International Journal of Performability Engineering Book Review



Palgrave Macmillan, U.K. Walter R. Stahel The Performance Economy 2010 349 978-0-230-58466-2

The book consists of the following 4 chapters followed by a Foreword and Authors' Preface:

Preliminaries: List of Tables, List of Figures, Acknowledgements, List of Abbreviations/ Glossary		11 Pages
Preface		02 Pages
Chapter 1	Introduction	85 Pages
Chapter 2	Selling Performance	93 Pages
Chapter 3	Managing Performance over Time	90 Pages
Chapter 4	Sustainability and the Performance	19 Pages
Notes		06 Pages
References		05 Pages
Index		51 Pages

Among the several books reviewed by the Editor so far, for the benefit of readers of this journal, this book stands out distinctly related to the theme and scope of the International Journal of Performability Engineering (IJPE). The reviewer, therefore, like to recommend this book to all the readers and subscribers of the IJPE to give it a careful and thorough study. The author of the book has been the founder Director of the Product-Life Institute of Geneva, which is the Europe's oldest sustainability-based consultancy organization and has had a very vast experience in the field. He is also visiting professor to universities in England and Japan. This book is a must for all those who are concerned with the performance of systems, products and services for these not only to be dependable but also sustainable. Sustainability will eventually become the driving force of all economic activity in the 21st Century. For instance, the strategy of dematerialization can help greatly in meeting sustainability requirements. At present, the population of the top 20 % rich countries are consuming 80% of the world resources. If all people of the world have equal access to resources, the affluent nations must reduce their consumption by a factor of 10. "Resource trading right', similar to "pollution rights" and the proposed CO₂ emission restrictions could balance the problem of over and under consumption of resources in the world. In another example, waste management in Germany costs the economy (and thus contributes to GNP) in excess of US\$ 545 billion per year. Therefore waste prevention for sustainability could reduce the need for this management cost and contribute to national savings.

The implementation of nature conservation, limiting toxicity, resource productivity, social ecology and cultural ecology can lead to sustainability era in the coming years. The book is full of wealth of information and replete with live examples to drive home the point, the author is trying to make. This makes the reading of the book more interesting and enjoyable.

The economic objective of the performance economy (PE) is to create the highest possible use value for the longest possible time so as to provide lowest material input per year (MIPS) of service, while consuming as few material resources and energy as possible. This allows PE to be considerably more sustainable, or dematerialized, than the present industrial economy, which is focused on production and related material flows as its principal means to create wealth. Whereas industrial economy offers product's value in \$/ kg, the performance economy offers product's value in million \$/kg. For example, the author quotes that between 1992 and 2003, the resource productivity in the manufacture of memory devices increased to 10,000-times. Newer technologies such as bio- and nano- technologies have shifted industrial economy towards performance economy as both help create products with much higher value-per-weight. The PE is based on the following tenets of creating wealth from knowledge, exploiting scientific and technological developments, incorporating prevention and sufficiency strategies and last but not the least, on finding smart solutions for systems.

- Krishna B. Misra

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