# IMAGINING A "POST COVID-19" GLOBAL ECONOMY – PROSPECTS & POSSIBILITIES AHEAD: Strategic Dos & Don'ts?

Partha S. Ghosh

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Five fundamental points

Corona-virus pandemic: Avoiding the likely **Armageddon**?

Beyond the obvious jolts: Need for an "ego free" Global coordination that will shape the "Essential Logic" of an "Enlightened Civilization"

New habits + New Preferences = **New Economic Constructs**?

Organizations to reinvent the future with a **fundamentally new perspective** (?)

Managing transitions through **multiple points of inflection**: Do we have the will?

### The challenge is more serious than we ever imagined?



## The Challenge?



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# COVID 19 RESPONSE: Innovative integration of multiple perspectives will be essential to shape a new socio-economic equations that are more robust





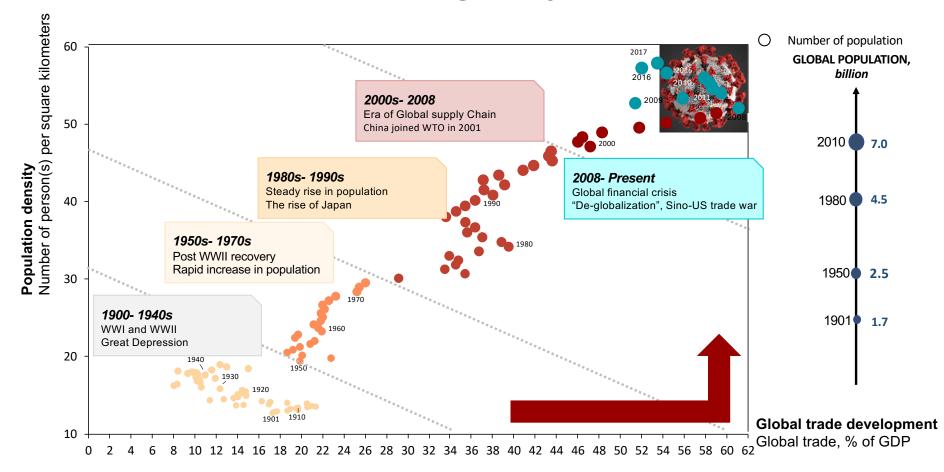
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Corona-virus pandemic: Avoiding the likely **Armageddon**?

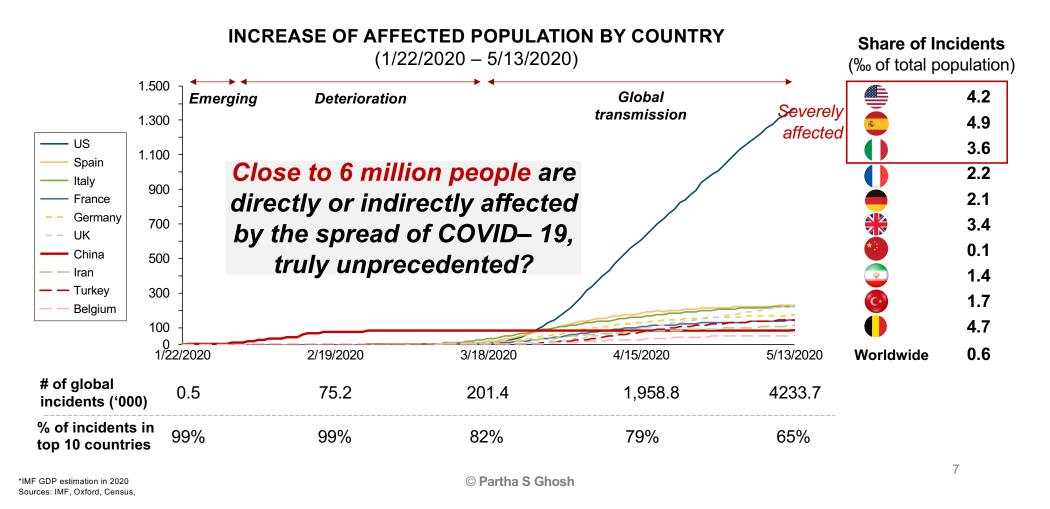
# With increased Globalization and significantly greater population density, infectious diseases like COVID-19 are dangerously more infectious





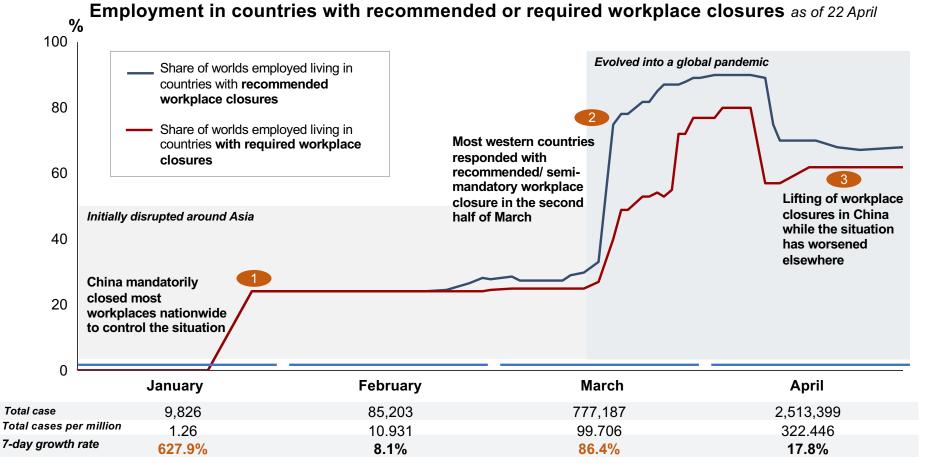
# The current pandemic COVID-19 has spread quickly to more than 180 countries within the span of four months





