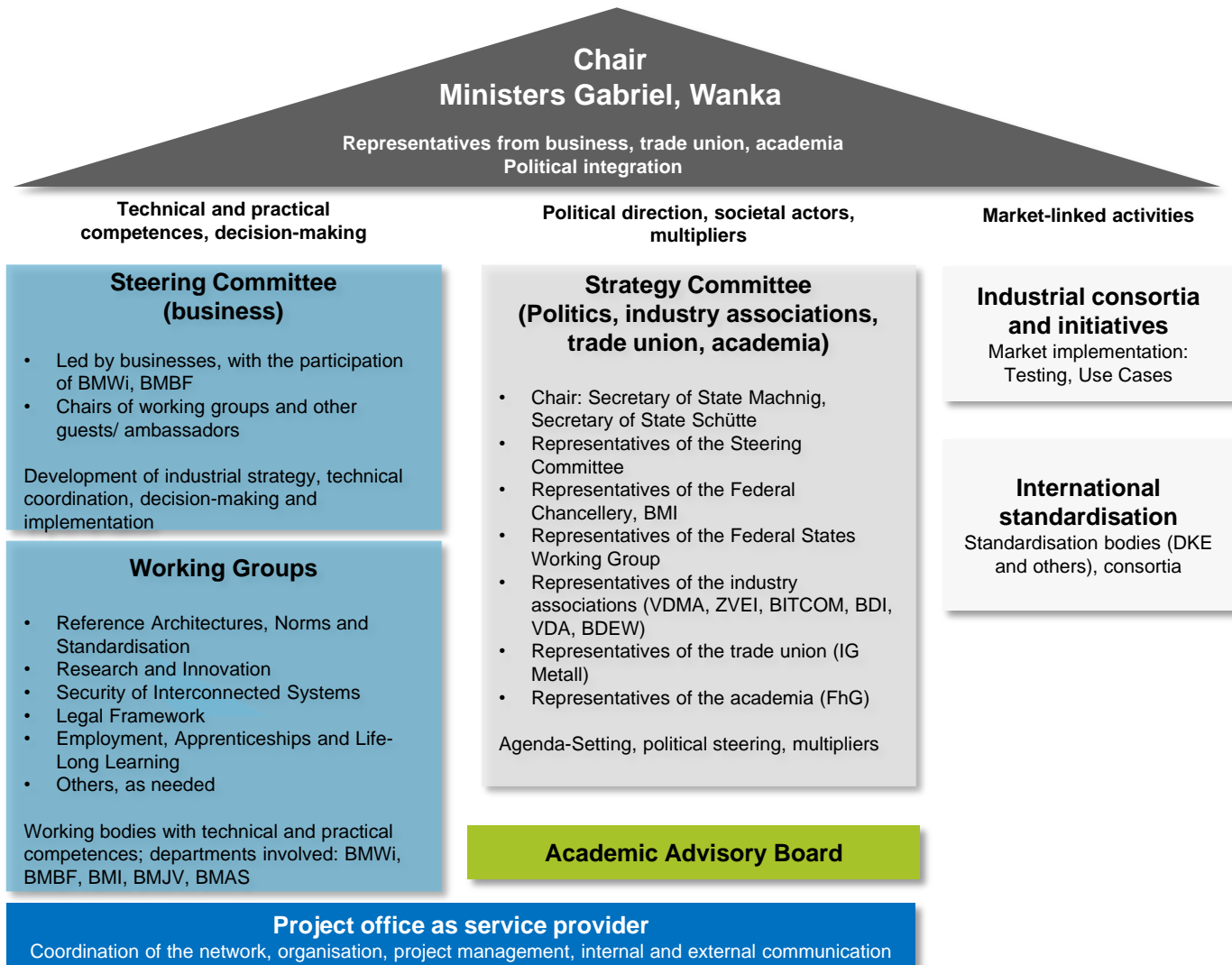
Five things we do.

