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***Building Capacities for Sustainable Entrepreneurship:
Theoretical and Practical Aspects***

Zbigniew Bochniarz
Kozminski University, Poland & Evans School at
University of Washington, USA

Agenda

- Urgency of the Problem – **IPCC 2018 “1.5°C”**
- Call for **Innovative Responses** => faster & more efficient based on **Human & Social Capitals (HC & SC)** => **entrepreneurship**
- The need for new curricula with institutional dimension => **Quadruple-Bottom-Line (QBL)** to boost building **corporate culture**
- Who will lead the **paradigm shift** how will proceed?
- Practical examples of building **sustainable entrepreneurship**
- Conclusions & Recommendations

Why do we need to **limit global warming to 1.5°C** instead of the recommended 2°C of the Paris Agreement?

GLOBAL WARMING OF 1.5 °C

an IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty

Summary for Policymakers

This Summary for Policymakers was formally approved at the First Joint Session of Working Groups I, II and III of the IPCC and accepted by the 48th Session of the IPCC, Incheon, Republic of Korea, 6 October 2018.

- IPCC October 6, 2018 Report => the **2° C limit** on the acceptable increase of global average temp. at the end of XXI Century => **too risky for irreversible changes on the Earth.**
- Global tem. has **already reached 1° C increase** from preindustrial level at the end of XX Century, the urgent need => **stop this trend at the 1.5°C** level at the end XXI.
- In order to do this the **mankind will have 10-15 years** from 2020 to introduce effective institutions and policies to **stay on the safer path** of development

Why do we need entrepreneurs to resolve urgent Climate Change & sustainability problems?

- Growing **threats** to the Climate Change & Earth' sustainability require **innovative solutions**, which only **creative human capital (HC)** can provide
- **Entrepreneurship** – business or social – an example of **creative HC**
- **Sustainable entrepreneurs (SE)** => securing **meeting basic needs** and **reducing threats** to sustainability by offering **innovative allocation of limited resources**

Who are the Major SHs of SD?

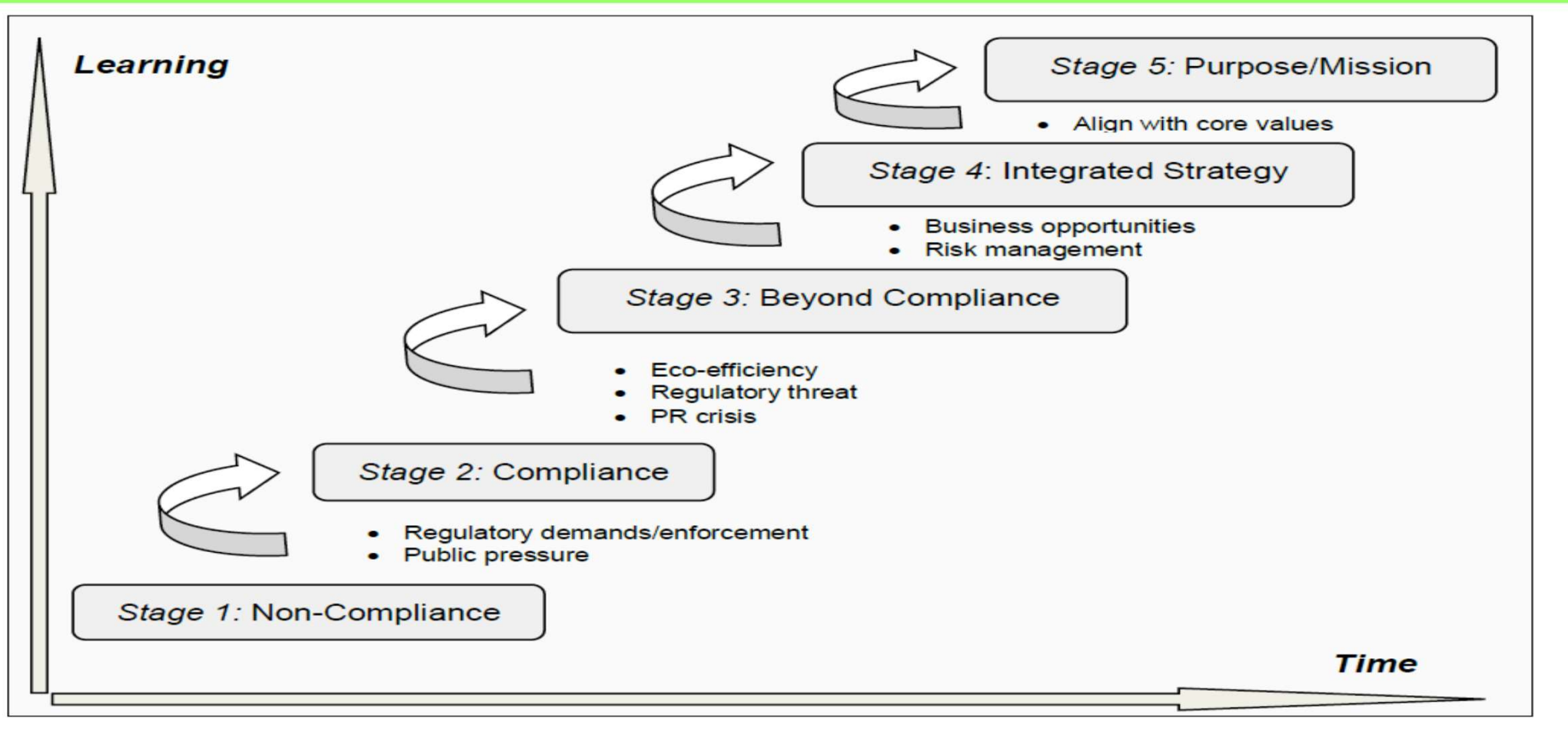
1. Governments
2. Companies
3. NGOs
4. Academia
5. Media
6. Citizens
7. International Institutions