### Global employment has been influenced in very significant fashion





NOTE: Data collected as of end of each month

### Our response to Covid-19? What could have been versus where we are?

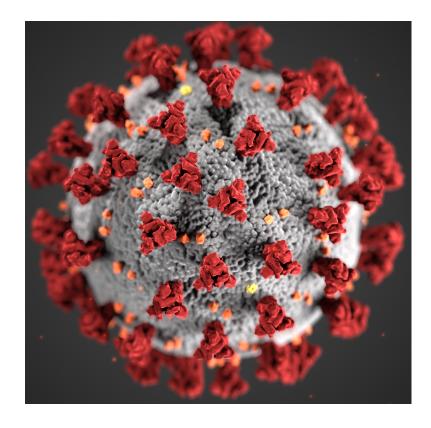


**Think** Local?.....

Act Local?.....

Leverage Global?.....

**Holistic** Perspective?...



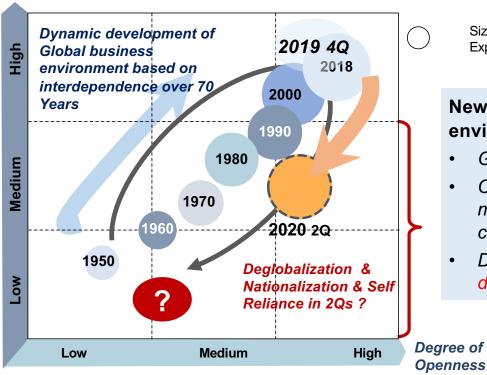
- Local demographics
- Local professions/jobs
- Local behaviors
- Local health care systems
- Local infra-structure
- Regulatory measures
- **Local industry responses**
- Local health care responses
- Local stay at home/curfews.
- Global knywedge base Global supply chain?
- Global practices
- Global travel restrictions
- Health care systems & supply chain implications
- Financial/Economic implications
- Capitalism versus Socialism versus "New ism"

### Unfortunately COVID 19 has uncovered weaker instincts of humanity, perhaps leading to Geo-economic Armageddon (?)





= Degree of Liberalization

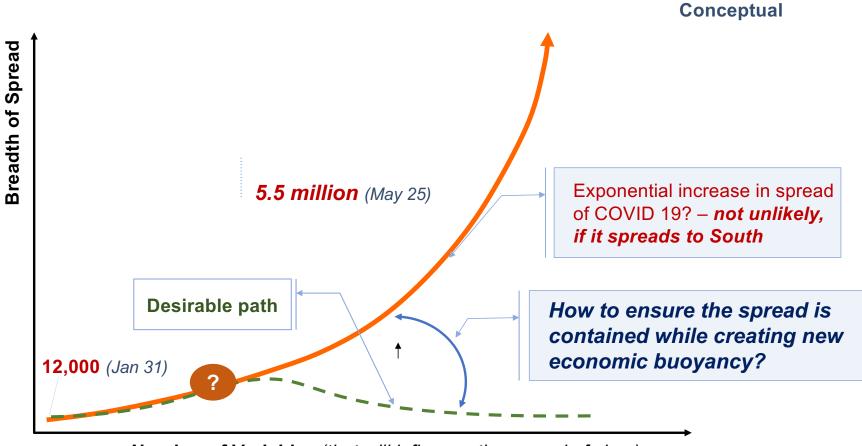


Size of the bubble represent Global Exports percentage of global GDP

### New Geo-economic & Geo-political environment = Armageddon?

- Governments more inward looking?
- Companies/businesses in survival mode?/Disruption of G-supply chains
- Despair versus Hope? (rising degree of -ve energy)

### We are indeed at a critical point



**Number of Variables** (that will influence the spread of virus)

Beyond the obvious jolts:
Need for an "ego free"
Global coordination that will shape the "Essential
Logic" of an "Enlightened
Civilization"

