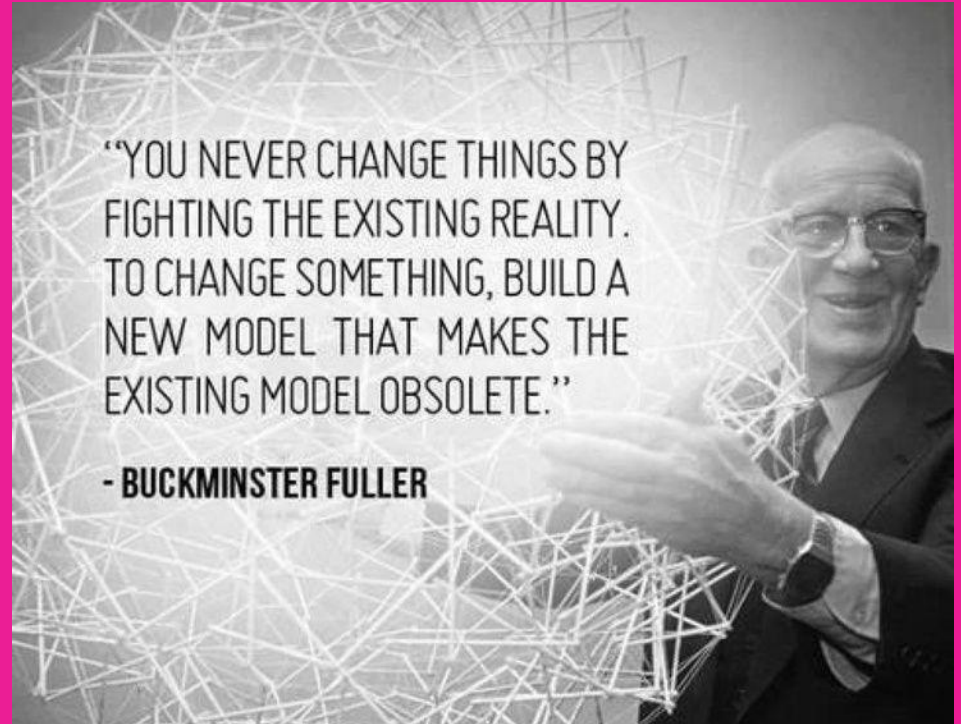# Spectrum of Sustainability

Under One Sky

AN INTEGRAL GUIDE TO DISRUPTIVE INNOVATION

Use our Sustainable Skills Profile Tool so we can get to know you. https://bit.ly/3jzSYQS

"YOU NEVER CHANGE THINGS BY FIGHTING THE EXISTING REALITY. TO CHANGE SOMETHING, BUILD A NEW MODEL THAT MAKES THE EXISTING MODEL OBSOLETE."

- BUCKMINSTER FULLER

THE THREE HOLY (holistic) CAPITALS

Shifting from measuring resource progress through separate profit, to collective prosperity indexes.

1. HUMAN:
2. NATURAL:
3. SOCIAL:

All three together: (produced, manufactured, financial, built capital)

Natural capital:
The stock of renewable and non-renewable natural resources that combine to yield a flow of benefits to people.

Social capital:
The networks together with shared norms, values and understanding that facilitate cooperation within and among groups.

Human capital:
The knowledge, skills, competencies and attributes embodied in individuals that contribute to improved performance and well-being.

Produced capital:
The man-made goods as well as all financial assets that are used to produce goods and services consumed by society.

DEVELOP

Child of Sustainability: story of survival.

My Expert Skills: ADAPTABLE-RESILIENT-RESOURCEFUL

Thriving Against the Odds Takes:

1. Humor
2. Heartiness (empathy, trauma through positive lens)
3. Intraversion (self-awareness)
4. Extraversion social 1-1, impact and purpose

SKYFARMS

I AM RESOURCEFUL

SKYFARMS

SKYFARMS

I AM RESILIENT

I AM ADAPTABLE

DEFINE

"The capacity to endure"

"The ability to maintain"