How we should get business SHs involved?

- The most critical challenge => **use the private sector resources in the most sustainable way** for the sake of the planet => converting business as usual (BAU) into **sustainable business (SB)**
- Two major ways:
 - **by external forces** – governmental regulations (command and control) and market-based incentives, and by civic pressure (mainly non-governmental organizations -NGOs)
 - **by internal forces** bringing the necessary change from within companies to make them SB

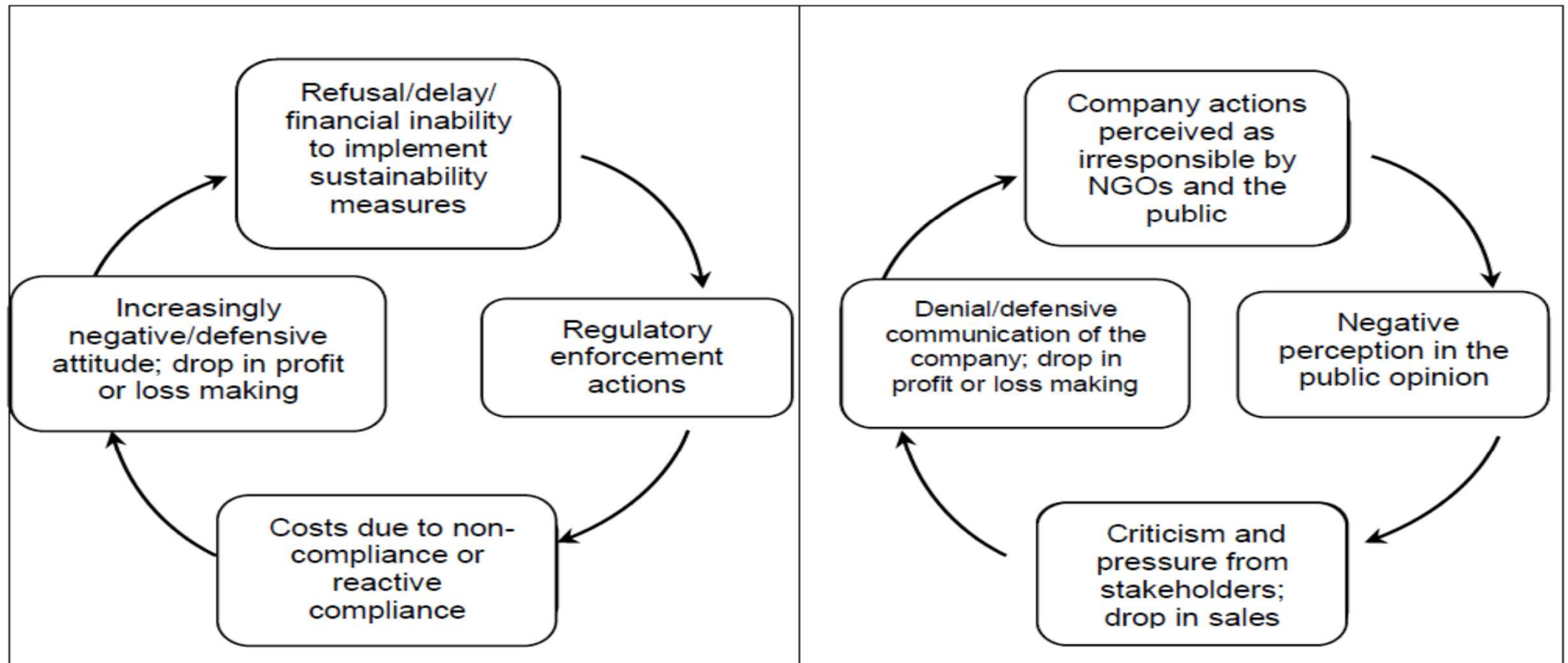
How we should get business SHs involved?

