

Book Review "Innovation, Technology and Sustainability: History, Concepts and Applications"

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Summary

AKABANE, Getulio K, POZO, Hamilton, São Paulo: Érica, 2020.152 p. ISBN-10: 8536532629

Keywords: Innovation. Technology, Sustainability

The book *Innovation, technology and sustainability: history, concepts and applications*, published in 2020 by Editora Érica, has as authors Getulio Kazue Akabane and Hamilton Pozo. Both authors are post – docs and research professors.

The work addresses the impact that technology and innovation have both on organizations and on society. Among the main features of this book is the presentation of contents that contextualize the importance of innovation and technology in creating and maintaining sustainable competitive advantage. The subject is treated in an objective and impersonal language, easy to understand through text, figures and exercises that work on historical, conceptual and technical/strategic aspects, providing the reader with tools on the subject.

The book is divided into 6 chapters, 152 pages, which deal respectively with: concepts of technology; innovation management; technology management; the role of technology in product and process development; technology and business model; and innovation, technology and sustainability.

The authors begin the work, contextualizing the technology, explaining its development, presenting the technology in a context of converting systematic knowledge in to better performance. In this sense, they demonstrate that business and technology are intrinsically linked. Technology and innovation management is presented as a multidisciplinary subject, which can be treated from two perspectives, the first being the broad perspective of the outside world, on how technology and innovation are impacting business and society. The second perspective, based on the managerial aspect of technology and innovation within organizations.

In chapter 2 of the book, the authors present dimensions of organizational innovation and describe how innovations happen. The chapter's content stands out: the four ways that innovation management can be classified: product innovation, process innovation, marketing innovation, and organizational innovation; as well as the description of how to accelerate the innovation management process, through six steps: become an innovative manager, create a culture of questioning and problem solving, develop the capacity for low – risk experimentation, use external change agents to explore new ideas, and become a continuous innovation manager. Considering technology as the main driver of change and innovation, chapters 3, 4 and 5 relate the

management and role of technology in the innovation process.

Among the most relevant contents of these chapters is the description of the stages of the technology lifecycle; and contextualizing the relationship between business models and technology, addressing, for example, how Artificial Intelligence (AI) can be used to gain competitive advantage. In this sense, the authors, in addition to presenting technology implementation metrics, highlight its impact on new and more competitive business models.

The last chapter of the book, chapter 6, highlights the relevant issue of sustainability related to technology and innovation. In addition to presenting the intrinsic relationship between innovation, technology and sustainability, the authors present concepts related to sustainability, as well as its pillars, based on economic, environmental and social impact. In this sense, sustainability must be understood as a way to meet the needs of the present without compromising the ability of future generations to meet their needs. As for the economic, environmental and social pillars, respectively related to profits, planet and people, according to the book, they must be considered together in order to achieve truly sustainable innovations.

The book does not bring new findings, being deficient in this aspect as it does not provide a contextualization of the evolution of research on the themes. The theme innovation and sustainability, for example, has been receiving the attention of Brazilian researchers for many years, as an example is the well – cited article “Innovation and sustainability: new models and propositions”, by Barbieri et al (2010). It would be richer if, together with the generalist approach carried out, reflections were presented relating theoretical bases and sectors of everyday reality, such as the rich relationship between theory and practice published in the article “It is possible to find managerial innovation and people management practices aimed at innovation in federal universities?”, from Montenegro (2021). It would also add richness to the analyzed work, new themes related to innovation, as is the case of business models tested by startups, a topic studied in recent years and very well addressed in the article “Discovery and Validation of Business Models: How B2B Startups can use Business Experiments”, by Brecht (2021). What can be seen in the book is a good conceptualization of the themes involved, innovation, technology, competitive advantage and sustainability, but without going into depth.

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Considering the content, the form and the depth of the approach adopted, it is understood as the target audience of this book, interested in having an overview of what innovation is, how it is influenced by technology and how innovation is becoming, more and more fundamental tool for creating and maintaining a sustainable competitive advantage.

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