LEADERSHIP IN SUSTAINABILITY – AN OPPORTUNITY FOR GREEN SKILLS DEVELOPMENT IN ROMANIA

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Abstract:
The aim of this paper is to present an opportunity for improving leadership in sustainability and/or management for sustainability by green skills/competencies development in the case of Romanian managers. Through the designed training and certification program, managers will develop their professional competencies in order to better identify, document, measure, analyze and manage, sustainable business processes in their companies. The proposed approach includes the learning materials development together with the certification procedure supported by the European Certification and Qualification Association (ECQA). The preliminary research phase consists of the marketing needs identification based on several focus groups developed with companies’ representatives from the West and Central Regions of Romania. The expected research results consist of the Leadership in Sustainability (LeadSUS) certification and qualification program that will be tested and validated through several training sessions (in class and on-line).

Keywords: management, leadership, sustainability, green skills, training, learning
1. INTRODUCTION

Sustainable development aims to minimize the environmental burden of the organizational growth through the development of clean technologies. It requires a long-term vision shared among all relevant stakeholders and strong moral leadership which has been recognized as a rare resource by Hart (1995). Furthermore, the same author has identified five resource domains where organizations have to be active (act proactive and with responsibility) in order to become greener. The main resource domain is related with human side of the organization by considering the investments in conventional green competencies related to green product and manufacturing technologies and also, the investments in employees’ skills, as measured by resource allocation to environmental training and employee participation (implication and commitment) (Buysse and Verbeker, 2003). From the point of view of (Hart, 1995) there have been recognized the role of managers and leadership behavior (together with the entrepreneurial one) in supporting the green skills and competencies of their employees in order to implement efficiently and effective the sustainable development strategy and other studies agree on this trend (Buysse and Verbeker, 2003; Alfred and Adam, 2009). Green skills taxonomy and different ways for their development are included in most strategies for sustainability development because employees and HR specialists expect managers to (Ehrenfeld, 1999; Stark and Marcus, 2000; Alfred and Adam, 2009):

Picture 1: Expectations for green management behaviour – reference review

References have underline the need for green management competencies, demonstrating the link between best practices in greening companies and human resources competencies related to process innovation and implementation (Aragon-Correa & Sharma, 2003; Christmann, 2000). It also, have been discover that green competencies are bring into practical exploitation by other causes because they are a type of public good, whose full value a firm cannot entirely appropriate (Teece, 2007) and also, government’s role in the acquisition of green capabilities obviously is important (Marcus, 1980). The government – companies relation in green management, do not refer to legally binding mandates imposed by the government on different companies and other polluters, but to policies and programs that support sustainable development (Vogel, 2005; Fiorino, 2006). Furthermore, the government – companies relation determine green competencies acquisition policies because managers have to consider the environmental policies (regulations and their orientations) and act in consequence. Companies together with training and consulting organizations are concern not only with the sustainable development strategy implementation (as a current business model), but also to support the new emerging training, qualifications and certification arrangements of the human resources, in order to better satisfy the actual needs of green competencies. These new competencies are linked not only for managerial positions, but also to full-fill a gap in other professions that have to be extended by considering the sustainable actions, processes and approaches that are needed in organizational practices and in employees’ social life (Alfred & Adam, 2009).
In the same context of the green management skills acquisition, training and development there have been found that the post crisis management vision includes the refinement of management practice through the integration of specific factors in business strategy, which allows sustainable corporate growth. Hence, the role of business education becomes crucial. Anninos and Chytiris (2012) have underlined that business education should be considered as an odyssey towards personal advancement that will allow systemic, multidisciplinary and innovative business thinking for sustainable management and excellence.

The European vision of sustainable development was integrated in the National Sustainable Development Strategy of Romania for 2013 – 2020 - 2030. This document establishes concrete action directions “within a reasonable and realistic timeframe, toward a new model of development that is capable of generating high value added, is motivated by interest in knowledge and innovation, and is aimed at continued improvement of the quality of life and human relationships in harmony with the natural environment” (NSDS, 2008). After the EU integration, the financial support of the Structural Found, there have been implemented national projects for organizations sustainable development and were adopted specific norms, regulations and standards for sustainability. In addition, the foreign investments positively affect companies concern for environment aspects and social responsibility. The Romanian National Institute of Statistics' publication indicates 426,320 active Romanian companies (in the first semester of 2010), of which 49,668 belong to the industrial sector; 9,557 Romanian companies have an ISO 14001 certification. Despite of the 106,700 at the European Union level (figures related to the end of 2010), more than doubled amount of the 3,884 certifications reported in 2008 (in comparison, in Slovenia there were reported 414 ISO 14001 certificates in 2010 versus 444 certificate in 2008, fact that demonstrate a loss in certificates).