Figure 1. From Compliance to Innovation. Source: Williard (2005), & Senge et al. (2008).



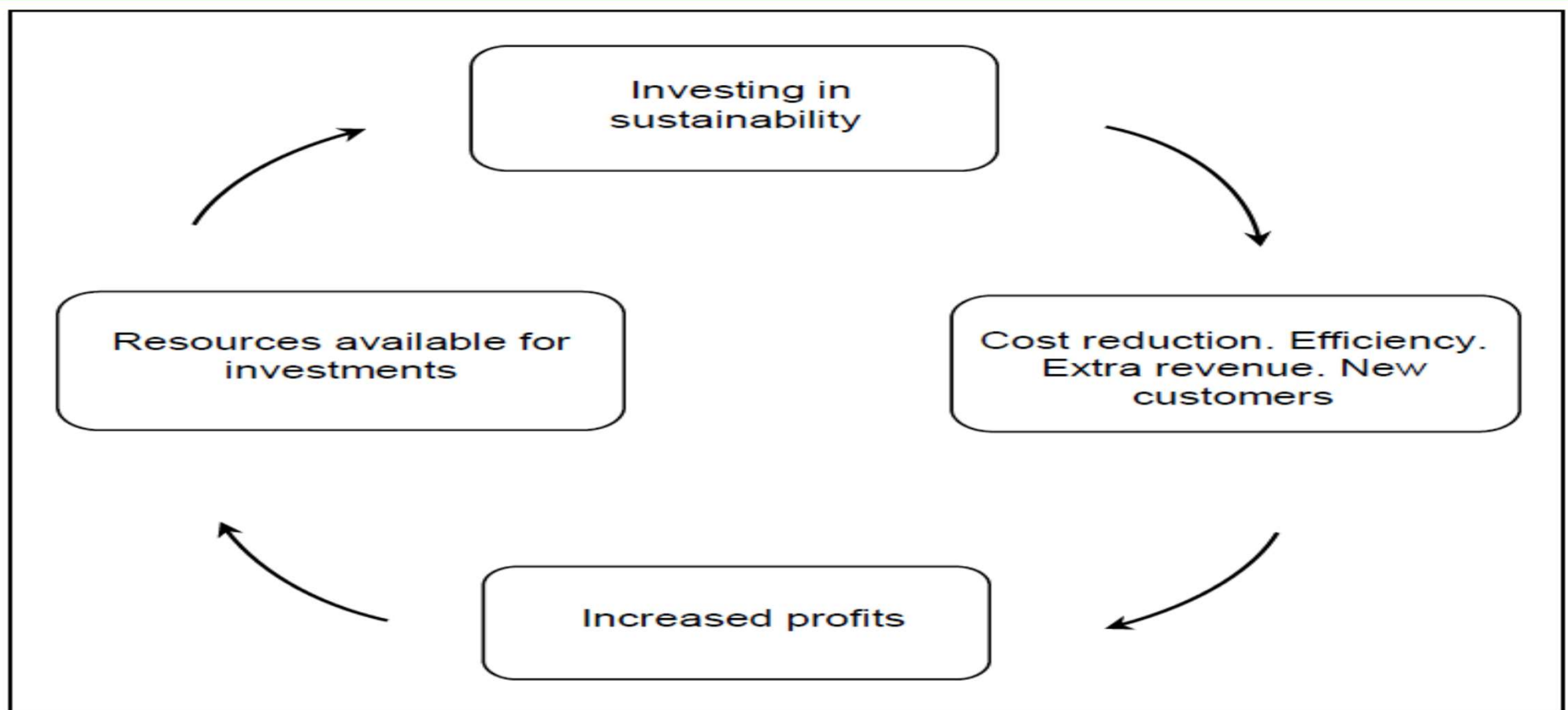
How we should get business SHs involved?