- 1 Focus on the **needs of businesses** and of end users
- 2 Create a **central point of contact** (for international partnerships and alliances)
- 3 Ensure acceptance through high **transparency and participation**
- 4 Develop a common language, **objective and key messages**
- 5 Establish **clear structures** and reliable processes for the day-to-day work of the platform



The **Plattform Industrie 4.0** is the moderator of and catalyst for the exchange amongst all societal actors in the pre-competitive phase

Plattform Industrie 4.0 Structure



The Working Groups

The heart of the platform

- ▶ Five Working groups with focus on various thematic priorities
- ▶ The groups are understood as a work forum set up by representatives from businesses as well as works councils and trade unions
- ▶ Participation in the working groups is open for all interested and qualified representatives from businesses and works councils
- ▶ Criteria for the participation are a proven subject-specific expertise together with an effective mandate from the represented organisation and a regional multiplication effect



The Working Groups

Five thematic priorities

Reference architectures, standards and norms

Chair:

Dr. Peter Adolphs,
Pepperl + Fuchs

Research and innovation

Chair:

Johannes Diemer,
Hewlett Packard Enterprise

Security of networked systems

Chair:

Michael Jochem,
Robert Bosch GmbH

Legal Framework

Chair:

Dr. Hans-Jürgen Schlinkert,
ThyssenKrupp

Work, education and training

Chair:

Dr. Constanze Kurz
IG Metall

The Plattform Industrie 4.0: *Reaching out for SMEs*

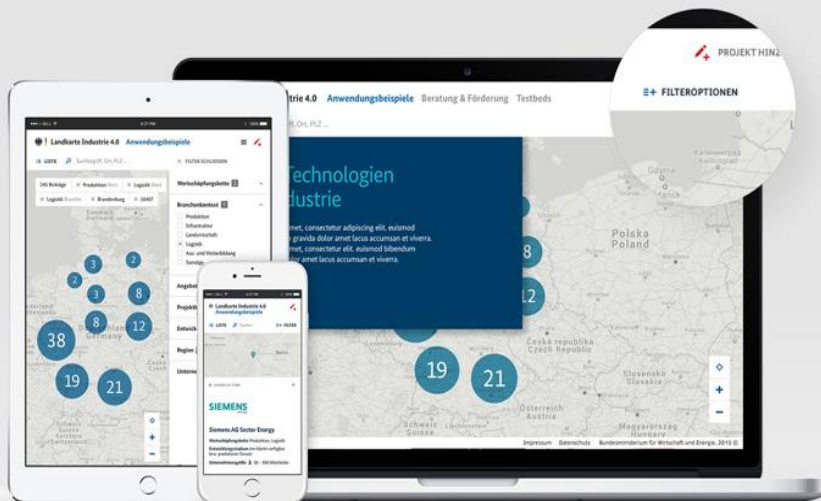
Virtual Map Industrie 4.0

Where Industrie 4.0 is put into practice already today.

>250 examples of application of Industrie 4.0...

...within **small, medium and large sized** enterprises from **various branches.**

Number of employees within the enterprises

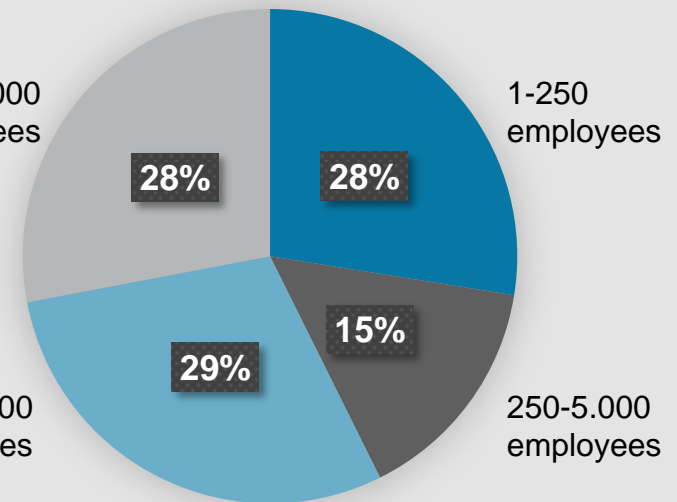


More than 15.000 employees

1-250 employees

5.000-15.000 employees

250-5.000 employees



[multiple answers possible]

<http://www.plattform-i40.de/I40/Landkarte>



Only available in German

Testbed network Industrie 4.0

Enabling SMEs to participate in the digital industry

The platform offers ...



Erproben



Vernetzen



Gestalten



...an overview of existing test-beds in Germany
and provides information on further support
structures to use those test-beds

Testbed network Industrie 4.0

Enabling SMEs to participate in the digital industry



Lowering the entry barrier by specific funding program

- Empowering SMEs to **evaluate I40 concepts**
- Facilitating the **cooperation between SMEs and public testing infrastructure**
- Dedicated call by Federal Ministry of Education and Research:
 - application of I40 concepts, technology open
 - **fast-track projects** (between 3 and 12 month)
 - up to 60% of funding (maximum 100k€)
 - **Matchmaking** between SMEs and testbeds coordinated by **independent agency**: “one-stop agency for SME”

www.i4kmu.de





Digitization – Evolution or Revolution?