"Meeting our own needs without compromising the ability of future generations to meet their own needs."
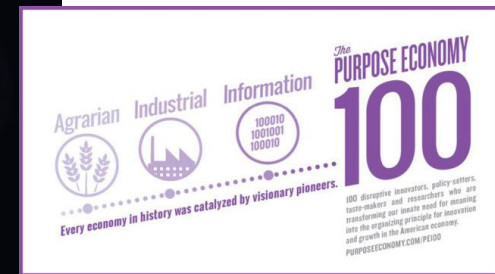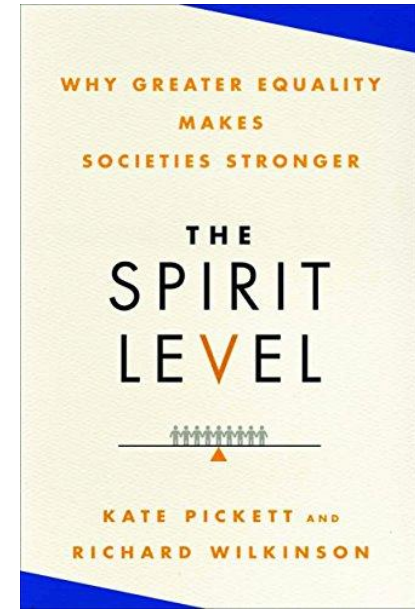
"Doing more with Less"

"Avoidance of the depletion of natural resources in order to maintain an ecological balance."

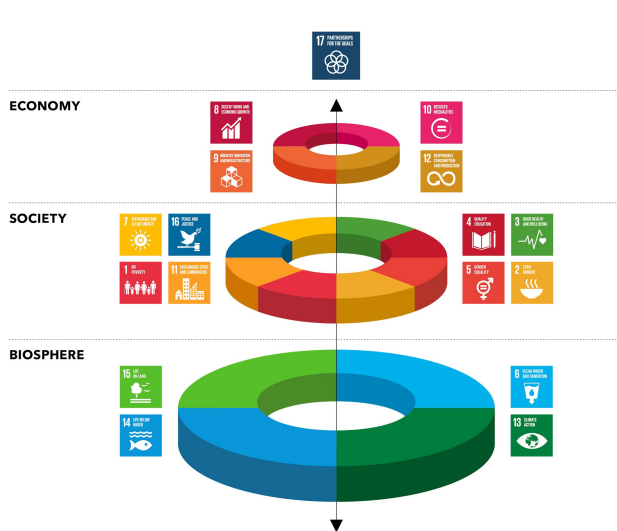"Consists of 4 Pillars: Human, Social, Economic, Environmental"

LITY?
?

Do More With Less

Shared Resources

Access

Repurpose, Reuse

Renewable Energy

Adaptable

Circular/Cyclical

Resilience

Closed-Loop

Maker/DIY

Sustainable Center for Capacity to Endure As a Whole "SUSTAINISM"

Zero Waste

Local-Zero Mile

Emergent

Holisitc

Smart Design

Human/Natural/Social Capital

Biological Designs

Diverse

Upcycling

Resourceful

Distributed

Interconnected/Interdependent

Symbiotic

Inclusive

n

DESIGN

- Drivers »
- SDGS (Sustainable Development Goals)
- Sustainism
- Principles
- Mindsets
- SMART CITY
- Purpose, Value, Worth

THE GREAT TRUST SHIFT:
FROM INSTITUTIONS TO INDIVIDUALS

FOUR DRIVERS

TECH INNOVATION + VALUES SHIFT + ECONOMIC REALITIES + ENVIRONMENTAL PRESSURES

AREAS RIPE FOR DISRUPTION

COMPLEX EXPERIENCES
BROKEN TRUST
REDUNDANT INTERMEDIARIES
LIMITED ACCESS

WHY GREATER EQUALITY MAKES SOCIETIES STRONGER

THE SPIRIT LEVEL

KATE PICKETT AND RICHARD WILKINSON

Agrarian Industrial Information The PURPOSE ECONOMY 100

Every economy in history was catalyzed by visionary pioneers.

MDGS 2000-2015 (8) - SDGS 2015-2030 (17)

SDG MATRIX/MARKET OPPORTUNITIES

MARKET OPPORTUNITIES FOR THE 2030 AGENDA

The Global Opportunity Explorer (goexplorer.org) showcases additional opportunities and solutions addressing all 17 Sustainable Development Goals.