Figure 2. Vicious Cycle – stalling at stages 1 or 2. Source: Oncica & Candea (2016, 17) after Senge et al. (2008) and Willard (2005).



How we should get business SHs involved?

Figure 3. Virtuous Cycle supporting the drive toward sustainability.
Source: Oncica & Candea 2016, 18).



Joachim H. Spangenberg, Sustainable Europe Research Institute SERI
Germany, research coordinator

The Prism of Sustainability: normative



How we should get business SHs involved?

- Growing significance of multinational corporations (MNC) => difficult to influence by specific national policies
- Global institutions protecting the Earth sustainability are rather weak and not sufficiently effective
- Need to complement them with internal forces, which are sensitive to the peer pressure of other competing MNC
- Few examples:
 - World Business Council for SD since 1992
 - Ethical Corporation => 18th Responsible Business Summit Europe 2019: *It's time to Lead: Innovate, Engage and Collaborate* <= response to IPPC 2018 Report
 - UN Global Compact since 2000.

UN Global Compact for Sustainability

The Mission: *Mobilize a Global Movement of Sustainable Companies and Stakeholders to create the World We Want.*

Dynamic growth of the Organization:

From **43 business in 2000** to **9,413 in 2017** (4,722 in Europe)

Some other figures:

- **163 countries** with Global Compact companies
- 28% of *Fortune 500*
- Employed 66M people
- **76 Local Networks**
- 7,448 have been **expelled** from the Organization
- 3,056 Non-business participants
- Over **1,900 members** (22%) responded to the 2017 Survey => Over 90% reported to have **Ten Principles in place**

How we should get business SHs involved?

- According to the Accenture Study of CEO (2010):
 - 90 percent of CEOs believed that sustainability was important to company profits
 - 72 percent CEOs believed that investing in education was critical to succeed in making their business sustainable
 - => Education of business leaders => investing in SE

How business schools respond?

- Recently published research by A. Hoffman (2017):
 - **tremendous dynamics** of business school course offering incorporating **sustainability in their MBA programs – four times increased** from 2001 to 2011
 - **the US school participation sustainability teaching** at all types of business education has **increased from 34 to 79 percent**
 - **two models of teaching** business sustainability:
 - “Business Sustainability 1.0: **Enterprise Integration**” - **sustainability principles** into company **preexisting conditions to survive** on the market,
 - “Business Sustainability 2.0: **Market Transformation**” - **systemic enterprise transformation including its role in society** (Hoffman 2017, 279-286)

What is the challenge for business schools & academia? (1)

- Expanding further course offering incorporating **sustainability not only in business schools but in whole academia**, particularly in public administration, economics and other social sciences and engineering
- Moving from “Business Sustainability 1.0 “**Enterprise Integration**” to “Business Sustainability 2.0: **Market Transformation**” and follow the model Willard-Senge of Five stages SB development
- Incorporating the **newest achievements of sustainable science** by including the role of **institutions, values and culture** to course contents, as well as all basic forms of capital involved in building SB, particularly – **Human and Social Capital**
- Shifting from TBL to **Quadruple-Bottom-Line** (QBL) approach in operationalizing sustainability