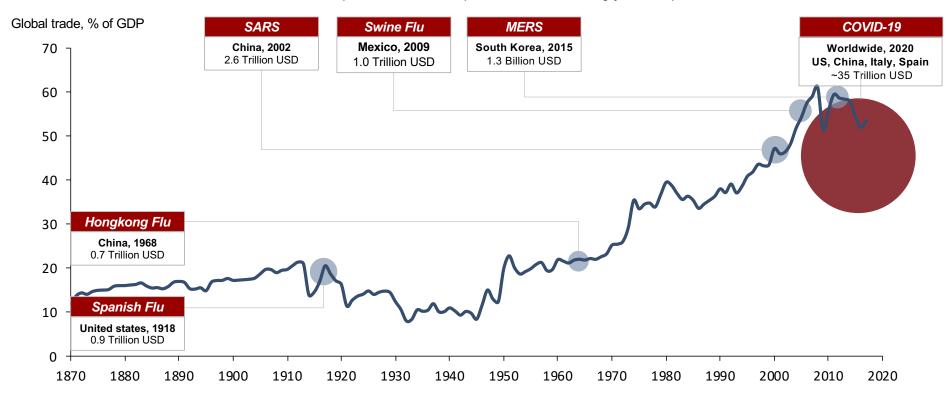


# Major global epidemics are seemingly occurring at an alarmingly high frequency in the last 20 years



### MAJOR EPIDEMICS IN THE LAST CENTURY

Size of circle represents GDP of epicenter in the starting year of epidemic

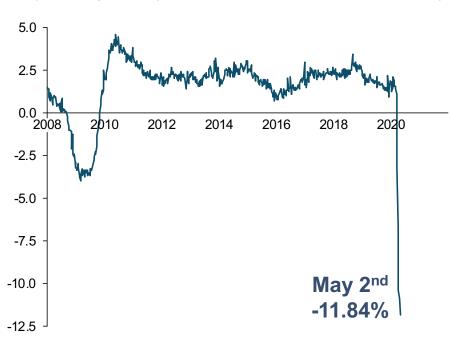


### Impact on global GDP growth has been profound



### **WEEKLY GDP OF UNITED STATES**

(% change on a year earlier, 05/01/2008 – 02/05/2020)



# (% change on a year earlier\*, 2008 – 2020) Rest of world China G6\*\* FORECAST G1 G2 G3 G3 G4 G4 G4 G5 G5 G6 FORECAST G6 FORECAST G7 G8 FORECAST G8 FORECAST

2014

2016

2018

CONTRIBUTION TO WORLD GDP GROWTH

2012

2008

2010

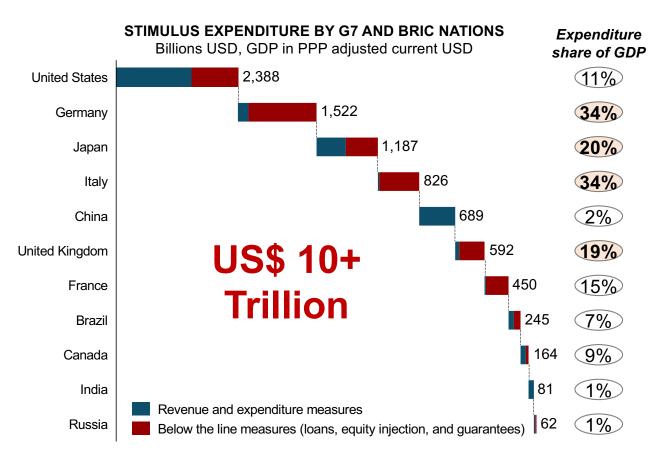
2020

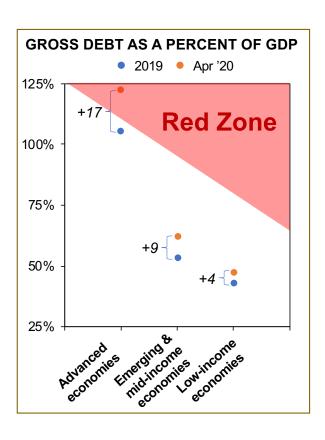
 $<sup>^\</sup>star\!:$  Estimates based on 90 economies, weighted by GDP at PPP, representing 90% of global output

<sup>\*\*:</sup> Britain, Canada, France, Germany, Italy, Japan Sources: FRBNY; Haver Analytics; IMF; Now-Casting; The Economist

### Fighting COVID-19 has been expensive and will raise national debt levels



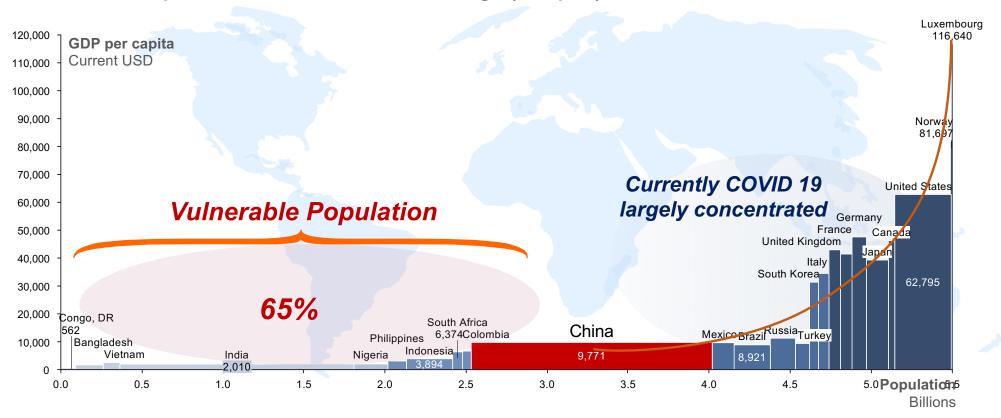




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# While large segments of the global population who are economically disadvantaged are increasingly vulnerable

### Global Population versus Relative Earnings (\$/capita) 2018



# In large segments of the world, practicality of physical distancing is questionable? ... and likely outcome could be dangerous?