	NO POVERTY	ZERO HUNGER	GOOD HEALTH & WELL-BEING	QUALITY EDUCATION	GENDER EQUALITY	CLEAN WATER & SANITATION	AFFORDABLE & CLEAN ENERGY	DECENT WORK & ECONOMIC GROWTH	INDUSTRY, INNOVATION & INFRA-STRUCTURE	REDUCED INEQUA-LITIES	SUSTAINABLE CITIES & COMMUNITIES	RESPONSIBLE CONSUMP-TION & PRODUCTION	CLIMATE ACTION	LIFE BELOW WATER	LIFE ON LAND	PEACE, JUSTICE & STRONG INSTITUTIONS	PARTNER-SHIPS FOR THE GOALS
CLOSING THE LOOP	○	●	○	○	○	●	○	●	○	○	○	●	○	●	○	○	○
REGENERATIVE OCEAN ECONOMY	○	●	○	○	○	○	○	●	○	○	○	●	○	●	○	○	○
SMART OCEAN	○	○	○	○	○	○	○	●	○	○	○	●	○	●	○	○	●
ANTIBIOTIC-FREE FOOD	○	●	●	○	○	○	○	●	○	○	○	●	○	○	○	○	○
NEW BUSINESS MODEL FOR ANTIBIOTICS	○	○	●	○	○	○	○	●	●	○	○	○	○	○	○	○	●
PRECISION TREATMENT	○	○	●	○	○	○	○	●	○	○	○	○	○	○	○	○	○
FLEXIBLE MOBILITY	○	○	○	○	○	○	○	●	○	○	●	●	○	○	○	○	●
CROWD TRANSPORT	○	○	○	○	○	○	○	○	●	○	●	●	○	○	○	○	○
OW TRANSPORT CITIES	○	○	○	○	○	○	○	○	●	○	●	●	○	○	○	○	○
FUTUREPRENEURS	○	○	○	●	○	○	○	●	○	○	○	○	○	○	○	○	○
THE DIGITAL LABOUR MARKET	○	○	○	●	○	○	○	●	○	●	○	○	○	○	○	○	○
OSING THE SKILLS GAP	○	○	○	●	○	○	○	●	●	○	○	○	○	○	○	○	●
NEW DIETS	○	●	●	○	○	○	○	○	○	○	○	●	○	○	○	○	○
SMART FARMING	●	●	○	○	○	○	○	○	○	○	○	●	○	○	●	○	○
REDUCE FOOD WASTE	○	●	○	○	○	○	○	○	○	●	○	●	○	○	○	○	●

SUSTAINISM/SUSTAINST QUESTIONS AND PRINCIPLES

SUSTAINIST DESIGN PRINCIPLES*

#1 PLACEMAKING
Redesigning cities for people from the bottom up

#2 CONNECTEDNESS
Building communities as webs of life

#3 LOCAL
Designing for local qualities in a globalised world

#4 COMMONS
Connecting the 'C's: Collaborative Community-owned Common

#5 CIRCULARITY
Creating circular cities that connect social & environmental sustainability

#6 PROPORTIONALITY
Bringing 'human scale' into our urban living environments

#7 CO-DESIGN
Making cities with citizens

* BASED ON 'A SUSTAINIST LEXICON', 2016
CONCEPT AND TEXT: MICHIEL SCHWARZ
SYMBOLS DESIGN: JOOST ELFFERS
DEVELOPED FOR FABCITY/EUROPE BY PEOPLE
CREATIVE COMMONS BY-NC-ND 3.0
A CO-PRODUCTION OF SUSTAINISM LAB
AND PAKHUIS DE ZWIJGER

HOW MIGHT WE DESIGN?

HOW MIGHT WE DESIGN FOR SHARING?

HOW MIGHT WE DESIGN FOR LOCALISM?

HOW MIGHT WE DESIGN FOR CONNECTEDNESS?

HOW MIGHT WE DESIGN FOR PROPORTIONALITY?

