Social, Political and Human Challenges of the Digital Transformation

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The most important and difficult challenges are on how **social**, **political** and **life-style** processes adjust to the deep changes brought by a powerful enabling technology

Admirable progress in:

- digital computer power and convenience

- mobile ever higher-speed telecommunications

- robotics.

Staggering promises of:

- large data set analytics

- artificial intelligence

- further cyber-physical applications

- and their convergence.

One face of the coin:

- The involved challenges are worth targets of the **attention of the most creative minds**

- **National public policy** must ensure the conditions for the flourishing of these areas **at the frontiers of knowledge**

Ambitious well-crafted public measures are required.

The other face of the coin:

1) **In economy:**
   Ever more powerful digital technology deployment,
   if untamed (i.e. **well regulated** and **taxed**) drives
   unbalanced higher concentration of capital
   in much fewer people and nations
   (due to **monopolist** effects of large networks and **global
   reach** and **scalability** of the immaterial digital technology).
   Revenues of capital and of work drift further apart.

   Besides, digital systems replace routine workers in
   growing complexity tasks.
   Good job opportunities require more and different **education**.

The other face of the coin:

2) **In society:**

Increasing knowledge is required to deal well with sophisticated digital applications and to understand the conditions of their use for personal and collective benefit.

This again drives **inequality** and requires **higher levels of general education with different goals**.

A new generation of education policy suitable to the digitally transformed society and economy is needed (e.g. much higher **analytic capacity** and **critical thinking**). It is not just digital literacy and skills.

The other face of the coin:

3) In politics:

Representative democracy processes developed for the **printed paper** one-to-many asynchronous mediated communication are **breaking down** with the prevalence of instantaneous and visually compelling **TV communication** and ludic interactive **social networks**,
with **fake-news** that spread fast and widely and cannot be countered effectively with all who have received them, and the **tendency to just follow like-minded people**, opening a wide avenue for **populist** politicians**.**

New political processes have to be developed
for democracy to thrive in the digitally transformed society.

The other face of the coin:

4) **In persons:**
   Smart-phone enabled digital communication and applications, if unchecked, **capture such an high attention span** of each person in superficial remote activities that **quality time** for **deep thinking**, **meaningful deliberation**, **concentrated analyses** and **study** becomes too scarce (we only need to watch digitally born millennials for a few hours and how they avidly use smart-phones to grasp this).

   The catch: When you need more knowledge and more advanced education to deal well with digital technology, you are more distracted by that technology and have less quality time to engage in deep personal learning.

These are far more important and difficult challenges than the purely technological.

It is by answering them that the sustainability of open democratic societies with quality of life will be decided.

We urgently need these challenges be addressed at least as effectively as those of digital technology progress.

**We must quickly bring this objective
to our agendas and to the Public Policy Agenda**