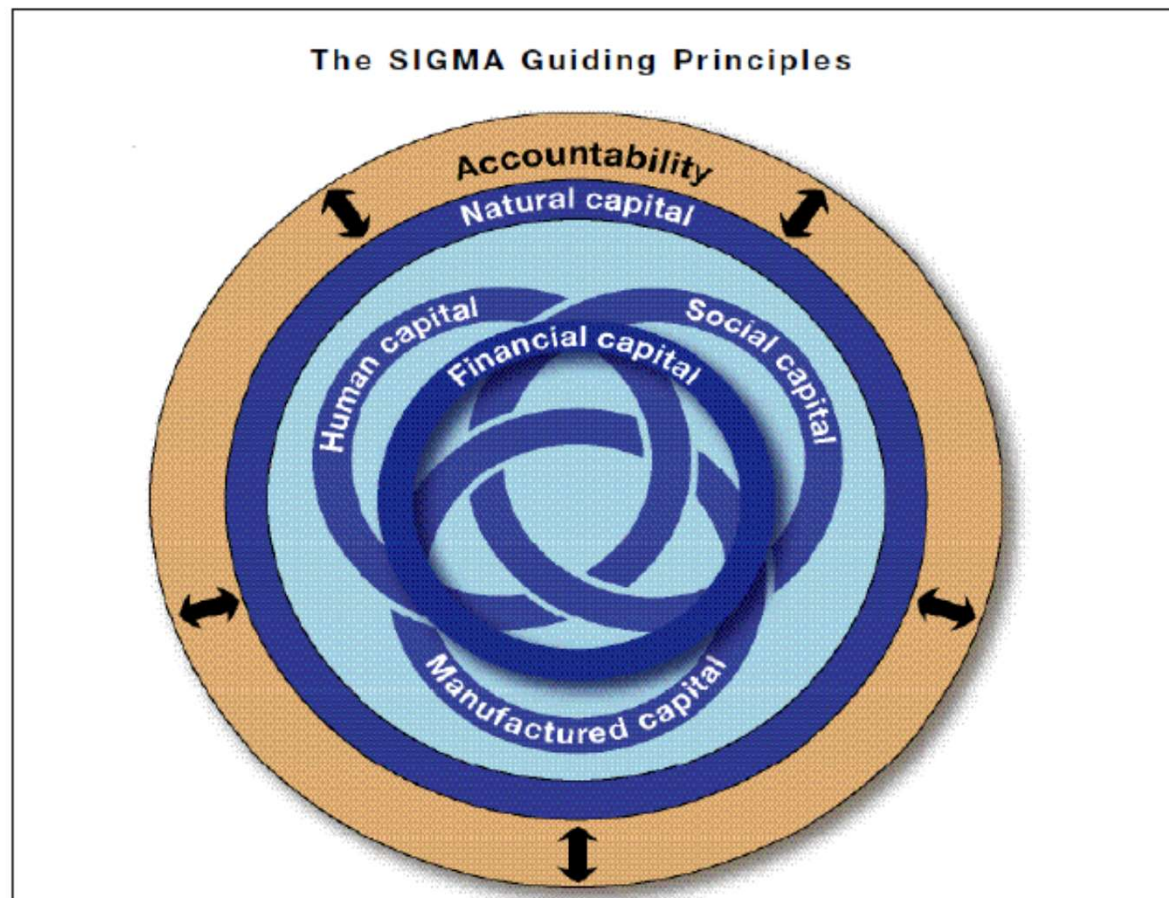


Figure 1.6.1.1. Guiding principles of sustainability. Source: The Sigma Project (2003)

What is the challenge for business schools & academia? (2)

- Delivering courses based on **student-centered approach**
- Converting capstone, diploma, master seminars or executive courses & post-graduate programs in a **learning community**
- Using **case studies** to introduce the basic theories and methods in practical way
- Equipping students in the basic social skills and attitudes => **investing in soft skills**

What is the challenge for business schools & academia? (3)

- Assisting students in selecting their **favorite topics** of field research, and encouraging team
- Facilitating contacts their project **main stakeholders (SH)**
- Monitoring **progress in action research** and delivering necessary **assistance**
- Inviting main SHs to the **final project presentations** to demonstrate **students achievements** and **strengthen contacts** with business, government and local communities

How we should **educate students and business leaders** to become **sustainability champions** – the practical cases (1)

University of Minnesota, Humphrey School, Center for Nations in Transition (USA):