PRINCIPLES

Design with the user

Understand the existing ecosystem

Design for scale

Build for sustainability

Be data driven
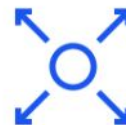
Use open source

Reuse and improve

Do no harm

Be collaborative

EXPONENTIAL MINDSETS

1. **Accelerating** toward opportunity and anything is possible attitudes (long-term vs short-term)

2. **Disruption** technologies: Digital Era of Ai, IoT, Blockchain, 3D 12 technologies

3. **Tomorrow's** business models: Circular, Sustainable, HSN Capital vs. Profit Index
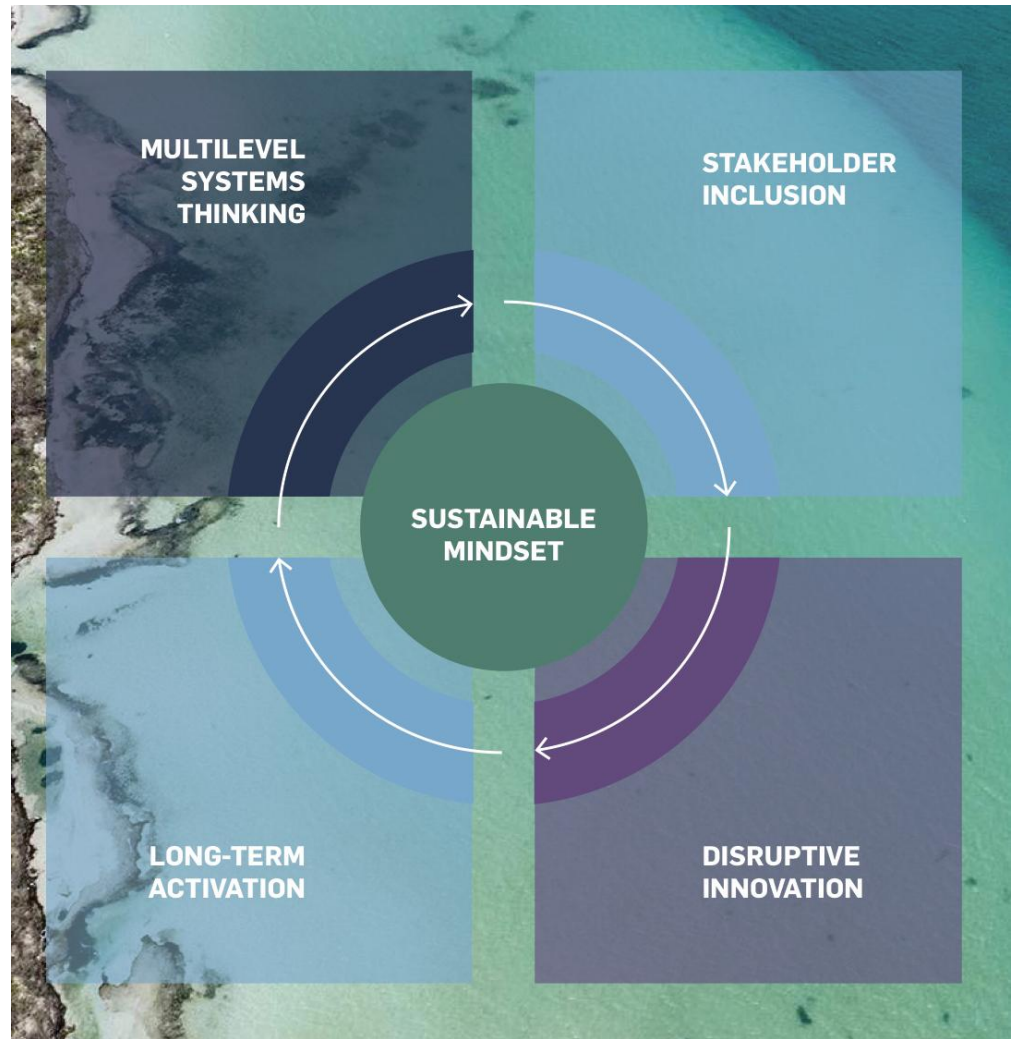
IMPLEMENTATION FRAMEWORK

