



# Technology Facilitation Mechanism

Multi-stakeholder Forum on FTI for SDGs

**Innovation Strategies: Designing national policies that use innovation to meet the SDGs**

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# SDGs and 169 targets in 13 years



There are only a few effective paths open for each nation...

and a great many difficult or counterproductive ones:

Progress in one goal can hinder others

Culture, religion, governance systems, institutional strength, social structure, geopolitical circumstances, economic resilience are determinant

Use of best intellectual resources to find optimal strategy and correct course





# all SDGs are intimately dependent on exponential technologies

In most countries technological progress will be imposed from the outside

Exponential technological change will increasingly and unexpectedly change the landscape of challenges and opportunities to achieving SDGs

Some emerging economies have successfully taken advantage of recent technological waves to jump stages and leap forward

**Successful cases are creating a new knowledge-economy, based on widespread digitalisation and inclusive innovation**



# Entrepreneurial and Innovator State

(Mariana Mazzucato)



Governments to invest in risky but necessary infrastructure to promote R&D and create private investment and innovation opportunities

Political, academic and business elites need to attract international support and investment to adapt new technologies to be inclusive and pertinent for achieving SDGs

**strengthening governance system and raising educational standards is only known proven way**



# Majority lacks impetus and understanding of tsunami approaching



Lack of strategy of structural change  
towards more technology intensive  
activities underlies slow and unstable  
economic growth

This hinders advance of ICT investment and  
of the emergence of a digital economy

ill equipped to absorb innovations from the  
rest of the world

can only hope to minimize negative effects  
of exponential technologies, but

also take advantage by leap-frogging  
technological stages

**success will depend on dedicated role of governments to boost R&D**







# Urgent research needed of impact of exponential technological change



There is practically no solid body of research on how automation, digitalisation and global connectivity might play out and what impact it could have on developing countries

Most research circumscribed to developed countries, mainly USA

Extrapolating from recent research regarding technological, 75 million people Latin America might lose their jobs due to automation

This is equal to the number of extremely poor people that SDGs commands to raise above the poverty line

**More effort needed to understand technological socio-economic effects**



# More research needed to benefit from exponential technologies



IT, biotechnology, genomics, robotics, nanotechnology and other exponential technologies could lift living standards and raise the wellbeing of most of humanity, even beyond SDGs

More research is needed to unleash creative forces that have positive impact on most vulnerable while preventing technological deflation, salary stagnation, more inequality and unemployment

There is a **cacophony of answers** to these and many more questions out there

**We should try to answer in a systematic, comprehensive and inclusive way**

# Recommendations



We need **permanent forums** within the UN system, and at regional and national levels to urgently address these issues

Widely disseminate challenges and opportunities

Elaborate viable technological strategies for each country

Full collaboration of scientists, economists, academics, businessmen, high public officials and other experts to better discern which of the many optimistic and pessimistic interpretations of technological change are more credible and worth investigating further

**stay vigilant to ensure that technological change benefits all**