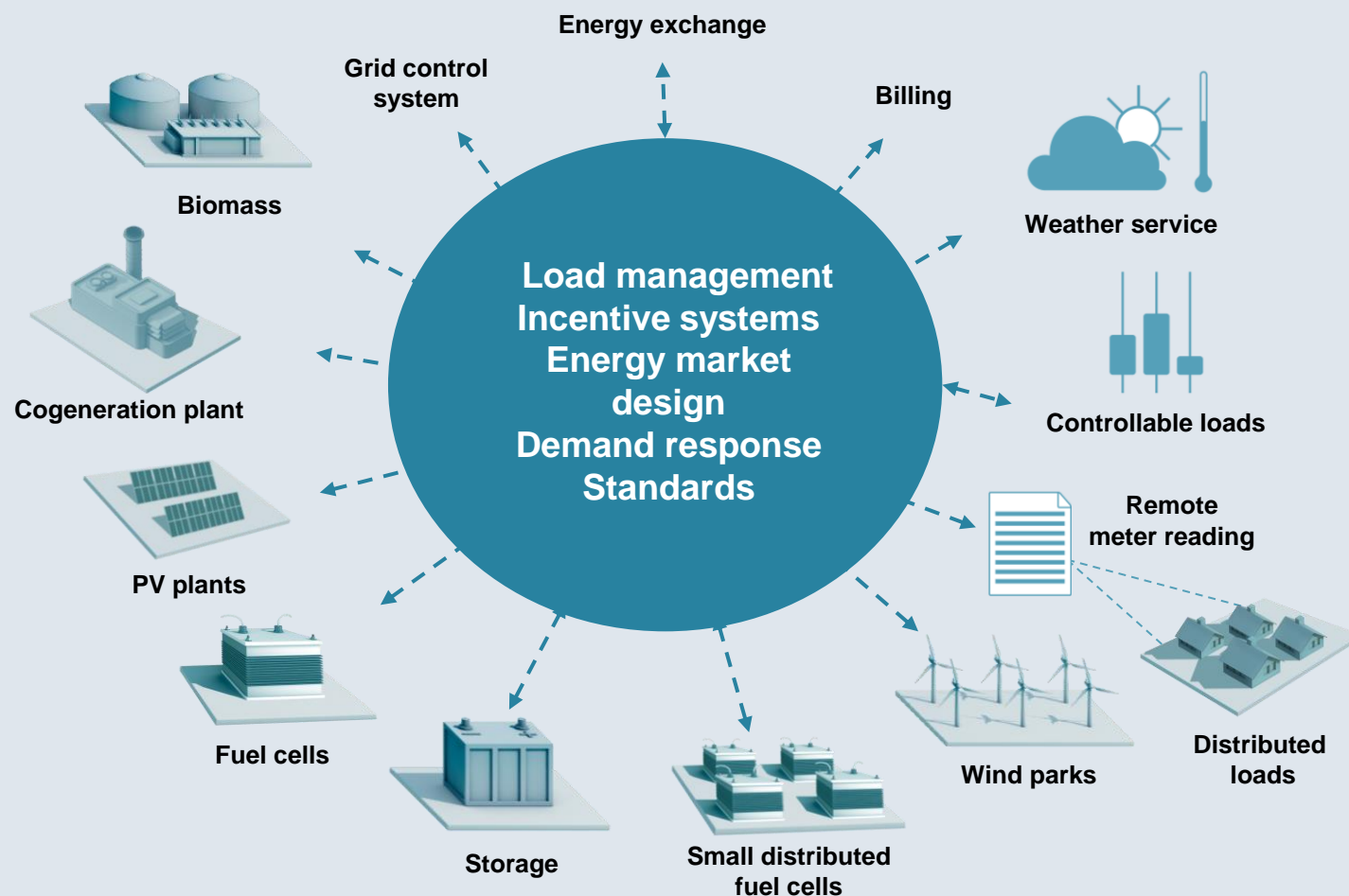


SIEMENS

Future-proof power supply for industry

Ralf Christian | CEO Energy Management Division

Energy systems need to become smarter and more flexible – time for industrial enterprises to get active