- GOVERNANCE
- OPERATIONS
- ENGAGEMENT

ANCHORING AMBITION IN STRATEGY AND GOVERNANCE	DEEPENING INTEGRATION ACROSS OPERATIONS	ENHANCING STAKEHOLDER ENGAGEMENT
PURPOSE	**PRODUCTS AND SERVICES**	**REPORTING AND CORPORATE COMMUNICATIONS**
▪ In Articles of Association ▪ In vision/mission statement ▪ In company values	▪ In development and innovation processes ▪ In supply chain management and across procurement ▪ In Total Quality Management System	▪ To investors and shareholders in financial statements ▪ In non-financial statements and third party reporting ▪ In public relations and communications
GOVERNANCE	**PEOPLE MANAGEMENT**	**SALES AND MARKETING**
▪ On board agendas and committees ▪ In board competencies and diversity ▪ In executive recruitment and incentive	▪ In performance management and remuneration ▪ In training and learning ▪ In company culture and communications	▪ In all brand and product promotion ▪ In all customer engagements ▪ In consumer education and behaviors
CORPORATE STRATEGY AND GOALS	**CORPORATE FINANCNE**	**PARTNERSHIPS AND STAKEHOLDER RELATIONS**
▪ In ambitious goals and targets integrated into a balanced scorecard ▪ In innovative business models ▪ Integrated in unit business strategies	▪ In key business investments ▪ In allocation of capital and financial strategy ▪ In managing risk and revenue	▪ In forming alliances to accelerate impact ▪ In relationships with communities and stakeholders ▪ In ensuring social license to operate
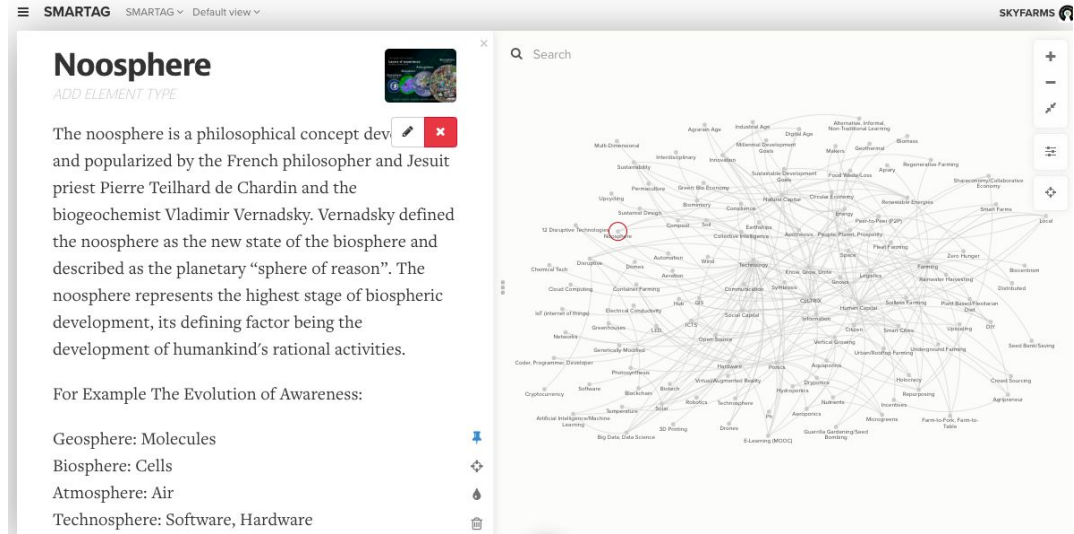
INTERACTIVE LEARNING TOOL

Explore, search, improve anything and everything that has to do with sustainability: the philosophy, the technology, the application, the implications, the opportunities and possibilities.

GET STARTED HERE

SMART METHODOLOGY/CITIES/TECH

S: sustainable

M: modular/mobile
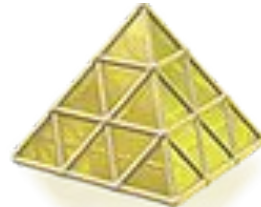
A: access/autonomous

R: replicable

T: technological

Skills of Tomorrow:

Automation/Autonomy will require doing non-routine, remedial tasks that include:

- SOCIAL INTELLIGENCE
- COMPLEX CRITICAL THINKING
- CREATIVE PROBLEM SOLVING

SOLUTIONS/SHAPES/STRUCTURES/

The Knowledge Triangle

CELTRIX
NETWORKS
DOUGHNUT ECONOMICS

CELTRIX UPGRADES

DIGITAL TRANSFORMATION

| Technology | Communication | Data | Internet of things | Automation | AI | Networking |

C–E–L: COMMUNICATION –ENERGY–LOGISTICS (MATRIX/NEXUS)

Fourth Industrial Revolution

Mechanisation–Electrification –Automation–Digitization

Singularity

SHIFTING NEURONS/NETWORKS

Collective Intelligence. Spiral Dynamics. Maslow.

