

Technology Assessment in a Globalized World: Facing the Challenges of Transnational Technology Governance

(Editors: Leonhard Hennen, Julia Hahn, Miltos Ladikas, Ralf Lindner, Walter Peissl and Rinie van Est)

Publisher: Springer

ISBN 978-3-031-10616-3 ISBN 978-3-031-10617-0 (eBook)

<https://doi.org/10.1007/978-3-031-10617-0>

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Technology has brought radical transformations to the world and has broken the barriers of national borders. This book explores the complex issues around the global impact of technology and technology governance in detail. Edited by a team of experts, this book is a valuable resource for understanding the critical role of technology assessment (TA) in addressing global challenges.

The book, at the beginning, acknowledges the fast-paced technological advancement and its far-reaching implications for society, the environment, and international relations. It argues that technology is no longer confined to individual countries but has become a global phenomenon, mandating a parallel shift in governance mechanisms, bringing out the need for a transnational approach to technology governance that transcends national boundaries

The structure of book is properly organized into three parts or volumes covering TA in a globalised world, Challenges of global TA and Global challenges and TA, with chapters in each part dedicated to a specific aspect of transnational technology governance. The contributors have dealt with diverse topics, including the relevance of TA in international governance, technological challenges, fundamental,

ethical & societal considerations, TA for developing countries, regulatory frameworks, health issues, environmental implications, and the role of international organisations. This comprehensive coverage allows readers to gain an overall understanding of the challenges posed by globalised technology and the different strategies employed to address them. The chapters are coherently organised and well-structured, making it easy for readers to follow the arguments and concepts presented.

Part 1 deals with tracing TA activities internationally and clustering them for reflection according to the key identified areas of science, politics and public. It covers multilateral cooperation in TA to enhance the outcome and impact of strategies targeted towards global challenges.

Part 2 draws its basis from the interdependence of globalisation and technological change while discussing TA. It establishes a need for global awareness of the global character for the upcoming challenges of globalisation and responsibility for taking joint action on a global scale to overcome those challenges. The globalisation of science and technology affects people, and the need to address the relationship between public spheres and technology

has been established. Further, the relevance of TA in developing countries has been discussed taking examples from the developing country.

Part 3 discusses the major global challenges: climate change, biotechnology, artificial intelligence and the pandemic disease and the role of TA in dealing with them. It sheds light upon the applicability and effectiveness of models and frameworks of TA being applied in these fields of study.

The outlook, while summarising establishes the need for global TA to resolve the global challenges, promote international development and regulate technologies. Further case studies from countries have been presented towards the end.

The chapters emphasise the importance of interdisciplinary collaboration and collaboration among nations and international organisations. The authors have acknowledged the diverse perspectives and interests and brought out the need for inclusive and participatory approaches to Technology Assessment. This emphasis on collaboration aligns with contemporary calls for responsible and inclusive technology development.

The focus on real-world case studies and practical examples is a notable strength of the book. The authors have examined specific instances of transnational technology governance from different regions and industries

and provided concrete insights into the opportunities and limitations of existing approaches. This empirical approach utilising real-world examples has added depth and relevance to the theoretical discussions, making the content relatable to a broad audience, including scholars, policymakers, and practitioners.

While the book presents a comprehensive overview of the challenges and solutions related to transnational technology governance, the fast pace of technological change may become one potential limitation. Considering the rapid evolution of technology, a few aspects of the book may become outdated comparatively early. However, this remains a common challenge in the field of technology assessment, and the book's strength lies in its framework and principles for addressing transnational technology governance challenges.

Conclusively, the book "Technology Assessment in a Globalized World: Facing the Challenges of Transnational Technology Governance" is a good resource for scholars, practitioners and policymakers interested in technology and governance on a global scale. It gives an insightful exploration of the challenges presented by today's globalised technology and a roadmap for addressing these challenges along with tapping the opportunities buried in them.