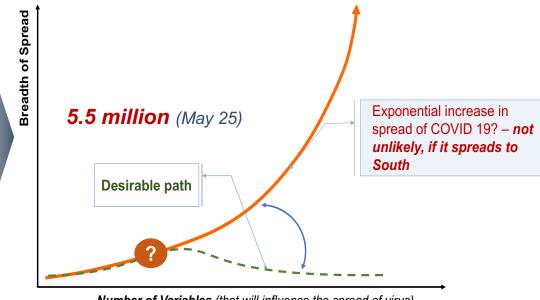


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### We are indeed at a critical point

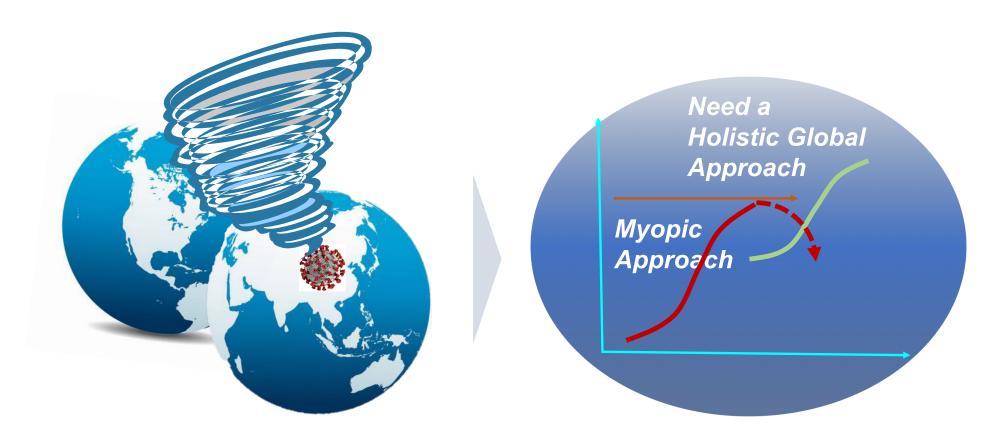


Number of Variables (that will influence the spread of virus)

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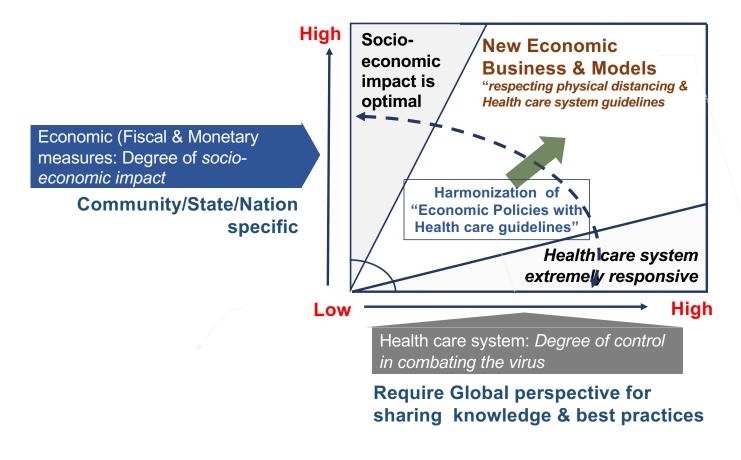
### Avoiding the Armageddon (?)- Need a holistic approach





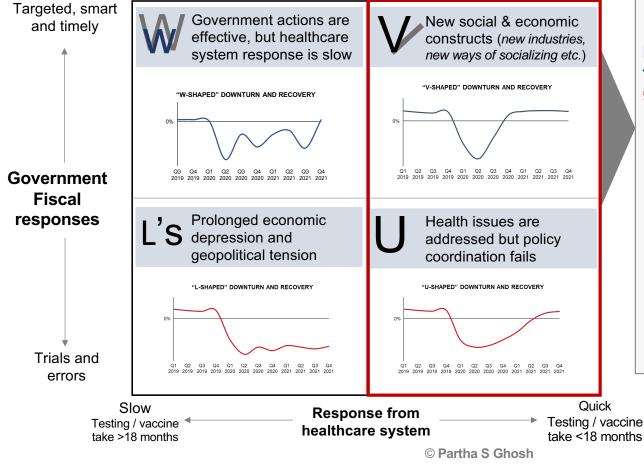
# Harmonization of Macro and Micro economic initiatives will be essential to evolve new economic models that are inclusive & transformational





# How the public and private sector measures are strategically coordinated to fight the COVID-19 will define the new S curve





### **NEED STRATEGIC APPROACH**

Macro economic policies - not just fiscal measures but strategic guidance, such as:

- ✓ Global health care system to fight and avoid virus
- ✓ Help creation of new industries & services for social distancing
- Provide incentives to transform & create new industries toward to minimize contacts?
- ✓ Social reengineering to shape new behaviors/preferences

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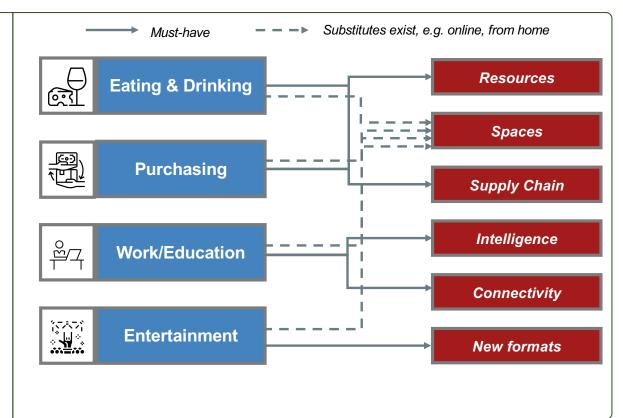


