Leadership in Sustainability

Authors: LeadSUS Training Material Committee
Dimensions of Sustainability

- Socio-Ecology
- Economy
- Eco-Economy

Society

Sustainability

Socio-Economy
LeadSUS European Certification

“Help and guide somebody in exploiting his potential”
Sustainability Maturity Levels

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### First wave
- **Opposition**
  - Highly instrumental perspective on employees and the natural environment
  - Culture of exploitation
  - Opposition to government and green activists
  - Community claims seen as illegitimate

### Second wave
- **Risk**
  - Financial and technological factors have primacy
  - More ignorant than oppositional
  - Seeks business as usual, compliant workforce
  - Environmental resources seen as a free good

- **Cost**
  - Focuses on reducing risk of sanctions for failing to meet minimum legal and community standards
  - Little integration between HR and environmental functions
  - Follows route of compliance plus proactive measures to maintain good citizen image

- **Competitive advantage**
  - HR systems seen as means to higher productivity and efficiency
  - Environmental management seen as a source of avoidable cost for the organization

### Third wave
- **Transformation**
  - Focus on innovation
  - Seeks stakeholder engagement to innovate safe, environmentally friendly products and processes
  - Advocates good citizenship to maximize profits and increase employee attraction and retention
  - Reinterprets the nature of the corporation to an integral self-renewing element of the whole society and its ecological context

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Kemp, Stark and Tantrum, 2004
Continuous Improvement in Sustainability

PLAN
Management responsibility

DO
Measurement analysis & improvement

CHECK
Resource management

ACT
Product realization

Continual Improvement
ISO and sustainable development

- “The Method”...international standards (ISO)

- **ISO9000**: Provides guidance to organizations for achievement of sustained success through a quality management approach.

- **ISO14000**: A poor environmental record can quickly damage an organization's reputation with customers and investors.

- **OHSAS18000**: Safe working conditions.

- **ISO26000**: Promotes sustainable development on health and safety and international norms of behavior.

- **ISO31000**: Identifies opportunities and minimizes threats related to environmental, financial and safety risks.
What we need...

- **A key for market-entering**
  The needs to answer the environmental legislations and the initiative industrial activities
  Ex: REACH, RoHS, WEEE, ERP, Battery directive, Package directive, Eco-declaration directive, etc.
  And

- **Reduction of manufacturing and logistics costs**
  An optimization of the quantity of matter and energy helps to reduce costs.

- **Access to finance**
  Meeting the new challenge of customer’s needs, New business mode, Product-service system, etc.

- **The opportunities to Increase the capacity for innovation**
  The eco design is a systematic work which need the collaboration between all inter-functions. The practices and all related supports create an opportunity for multi-types innovation (Tech, Business mode etc.)

- **The opportunities to enhance the competitiveness**
  Identify new hitting areas to make more efficiencies can lead to the enhancement of offer’s differentiation.

- **Development of new markets**
  Anticipating or exploring the improvement to meet the customer’s expectations in order to access to new markets or new business opportunities.

- **Enhancement of image**
  Stakeholders responsibilities, The eco-behaviors contribute to enhance the brand image with new positive characteristics: high-quality, pure, advance and green etc.
The Importance of Sustainable Design

- The environmental improvement could be realized in All human activities - production, distribution, use and end of life treatment causing impacts on the environment.

- Approx. 80% of product-related environmental impacts are determined during the product design phase.

- Considering environmental aspects in the design phase is a effective approach to improve the environmental performance in next product generation.

* Preparatory studies of European “ERP” directive.
Design for the Life Cycle

- A systematic view of product’s entire life cycle → A strategic view of enterprise
- This systematic view generates some new possibilities to improve the profits from environmental protection

- The natural resource doesn’t absolutely lead to greener impacts
  - Basing on Functional unit
    Quantified performance is considered as a reference unit
  - Focusing on the life cycle of offer to treat inter-phases pollution transfer
    Life cycle analysis of product, system, solution and service

- Multi-criteria analysis and description of product profiles

- Harmonization with other characteristics
  The product quality, manufacturing cost, ergonomics and engineering achievement
Disposable vs. re-usable Shopping Bag
Disposable vs. re-usable Shopping Bag

- Compare the material

One disposable bag VS One reusable bag
  - The disposable bag is better
  - But.......

![Spider chart showing comparison between disposable and reusable bags in various aspects like energy consumption, water consumption, hazardous waste potential, etc.]

Wait!
It's re-usable

Reusable bag is worse

Need consider the using condition
Three disposable bags with One reusable bag
- Number of reuse = 3
- This reusable bag is better now

Compare the product concerning the using condition

Reusable bag is better

The functional unit is a key element. It provides a reference to identify which and how many inputs and outputs should be related.
Classic Vehicle vs. Electric Vehicle
A systematic view of a product’s entire life cycle generates some new possibilities to improve the profits from environmental protection.

**Classic vehicle** - gasoline, diesel
- The fuel consumption of utilization phase presents the major environmental impacts.

**Electric vehicle**
- The optimization of utilization phase
- Partial impacts transfer to other life cycle

*The above histograms illustrate the conceptual trend of environmental impact transfer. They don’t present the real transfer data.*
What is LeadSUS?

- **LeadSUS**

  Leadership in Sustainability - Sustainability Manager

  a PROJECT designed for CAPACITY BUILDING
  in the field of
  SUSTAINABLE DEVELOPMENT

- TRANSFER OF INNOVATION project – transfer into RO, SI, FR
- Create framework for a new EU Certification training program and job role as Sustainability Manager within the ECQA (European Certification and Qualification Association)
The LeadSUS Consortium
LeadSUS Project Activities

Similar trainings  |  Training material integration  |  Training material refinement  |  Training material refinement  |  On line examination

**Identification of market need and skills set design**  |  **Training material adaptation**  |  **Transfer of knowledge**  |  **ECQA On line learning platform**  |  **Examination & Certification**

Companies, institutions, employees willing to attend  |  Pilot testing  |  Classroom training  |  On line training  |  ECQA certification

Train the trainers  |  Self assessment SM tool  |  

**PROJECT MANAGEMENT**  |  **DISSEMINATION**  |  **QUALITY MANAGEMENT**
LeadSUS European Certification

- Self Assessment Sustainability management
  - **Capability adviser** - Process management software tool extension with Sustainability formal assessment section

- ECQA framework
  - ECQA new job role creation
  - ECQA job role committee
  - ECQA LeadSUS On line learning working platform
  - ECQA LeadSUS platform user guide
  - ECQA LeadSUS examination guide
  - ECQA examination platform
  - **ECQA certification system for Sustainability manager**
    - Certification issuing for those who pass the exam
Free on-line pilot training

Interested?

You are ALL kindly invited to a free LeadSUS pilot training in early autumn 2014!

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THANK YOU

Leonardo da Vinci – Transfer of innovation project
Leadership in Sustainability – Sustainability Manager
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