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Disruptions in the Global Order



A World in Disarray

- Things fall apart. The center can not hold. The rules policies, and institutions that have guided the world since World War II have largely run their course.
- The Middle East is in chaos
- Asia is threatened by China's rise and a reckless North Korea
- Europe, for decades the most stable continent is now anything but
- Geopolitical competition among the major powers is increasing and challenge international norms and institutions

Trends Affecting Global Disarray

- Global epidemics- Ebola, Zika, Avian and Swine flu
- Mass refugee movements- Syria, Iraq, Ukraine, Sudan, Somalia, Eritrea, Myanmar, Afghanistan, Mexico and Central America
- Global climate change- droughts, flooding, food disruptions, transportation disruptions
- Decentralization- power, information, technology, and communication
- Weapons Proliferation- nuclear, biological, and chemical
- Trade Frictions- collapse of the TPP, NAFTA and the EU in crisis
- Weakening of regional and global institutions- NATO, the World Bank, The United Nations, and the World Health Organization

Industries of the Future

- Given the pattern of disarray, what industries will rise in prominence
- Robotics
 - Caretakers- cleaning, cooking, entertainment
 - Care Givers- mobility treatment
 - Assistants- research, document preparation and analysis
 - Manufacturing

Implications of Robotics

- Robots will replace human workers due to human shortages, disinterest, unreliability, and fragility
- Robotics will continue to improve efficiencies, quality, reliability, and lower costs
- Robotics will lead to employment disruptions and a general decline in average income

Drivers of Accelerated Advances in Robotics

- Connectivity and the cloud
- Material Sciences
- Nanotechnology
- Significant and continued investments in Research and Development

Genomics

- Precise genetic engineering to cure and eliminate diseases in humans, animals, and plants
- Cloning of organs and people, animals plants
- “Jurassic Park”

The Brain

- Curing chemical malfunctions
- Enhancing memory and processing power through computer interfaces
- Curing mental illnesses
- Curing strokes

Financial Systems

- Money becomes “virtual”, electronic, and hackable
- Disintermediation of banks
- Improved reliability, traceability, and security

Hospitality

- Airbnb is now the largest “hotel Chain” in the world

Transportation

- Uber is now the largest taxi company in the world

Retailing

- Amazon and eBay are the two largest retailers in the world

Cold War to Code War- Laying Waste to the World

- Penetration and manipulation of code to disrupt, disable, and kill systems and people
- Malware, viruses, worms, and Trojan horses

Velocity and Acceleration

- The velocity of an object grows or shrinks as a function of the acceleration applied to it
- The “world” (science, business, information, etc.) acceleration is increasing and so, therefore, is velocity
- This causes an increase in both the speed and rate of change
- When the rate of change exceeds our capacity to adapt, “dislocation” is created

Disruption and Dislocation

- Disruption is when a new idea makes your company or industry obsolete
- Dislocation is when the environment moves so quickly that everyone (multiple industries, societies, continents, etc.) feel as though they have lost control

A Star Supernova

- The explosion of a star that creates a one time release of massive energy in all directions

The Computational Supernova

- The release of energy at an exponentially accelerating rate driven by the reduction of costs and the increased performance of components and software. This release is re-shaping virtually every man-made system. Everything is being changed and everyone is being impacted by it, both positively and negatively
- The power of one person is rapidly increasing
- The power of many is rapidly increasing

Major Challenges to Global Steel Industry

- Advances in material sciences- E.G. aluminum replacing steel
- Trade discontinuity and protectionism- tariffs, collapse of TPP, threats to EU
- Over-capacity
- Advances in design requiring less steel components
- Unstable steel prices/commoditization of steel
- Falling oil prices
- Cost structures- mini-mills vs. mega-mills
- Environmentalism

Discussion Question

- What do you believe will be the top five global challenges to your industry by the year 2027 and why?

Bibliography

- Thank You for Being Late: An Optimist's Guide to Thriving in the Age of Acceleration by Thomas L. Friedman, 2016
- The World in Disarray by Richard Haass, 2017