# New habits + New Preferences = New Economic Constructs?

# COVID-19 responses will shape new preferences, new suspicions, new behaviors ....which could open up new frontiers



- □ Attitudes, policies, and the direct experience of the pandemic are already changing how we work, including greater emphasis on evidence-backed authority, remote working, digital collaboration, and mental health
- ☐ Humanity will want greater focus on crisis preparedness, systems resilience, social inequality, social solidarity, and access to health care
- □ People will demand new investments in public goods and services and contingent best alternative solutions in the future



### Structuring a more enlightened processes...

### **Strategic Triangle**

Containing the Virus

Reconstruction of the Global Economy

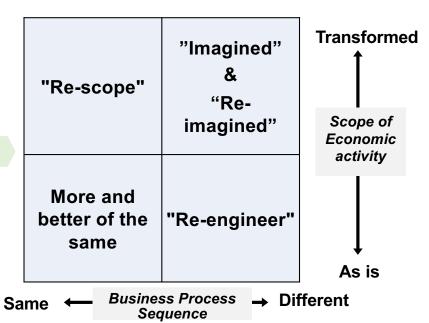
Need for a Global Coordination?



Re-engineering of social behaviors

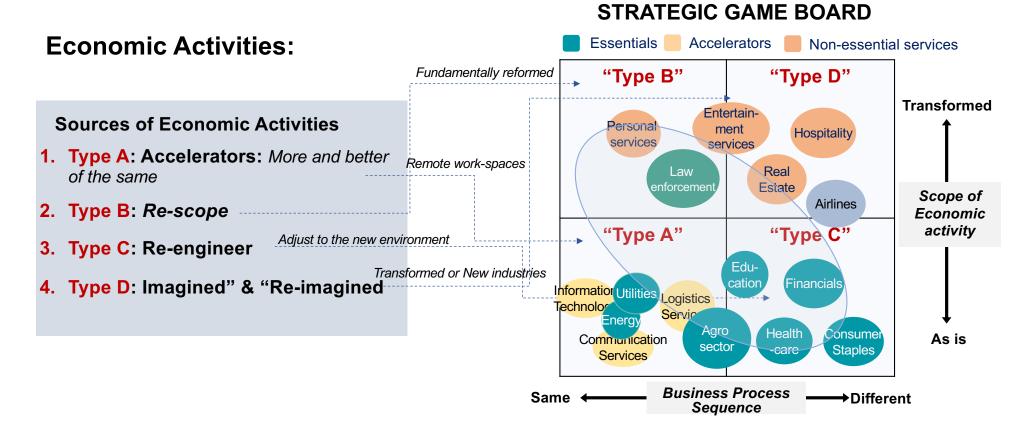
- Social distancing
- Remote learning/working
- Fading confidence in institutions
- Cleaner /Self reflective lifestyle
- Digital divide

### **Strategic Game Board**



### Structuring a more enlightened processes...

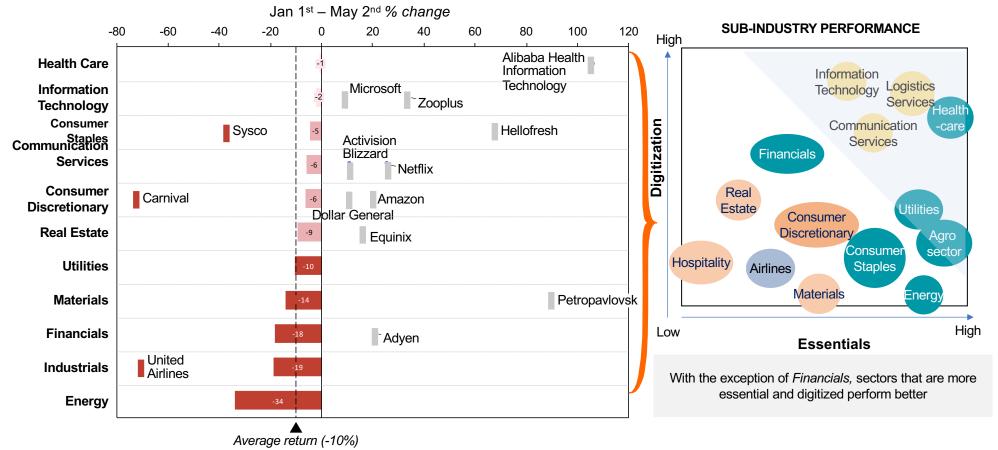




# Global capital markets are rewarding Type A industries - highly digitized or are considered essential by local governments

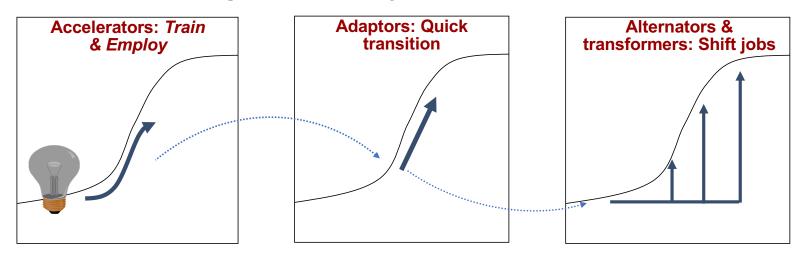


### **GLOBAL STOCK PERFORMANCE BY SECTOR\***



### Strategic bets during change over to "post COVID 19"? era

### Towards "Ideation/Imagination" Economy?



# Type A: Shape the future

New industries that could be advanced because of COVID-19 Al/AR, Bio-informatics, Social media/IT services

