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Overviews from Information Science to Sustainability

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In the face of global environmental challenges, Information Science is emerging as a powerful ally in the pursuit of sustainable development. *Integrating Information Science for Sustainable Development: Topics and Trends* examines the essential role of information professionals in addressing the United Nations Sustainable Development Goals (SDGs) and contributing to sustainability. This book serves as both a practical guide and a comprehensive analysis of how Information Science can be integrated into sustainable practices, with insights that span digital transformations, information behavior, knowledge organization, and more.

Divided into five key parts, the book explores the intersections between Information Science and sustainability from multiple perspectives, illustrating how libraries, information literacy, and digital tools contribute to building a sustainable future. Each part delves into the unique ways information professionals are adapting to the demands of the 21st century and contributing to environmental and social well-being across different cultural and institutional contexts.

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The opening section, titled “21st Century Skills and the Information Profession”, focuses on the evolving roles of information professionals as they adapt to sustainability-related responsibilities. This part begins with an exploration of green libraries, highlighting the actions of the International Federation of Library Associations and Institutions (IFLA) to integrate sustainability into library practices. Through these initiatives, libraries become agents for promoting sustainable development, providing resources, and fostering community engagement around environmental issues. The next chapter examines the availability of open-access legal and environmental information sources in Spain and Europe. These resources are critical for ensuring that both policymakers and the public have access to accurate information, which in turn supports informed decision-making for sustainability efforts. Following this, the book turns to the topic of misinformation, specifically addressing conspiracy theories circulated on Twitter during the first wave of COVID-19 in France. This discussion emphasizes the importance of information hygiene and responsible information management in times of crisis. Further chapters in this section explore topics such as internet censorship in Russia, revealing the challenges faced by citizens when accessing unbiased information, and the efficiency of records management in the administrative archive of the University of Coimbra. The section ends with a discussion on the convergence of digital transformation and sustainability, illustrating the role of information professionals in creating a sustainable digital future. In a rapidly changing digital landscape, information professionals are not only adapting to new technologies but also actively shaping the principles of sustainable information practices.

The second part of the book, “Digital Transformation and Sustainability”, delves into the digital transformation sweeping across libraries and information institutions, emphasizing the importance of these changes in supporting sustainable development. The section opens with a look at information tools that are becoming fundamental to the librarian profession, highlighting how digital skills reshape information practices. Digital tools allow libraries to enhance sustainability through efficient resource management, community outreach, and data-driven decision-

making. A chapter on the sustainable development of library institutions underscores how the Digital Library at the Library and Information Center of the University of Library Studies and Information Technologies – Sofia, Bulgaria, is incorporating information and communication technologies and demonstrates that digital transformation is a key element of the sustainability of any modern library. Another chapter discusses Romania's transition from "pay-to-read" to "pay-to-publish" models in open access, signalling a shift in how knowledge is disseminated. This movement supports equitable access to knowledge while fostering a more sustainable, open, and collaborative research environment. Next, the implications and challenges of using text generators in information services are explored, offering insights into the potential of AI in supporting sustainable information management while acknowledging the ethical considerations that come with such innovations. Lastly, the role of records managers in balancing sustainable development with personal data protection is examined, stressing the need for information professionals to handle sensitive data responsibly while contributing to a sustainable information landscape.

"Information Behavior and Sustainability" is the core of Part III, which explores the relationship between information behavior and sustainable development, focusing on how information literacy and access to information can influence sustainable practices. The first chapter examines information behavior at the School of Medicine and Biomedical Sciences (ICBAS) – Porto, Portugal –, analyzing how information literacy can contribute to sustainable development in business and health-related fields. By fostering information literacy, educational institutions can cultivate a generation of professionals who are not only well-informed but also committed to sustainable practices. The role of information literacy in Mozambique's public administration is another focus, where the implementation of the National Records Management System (e-SNGD) aims to streamline information processes and promote sustainability in governance. The following chapters offer an overview of prominent topics in teaching sustainability and information literacy, underscoring the importance of integrating these concepts into educational curricula to foster an informed citizenry. Further discussions

highlight university extension programs as platforms for promoting sustainability. These initiatives help students and community members develop information skills that support the SDGs, bridging academic knowledge with practical, community-based applications. A chapter on the information sources of the Terena Indigenous people in Brazil brings a unique perspective about the relevance of legal policies and international treaties in preserving cultural diversity and the right to access information, which is in line with the UN Sustainable Development Goals. The section concludes with a case study on the information behavior of Czech and Slovak students during the COVID-19 pandemic, underscoring the critical introduction of a new course, called Information Hygiene, into the Library and Information Science (LIS) curriculum to overcome misinformation and support public health.

