Industry 4.0 – The path for competitive advantage
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TRUST ME, I'M AN ENGINEER
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video: The Fourth Industrial Revolution

https://www.youtube.com/watch?v=SCGV1tNBoeU
‘Industrial companies are in the information business whether they want to be or not’

- Jeff Immelt, GE
THE INTERNET OF THINGS
AN EXPLOSION OF CONNECTED POSSIBILITY

- 2002: 1,000,000
  - About the equivalent of the population of San Jose.
- 2003: 0.5 BILLION
  - 8.49% increase in connected devices in just one year.
- 2009: IoT INCEPTION
  - Cisco estimates the IoT was born sometime in 2009.
- 2013: 11.2 BILLION
- 2014: 14.4 BILLION
  - Today, there are twice as many things connected to the Internet as human beings on the planet.
- 2016: 34.8 BILLION
  - Devices that are a step beyond will become more prevalent—traffic-light cameras, parking spot sensors, entertainment features and smart energy meters are all talking to other machines via broadband.
- 2017: 28.4 BILLION
  - 2018: 8.7 BILLION
  - Join the experts at The National Intelligence Council has recognized IoT as one of the 10 most "emerging" technologies—with impacts that will last through 2025.
- 2019: 42.1 BILLION
- 2020: 50.1 BILLION
  - Taking population predictions into account, there will be about 8.6 devices per human on the planet.
New IoT technologies enabler for massive application

- **1 Gbit/s**: Used for high-speed data transfer.
- **100 Mbit/s**: Suitable for medium-speed applications.
- **10 Mbit/s**: Common for standard internet connections.
- **1 Mbit/s**: Typical for basic broadband services.
- **100 kbit/s**: Common for dial-up internet connections.
- **10 kbit/s**: Often used for very basic data transfer.
- **1 kbit/s**: Used for simple text and voice communications.

The diagram illustrates the different data speeds and their corresponding ranges, from 1 kbit/s over 1 Mbit/s to 1 Gbit/s, indicating their suitable applications based on the required data speed and communication range.
Survey: 2,000+ respondents in 26 countries from all industries
The golden bullet: First movers achieve both significant revenue growth and cost reduction

196

% of companies achieving >30% increased revenue and >30% reduced costs simultaneously by 2020

10% All Companies
27% First movers
The 3 biggest challenges starting with Industry 4.0

People  
Data  
Leadership
The Data, People, Culture challenge

62% of information technology and business executives surveyed by PwC believe that Big Data has significant potential to create business advantage.

3 Key Challenges
Survey respondents also acknowledged three key Big Data challenges:

- 58% indicated that transitioning from data to insight is a major challenge.
- 41% noted that their systems cannot process large volumes of data from different sources.
- 25% said they lacked the talent to undertake deep analysis of Big Data.
Trumpf: from leader in machinery to leader in digital production

Connect. Create. Control.

The digital business platform for manufacturing companies and manufacturers.

Learn more about our Solutions:

Smart Enterprise IoT Platform

www.axoom.com

A global perspective on Industry 4.0

PwC
“The one who owns the platform will basically dictate what’s going on, and now we have one of those platforms. It’s that simple.”

- Stephan Fischer, Trumpf
Predictive maintenance brings advantages to clients and service providers

Less interruptions of service as usual.  
Shorter interruptions caused by maintenance.  

High reliability  
High efficiency

Less stress on maintenance services.  
Lower amount of spare parts required.  

Less demanding  
Less working capital
Trust me, I'm a ROBOT
Thank you!