Empathy Extension: Tribal, Religious, National, Global
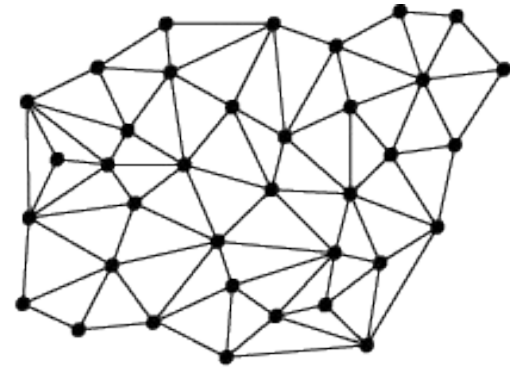
Layers of Experience/Evolution of Consciousness:
Geosphere, Biosphere, Atmosphere, Noosphere.
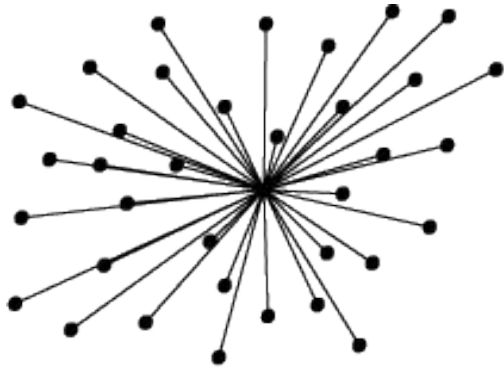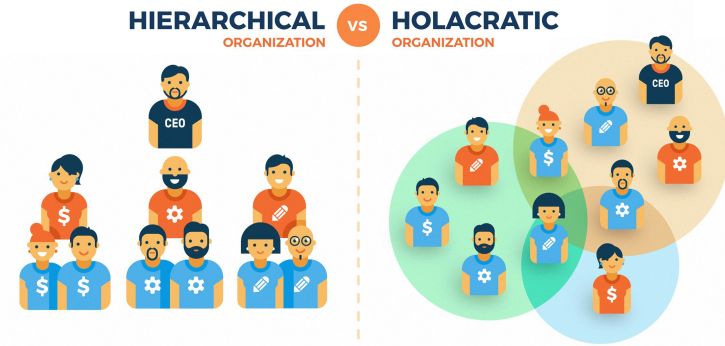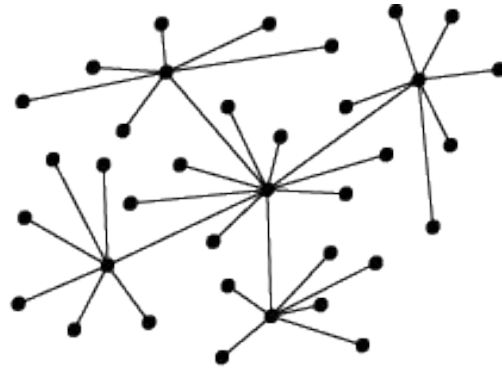
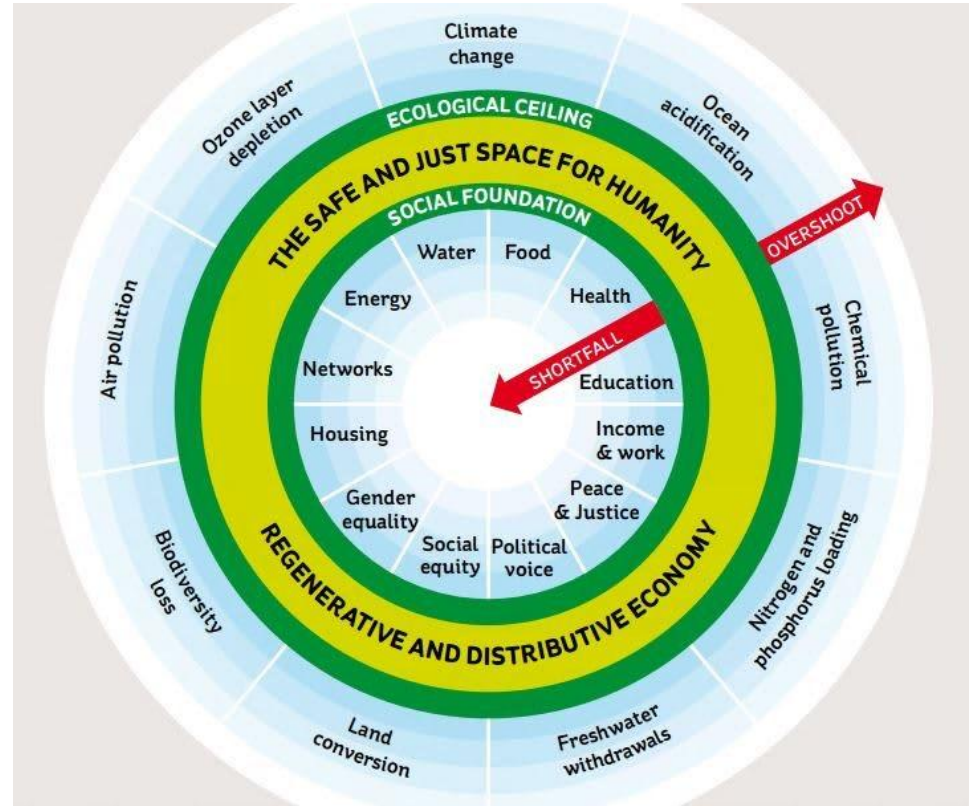