# Type B & C: Adapt to the future

Shift to on-line to practice social distancing -Education, Entertainment, Health care/Wellness and Retailing services

# Type D: Reconfigured Significant scale down to

Significant scale down to avoid but stay in the game

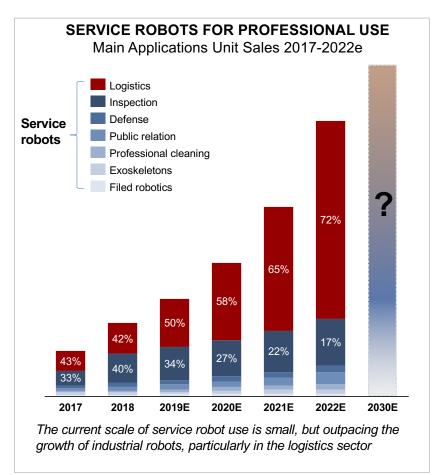
- Hospitality, Restaurant Travel, Public transportation, Hi-touch services

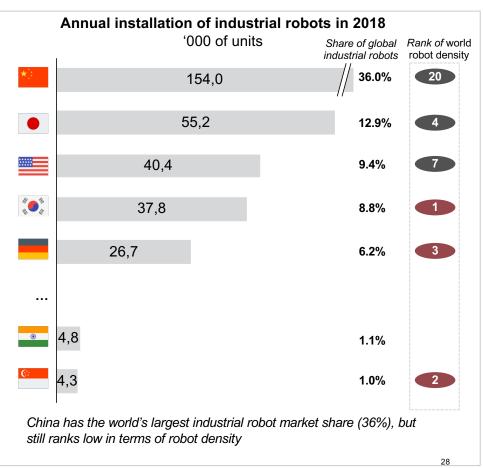
# Looking forward, we believe development of several industries will be greatly accelerated enabling a post COVID-19 era upon us?

		Examples of applications amid COVID-19	Rationale for faster acceleration
Automation/ Robotization		☐ Medical robots in hospitals☐ Advanced robotics in manufacturing	Mitigate human risks and ensure safety
Artificial Intelligence	Au The State of th	☐ Genome-wide testing and analysis☐ Body temperature surveillance	To speed up innovation and testing, tracing and tracing services
Cloud technology		☐ Video conferencing ☐ Cloud computing support for vaccine research	Empower digital transformation of all industries with real-time data and computation
Internet of things		☐ Tele-health, Smart Healthcare☐ Social-distancing management	Smart City initiatives to accelerate post COVID-19 to deal more effectively with future public crises
Next generation Genomics	CGGGGTGCGGGTGCSGGGGGGGGGGGGGGGGGGGGGGGG	□Rapid sequencing of the virus	Genomic Sequencing is critical in decoding the virus and understanding its evolution
Advanced materials		☐ 3D printing for medical supplies	3D printing can quickly make up for the shortage of critical components during supply disruption
Distributed energy Resource (DER) system		☐ Small-scale, decentralized power system	Cost efficient and renewable energy systems will be increasingly adopted to address sustainability challenges

# For example driven by "physical distancing" we will witness a giant leap forward in robotization in industries & service spaces





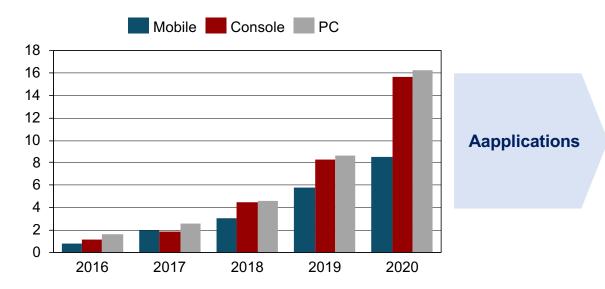


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# Similarly application of virtual and augmented reality technologies will accelerate renewal of Type B, C and D

### THE WORLDWIDE VIRTUAL REALITY MARKET

Forecasted market size of VR hardware and software, billion USD, 2016 – 2020, by platform





GW hospital uses innovative VR technology to assess its first COVID-19 patient



Virtual reality games to keep fit during COVID-19 lockdown

### **COVID 19 will also accelerate the rise of autonomous delivery**





# Benefits of autonomous vehicles (AVs)

Under COVID-19 pandemic, AV adoption will benefit "contact-less" supply chain systems:

- Alleviate the strain on existing delivery services
- Reduce the risk of exposure for citizens and workers



### **Post-COVID** future

Regulators should push policies forward to move into a positive post-Covid future

### **Aapplications**



### **JTA**

 Deployed autonomous shuttles for moving COVID-19 tests in Florida





- Self-driving truck company

   depot-to-depot without
   human intervention
- Raised \$298M funding

# In the same spirit service industries in (Type D quadrant) powered by Al/IT (Type A) could undergo major transformation



