

D5.4 Book

on mainstreaming RRI in industry

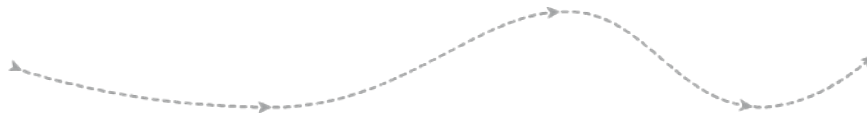
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RESPONSIBLE INNOVATION
COMPASS



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1. Executive Summary

DORIS SCHROEDER

One of the main academic outputs of the COMPASS project is a Springer Brief on mainstreaming RRI in industry.

1.1. Springer Briefs

SpringerBriefs are concise summaries of cutting-edge research and practical applications across a wide spectrum of fields. In particular, a snapshot of a hot or emerging topic is a typical area for a Springer Brief.

1.2. Book development

Initially conceived as a co-authored book, the format was changed to edited collection following peer reviewer comments.

1.3. Book Abstract

Responsible innovation (RI) provides benefits for society, for instance more sustainable products, more engagement with consumers and less anxiety about emerging technologies. As a governance tool it is mostly driven by research funders, including the European Commission. To achieve uptake in private industry is a challenge.

This book provides successful case studies for the implementation of RI in businesses. The importance of social innovations is emphasized as a link between benefits for society and profits for businesses, especially SMEs. For corporate industry it is shown how RI can offer a competitive advantage to adopters.

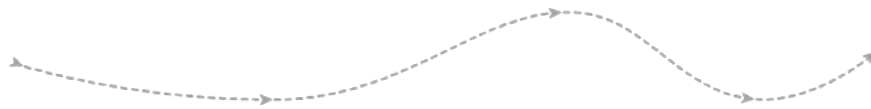
The book is based on the latest insights from theory and practice and combines conceptual work with first-hand experience. It is tailored towards the interests of innovation managers, entrepreneurs and academics. For academics, the book will provide a combination of analysis and discussion, and present recent learnings from interaction with entrepreneurs. For innovation managers and entrepreneurs, it will provide inspiration and better ideas about what RI can look like in practice, why others have “done it” and what the potential benefits might be.

The book will thus serve the purposes of spreading the word about the RI concept among different audiences whilst making it more accessible to innovation managers and entrepreneurs.

1.4. Book Timing

All chapters have been completed at the time of writing (October 2018), will go to professional editing in November 2018 and submitted to Springer for production in December 2018. Anticipated publication date is June 2019.





2. Book Summary

Prior to the publication of the Springer Brief, it cannot be made available in full on the COMPASS website for copyright reasons. This deliverable therefore contains a summary of all chapters and the results of the literature review.

Responsible Innovation

Business Opportunities and Strategies for Implementation

2.1. Table of Contents

The book will be structured as follows:

1. What does responsible innovation mean – An introduction
2. Responsible innovation in a business context
3. Learning from sustainability-oriented innovation
4. Learning from social innovations
5. Responsible innovation – A drain on company resources or a competitive advantage?
6. Engaging cyber security companies in responsible innovation
7. The business case for responsible innovation

2.2. What does responsible innovation mean - An introduction

Author: Katharina Jarmai

This chapter offers an introduction to the concept of responsible innovation and provides an outline of its history and development. It presents responsible innovation projects and initiatives carried out in Europe over the course of the past ten years. It gives an overview of what the reader can expect from each chapter of this book and concludes that the knowledge and expertise about responsible innovation gathered in the last decade can substantially help companies manage their development and innovation activities in a responsible and inclusive manner.

Keywords: RRI, Responsible innovation, Corporate responsibility, FP7, Horizon 2020, European research and innovation policy

2.2. Responsible innovation in a business context

Authors: Katharina Jarmai, Adele Tharani, Caroline Nwafor

This chapter introduces responsible innovation in a business context and is structured in three parts. The first part explains the basic terms that constitute responsible innovation from a business perspective. The second part presents tangible business practices that





operationalize responsible innovation. The third part presents two good practice examples that hint at the variety of ways in which responsible innovation can be implemented in companies: While one of them details the various practices that a nanotechnology company has introduced to ensure that all of its research and innovation processes and products exceed the requirements of responsible innovation, the other demonstrates how a cybersecurity company is relying on the principles of responsible innovation to inform their decision-making processes.

Keywords: RRI, Responsible innovation, Innovation, CSR, Corporate responsibility

2.3. Learning from sustainability-oriented innovation

Author: Katharina Jarmai

This chapter argues that insights from the realm of sustainability-oriented innovation can provide useful answers to the question of why SMEs would (or should) become interested in implementing responsible innovation practices. It is based on the assumption that “responsible innovation” and “sustainability-oriented innovation” are different approaches aimed at orienting innovation towards increased positive impacts on social and natural environments. Motivations and influences for pursuing sustainability-oriented innovation have been studied in the past, and can provide insights into reasons for pursuing the implementation of responsible innovation practices.

