Creating Integrated Value: From Systems Thinking to Sustainable Transformation in Business and Society

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#SustainableTransformation
Are the SDGs an Adequate Response?

RISKS
1. Business ignores the SDGs
2. Business spins the SDGs
3. Business cherry-picks the SDGs

OPPORTUNITIES
1. Business adopts the SDGs
2. Business innovates around the SDGs
3. Business transforms the SDGs

THE REAL CHALLENGE
• Systems Thinking

SOURCE: Visser, 2018; Laszlo, 2004
Systemic Breakdown #1: Disruption

According to the Global Peace Index 2016, only 10 countries in the world can be classified as conflict free.

According to Munich Re, natural disasters increased from around 200 per year in 1980 to around 700 per year in 2016.

Systemic Breakdown #2: Disconnection

4 billion people still lack access to the internet and nearly 6 billion people do not have high-speed internet.

Nearly 2 billion do not use a mobile phone, and almost half a billion live outside areas with a mobile signal.

SOURCE: World Bank, 2016
Systemic Breakdown #3: Disparity

From 1960, the absolute gap between the average incomes of people in the richest poorest countries has grown by 135%.

Average CEO to worker pay in the U.S. has gone from 20 to 1 in 1965 to around 300 to 1 today.

SOURCE: Bolt and van Zanden, 2014; Mishel and Davis, 2015
Systemic Breakdown #4: Destruction

Populations of vertebrate species will have declined 67% from 1970 to 2020 if current trends continue.

2.5 °C climate warming will devastate ecosystems, increase poverty and cost the global economy $12 trillion by 2050.

Systemic Breakdown #5: Discontent

More than 40% of deaths from non-communicable diseases (70% of all deaths) are premature or preventable.

Depression and anxiety disorders affect 10% of people, cost the global economy US$1 trillion each year and have increased.

Systemic Problems: 5 Forces of Fragmentation

Disruption
- Natural/climate disasters
- Industrial accidents
- Market crises

Discontent
- Lack of purpose
- Work stress
- Unhealthy lifestyles

Disconnection
- Lack of internet
- Digital divide
- Technology exclusion

Destruction
- Resource depletion
- Biodiversity loss
- Ecosystem damage

Disparity
- Income inequality
- Discrimination
- Economic exclusion

SOURCE: Visser, 2017
Systemic Breakthrough #1: Secure Innovation

SECURE innovation in the RESILIENCE ECONOMY

- Lowering risk
- Aiding recovery
- Ensuring continuity

Helps us to address problems like the $330 billion in losses ($49 billion uninsured) from world-wide natural catastrophes in 2017, up from $184 billion in 2016

SOURCE: Buheji, 2018; Munich Re, 2018
Systemic Breakthrough #2: Smart Innovation

SMART innovation in the EXPONENTIAL ECONOMY

- Connecting people and things
- Using big data
- Artificial intelligence

The increased use of exponential technologies could add $1.36 trillion to total global economic output in 2020

SOURCE: Carlson and Wilmot, 2006; Accenture, 2015
Systemic Breakthrough #3: Shared Innovation

SHARED innovation in the ACCESS ECONOMY

- Equity / fairness
- Inclusive design
- Sharing platforms

PwC estimates the access economy – also called the sharing economy - may be worth $335 billion by 2025

SOURCE: Eckhardt and Bardhi, 2015; Botsman and Rogers, 2010; PwC, 2015
Systemic Breakthrough #4: Sustainable Innovation

SUSTAINABLE innovation in the CIRCULAR ECONOMY

- Bio/renewable products
- Zero waste design
- Being climate positive

Accenture estimates that the circular economy opportunity could be worth $4.5 trillion by 2030

SOURCE: Webster, 2017; Lakha, 2017; Lacy and Rutqvist, 2015
Systemic Breakthrough #5: Satisfying Innovation

SATISFYING innovation in the WELLBEING ECONOMY

- Human health
- Quality of life
- Meaning in work

According to the Global Wellness Institute, the wellbeing economy was worth $3.72 trillion in 2015

SOURCE: Fioramonti, 2017; Global Wellness Institute, 2016
Systemic Solutions: 5 Forces of Integration

Secure
RESILIENCE ECONOMY
- Lowering risk
- Aiding recovery
- Ensuring continuity

Satisfying
WELLBEING ECONOMY
- Promoting health
- Meaning in work

Sustainable
CIRCULAR ECONOMY
- Bio products
- Zero waste
- Climate positive

Smart
EXPONENTIAL ECONOMY
- Connecting people & things
- Big data & AI

Shared
ACCESS ECONOMY
- Promoting equity
- Inclusive design
- Sharing platforms

GLOBAL INNOVATIVE SOLUTIONS
Five Forces of Integration

SOURCE: Visser, 2017
Creating Integrated Value: Sustainable Ports

Port of Auckland – DC Microgrid Research

Secure + Sustainable

New Zealand
- Climate and Energy
- Community
- Resilient Infrastructure
- Ongoing

Ports of Auckland Ltd and the University of Waikato are working together on a pilot project with a DC micro grid for buildings.

SOURCE: Anzilotti, 2017
Creating Integrated Value: Sustainable Ports

Port of Antwerp – CIVITAS PORTIS project

In September 2016, Antwerp hosted the CIVITAS PORTIS project kick-off meeting. The project involves 33 partners from five port cities working together on sustainable mobility in terms of transport for commuters and goods.

SOURCE: Anzilotti, 2017
Creating Integrated Value: Sustainable Ports

ESPO – EcoPorts

The aim of EcoPorts is to identify, understand and address environmental challenges, develop and implement solutions and to demonstrate a high standard of environmental management.

Sustainable + Satisfying

SOURCE: Anzilotti, 2017
Creating Integrated Value: Sustainable Ports

Port Authority acquires NMP pipeline company

22 Nov 2017 | Antwerp Port Authority is to acquire Nationale Maatschappij der Pijpleidingen (NMP) from its current shareholders Ackermans & van Haaren and Electrabel. With the takeover Antwerp Port Authority will gain ownership and control of 720 km of pipelines, 90% of which serve the chemical and petrochemical companies in the port of Antwerp and its hinterland. The Port Authority is paying 44 million euros for the NMP shares.

“Pipelines are the backbone of the chemical industry and oil refining,” explains Port Authority chief executive Christian de Vries. “By giving them access to a pipeline network that is of at least two fronts: we help to reinforce the presence in the port of Antwerp and pipelines leading to and from it. NMP at present obtains 86% of its income from 600 km of pipelines

SOURCE: Anzilotti, 2017
A Systems View Focuses on Innovation Synergies

INTEGRATED VALUE goes beyond looking at new ways to measure value. Integrated value is much more about INNOVATION SYNERGIES through solutions that are secure, smart, shared, sustainable and satisfying.

SOURCE: Visser, 2017
In Conclusion: Go Far, Together

First they ignore you. Then they laugh at you. Then they fight you. Then you win.

-Mahatma Gandhi

THANK YOU!

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