Challenges

- Ever more complex energy systems
- Changing energy purchasing situation for industry
- Industrial enterprises need a holistic energy management strategy to:
 - Enhance energy efficiency
 - Ensure supply security
 - Guarantee the protection of personnel and equipment

Energy efficiency as an economic factor: Digitalization forms the foundation



Challenges

- Energy as a cost factor
- Legally prescribed energy audits every four years
- Different dimensions of energy efficiency
 - Economic
 - Environmental
 - Legal
 - Structural

Solution

- Integrated solutions using Totally Integrated Power (TIP)
- Planning tools
- Energy monitoring and measuring systems
- Broad-based energy management

Supply reliability must be guaranteed: A one-hour power cut costs 1.3 billion Euro in Germany (ZVEI)!



Challenges

- Variable infeed
- Stabilization of power grids
- Voltage and current quality
- Plant and grid dimensioning

Solution

- Integration of storage solutions
- Intelligent substations with regulated distribution transformers
- Active energy management for companies
- Distributed energy supply

Digitalization requires new protection concepts for industry: Ensuring trouble-free production

Integration into industrial automation

Project engineering software PowerConfig

Link to automation via bus systems,
Profibus, Profinet.



Integration in energy efficiency solutions

Integrated measurement
and communication function.



3VA molded case circuit breaker

Integrated system for failsafe production
processes with maximum availability



Integration into automated planning and engineering processes

EPLAN Data Portal, EPLAN ProPanel (3D planning), Simaris-Tools

Consultancy,
planning



Engineering



Installation,
commissioning



Operation



Servicing,
modernization



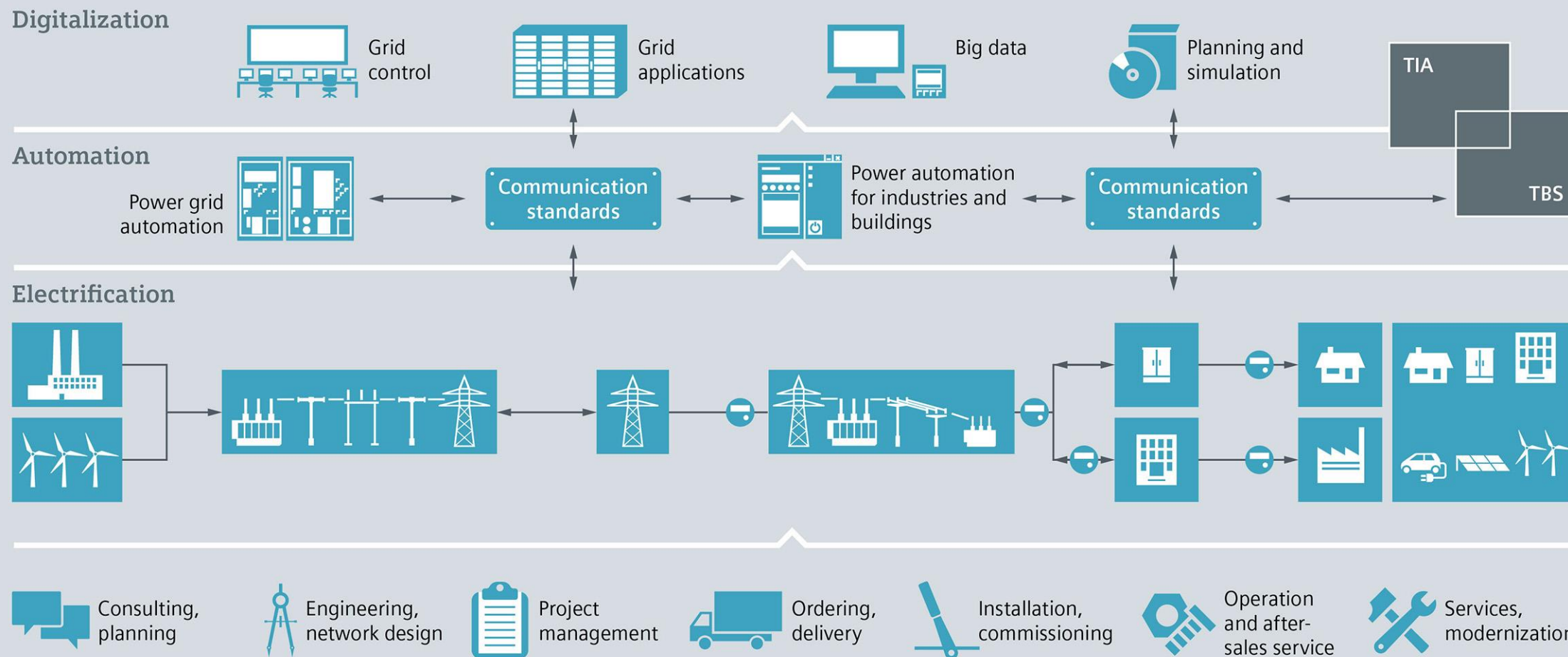
Challenges

- Networked automation with variety of sensors and actuators
- Safeguarding availability
- Managing data volumes produced

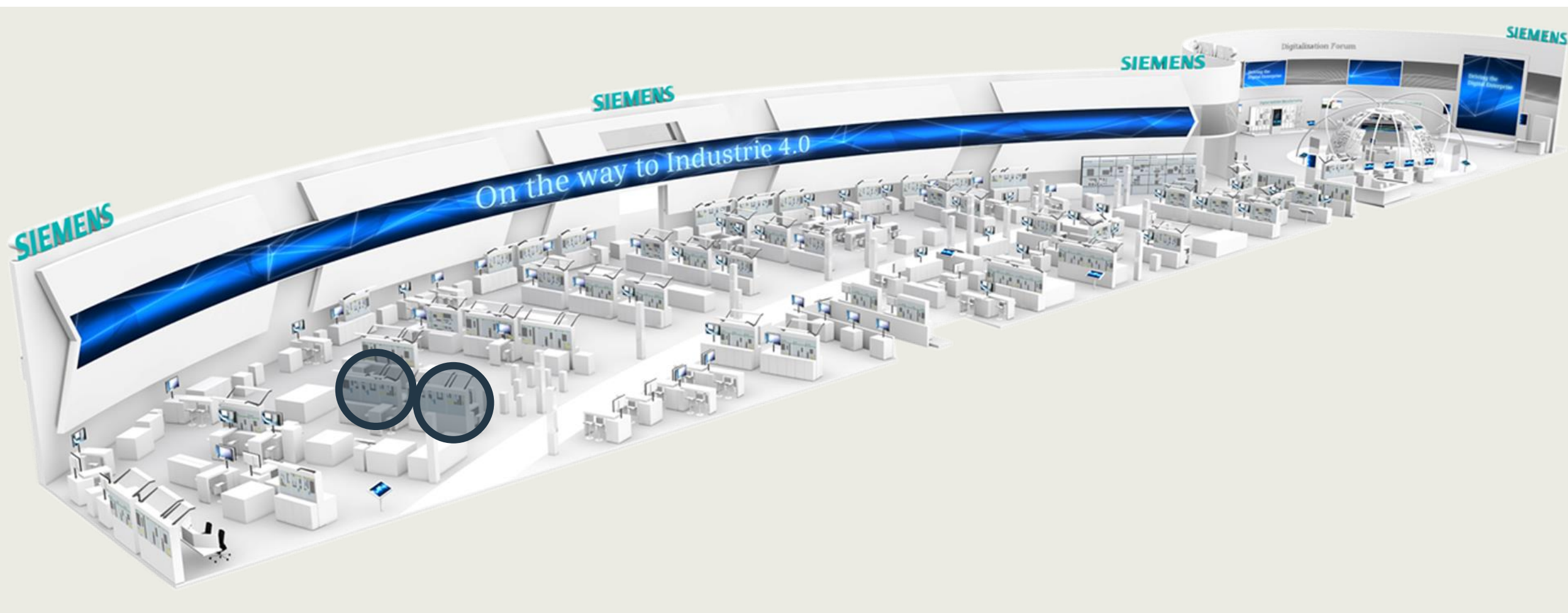
Solution

- Integrated protection concepts
- Devices with communication capability such as 3VA MCCB
- Automated mechanical and electrical engineering

Totally Integrated Power (TIP): Integrated solution for industry



Totally Integrated Power trade fair highlights



Totally Integrated Power trade fair highlights

3VA molded case circuit breaker



- Comprehensive data support automated engineering
- Completely able to communicate
- Transparency across all consumption figures and plant conditions