These figures demonstrate that Romanian companies have improved their policies and strategies in the field of sustainability in the last years, but there are still a lot of organizations that need to move forward for managing sustainability (implementing ISO 14000 and ISO 26000). This will need effective education and training programmes that have to support employees and managers, different organization leaders to develop new skills in order to support their approach in managing sustainable development. Taking into consideration the previously mentioned reports, statistics and the future changes of ISO 140011 we conclude that education is a necessity in order to ensure continuous improvement towards sustainable development of the Romanian companies. Statistics and reports have underlined that many companies are not yet certified and they do not apply for the ISO 14001 implementation, but their managers understand the new trends for improving environmental performance, and its integration into the company's business model.

In the case of Romanian companies, in order to face the new challenges and attend the environmental performance on both the national and international markets, to be competitive, responsible and sustainable, they require employees that are qualified in the field (that exploit the new green skills and knowledge). In the same time, managers have to change their behavior and attitudes and be attached to leadership in sustainability trends, and/or sustainability managers and that suppose integrated environmental, social and business skills (also, known as green skills or competencies). Nowadays, there is an increasing demand on the labor market's for such specialists and for training programs in the field (Jackson et al., 2011; Luna et al., 2012; Fien & Guevara, 2013).

Thus, the role of Environmental Manager is gradually morphing into the role of Sustainability Manager. However, the problem for Romania and many other European countries is the fact that there is currently no national standard available for this field and subsequently, there do not exist any occupational classification codes or certified trainings. This is the context of the present research and the “Leadership in Sustainability – Sustainable Manager” (LeadSUS) project (LLP-LdV/TOI/2013/RO/022 that is implemented from 2013 to 2015). In the following there will be briefly presented the most relevant aspects regarding the project development and the approach established for the LeadSUS training and European certification program development. This is considered a great opportunity for Romanian companies in order to develop the green skills and competencies for their employees.

2. THE LEADSUS PROJECT

“Leadership in Sustainability – Sustainable Manager” (LeadSUS) project’s goal is to develop and provide a training program which is certified by a prestigious European organization (ECQA, www.ecqa.org) that will be validated on particular markets (Romania, Slovenia, France). The project’s objectives are shown in Table 1 (LeadSUS, 2013).

<table>
<thead>
<tr>
<th>Objective 1</th>
<th>Objective 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation, harmonization and refinement of existing training materials (from the existing training programs available on the ECQA e-learning platform) and their integration into a new, actual and original professional training program (European certification of the new training program and job role as “ECQA Certified Sustainability Manager”, with respect to the ECQA framework and guidelines);</td>
<td>The creation and development of the e-learning platform within the ECQA framework; this will allow trainees from different European countries to register and have access to the training materials (multimedia materials and references, case studies, exercises);</td>
</tr>
</tbody>
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<table>
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<tr>
<th>Objective 3</th>
<th>Objective 4</th>
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</thead>
<tbody>
<tr>
<td>Extension of the ECQA Capability Adviser, that is a process management software tool that has to be extended with LeadSUS formal assessment section;</td>
<td>The training program test/validation on Romania and France market; building Capacity in Sustainability Management in Romania, Slovenia, France.</td>
</tr>
</tbody>
</table>

Individuals (potential trainees as employees, managers of different organizations), included in the target group of the project, are able to attain the broad range of experience, skills and knowledge needed to transform them into successful Leaders in Sustainability. In addition, they will be able to certify their competence (and get a European certificate as recognition of their acquired professional competencies in the field). The general objective of LeadSUS project is to transfer and integrate a new skill at the level of European industry and institutions.

