Technology Facilitation Mechanism

Multi-stakeholder Forum on FTI for SDGs

Session 6: Emerging Frontiers: Evolving STI developments with implications for SDGs

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Humanity is at a turning point

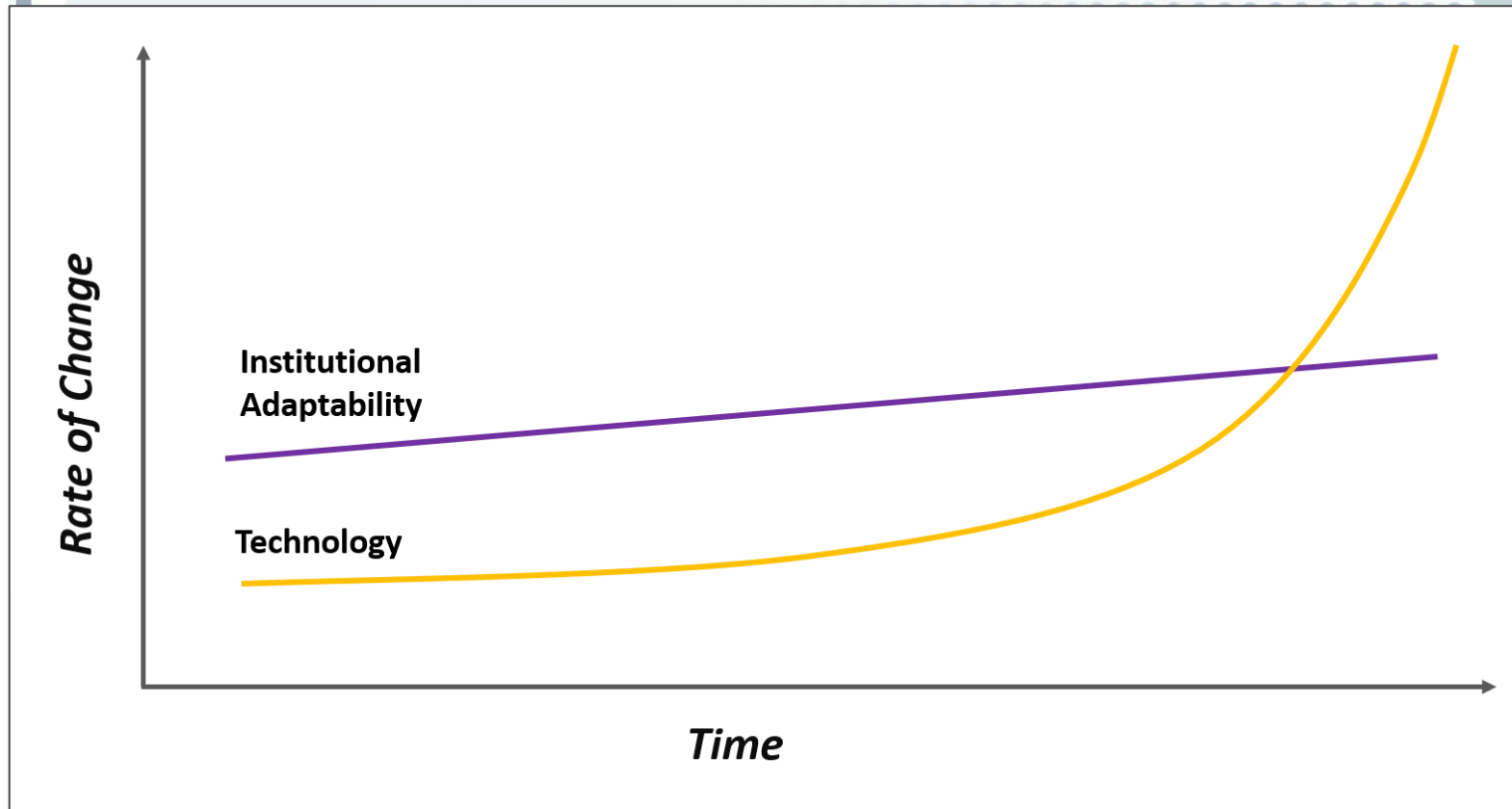We are entering the most disruptive era in human history, driven by exponential technological change

