

INNOSOC Case Study

(selected for Valencia 2017; extended version)

Case Study title:

***Issues and Challenges of Corporate Social Responsibility and Sustainability in the ICT Sector:
New challenges for Engineers in the 21st century***

Keywords: corporate social responsibility; sustainability; innovation; responsibility of the ICT industry; societal responsibility; European society; extended profile of engineers

H2020 challenge addressed by the Case Study: Europe in a changing world - Inclusive, innovative and reflective societies

Introduction to the Case Study

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts [1]:

- the concept of **needs**, in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of **limitations** imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

The **ICT sector is a major driver for growth and innovation** in Europe. Around 5% of the total European GDP and 20% of productivity growth in the other sectors is related to the ICT sector. The share of ICT services is 80%, while 20% of the sector's turnover is caused by ICT manufacturing. ICT is a young, complex, growing and dynamic sector. From the perspective of **sustainable development** there is less attention paid to this industry than there is to other manufacturing industries such as automotive, energy, transport. However, research has revealed that there are major problems in the production of ICT hardware and the development of ICT software [2].

Corporate Social Responsibility (CSR) and **Sustainability** are terms which are used around the globe but nobody really knows what it is about and how we are affected by them. Climate change, biodiversity, natural resources and many other topics can be subsumed under these terms.

To explain the dimension it is necessary to understand that both **vertically** (human beings, corporations, governments) and **horizontally** (family, community, region, state, global society) it is clear that "something" has to be done.

INNOSOC students, supervised by INNOSOC lecturers, will collaborate on finding the relationships (e.g., from the perspective of challenges, chances and risks) between ICT as such and all relevant actors impacting the sustainable development, by analysing their responsibility towards individuals as well as regional and global societies [3]. These activities will be conducted as a part of the ERASMUS+ blended mobility and will be finalized during the INNOSOC Valencia 2017 workshop in late May 2017.

How this Case Study is related to the selected H2020 challenge?

About 60 million people around the globe have actually the status of **refugees**. Europe is specially effected by the situation in the Near and Far East as well as Africa. Besides that millions of people are on their way because of economic reasons.

Not only Europe but Europe at its first faces huge challenges in **reducing inequality** and **social exclusion**. Around 80 million people are at **risk of poverty** and 14 million young people are not in education, employment or training. We have not yet overcome the economic crisis which has led to **unemployment rates** of 12% in general and 20% among the youth.

This is why Europe has not only to develop new ideas, strategies and governance structures for overcoming the **crisis in Europe**, but has to take the responsibility for other underdeveloped parts of the world as well. **Inequity** is not a European phenomenon but a global one. This is why Europe has a cross-border responsibility.

In order meet these challenges the actors of the ICT sector have to take responsibility for the natural resources, the climate, poverty, employment, education and training, living conditions and others. They have to build up a credible **social responsibility** and develop *Corporate Sustainability Management* systems.

How this Case Study is related to the INNOSOC project?

INNOSOC focuses on **innovation**. Innovation is more and more related to the idea of limitations imposed by the **state of technology** and **social organization** and neglects environment's ability to meet present and future needs. This means that ICT is a driver of innovative technical development but has to consider the principles of a **sustainable global development**. The overall aim is the elimination of inequity within Europe and worldwide, to improve living conditions by respecting that **we have "just one world"**.

This is why while studying innovative technical ideas and projects it is important to understand the general **theoretical background of innovative solutions**.

Engineers besides sales managers have to take more and more responsibility for the consequences of innovative solutions.

Questions that need answers during the Case Study development

Questions that need answers include but are not limited to the following:

- What is the meaning and the importance of ICT in today's world?
- Why is Sustainability a key issue in the ICT sector in general?
- Which key elements of ICT play which role in the sustainability debate?
- What are the challenges and risks of innovative ICT?
- Which role plays social responsibility for the actors involved in ICT?
- Which ICT tools can help to solve social problems in Europe and globally?
- How does this soft skill approach influence the profile of the ICT engineer of the 21st century?
- Corporate Sustainable and social Responsibility of ICT companies – *Sincerity* or *Greenwashing*?

References

- [1] Büchner, L.M. (2012) Corporate Social responsibility and Sustainability. From a Global, European and Corporate Perspective. Eurolimes, volume 13, 2012, pp.25-35
- [2] Martinuzzi, A./Kudlak,R./Faber/C./Wiman,A. (2011), CSR Activities and Impacts of the ICT Sector, RIMAS Working Papers No. 5/11 Vienna University of Economics and Business
- [3] http://ec.europa.eu/information_society/activities/sustainable_growth/index_en.htm

Further information you will find here:

- Adams, W.M. (2006). "[The Future of Sustainability: Re-thinking Environment and Development in the Twenty-first Century.](#)" Report of the IUCN Renowned Thinkers Meeting, 29–31 January 2006. Retrieved on: 2009-02-16.
- <http://www.ukessays.com/essays/management/challenges-of-csr-in-the-ict-industry-management-essay.php>
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- http://ec.europa.eu/information_society/activities/sustainable_growth/index_en.htm

Knowledge and skills needed for developing the Case Study

(P: prerequisite; D: desirable, but not necessary)

- Interdisciplinary interest for economic issues (P)
- Interest for general approach to innovative ICT (P)
- Interest for development of the EU (D)
- Interest for global correlations (D)
- Interest for their professional future as engineer in the 21st century (P)
- Being aware that the students are developing their future and are responsible for the next generations (P)

Figures describing this Case Study



Figure 1. Three pillars of sustainability – People, Planet, Profit

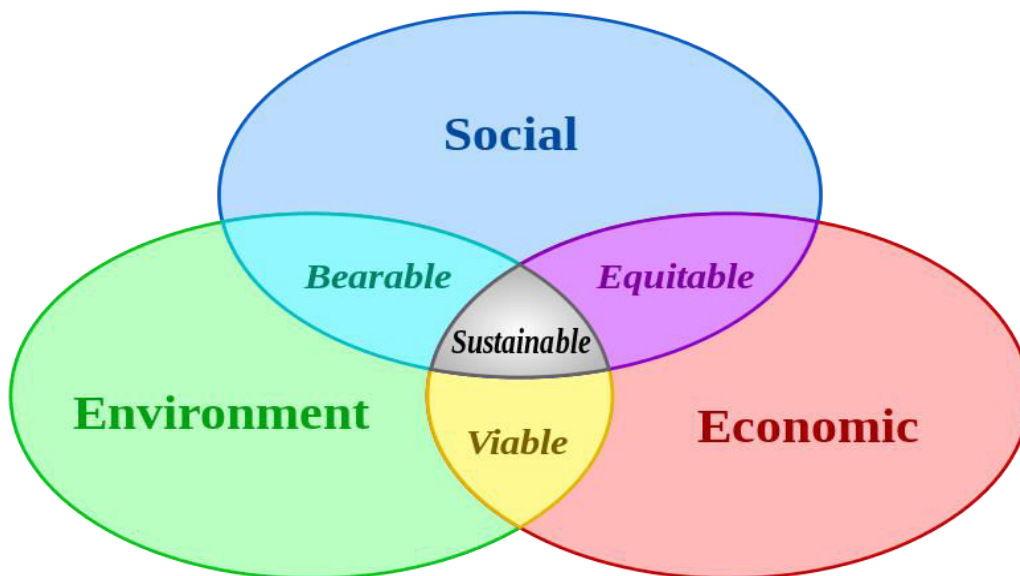




Figure 2. Sustainability from three perspectives: Social, Environmental and Economic



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for the Societal Challenges

Co-funded by the
Erasmus+ Programme
of the European Union