centralised   decentralised   distributed

DOUGHNUT ECONOMICS

AKA: also known as

- Green economy
- Collaborative Consumption
- Shareconomy
- Bio economy
- Resource Based economy
- Regenerative - Renewable
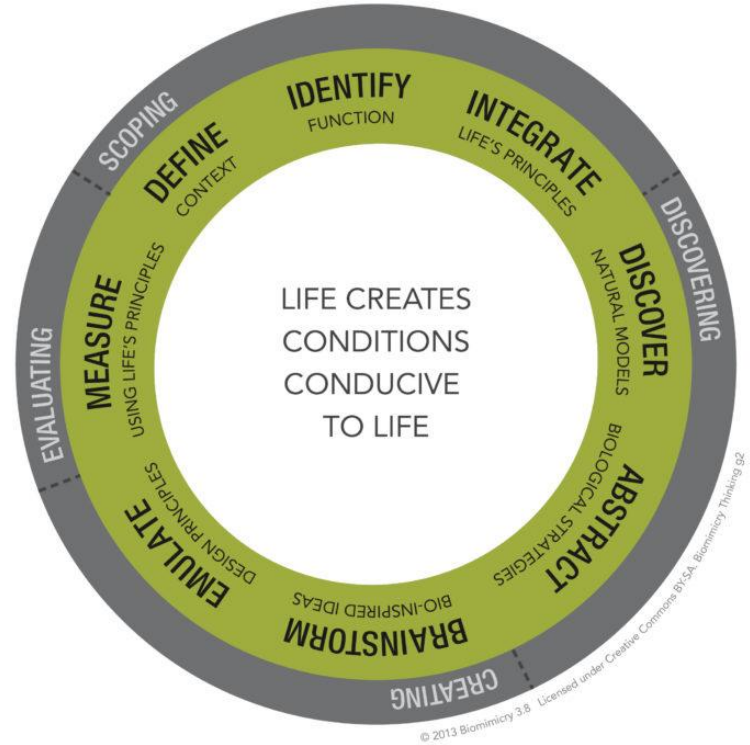- Conscious Capitalism
- Creative/Purpose Economy