- Extraordinary opportunities
- Huge challenges

- So far, technological progress has generally played a positive role, BUT…

- Unlike other periods of great transformation, today the effects are **global**, **immediate**, **deep** and increasingly **irreversible**

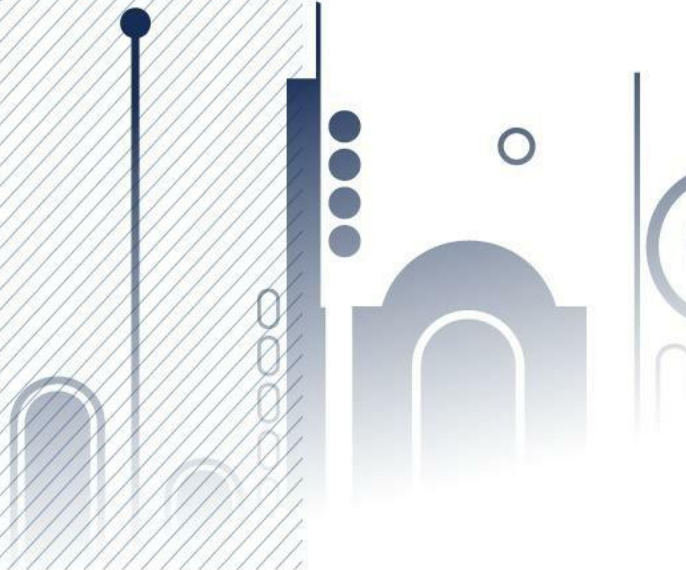*"It all depends on what we do today"*

It is difficult for institutions, and for society, to adapt effectively and in a timely manner

- Institutions move **linearly**
- Technological change does so **exponentially**

Rise of Artificial Intelligence changes the playing field

- Machines are increasingly capable of self-improving their performance

- All aspects of achieving SDGs are increasingly dependent on exponential technologies

"These challenges are probably more urgent to address, and the consequences of not doing so more imminent and devastating, than predictions of climate change"

Experts and forecasts are divided

Optimists

- Exponential technological change will continue lead by explosion of artificial intelligence

- Greater connectivity will unleash creative and collaborative forces of all humanity

- Will free people from repetitive, undignified and dangerous jobs

- New unthought-of occupations will be created

- Economy based on scarcity will be overcome

- We will enter postcapitalist era of abundance and cooperation

- Transition toward this technological superiority is dangerous, but

- It can be facilitated by compensatory mechanisms like universal basic income

Pessimists

- Some say exponential growth will stop and fail to avoid future crises

- Others say it will continue, but

- lead to unstoppable socio-economic dangers like mass-unemployment and

- collapse of governance systems

- Greater connectivity leads to apparent empowerment of civil society, but

- At the expense of privacy and freedom

- Increasingly disruptive forces will lead to populist and authoritarian regimes and

- Possibly to totalitarianism

Recommendations

1. Establish **<u>permanent</u>** forums of the highest international, regional and national level to explore and resolve them
    a. Follow key recommendations put forward by the Expert Group Meeting in Mexico City, last December
2. Recognise national and regional differences, as most studies are based on advanced economies:
    a. urgent research is needed on the possible impact of technological change on developing countries
    b. most developing countries will have to adopt foreign technologies, but
    c. Need to adapt them to minimize negative effects and maximise advantages

3. Governments should focus on creating investment and inclusive innovation opportunities at all levels of society
    a. Strengthen government-business-university bond to generate and disseminate new ideas and strategies
    b. Civil society should be empowered to stay vigilant in achieving SDGs through wide dissemination of these issues
    c. UN and international organisations should intensely monitor and help mitigate disruptive effects of technological change and propose much needed strategies