Jak wykorzystać przedsiębiorczość w działania dla zrównoważonego rozwoju?

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1. Why do we need entrepreneurship to resolve the Earth sustainability problems?
2. Who are the major sustainable development (SD) stakeholders (SH) and why do we need the business SH actively involved?
3. What curriculum we should offer for business entrepreneurs to help them transforming their companies to sustainable businesses (SB)? Is SB based on triple-bottom-line (TBL) sufficient to reach out sustainability?
4. How we should educate students and business leaders to become sustainability champions?
Why do we need entrepreneurs to resolve sustainability problems?

Growing threats to the Earth’s 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.
Major SHs of SD

1. Governments
2. **Companies**
3. NGOs
4. **Academia**
5. Media
6. Citizens
7. International Institutions
The Economic Power of Main SD SHs in USA (Porter 2013)
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), and 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).
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
- During last 16 years the number of companies of the UN Global Compact increased from 100 in 2001 to 350 in 2011 (UN Global Compact-Accenture CEO Study 2010) and by October 2017 reached the number of 9000 companies in 170 countries in (www.unglobalcompact.org 2017)
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
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 are the major drivers of SB for companies?

According to A. Hoffman (2017, 281) there are four drivers:

- **Coercive drivers** - domestic and international regulations and courts
- **Resource drivers** – suppliers, buyers, investors and financial institutions
- **Market drivers** – consumers, trade associations, competitors and consultants
- **Social drivers** – environmental NGOs, media, religious and academic
What is the challenge for business schools?

- To expand further course offering incorporating sustainability

- To move 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

- To deliver courses based on student-centered approach

- To incorporate 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

- To move from TBL to Quadruple-Bottom-Line (QBL) approach in operationalizing sustainability
The Prism of Sustainability: normative

Institutional Imperative
- strengthen participation

Economic Imperative
- improve competitiveness

Social Imperative
- improve

Environmental Imperative
- limit throughput

justice
care
democracy

net burden sharing

eco-efficiency (TMR)

Access
Understanding the Basic Relations in Shaping Human Behavior: Institutions

Values

Attitudes

Behavior
BASIC ELEMENTS OF INSTITUTIONAL DESIGN FOR SUSTAINABILITY

INCENTIVES

SOCIALIZATION

LEGITIMATION

MONITORING AND ENFORCEMENT

MEANS FOR CONFLICT RESOLUTION
BASIC CRITERIA OF INSTITUTIONAL SUSTAINABILITY
(L. Hurwicz, 2000)

INCENTIVES

EFFICIENCY

SUBSIDIARITY
BASIC TEST OF INSTITUTIONAL SUSTAINABILITY
(Boland & Bochniarz, 2000)

- Loyalty
- Spirit and Energy
- Perceived Fairness & Justice in Conflict Management
- Mutual Help in Difficult Time
Evaluating Sustainable Development: Non-Declining Wealth vs. Non-declining Total Capital

Figure 1.6.1.1. Guiding principles of sustainability. Source: The Sigma Project (2003)
Two Basic Approaches to Sustainability and their Implications

- Maximizing Material Wealth (MMW) vs. Maintaining Non-Declining Total Capital (NDTC)

- Applying John HARTWICK’s rule (1977): “constant level of consumption could be maintained perpetually if all the scarcity rents were invested in capital.” (after Tietenberg 2008)

- Implications of the dominant MMW approach => huge distributional gap, dominance of material private goods, discrimination of investment in non-material capital and public goods
Further Implications of the Dominance of the MMW Approaches

Maximizing Material Wealth led to:

- Overpricing man-made and financial capital => crises
- Dominance of material values over non-material
- Discrimination of investments in non-material capital
- Erosion of ethical values and compassion
- Greed and corruption
- Uncontrolled depreciation and degradation of public goods – both natural and institutional
- Local, regional and international conflicts and wars

Significant deterioration of public trust in two basic resource allocation modes: self-regulated markets and government regulations, including centrally planning
Basic Assumptions for Exploring Sustainable Business Concept: Non-declining Total Capital

\[ TK = Km + Kn = \text{constant (non-declining capital)} \]

Where:
- \( Km = Kph + Kf \) material capital (physical & financial)
- \( Kn = Khc + Ksc \) non-material capital (human & social)
- \( Kph = Kmd + Knc \) physical capital (man-made & natural)
Defining Human Capital (HC)

HC is the *unique form of capital* that has the *ability* to put other forms of capital – tools, infrastructure, land and financial assets - *in motion* to produce goods & services and thus *to create new values*.

This is the *single creative form of capital*.

\[ HC = \text{Knowledge} + \text{Skills} + \text{Attitude} \]
Defining Social Capital (SC)

SC is a special type of capital resulting from investments in building relations, institutions and networks that produce collaborative attitudes, shared norms and values, mutual understanding and trust – critical factors for cooperation with other types of capital and thus contributing to sustainable development (SD).