1. Executive program: *Microeconomics of Competitiveness (MOC* - 2006 -2007):

- The **main goal** - providing the knowledge and skills necessary to sustain development and prosperity in the State of Minnesota (MN).
-
- Participants: Leaders and managers of state agencies (72) & SME (5)
- Output/Impact:
 - 15 projects for MN communities => 12 funded over \$5M
 - 10 participants started their own consulting on SB

How we should **educate students and business leaders** to become **sustainability champions** – the practical cases (2)

University of Minnesota, Humphrey School, Center for Nations in Transition (USA):

2. Joint Post-Diploma Studies in Eco-Management in Central & Eastern Europe (CEE): Poland, Bulgaria, Hungary, Slovakia & Romania (1994-2005):

- The **main goal** - providing the knowledge and skills for undertaking & sustaining environmental friendly restructuring of the most polluted industries and regions in CEE.
- Participants: **Leaders & top managers** of polluting industries and regional and local governments (380)
- Output/Impact:
 - 350 restructuring projects for business and communities => over \$3.5B raised
 - 8 local universities involved and sustained the program
 - Significant improvement in regional environments
 - Two executive centers for Eco-management (PL & RO)

How we should **educate students and business leaders** to become **sustainability champions** – the practical cases (3)

University of Washington, Evans School of Public Policy and Governance, Seattle (USA):

1. Over 20 years conducting **Capstone seminars** with over mostly team 100 projects annually mainly for public and non-profit sectors:

- The **goal is enhanced practical** skills at the end of their studies (last two quarters) by engaging students as project-focused professionals working independently with key guidance from faculty advisors and periodic assistance from faculty
- The **venue & scope**: the Evans School Student Consulting Lab (formerly Public Service Clinics) has been producing program evaluations, strategic plans, policy analyses, and new program proposals that address the real-world needs of nonprofit and public agencies.

How we should **educate students and business leaders** to become **sustainability champions** – the practical cases (4)

University of Washington, Evans School of Public Policy and Governance, Seattle (USA):

2. Own-project oriented courses on SD, MOC, Comparative International Environmental Policy, Independent Studies and Capstone (2007-2015):

- Participants: Graduate students from University of Washington (over 120)
- The output/impact:
 - 30 practical projects for public, non-profit and business organization
 - Active involvement of local and international communities, particularly with the State Government and cluster organizations
 - Over \$2M raised to implement projects

How we should **educate students and business leaders** to become **sustainability champions** – the practical cases (4)

Kozminski University (KU) in Warsaw, Poland 2016 - 2018

Programs/courses:

1. **MOC** for Ph.D. students (2016 & 2018)
 2. **Building Sustainable Enterprise** (2017 & 2018)
 3. **Economic Competition and Innovation** (2018)
 4. **Sustainable Development: A Strategic Approach** – 3rd year undergraduates (2018)
- The main goal of these programs was providing the knowledge, skills and social competencies necessary to sustain business or public organization in global competition and create positive impacts on a firm, region or a country.
 - Participants: 50 Ph.D. students, 52 graduate students & 15 undergraduate students.
 - Output/Impact: 28 projects developed and delivered to stakeholders.

Conclusions (1):

1. The cases confirmed – investing in HC & SC produced significant impact for business and local communities.
2. The **highest** and easiest to measure **impacts** resulted from **executive programs**, which contributed additional values to already rich HC (e.g. PDS – Gliwice case with \$350M investment).
3. For **graduate students** the project-based courses => the best opportunities to **verify their investments** in new HC & SC, build **professional confidence** by elaborating a “Signature Product” showing their **entrepreneurial credentials**.
4. For **business, public and civic organizations** such programs offered **high returns on investment** by getting young dynamic professional **reviewing** the status, **resolving** their problems and **providing fresh & sustainable prospects** for their organizations.

Conclusions (2):

5. It is **difficult to build initial confidence** with business, public and civic partners to conduct collaborative student projects = the academic credentials are very important asset.
6. The **most difficult** is to convince corporations that the most sustainable path of development is **NOT** through **mergers and acquisitions** but by **investing in their HC & SC**.
7. It is **not easy** to find **dedicated and experienced** faculty members who will provide such demanding services => **special efforts** needed to **mobilize** such group.

Thank you!

Questions please...