LeadSUS projects’ objectives and activities will be developed in an international consortium consisting six partners, all vocational education training (VET) organizations (of public or private nature, see Table 2). Due to their exceptionally wide spectrum of contacts in different sectors and levels of education due to their status of VET organizations, the partners will have a major impact in the dissemination process and the exploitation of the project's results. LeadSUS professional trainers in the field of sustainability management will positively affect companies and institutions managers and specialists on a long term. LeadSUS project impact will be in three countries (Romania, Slovenia, and France) and four corresponding regions as West and Bucharest Region in Romania, North-Eastern Slovenia, and South – Eastern France. Long term impact of the LeadSUS project (and its sustainability) at the European level will be assure by the new ECQA certified job role in a new profession (green competencies recognition, too), available for the European citizens and other more (LeadSUS, 2013).

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2 Trainers that will be trained during the LeadSUS project development and that will be evaluated and certified by ECQA
Table 2: LeadSUS project partners

<table>
<thead>
<tr>
<th>#</th>
<th>Partner name (acronym)</th>
<th>Country</th>
<th>Role in the project</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>denkstatt Romania (DSRO)</td>
<td>Romania</td>
<td>Coordinator (contractor)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><a href="http://denkstatt.ro/">http://denkstatt.ro/</a></td>
</tr>
<tr>
<td>1</td>
<td>Politehnica University Timisoara, (UPT)</td>
<td>Romania</td>
<td>Partner</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><a href="http://www.upt.ro">www.upt.ro</a></td>
</tr>
<tr>
<td>2</td>
<td>Institute National Polytechnique de Grenoble (INPG)</td>
<td>France</td>
<td>Partner</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><a href="http://www.grenoble-inp.fr/">http://www.grenoble-inp.fr/</a></td>
</tr>
<tr>
<td>3</td>
<td>Business Informatics Center Rozman Ltd. (BICERO)</td>
<td>Slovenia</td>
<td>Partner</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><a href="http://www.bicero.com/">http://www.bicero.com/</a></td>
</tr>
<tr>
<td>4</td>
<td>International Software Consulting Network Ltd. Graz, (ISCN)</td>
<td>Austria</td>
<td>Partner</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><a href="https://www.iscn.com/">https://www.iscn.com/</a></td>
</tr>
<tr>
<td>5</td>
<td>European Manufacturing and Innovation Research Association, a cluster leading excellence (EMIRAcle)</td>
<td>Belgium</td>
<td>Partner</td>
</tr>
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<td><a href="http://www.emiracle.eu/">http://www.emiracle.eu/</a></td>
</tr>
</tbody>
</table>

Source: LeadSUS, 2013

The core of the LeadSUS project results envisaged a skill card, which clearly fit the competencies required for becoming a real leader in sustainability. For all the skill elements training material will be provided in several languages (English, Romanian, French) and will be upload on an e-learning system (using the facilities of the ECQA e-learning system). A pool of test questions will be defined, which provides the basis for the trainees’ certification process. Picture 5 presents the LeadSUS preliminary skill card, which is the basis for the training program structure that will be delivered by the international project consortium members. Although we consider this skill set card as first draft; it is supposed to evolve in the implementation stage of the project as we involve experts from different research sectors, and get the feedback from trainers, partners in industry (the trainees after the pilot training session) and academia specialists, too.

Picture 5 shows the skill card is represented as a map with the main branches consists of the skill units and the second branches that are the skill elements. The third branches are allocated to the performance criteria of each element (that are related to the examination questions used in the certification process). This representation of the skill card allowed an optimal visualization of the completely developed work (in different project stages) and the harmonization and integration of the partners’ contributions in order to attend the project objectives. The skill card map is a good tool for communication between project partners.

Picture 5: LeadSUS skill card – the core for the green skills development through the designed training program

Source: Authors own development.
3. QUALIFICATION AND CERTIFICATION SYSTEM - THE ECQA SCHEMA

This chapter gives an overview of the system and the platform proposed and implemented by the European Certification and Qualification Association. One of the major aims of this research is to show that both ECQA system and the e-leaning platform are very well suited to implement and roll-out the qualification and certification of modern and very required (on the market) job roles as the Leadership in Sustainability is. Picture 5 shows the integrated European skills acquisition system of ECQA (Messnarz, et. al, 2008).