### Wellness (and Fitness) -



- Video classes are trending
   E.g. Orange Theory has free 30-min work out everyday on their website
- 20% of studios see increase in new membership, albeit an overall decrease in revenue

### Hospitality



- **Al-targeted marketing** to incentivize people to travel and 'live the moment'
- Need a disaster preparedness and business continuity plan - data recovery, property loss, hygiene, workforce shortage and safety

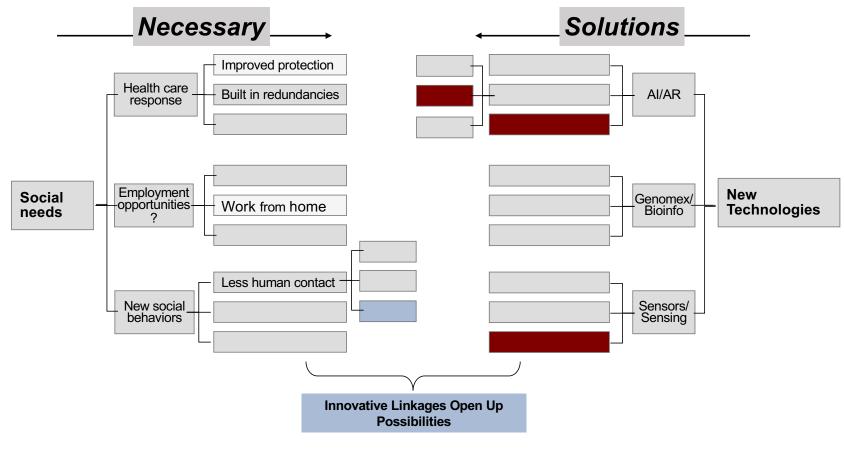
### **Education**



- Improved online education experience to achieve equivalency to on-campus schooling and online professional development programs
- More families may prefer full or partial K-12 homeschooling or online homework

### COVID 19 related spending should be deployed strategically to fund technologies in evolving innovative solutions ...to create the "New economy"





...Will require Interoperability & Uncommon connections help to open up problem solving spaces..





Organizations have to reinvent the future with a fundamentally new perspective(?)

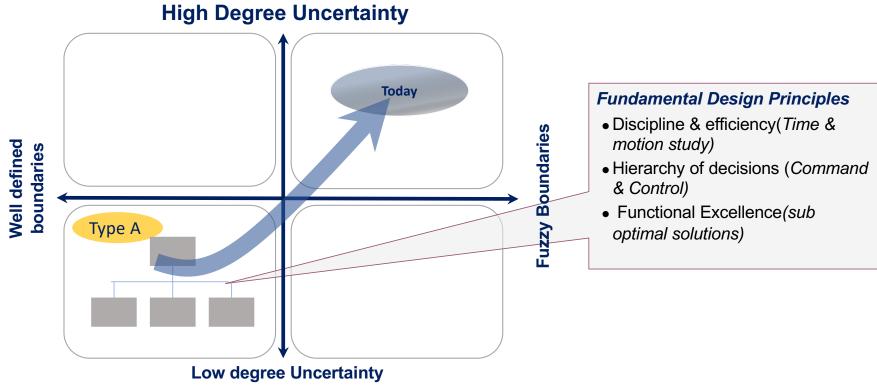


# So the challenge is how to develop organizational principles which will work in the emerging environment



### THE EMERGING ENVIRONMENT

(Global socio-economic dynamics)

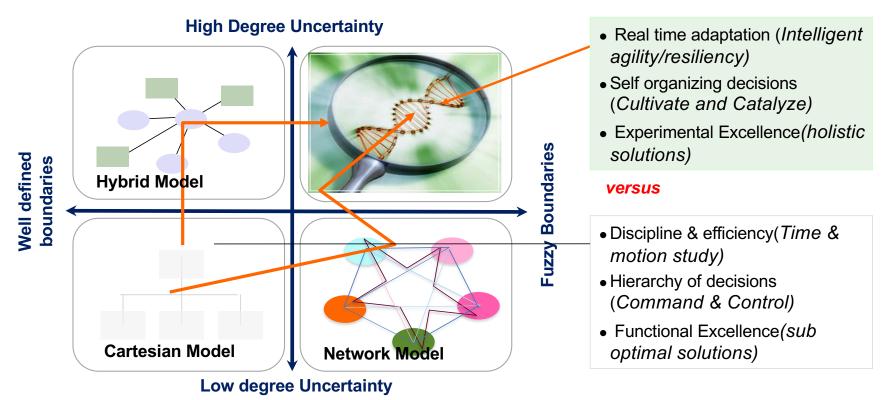


# Adopting a "Biological model" will require careful planning in adopting the fundamentally a new construct



### THE EMERGING ENVIRONMENT

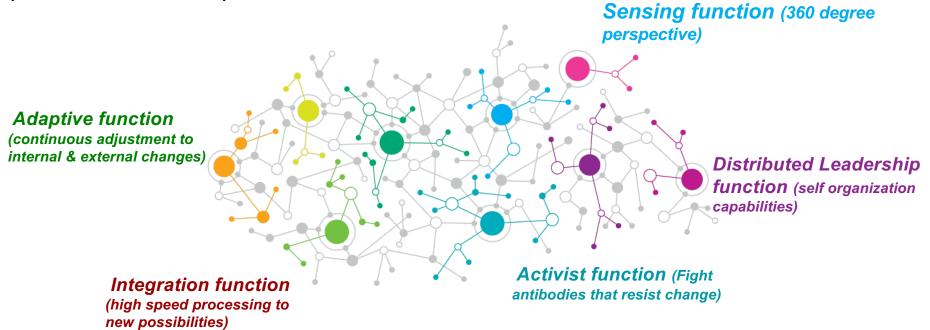
(Global socio-economic dynamics)