In Part IV, Libraries and Education for Sustainability, the book examines the role of libraries and education in advancing sustainability literacy and awareness. Through an analysis of LIS programs in Croatia and Portugal, this section sheds light on students' perceptions of the field, their expectations, and their role as future information professionals. The section also explores the best practices of Brazilian university libraries to achieve the Sustainable Development Goals of the United Nations 2030 Agenda, and underscores that libraries are equipping patrons with the skills necessary for sustainably navigating the digital world. Another chapter considers the role of public libraries in Brazil's national policy on smart cities, exploring how these institutions can contribute to sustainable urban development and the need for law recognising their role as a fundamental public policy actor with objectives congruent with those of the 2030 Agenda. Lastly, the book discusses the SDG Book Club in Portuguese-speaking countries and its potential to shape public policies for reading. This initiative demonstrates how libraries and educational programs can cultivate a reading culture that aligns with sustainability goals, fostering awareness of social and environmental issues through literature.

Part V, titled "Knowledge Organization to Support Sustainability", is the final section of the book. It delves into Knowledge Organization as a foundational element for sustainable practices in Information Science.

The first chapter explores Knowledge Organization within Brazilian Information Science, discussing bibliographic systems and systematic reviews on innovation in environmental contexts. These systems not only facilitate access to information but also support the management and dissemination of sustainable knowledge. A chapter on decolonial practices in Knowledge Organization offers a critical perspective on how Brazilian Knowledge Organization has engaged with decoloniality over the past decade, focusing on its incorporation into theories, methods, and practices. Findings indicate that while the field has been slower to develop than in other countries, it is establishing a foundation centered on marginalized groups, including women, Afro-Brazilian communities, Indigenous peoples, and LGBTQ individuals. The next chapter investigates the self-archiving policies of institutional repositories in federal universities across Southern and Southeastern Brazil, with a focus on subject representation, keyword assignment, and controlled vocabularies. Results show that despite most of the repositories having self-archiving policies, improvements are needed in guidelines for effective information representation and retrieval. The section continues with a discussion on indexing language, focusing on subject representation during the COVID-19 pandemic, which underscores the importance of clear and accurate categorization in managing health-related information. Findings reveal that indexing languages offer more specific and hierarchically organized terms, while database subject categories tend to be broader and less systematically aligned with the central topic, retrieving documents from various fields. The book concludes by analysing metadata's role in preserving digital heritage. This final chapter, focuses on how the Luso-Brazilian Digital Library preserves rare book metadata through digitization, ensuring accessibility and alignment with W3C best practices for long-term heritage sustainability. By examining metadata standards, it highlights efforts to unify access and preserve the cultural memory of Brazil and Portugal through digital curation initiatives. By standardizing metadata practices, digital libraries can ensure the longevity and accessibility of valuable cultural resources, supporting the sustainability of both digital and physical heritage.

Throughout the book, readers will find a comprehensive collection of 27 chapters, authored by 66 contributors from 9 countries — Brazil, Portugal, Spain, France, Croatia, Bulgaria, Romania, the Czech Republic, and Sweden — representing over 20 academic and research institutions. These 27 chapters are selected papers from the presentations given at the 32nd BOBCATSSS Conference held at the University of Coimbra, Portugal, from January 23rd to 25th 2024, and co-organized by the State University of São Paulo – UNESP, Marília, Brazil, and the University of Library Studies and Information Technologies – ULSIT, Sofia, Bulgaria. The name BOBCATSSS is an acronym representing the university network, with each letter denoting the initial letters of the cities where the universities that initiated the BOBCATSSS symposium are located: Budapest, Hungary; Oslo, Norway; Barcelona, Spain; Copenhagen, Denmark; Amsterdam, Netherlands; Tampere, Finland; Stuttgart, Germany; Szombathely, Hungary; and Sheffield, England. Since the 1990s, the BOBCATSSS conferences have been notable for the strong engagement of the host universities' Library and Information Science students, fostering a uniquely dynamic and vibrant atmosphere. The conferences were initially organized under the auspices of EUCLID (European Association for Library & Information Education and Research), which was renamed BOBCATSSS Association in 2019, acknowledging the name's wider recognition.

Integrating Information Science for Sustainable Development: Topics and Trend presents a forward-thinking exploration of how information professionals can support sustainability in an increasingly digital, interconnected world. Through diverse topics, case studies, and innovative practices, this book serves as a vital resource for information professionals, educators, and researchers committed to building a sustainable future through knowledge and collaboration.