Swiss Digital Agenda

Observations
- **Ubiquity of Informatics**
  - Smart devices
  - Transportation
  - Medicine
- **Opportunities**
  - What are they?
- **Risks**

Trends
- **Novel sensors**
  - Autonomous systems — self-driving cars, trains
  - "zero-power" systems
- **Improved communication infrastructure**
  - Longer distance
  - Higher rates
  - Lower costs
  - Consequences
    - Easy data accumulation
    - Permanent interaction
- **Decreased storage costs**
  - Increased storage capacity
  - Enables long-term, large data sets
- **Increased processing capabilities**
  - Enables compute-intensive apps
    - real-time speech translation
    - simulations
    - data analysis
    - data mining

Advances
- **Big Data** — Rise of data-driven science
- **Always connected**
  - Enables fast reaction to customer needs
  - New models of service provision — eg Uber
- **Better simulation and modeling**
- **Attacks on privacy** — What is the advance?

Actions
- **Build broad foundation** — Teaching/training at all levels
- **Provide showcases and surprises**
- **Maintain technology leadership** — Maintain and strengthen top research
- **Teach the teachers**
- **Federal government as an example** — Buy services or prototypes from startups — Instead of giving away "startup grants"
- **Gain leverage for SMEs** — Develop a program to connect SME with technical colleges

Questions
- What are the challenges?
- What is the economic impact?

Key ideas from Informatics and the Future of Switzerland
SI Task Force June 10, 2015