**Picture 5:** Integrated European Skills Acquisition System


The ECQA has set up a partnership of experienced partners in 18 European countries to create a pool of knowledge for specific professions. This pool will be extended for LeadSUS profession. All the professions that have been configured in this system up to now, are based in the information and communication technology (ICT) area, and are thus closely related to the Software Development. As the integrated product development, processes are increasingly related to the software development, and the LeadSUS new job role domain will profit from this basis (Messnarz, et. al., 2008).

Picture 5 gives an overview of the uncomplicated but efficient skill acquisition process supported by the ECQA platform: If there is a need, a person can attend a course for a specific job role online through an advanced learning infrastructure as described in the following. The student starts with a self-assessment against the skills. Then she/he can sign into an online course. Here she/he is guided by a tutor and does a homework which is corrected by the tutor. Finally, the homework and the real work done in her/his project are sufficient to demonstrate the skills. The learning platform is based on the web-based public domain learning management system Moodle (www.moodle.com). The so-called Capability Adviser supports the assessment process, which is a web based assessment portal system with a defined database interface to connect the systems. Network Quality Assurance (NQA) is a web based team-working tool that was developed in a previous project. So far, many professions have been configured in the platform (www.eu-certificates.org).

The ECQA platform of knowledge is enhanced on an annual basis. Existing skills sets are being reworked and new skills sets are added. Joint knowledge is being configured in the form of a job role with standard content structures like skills set, syllabus, learning materials and online configuration, as well as sets of test questions. So-called Job Role Committees decide upon the content for a specific skills set. These committees are composed of academics and industrialists. The job role committee for the LeadSUS will create a skills set of a leader in sustainability together with a set of online courses etc. People can register from their work places (Messnarz, et. al., 2008). Nowadays and according to the Bologna Process, it is very important that training courses are internationally recognized and those
successful course attendees receive certificates that are valid for all European countries. The EU supported the establishment of the European Qualification Network (EQN), from which the ECQA has evolved, with exactly this target in mind. This has resulted in a pool of professions in which a high level of European comparability has been achieved by a Europe wide agreed syllabus and skills set, a European test questions pool and exam systems (computer automated by portals), a common set of certificate levels and a common process to issue certificates (Messnarz, et. al., 2008; Riel, 2006). Quality criteria to accept new job roles in the ECQA, to accredit training organizations and certify trainers, as well as to certify attendees have been developed. The existing skills assessment portals (already used by more than 5000 students in different learning initiatives) are extended to cover the new requirements of the ISO 17024 (General Requirements for Bodies operating Certification of Persons) standard. Among the international certification organizations that provide ECQA - compliant certification is the ISQI (International Software Quality Institute, www.isqi.org).

4. CONCLUSIONS

Picture 6: LeadSUS Main Opportunities for Different Actors

- **Managers**
  - Will become transformational leaders of sustainable development
  - Will positively affect the sustainable development of their organization
  - Will better support sustainable development in their communities (environment and social aspect)

- **Employees**
  - Will update and develop their knowledge in the sustainable development field and will better develop their work task and projects with respect to sustainable values
  - Will have an EU certificate for their new professional competencies and will be more attractive on the labour market

- **Organizations**
  - Will profit from a free of charge training and certification program (support their human resources development)
  - Will better formulate, design and implement their sustainability strategies

- **Teaching staff (consultants and teachers)**
  - Could be certified as ECQA Trainers and join the Job Role Committee of LeadSUS
  - Could join and benefit from the ECQA community of trainers (knowledge pool, experiences, community of practice)

Source: Authors own development.

The described approach is a classical one for skill set provision (qualification - certification) on the ECQA platform (www.ecqa.org). The presented LeadSUS skill card (training program structure) is the result of many virtual and face-to-face meetings of the partners involved in the project. The certification procedure will allow total and partial certificates. The defined skill set map is complementary to the academic programs in the field of sustainable development that exist on the Romanian market. The main opportunities offers by the LeadSUS program are shown in Picture 6.

ACKNOWLEDGEMENT

The paper is linked with the research activities related to the project: “Leadership in Sustainability – Sustainable Manager” (LeadSUS, LLP-LdV/TOI/2013/RO/022), founded with support of the European Commission. This paper and the communication reflects the views only of the authors, and the Commission cannot be held responsible for any use, which may be made of the information contained therein.
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