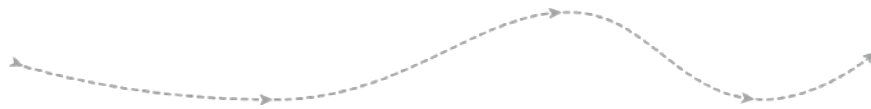
Keywords: Responsible innovation, Sustainability-oriented innovation, Corporate responsibility, Sustainable development, Corporate impact

2.4. Learning from social innovations

Author: Josephina Antoniou

Initiatives and success stories from the realm of social innovation are presented with the aim of identifying elements of Responsible and Innovation (RI) and their significance. The motivation behind selecting social innovation to highlight the positive impact of RI practices is twofold. On the one hand, focusing on social innovation provides the opportunity to investigate the business perspective, by looking into cases where businesses have reconnected with the community through shifting focus towards serving society as a means to become more prosperous and successful. Often this leads to immediate benefits for the business *and* sets the framework for a long-term strategy that encompasses more than just the well-known corporate social innovation activities, but further activities that could potentially initiate and support both social and environmental change. On the other hand, the focus on social innovation allows a better look into the community perspective, by viewing the public as important business stakeholders, i.e. consumers and customers.

The public increasingly demands that business practices are handled in a more ethical way. In fact, as societies are becoming more vulnerable due to economic instabilities, resource crises and political changes, the public demands adoption of new ways of thinking, as it is often implied that the road to a successful economic, and often cultural, transformation needs to go through social innovation. Undoubtedly, the goal of social innovation is to provide socially beneficial solutions that drive economic growth, but the task is not an easy one. Therefore,



research and innovation are essential for driving society forward, especially when it comes to the key aspects of employment, education and social inclusion.

Keywords: Responsible innovation, Public good, Social innovation, Economic growth

2.5. Responsible innovation – A drain on company resources or a competitive advantage?

Author: Doris Schroeder

Responsible innovation is an approach to business that can both incur and save costs. Some company leaders are concerned that it is yet another administrative and financial burden on their commercial operations. Others can see its financial advantages, e.g. avoiding the development of products the market will not accept or reducing costs through sustainability measures. Building on the corporate responsibility and management advice literature, this chapter will indicate a number of areas where RI can create a competitive advantage. Using case studies, examples will be given of reduced costs, reputation gains, employee retention, faster market entry, access to stakeholders who were previously unavailable, higher acceptability of end products and higher innovation potential through diverse employees.

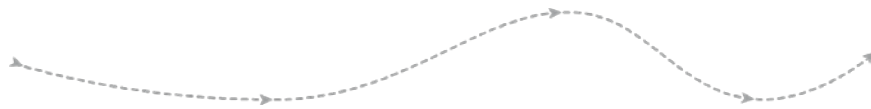
Keywords: Responsible Innovation, Profits, Competitive Advantage, Corporate Responsibility

2.6. Engaging cyber security companies in responsible innovation

Authors: Catherine Flick, Malcolm Fisk, George Ogoh

A significant part of responsible innovation is engagement with diverse groups of stakeholders; this remains true for projects investigating responsible innovation practices as well. This chapter discusses strategies for engaging small-medium enterprises (SMEs) in responsible innovation activities, drawing on a case study of UK cyber security companies. The key aspect of the engagement that will be described is the building of trust between the responsible innovation researchers and the companies. Trust was built by the movement away from traditional recruitment procedures for research projects and toward a proactive engagement with the culture and traditions of the sector – participating in company sponsored talks and conferences, finding ways to communicate effectively, and ensuring a tailored message that fit the expectations and requirements of the sector. This chapter reviews the context in which the recruitment took place, the assumptions made, the approaches taken, the revisions made, and ultimately details some general recommendations for industry engagement.

Keywords: Cyber security, Responsible innovation, Engagement, Small-medium enterprises, Trust



2.7. The business case for responsible innovation

Author: Norma Schönherr, Katharina Jarmai, André Martinuzzi

The chapters of this volume illustrate that responsible innovation is emerging as a new field in the continuing discourse on the role and responsibility of business in society. It has the potential to advance this discourse in light of two major challenges business is facing today. The first relates to the accelerating race to innovate in order to stay competitive in a rapidly changing world. The second concerns the need to maintain public trust through innovations that generate societal value in addition to economic returns.

As an emergent field, there is still work to be done in conceptualizing how responsible innovation applies to business today. At the same time, lessons can be drawn from adjacent fields of inquiry such as sustainability-oriented and social innovation. However, the central challenge of developing a business case for responsible innovation in industry requires additional insights into how responsible innovation may support companies in generating competitive advantage and what levers can be effectively employed to engage business.

This final chapter summarises the most important lessons learned from among and across the contributions of this volume. Based on these insights, the authors develop the outlines of a broader business case for responsible innovation. In doing so, they show that Corporate Social Responsibility and innovation can mutually strengthen each other. Such a synergy between responsibility and innovation may serve the maintenance of trust in business' ability to drive desirable social change while improving innovation performance.

Keywords: Responsible innovation, Corporate responsibility, Business case

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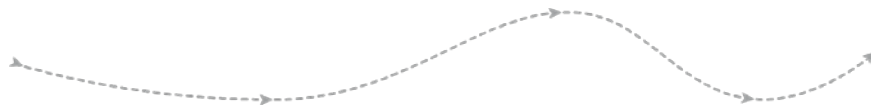
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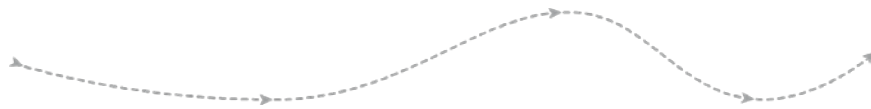
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4. Springer Brief Flyer - Appendix

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