SCIENCE OF LIFE: BIOMIMICRY
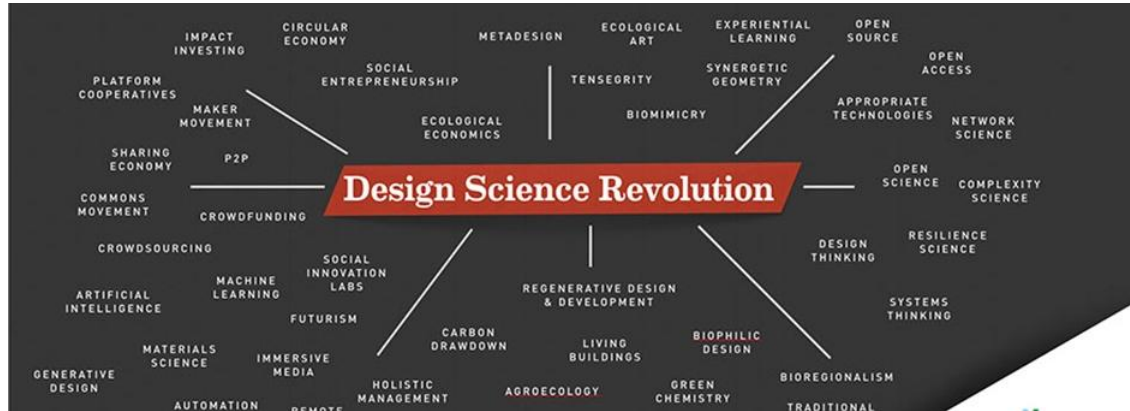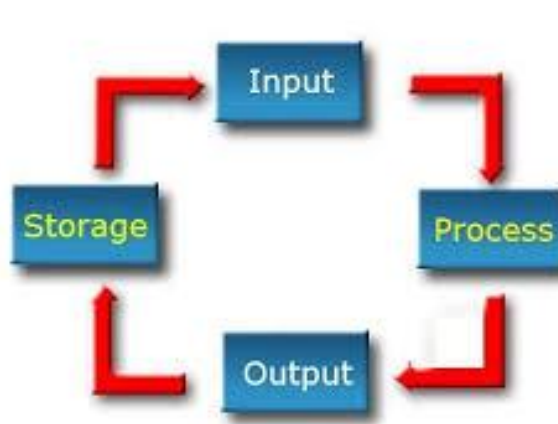

JANINE M. BENYUS —
9 basic principles of biomimicry

1 Nature runs on sunlight
2 Nature uses only the energy it needs
3 Nature fits form to function
4 Nature recycles everything
5 Nature rewards cooperation
6 Nature banks on diversity
7 Nature demands local expertise
8 Nature curbs excesses from within
9 Nature taps the power of limits

LIFE CREATES CONDITIONS CONDUCIVE TO LIFE

SCOPING
DEFINE CONTEXT
IDENTIFY FUNCTION
INTEGRATE LIFE'S PRINCIPLES
DISCOVERING
DISCOVER NATURAL MODELS
ABSTRACT BIOLOGICAL STRATEGIES
CREATING
BRAINSTORM BIO-INSPIRED IDEAS
EMULATE DESIGN PRINCIPLES
EVALUATING
MEASURE USING LIFE'S PRINCIPLES

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CLOSING THE LOOP

INPUTS/OUTPUTS –
conservation, resource management

The Pareto principle states that for many outcomes roughly 80% of consequences come from 20% of the causes

INNOVATION RESOURCES

1. https://marcbuckley.earth/
2. https://www.nesta.org.uk
3. https://intelligence.weforum.org/
4. https://learningforsustainability.net/
5. https://www.sustainablelearning.com/
6. http://www.sustainabilitylabs.org
7. https://sustainabilitydefined.com
8. https://www.thelexicon.org
9. https://www.oneplanetnetwork.org
10. https://www.springwise.com/
11. https://reflowproject.eu
12. http://breakthrough.unglobalcompact.org
13. https://www.thevenusproject.com/the-venus-project/jacque-fresco/
14. https://www.ellenmacarthurfoundation.org/
15. https://www.thersa.org/
16. https://impacthub.net/
17. https://eit.europa.eu/
18. https://www.itu.int/net4/wsis/stocktaking/
19. https://ec.europa.eu/info/index_en

LABS

1. https://space10.com/
2. https://circulab.com
3. https://www.greenschool.org/
4. https://biomimicryinnovationlab.com
5. https://www.theschooloflife.com/
6. https://www.biopolus.net/urban-circularity/
7. https://doughnuteconomics.org/
8. https://www.coactlab.org
9. https://www.fablabs.io/organizations
10. http://opensourceecology.org
11. https://www.openbuildinginstitute.org
12. https://make.co/maker-movement/
13. https://www.arduino.cc

Questions?

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https://bit.ly/3qvec5v

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