SC – positive or negative (non-ethical)
Measuring SC

- The economic value of SC depends on time invested in developing institutions, networks, relations, attitudes and trust within the a certain group of people (from family, through firms, cluster, region, nation to global community) Bochniarz (2008)

- Similar approach proposed C. Roman (2009) with a set of complex indicators assessing its value mainly through surveys
Responsibilities Call for Action!

Academia

Companies

NGOs
Responsibilities of Academia in paradigm shift toward HCSD (1)

In education process:

• Implement student-centered approach to identify their unique talents => facilitate personal and professional development

• Keep balance between Knowledge (K), Skills (S) and Attitudes (A) building

• Help them to discover K rather then transfer

• Promote not only hard but particularly the soft S = critical factor for building SC

• Include ethical principles in A building by individual and team practical projects
Responsibilities of Academia in paradigm shift toward HCSD (2)

In research process:
- Popularize best practices of government, business and NGOs leading toward HCSD
- Have a courage to defend academic integrity in identifying of governmental policy and market (business) failures threatening HCSD
- Promote action research involving all major HCSD stakeholders and share with results
- Support networking as the third resource allocation mode based on ethical principles in correcting governmental and market failures and thus enriching SC and contributing to HCSD
From economics point of view, the SB means an enterprise that maintains its competitive advantage coming from its unique value chain (Porter 2008)

It requires strategic approach to SB including redesigning value chain, diamond of competition & shared values (Porter & Kramer 2011)
Two Types of Competitive Advantage
(M. Porter)
Redesigning Value Chain for SB (Porter)
Adjusting Diamond of Competition to SB (M. Porter)

Context for Firm Strategy and Rivalry
- Local rules and incentives that encourage investment and productivity
  - e.g., incentives for capital investments, IP protection
- Sound corporate governance
- Open and vigorous local competition
  - Openness to competition
  - Strict competition laws

Factor (Input) Conditions
- Improving access to high quality business inputs
  - Qualified human resources
  - Capital availability
  - Physical infrastructure
  - Scientific and technological infrastructure
  - Administrative and regulatory infrastructure

Demand Conditions
- Sophisticated and demanding local needs
  - e.g., Strict quality, safety, and environmental standards
  - Sophisticated demand in the private sector or government

Related and Supporting Industries
- Availability and quality of suppliers and supporting industries

- Many things matter for competitiveness
- Successful economic development is a process of successive upgrading, in which the business environment improves to enable increasingly sophisticated ways of competing
Creating Shared Value  (Porter & Kramer 2011)
How we should educate students and business leaders to become sustainability champions – the case of “Building Sustainable Business” course

Graduate course (3 ECTS credits) on “Building Sustainable Business” at the Kozminski University (KU)

The main goal of the course was providing knowledge & skills necessary to sustain business in global competition and create positive impacts on a firm, region or a country.

The design of the course was student-centered with the instructor roles as a facilitator of building the learning community.

All participants were treated as equal partners, who should contribute to the community based on their knowledge, experiences and skills.
How we should educate students and business leaders to become sustainability champions – the case of “Building Sustainable Business” course

The course based mainly on cases with introductory theoretical part from the recently published book by D. Oncica & D. Candea, Sustainable Business: Is the Learning Organization step ahead? (2016) and selected chapters - and two chapters from the instructor’s publications.

There were 11 cases discussed in the class, 7 of them based on students’ field research projects elaborated by 3-5 person teams.

The quality of the project was equally important as the active class participation (50:50 including 10 points for effective class and project presentations).

From 38 initially enrolled students, 28 completed and passed the minimum requirements of the course.
BUSINESS SUSTAINABILITY

Is the Learning Organization one Step Ahead?

- A Research Report -

Authors:
Dan Oncică- Sanislav
Dan Cândea

The 9th book in the Series of research publications

THE SUSTAINABLE ENTERPRISE
Conclusions from the Case BSB (1)

1. The course reached its major goal and objectives.

2. The students - besides gaining new knowledge - built and exercised their soft skills & competences – including entrepreneurship & leadership – by selecting areas of their projects, designing their own team “constitutions” to manage effectively the project, conduct interviews with SHs distribute team work according to their best capacities, and prepare policy recommendations.

3. Two of the SHs (from different projects) participated in final presentations and one of them delivered a guest lecture.
Conclusions from the Case BSB (2)

4. The instructor conducted two anonymous team member performance evaluations and provided written guidelines for the contents of the project and for effective team presentations.

5. At the end of the course an anonymous instructor performance & the quality of the course evaluation was conducted with the average score of 4.4 points of 5 maximum points.

- 1990: 200 billion USD
- 1995: 500 billion USD
- 2000: 1000 billion = 1 trillion USD
- 2010: 1.5-1.8 trillion USD
- 2030: 7 trillion USD
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