# Organizations have to develop "adaptive and agility" properties at multiple levels of decision- making hierarchy



"Outs & Ins" of the future organization (Partha Ghosh model)





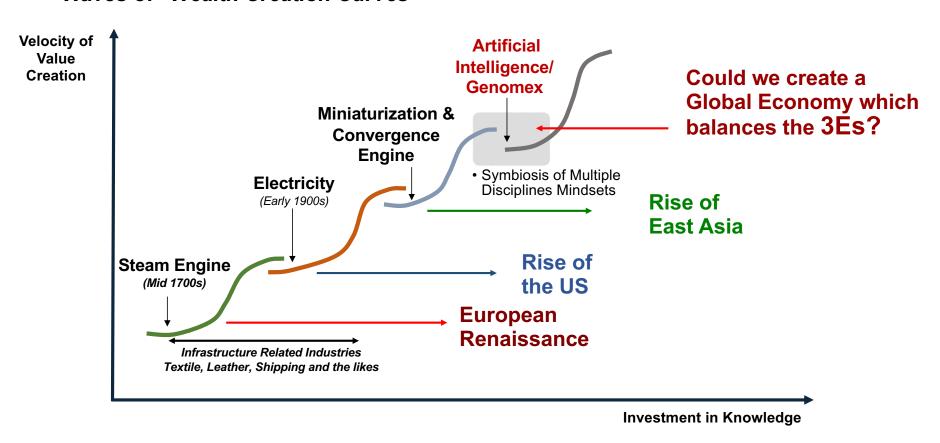
have the will?



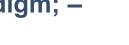
### So could COIVD 19 responses address broader global issues?

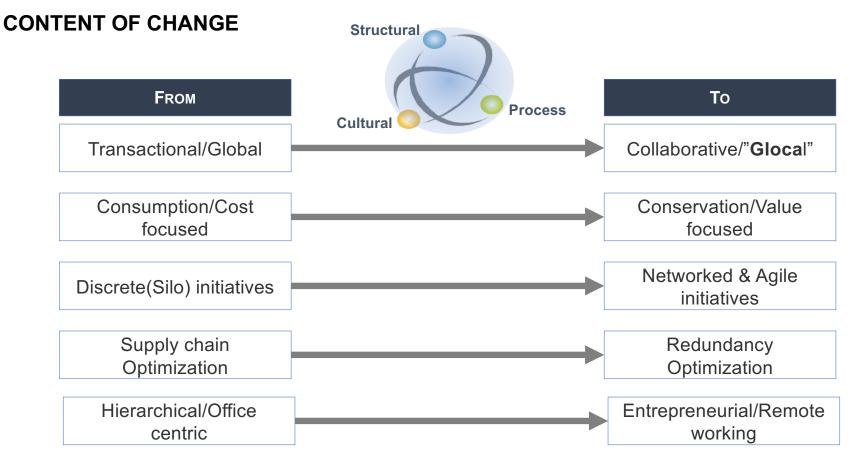


### Waves of "Wealth Creation Curves"



Organizations should consider to embrace new economic paradigm; will require transition through multiple points of inflection

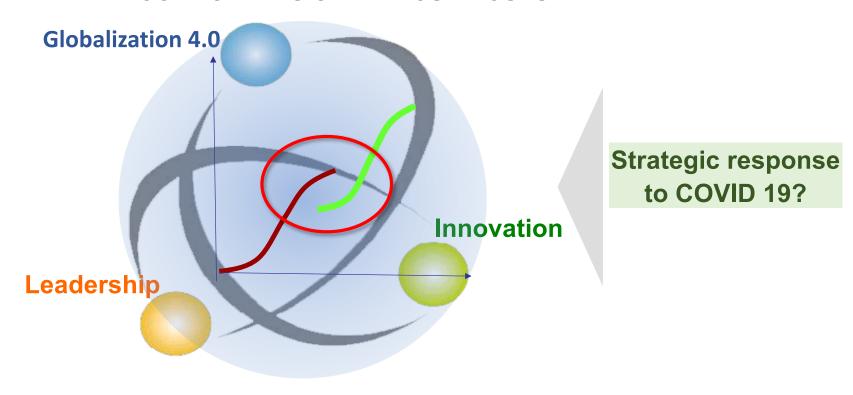




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### **Ensuring Change Is Self-Perpetuating at all levels**

### **KEY COMPONENTS OF NEW CURRICULUM**



### Key takeaways.....





**Five fundamental points** 

Corona-virus pandemic: Avoiding the likely **Armageddon**?

Beyond the obvious jolts: Need for an "ego free" Global coordination that will shape the "Essential Logic" of an "Enlightened Civilization"

New habits + New Preferences = **New Economic Constructs**?

Organizations to reinvent the future with a **fundamentally new perspective** (?)

Managing transitions through **multiple points of inflection**: Do we have the will?